

Lessons from Surges and how Home Based Programs can be leveraged to meet the needs of Stressed Hospital Systems

Jeffrey Epstein MD, Trini Truong MD, Samuel Ware, Joseph Meehan RN, Ania Wajnberg, MD

Department of Medicine, Mount Sinai at Home, Mount Sinai Health System, New York, NY



BACKGROUND

WHAT IS MOUNT SINAI AT HOME?

- A continuum of home-based care including:
 - Hospitalization at Home (HaH)
 - Palliative Care at Home (PCaH)
 - Subacute Rehabilitation at Home (RaH)

WHAT CLINICAL CONDITIONS CAN WE SERVE?

- HaH: patients with acute illness requiring hospitalization
 - Most common diagnoses -> UTI/pyelonephritis, asthma/COPD, CAP, viral URI/COVID, CHF
 - Eligibility criteria -> safe home environment, currently Queens, Bronx, Brooklyn, Manhattan
- PCaH: patients with serious, chronic, life-limiting illnesses requiring close outpatient management
 - Complex illness, symptom management, goals of care and advanced illness planning
- RaH: patients requiring intensive therapy/nursing services post discharge – replaces subacute rehab

WHAT STAFF IS PROVIDING CARE IN OUR COMMUNITY?

- MSHS Hospitalist Physicians – Telehealth
- Community Based Acute Care Nurses
- Physical and Occupational Therapists
- Virtual Care Unit (Care Coordinators, Nurses, SW)

LESSONS FROM PRIOR SURGES

- During a surge, patients may fear/mistrust hospitals and avoid presenting, even for serious illnesses.
- Hospital systems are stressed by surges due to constraints related to hospital beds, isolation needs, infection prevention and geography/access.
- Palliative Care is relevant for subgroup of patients and can be safely delivered in home setting in partnership with hospice, etc.
- Telehealth and home-based care are valued and acceptable care delivery models to patients.

QUALITY OF CARE DELIVERED

Quality Metrics	Target	2023	2024 (Q1-2)
% re-Hospitalization	≤10%	7.7%	5.2%
% Treat-and-Release ED Visit	≤5%	5.4%	6.0%
% Unanticipated Mortality	0%	0%	0%
% Fall with Injury	≤1%	0.4%	1.5%
% New Pressure Ulcer	≤1%	0%	0%
% HaH-acquired Infections	≤1%	0%	0%
% Patients who consent to program	≥60%	76%	62%
Likelihood to Recommend Program	≥85%	88%	90%

POPULATION SERVED

- Patient demographics (2023):
 - 56% female, 44% male
 - Average age 70
 - 26.4% with non-English preferred language
 - 39.1% Hispanic, 25.3% White, 21.4% Black
 - 59.8% Medicare, 10.7% commercial insurance
 - 41.6% enrolled in Medicaid
- Significant (8-fold) admission growth over past 2 years
- Reduced strain on limited traditional hospital resources
 - ~2500 total bed days saved in 2023 (HaH only)
 - >3500 total bed days saved YTD (HaH only)

CLINICAL RELEVANCE

- Reduced strain on limited traditional hospital resources
- Reserved inpatient isolation beds for more critically ill patients, facilitate discharge and hospital avoidance for high-risk populations.
- Decreased risk of infection transmission/exposure.

SURGE POTENTIAL AND BARRIERS

- In a surge, Mount Sinai at Home could flex up to care for dozens of patients outside of our EDs/hospitals.
- Regulatory relaxation in an emergency would help to facilitate rapid growth, including:
 - Waiver of Article 36 home care requirements
 - Paramedic role expansion
 - Pharmacy chain of custody

CONCLUSIONS

- Mount Sinai at Home is uniquely positioned to provide safe and effective home-based care to a diverse patient population.
- In a surge state, Mount Sinai at Home offers a promising solution to alleviate overwhelming patient volume and strained hospital resources while achieving high-quality patient care.
- Mount Sinai at Home is currently in a phase of rapid growth with the ability to scale further in the event of a surge.

ACKNOWLEDGEMENTS

- Thank you to our many inter-disciplinary partners across MSHS who play a vital role in transitioning our patients' care home, including inpatient clinical teams, MSH/MSM pharmacy, Mount Sinai CAM pharmacy, MSH/MSM clinical labs and Throughput.