

Can We Deliver Skilled Nursing Facility Care at Home? Should We?

David M. Levine, MD MPH MA | Mass General Brigham

Jessica A. Hohman, MD MSc MSc | Cleveland Clinic

Joshua Johnson, DPT PhD | Cleveland Clinic

Emily Downing, MD | Allina Health

Swetha Gudibanda, MD | Marshfield Clinic Health System



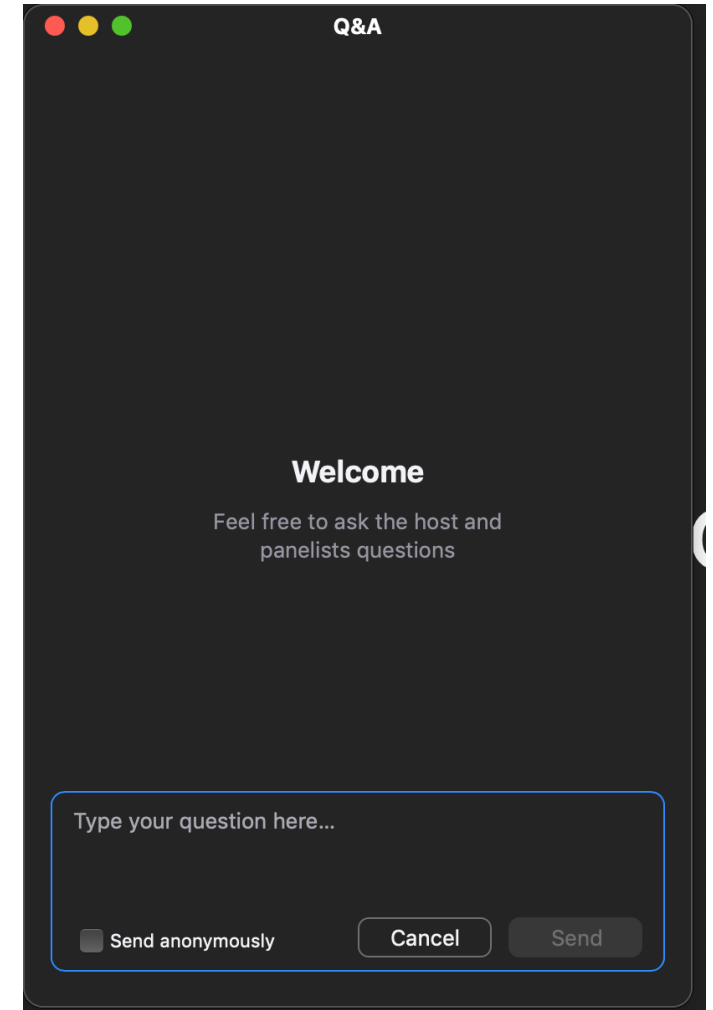
We appreciate the generous support of



The
John A. Hartford
Foundation

ZOOM Webinar Housekeeping

- Please submit your questions via the Q&A option.
- Due to the large audience for today's webinar, everyone has been placed on mute.
- If you have any technical issues, please contact Jane Donahue (jdonahue@aboutscp.com) or send her a message via the Zoom chat feature.



Hospital AT Home USERS GROUP™

Website: hahusersgroup.org

Twitter/X: @hahusersgroup

TA Center: hahusersgroup.org/technical-assistance-center

The HaH Users Group Webinar Series

On Time, Every Time: Delivering Hospital at Home Ancillary Services

How Are We Doing? Evaluating Hospital at Home Quality and Safety

Mastering Meds: Exploring Issues of Pharmacy in Hospital at Home

Finding Your People: Issues in Patient Identification, Recruitment and Referral

Looking Ahead: Hospital At Home Beyond the Public Health Emergency

By the Numbers: Financial Models, Value Propositions, and Projections for the Next Generation of Hospital at Home Programs

Hospital at Home for Cancer Care: Current Innovations, Opportunities, and Challenges

Building Your Dream Team: Strategies for Staffing Your Hospital at Home Program

Hospital at Home for COVID-19: What We've Learned and What We're Learning

Are We Ready?: Preparing Your Clinical Team For Delivering Hospital At Home Care

Measuring Up: Meeting Program Standards for Hospital at Home

What's Needed Next? Hospital at Home During the Extended Waiver and Beyond

Always Prepared: Ensuring Your Hospital at Home Program is Ready for Any Emergency, Large or Small

