Hospital at Home:
Implementation and Scaling in a Health System

Linda V. DeCherrie, MD

Clinical Director, Mount Sinai at Home
Icahn School of Medicine at Mount Sinai
Mount Sinai Health System

Mount Sinai


CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES
CENTER FOR MEDICARE & MEDICAID INNOVATION
THE JOHN A. HARTFORD FOUNDATION
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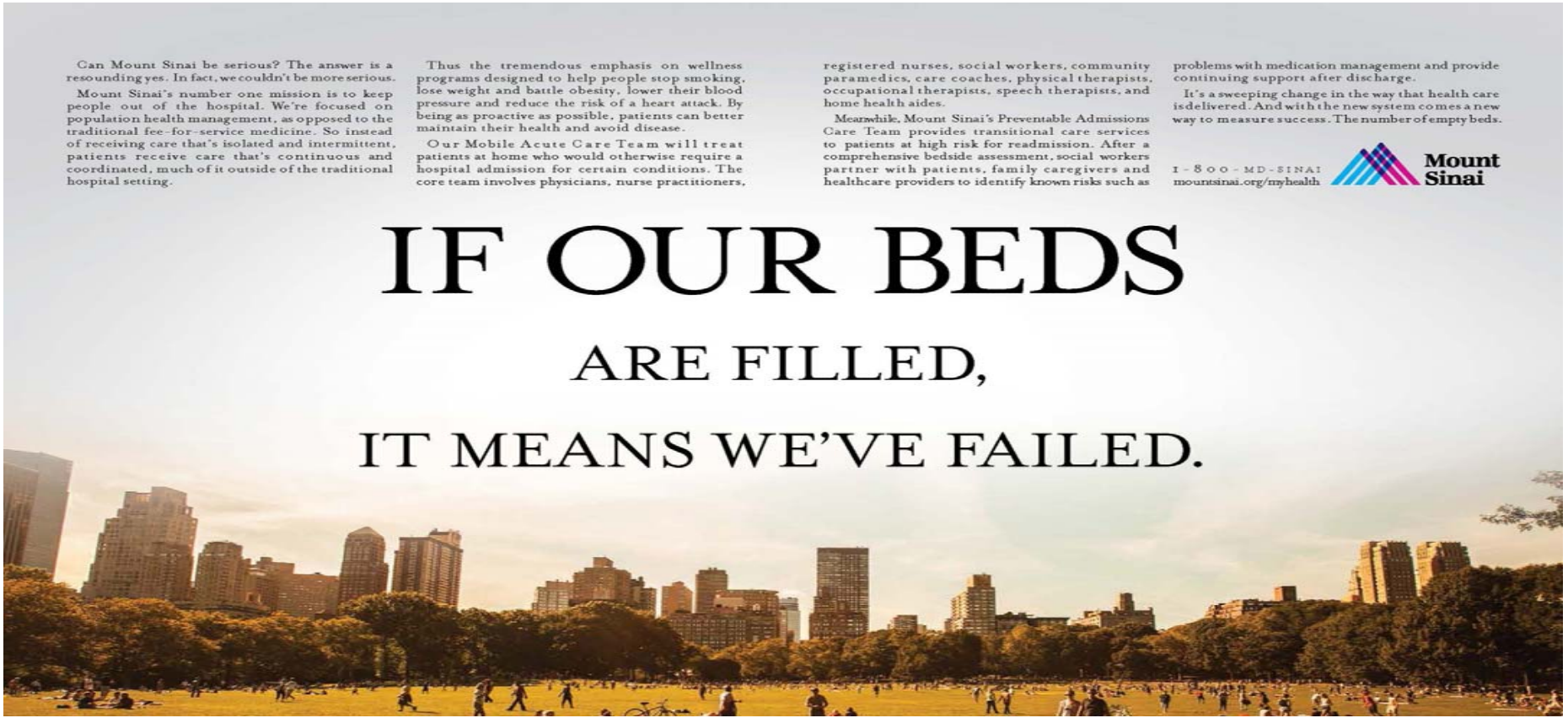
Conflicts

No conflicts of interest

Dr. DeCherrie is a full time employee of the Icahn School of Medicine, which in turn has an ownership interest in a joint venture with Contessa Health, a venture that manages acute care services provided to patients in their homes through prospective bundled payment arrangements. Dr. DeCherrie has no personal financial interest in the joint venture.



New York Times, 2015-present

Hospital at Home – Plus

Admission

- Eligibility and home situation reviewed
- Services organized
- Transport home

Acute Care

- 3-5 days
- Daily MD & nursing visits
- IV medications, oxygen, x-ray, lab tests
- 24/7 support
- Community Paramedics
- Discharge

Post-acute

- Services available for 30 days
- Follow-up visits by team

Why consider Hospital at Home

- Improved care (avoiding hazards of hospitalization)
- Increased patient satisfaction
- Lower cost

Outcomes

Hospitalization at Home v. Control

	HaH* n=247	**Control** n=178	**p**
Length of stay in days, *mean (sd)*	3 (2)	5 (3)	<0.01
30-day ED revisit	5%	10%	0.06
30-day hospital readmission	8%	16%	0.01
Escalations	7%	-	-

* HaH group includes Acute patients and Observation at Home patients who converted to Acute due to a length of stay ≥2 midnights.

