Transforming Care Delivery with Hospital at Home

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MGH Healthcare Transformation Lab Series

January 8, 2021
Hospital at Home Care Will Be Mainstreamed into the US Healthcare Delivery System
Seeing Patients as People: Why I’m a Home Care Physician

By Bruce Leff, ACP Associate
Mental Map of Home-Based Care

Informal Services
- Low Acuity Chronic Care
- Little or No MD Involvement

Formal Personal Care Services
- High Acuity Acute Care

Skilled Home Health Care
- High Level MD Involvement

Home-Based Primary Care

Hospital at Home

The Field is Expanding + Being Disrupted

Informal Services

Formal Personal Care Services

Skilled Home Health Care

Home-Based Primary Care

Hospital at Home

Home-Based Palliative Care

Transitional / Post-Acute Care

Urgent Care at Home (and on Phone)

EMS-based Models

Real Estate Plays

Formal Personal Care Services Plus

Function-Focused Brief Interventions (CAPABLE)

Home-Based Primary Care Co-management

Telemedicine / RPM / Sensors

Rehabilitation at Home
Why We Need Hospital at Home

Walter’s Gripes

“I can’t get breathing treatments on time so I end up on a ventilator”

“Food stinks”

“No one talks to me”

“I got confused and tied down”

“I always come home with a completely new set of medicines”

Walter got sick...
Snapshot of Hospital at Home Process 1.0

Assessment | Transport | Care | Discharge

Determined who and what to treat

Evaluated patient acceptability
\textit{JAGS} 46:605, 1998

Developed patient eligibility criteria
\textit{JAGS} 45:1066, 1997

Pilot Studies: clinical / econ feasibility
\textit{JAGS} 47:697, 1999

Early experience with CMS – “Go to MA”

RFP to managed care

National Demonstration and Evaluation
\textit{Ann Int Med} 143:798, 2005

Commercial HaH

Dissemination activities

HaH Users Group

PTAC

CMMI Demo
\textit{JAMA IM} 178:1033, 2018

COVID / CMS Waiver

National Demonstration and Evaluation
\textit{Ann Int Med} 143:798, 2005

Pilot Studies: clinical / econ feasibility
\textit{JAGS} 47:697, 1999

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COVID / CMS Waiver
61% chose HAH care

- High-quality care
- Fewer complications
- Better patient /family experience
- Lower costs of care
- Less CG stress
- Better function
- High provider satisfaction

## HaH CMMI Demonstration - Mount Sinai

**Original Investigation**
August 2018

**Association of a Bundled Hospital-at-Home and 30-Day Postacute Transitional Care Program With Clinical Outcomes and Patient Experiences**

Alex D. Federman, MD, MPH; Tacara Soones, MD, MPH; Linda V. DeCherrie, MD, et al

<table>
<thead>
<tr>
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<th>HaH N=295</th>
<th>Control N=212</th>
<th>Adjusted OR</th>
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<tbody>
<tr>
<td>Acute LOS (days)</td>
<td>3.2</td>
<td>5.5</td>
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<tr>
<td>Readmission, all cause</td>
<td>8.6%</td>
<td>15.6%</td>
<td>0.43 (0.31,0.52)</td>
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<td>ED visits, all cause</td>
<td>5.8%</td>
<td>11.7%</td>
<td>0.39 (0.31,0.49)</td>
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<tr>
<td>Highest overall experience rating</td>
<td>68%</td>
<td>46%</td>
<td>3.12 (2.63, 3.70)</td>
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<tr>
<td>Discharge to SNF</td>
<td>1.7%</td>
<td>10.4%</td>
<td>-8.7%</td>
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<tr>
<td>Overall costs</td>
<td>$11,875</td>
<td>$13,133</td>
<td>-$1259</td>
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*JAMA IM 2018;178:1033-40*
## HaH U.S. RCT

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<th>HaH N=43</th>
<th>Control N=48</th>
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<tbody>
<tr>
<td>Readmission, all cause</td>
<td>7 %</td>
<td>23 %</td>
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<tr>
<td>ED visits, all cause</td>
<td>7 %</td>
<td>13 %</td>
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<tr>
<td>% of Day Lying Down</td>
<td>32 %</td>
<td>66 %</td>
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<tr>
<td>Overall costs</td>
<td>38% lower in HaH</td>
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*Ann Intern Med. 2020;172(2):77-85*
HaH Meta-Analysis

21% Reduction in Mortality: NNT = 50

24% Reduction in Readmissions

What Did Walter Think?

“I definitely would have ended up on a breathing machine if I had been in the hospital.”

“It was great to get the attention from the nurses and to have the doctor see me at home.”

“I didn’t have to worry about my cat.”
Moving from Research to Practice

• Broaden awareness & create interest in HaH
• Dissemination paths: VA, Medicare managed care, fee-for-service
• Technical assistance
• New HaH commercial entities
• Payment and policy issues
Creating a Suite of HaH Services

- Hospital at Home
- Observation at Home
- Acute Pall Care at Home
- Hospital Averse at Home
- Peds Hospital at Home

- Transfer HaH
- Rehab at Home

- Hospital at Home Acute Care Team
- Home-Based Primary Care
The Goal: Mainstream and Scale Hospital at Home Care
Leadership, Backwards Bicycles, and Culture Change
Supply Chain Challenges

Photo courtesy of Dr. Al Siu
HaH Fee-for-Service Payment Model — The PTAC

Physician-Focused Payment Model Technical Advisory Committee

REPORT TO THE SECRETARY OF HEALTH AND HUMAN SERVICES

Comments and Recommendation on

“HaH-Plus” (Hospital at Home Plus) Provider-Focused Payment Model
Create a Community: HaH Users Group

- 25+ programs
- Developed
  - Practice standards
  - Quality measures
  - Regulatory framework
- Research
- Advocacy

hahusersgroup.org
World Hospital at Home Congress

https://whahc.kenes.com
Scalable Versions of Hospital at Home
CMS Acute Care at Home Waiver 2020

- Hospital requirement for 24/7 on-site nursing waived
- Hospitals attest to being able to perform key HaH functions
- Full hospital DRG payment
- Only for the duration of the Public Health Emergency (PHE)
Administrator Seema Verma 🔄 · 2d

We have 51 approved hospitals for the Acute Hospital Care at Home initiative! Thank you to our latest approved hospitals, @CHS_LI’s @StFrancis_LI, @stjosephhospit1, & Mercy Medical Center, for taking advantage of the opportunity to expand hospital capacity as we battle #COVID19!
With Leadership and Culture Change...

If our beds are filled, it means we’ve failed.

The 500-bed hospital that isn’t there: the Victorian Department of Health review of the Hospital in the Home program

MJA 2010;193:598

New York Times, 2015-present
Hospital at Home Care Will Be Mainstreamed into the US Healthcare Delivery System