Nurses at the Forefront: Essential Clinicians in Hospital at Home Programs

Hospital at Home, Medicaid, and Equity: Lessons from Three States

See the full list of webinars on the [Events](#) page at [HaHUsersGroup.org](#)

Users Group Caregiver Experience Study

- A team of researchers at the Icahn School of Medicine at Mount Sinai is looking to interview HaH Users Group program leaders for their input on the caregiver experience and their expertise on caregiving issues.
- To participate, scan the QR code or contact info@hahusersgroup.org





David M. Levine, MD MPH MA

Clinical Director,
Research and Development,
Mass General Brigham
Associate Professor of Medicine,
Harvard Medical School

Today's Webinar

Can We Deliver Skilled Nursing Facility Care at Home? Should We?

Lots of Rehab

	LTAC	Acute Rehab (IRF)	Subacute	SNF	Home Health Care (HHC)
Which Patients	Technology dependent: trach, vent, TPN, dialysis	Mostly CNS or neuro-muscular	Complex med or surg	Med or Surg	Homebound. PT or skilled nursing to open
Hospital Stay	Required	Not required	3 midnight unless waived by Medicare advantage plan. Excludes ED observation		Not required (can order from the office)
Therapy	Not specified	3 hr 5d/wk	1.5 hr 5-6 d/wk	1 hr 5-6 d/wk	PT/OT 2-3/wk. SN 1/wk
Length of Stay	Aggregate > 25d	1-4 wks	Aggregate < 2wk	Avg 30d	Usually 1-8 wks
Medicare Part A	100%	100% (if show progress)	100% d1-20, then 80% d21 – 100 plus copay		No co-pay
Physician Visits	Daily (hospitalists, pulmonologists)	Daily (mainly PM&R physicians)	Every 30d or as required by facility (usually 2-3 days) (primary care clinicians)		As outpatient, Face-to-face encounter w/in 90d prior to or 30d after start HHC
Usually Excludes		Complex wounds	In-house dialysis, TPN, Vent, PCAs, continuous infusions		Unsafe environment
Approx cost range	\$1500-3000/d	\$1000-2000/d	\$600-700/d	\$150-400/d	\$100-300/d
Comment	Can have complex wounds		Unusual: Medicaid	Medicaid can provide copay	HHA 6 hr/wk. Can add SW, ST. Can have SN daily early.

Problems with Rehab

22% experience
adverse event

11% experience
temporary harm

26% HAI

Unintended
Clinical
Consequences¹

Often >100%
capacity

Variable care
experience

Insufficient
Rehab

Fastest-growing
part of Medicare

Expensive²

1: Levinson, DR. HHS. 2014. OEI-06-11-00370

2: Chandra, A. Health Affairs. 2013.

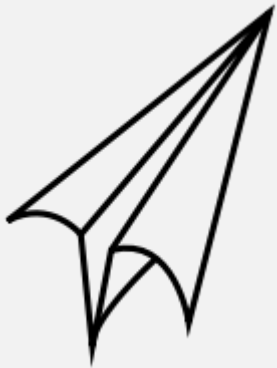
Need for Rehab at Home



Design Methodology 101

Phase 1

It might work



Interest

Phase 2

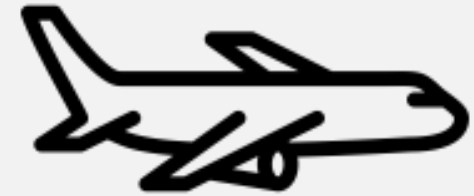
It does work



Measurable Outcome

Phase 3

How we work



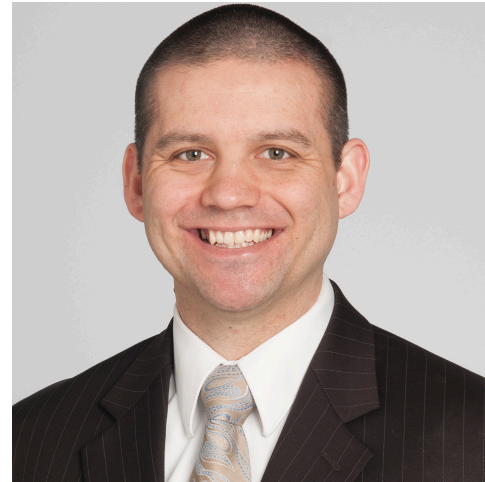
Impact

Previous Rehab at Home Work

Characteristic	Sinai RaH (n=264)
Age, mean	85
Female, %	66
Diagnosis, %	
Infection	17
HF	2
Mechanical fall	16
MSK Pain	5
Other medical	42
Other surgical	16
Visits, mean #	
MD/NP	2.2
Nurse	2.7
PT	10.4
OT	2.4
SLP	0.3
SW	1.2