Patients' Experiences with Care (HCAHPS) HaH vs. Control

	Medicare HVBP 2018 Benchmark	HaH	Control	P
Communication with Nurses	86.7	88.0	75.9	.006
Communication with Physicians	88.5	98.2	88.1	.0004
Communication about medications	62.5	85.8	64.0	<.0001
Care transitions (CTM-3)	62.4	60.7	47.3	.02
Overall rating	84.6	80.5	69.3	.03

HCAHPS scores adjusted according to the Medicare Hospital Value Based Purchasing program Patient Mixed Adjustment criteria. HVBP benchmark is the mean of the top decile of scores from contributing hospitals.

By Lesley Cryer, Scott B. Shannon, Melanie Van Amsterdam, and Bruce Leff

DOI: 10.1377/hlthaff.2011.1132
HEALTH AFFAIRS 31,
NO. 6 (2012): 1237–1243

INNOVATION PROFILE

Costs For 'Hospital At Home' Patients Were 19 Percent Lower, With Equal Or Better Outcomes Compared To Similar Inpatients

- Length of stay shorter: HaH 3.3, Hospital 4.5 days
- Satisfaction better
- 19% lower costs – lower rates of procedures and tests

Who are the patients?

- Require Hospital admission (not a home care episode)
- Require daily physician/NP monitoring, frequent labs
- Safe home environment
- ~575,000 FFS Medicare admissions each year could qualify for such a program (~5%)

Who are the patients?

86 yo woman with dementia, HTN, DM aspirates and develops pneumonia, becomes dehydrated and in the ED cannot maintain oxygen above 90% with 4 L of oxygen

ICU/step down in hospital

86 yo woman with dementia, HTN, DM aspirates and develops pneumonia, becomes dehydrated and in the ED can oxygen saturation stays >90% on 2 L, safe home environment

Hospital at Home

75 yo woman with HTN, DM who develops pneumonia, not dehydrated, can take oral medications, does not require oxygen – treated at home and follows up with PCP in 3 days

Does not require admission to a hospital

Current payment/system does not match what is needed for this program

- Daily MD/NP in person and video visit
- Nursing daily, twice daily or three times daily
- IV antibiotics delivered to home within 2 hours
- Labs processed like inpatient 2-3 hours
- SW and PT to home for assessments
- DME delivery to home within 2 hours
- Oxygen not covered for acute conditions (ie pneumonia)
- Community paramedics

Payment

- Contracting with Medicare Advantage, Managed Medicaid and Commercial Insurances
  - Challenging – fitting inpatient payment into an outpatient payment model
  - Contracting for bundle payments – acute period only and 30 day periods

- Submission to Medicare through Physician Focused Payment Model Technical Advisory Committee (PTAC) - **Hospital at Home Plus** – recommended for implementation
  - 95% DRG payment for 30 days of care
  - Shared savings for total care based on quality metrics

General Considerations

- Start up: ideal in a supportive health system and home based primary care program
- Need to provide 24/7 care but can leverage other services with existing health system providers with training (hospitalist, home care nurses, social work)
- Insourcing vs Outsourcing (ie contracting) staff and services
- Most HaH programs stay with in 1 hour geography
- 200-300 admissions annually is minimum volume for a program

The HaH “At Home” Platform

Hospital at Home

Short-term (3-5 day) acute inpatient-level care at home with 30 day follow up

Hospital at Home Acute Care Team

The Platform: Home-based Care Team

Medicine, nursing, social work, rehabilitation, community paramedics, pharmacy, laboratory, radiology, other community-based services, and transport

Diversifying the HaH "At Home" Suite of Services

Hospital at Home	***Observation Unit at Home***	***Palliative Care Unit at Home***	***Hospital Averse at Home***	***HaH@Nite***	***Pediatric Hospital at Home***	***Completing Hospital Stay at Home***	***Rehab at Home***
Short-term (3-5 day) acute inpatient-level care at home with 30 day follow up	Short-term (1 day) acute observation unit level care at home that can transition to Hospital at Home with 30 day follow up	Short-term (3-5 day) acute level care at home for hospice-eligible patients with 30 day follow up (and possible transition to hospice)	Short term (3-5 day) acute level care at home for patients who decline being in the hospital	Recruitment at night with overnight care in the hospital with transition to home in the morning	Short-term (3-5 day) acute inpatient-level care at home for children up to age 18 with select illnesses.	Short-term (<20 day) completion of acute inpatient level care at home for hospital inpatients	Short-term (<20 day) post-acute rehabilitation, medical, and nursing services in lieu of a nursing home stay with follow up to 30 days

Substituting for Full Hospital Stay

Shortening Hospital Stay

Substituting for SNF

Hospital at Home Acute Care Team
Medicine, nursing, social work, rehabilitation, community paramedics, pharmacy, laboratory, radiology, other community-based services, and transport

1 Ambulatory Surgery Post-Op (spring 2018)
2 Program for veterans to pilot ~July 2018

Linda.decherrie@mountsinai.org