Outcomes	Sinai RaH (n=264)
LOS	14
30-day ED visit	4.7
30-day hospital readmission	19
30-day mortality, %	2.3

Today's Speakers



Jessica A. Hohman,
MD MSc MSc

President, Cleveland Clinic
Accountable Care
Organization
Investigator, Center for
Value-Based Care Research

Joshua Johnson,
DPT PhD

Assistant Professor,
Lerner College of Medicine
Director,
PM&R Outcomes Research,
Cleveland Clinic

Emily Downing, MD

System Clinical Officer,
Continuing Care
Allina Health

Swetha Gudibanda, MD

Medical Director, Hospital at
Home/Home Recovery Care
Medical Director, Telehealth
Program (Virtual Care Services)
Marshfield Clinic Health System

Moving Post-Acute Care into the Home: HomeCare +

Jessica Hohman, MD MSc MSc

President, Cleveland Clinic Accountable Care Organization (ACO)

Josh Johnson, PhD

*Director of Outcomes Research,
Cleveland Clinic Department of PM&R*

December 5, 2023



HomeCare+: A Multidisciplinary Collaboration

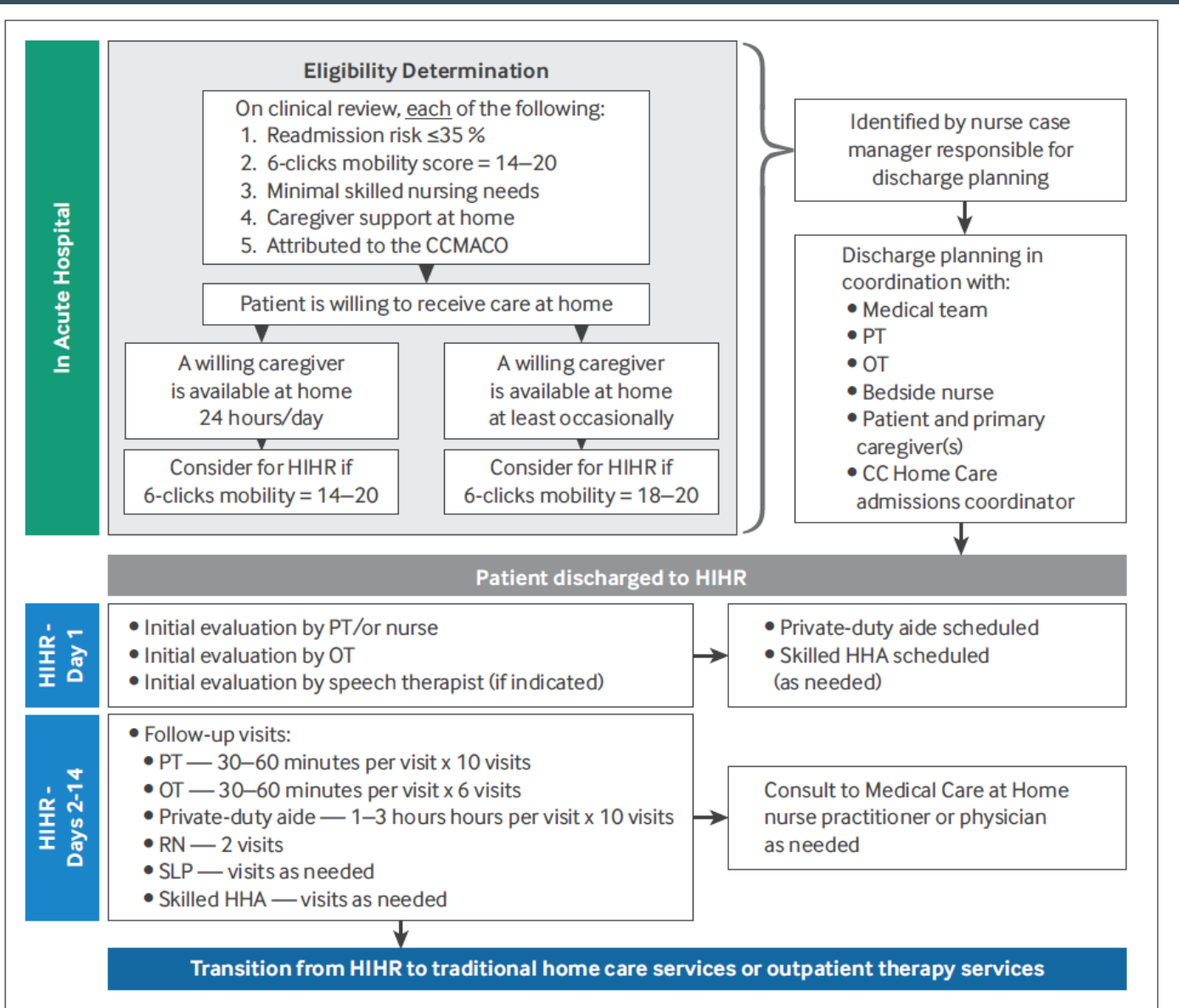
Goal: To offer a safe, home-based alternative to SNF for post-acute rehabilitative care

HomeCare+ Program Overview

- Partnered with internal home health agency to provide all skilled services for patients
- Contracted with vendor to provide additional custodial / private duty aide support for 3h/day (up to 14 days)
- Leveraged home-based primary care APP capacity to provide additional home visits as needed (up to two visits in 14 days)
- Designed program to include front-loaded, higher intensity contact in first 14 days
 - 5h/day total



HomeCare+ Eligibility Criteria



Initial patient eligibility criteria were established by a multidisciplinary team—including physical and occupational therapy, physicians, care management, and home care stakeholders. Extensive chart reviews and a review of the literature were also performed.

Additional exclusion criteria were implemented to ensure patient safety, including: delirium, severe mental illness, advanced dementia, metastatic cancer, 24/7 care needs, and lack of rehabilitation-appropriate needs.

Leveraging IT Tools to Identify Eligible Patients

ACO Home Care Plus Hourly This report uses the 2020 CMS prospective assignment list

Reset Akron Avon Euclid Fairview Hillcrest Lutheran Main Campus Marymount Medina South Pointe Weston All My Units

[View Report Guide](#)

Primary Plan Patient Type	Bed PCP	Admit Date Date Of Birth	Name (from Epic) Name (if different in ACO list)	EMPI MRN	6 Clicks PT Rec	Has SNF Referral? Attending Physician	High Risk Score HICN
MEDICARE A AND B	FV 5PAV / FV-5PAV-0555-02				14	Yes	31
Inpatient 3.04 days	Lisa A Marsh, MD				Subacute/SNF	ALAHMAD, JALAA	269285151D
MEDICARE A AND B	FV PKTA / FV-PKTA-05				17	No	33
Inpatient 3.13 days	Kelly A Raj, DO				Subacute/SNF	RAJ, KELLY	302446125A
MEDICARE A AND B	MM 3EST / MM-3EST-0307-01				16	No	29
Inpatient 6.21 days	Charles Wu, MD				Subacute/SNF	BRAR, PRABHJOT	275202107D
MEDICARE A AND B	MM 3WST / MM-3WST-0324-01				17	Yes	12
Inpatient 5.29 days	Irina Chteingardt, MD				Subacute/SNF	CHTEINGARDT, IRINA	270265772A
MEDICARE A AND B	MM 4EST / MM-4EST-0401-01				18	Yes	28
Inpatient 5.21 days	Avi S Marocco, MD				Subacute/SNF	MAROCCO, AVI	285287142A

Adapted from John Crisafi

We partnered with ITD and Analytics to identify appropriate patients each day and flag them for our clinical teams to make it easy to identify patients who are both definitely and potentially eligible for the program

Early Hospital Implementation

- **Engagement with key clinical stakeholders**
 - Care Management, Therapy, Clinicians, Home Care, ITD
 - Education and Bidirectional communication (PDSA)
- **Engagement with patients**
 - Patient-facing communication about intervention
- **Gradual scaling to regional hospitals**
 - Contracting with additional custodial care vendor locations



Evaluation Objectives

- Primary: Examine functional status at PAC discharge for patients in HCP versus a SNF.
- Secondary: Compare...
 - hospital length of stay
 - 30-day readmission



Adjusted Outcomes

	SNF (N=774)	HCP (N=139)	Δ (HCP vs SNF)
Adjusted last AM-PAC mobility score, mean (95% CI)	48.9 (48.3-49.4)	55.0 (53.9-56.2)	6.3 (5.1-7.6)
Adjusted hospital LOS (days), mean (95% CI)	7.3 (7.0-7.6)	6.7 (6.0-7.4)	-0.6 (-1.4-0.1)
30-day readmission, odds (95% CI)	1.16 (1.13-1.19)	1.17 (1.11-1.24)	1.02 (0.95-1.08)

Lessons Learned

- The model is feasible with collaboration
- Outcomes are promising
- Fidelity influenced by internal & external drivers
- Continue to iterate





Every life deserves world class care.

Elevated Care at Home

At home care providing a SNF alternative, and an early discharge track from the hospital

Dr. Emily Downing, System Clinical Officer Population Health and Continuing Care

Who are we serving in Elevated Care at Home?

- Patient with medical complexity beyond the scope of traditional skilled home health
- **Minimum** threshold of meeting Skilled Nursing Facility criteria for skilled nursing care:
 - High medical complexity and risk (often fills gaps in medical complexity needs of either skilled nursing facility care or home health)
 - High functional status
- Strive to support earlier discharge from the hospital due to enhanced clinical capabilities

Elevated Care at Home vs. SNF vs. Home Health- Patient qualification

Home Health

- Skilled qualification required for PT, skilled nursing, or speech therapy, not typically on a daily + frequency
- Stable clinical condition, may have high chronic medical complexity, anticipated straightforward care plan in place
- Homebound status

Elevated Care at Home (SNF alternative)

- Medical complexity meeting skilled nursing needs- minimum daily
- Unstable clinical condition
 - Medical Plan of care anticipated to change
 - Functional mobility at Min- mod assist of 1 or less with caregiver
- May or may not meet Skilled nursing facility criteria based on functional status and Physical rehabilitation needs
- Meets skilled nursing criteria based on either
 - direct daily skilled care provision (ex. IV abx, wound cares)
 - Management and Evaluation of Care Plan (30.2.3.1)
 - 30.2.3.2 - Observation and Assessment of Patient's Condition (30.2.3.2)

SNF

- Functional complexity +/- medical complexity meeting skilled criteria for daily requirement
- Functional mobility with max assist of 1 or more

Elevated Care at Home— Model of Care

- Community Paramedic transition visit
- Daily nurse or Community paramedic visits for the first 3 days of the episode
- Daily, and urgent tele-provider visits from physicians or nurse practitioners
- Urgent visits from community paramedics, nurses
- Same day set up and 24/7 Biometric monitoring with alerts and rounding; minimum twice daily
- 24/7 centralized nursing access and provider coverage
- Ancillary services: DME/oxygen, lab, imaging, respiratory therapy, and pharmacy support
- Physical therapy, occupational therapy, speech therapy, and social work as indicated

Elevated Care at Home Patient Demographics

n	2029
Age (mean (sd))	65.09 (14.59)
Sex (n(%))	
Female	962 (47.4)
Male	1067 (52.6)
Language (n(%))	
English	1860 (91.7)
Other	169 (8.3)
Patient declined/missing	0 (0.0)
Race (n(%))	
African American or Black	199 (9.8)
White	1672 (82.4)
Other	116 (5.7)
Patient declined/unknown/missing	42 (2.1)
Ethnicity (n(%))	
Hispanic/Latino	119 (5.9)
Not Hispanic/Latino	1880 (92.7)
Declined/Unknown	30 (1.5)
Payer source (n(%))	
Medicare	1066 (52.5)
Medical Assistance	280 (13.8)
Private	667 (32.9)
Missing/Uninsured/Other/Declined)	16 (0.8)

Hospital ALOS (mean (SD))	8.20 (7.20)
Oxygen requirements (n (%))	1216 (59.9)
Readmission risk LACE + (mean (SD))	63.05 (12.31)
APR-DRG SOI (n (%))	
None (0)	0 (0.0)
Minor (1)	65 (3.2)
Moderate (2)	188 (9.3)
Major (3)	740 (36.5)
Extreme (4)	1036 (51.1)
APR-DRG ROM (n (%))	
None (0)	0 (0.0)
Minor (1)	124 (6.1)
Moderate (2)	205 (10.1)
Major (3)	635 (31.3)
Extreme (4)	1065 (52.5)
Sit to Stand (n (%))	
No hands on assistance needed (0-1)	1355 (66.8)
Hands on assistance needed (2-3)	88 (4.3)
Total Assistance (4)	7 (0.3)
Not reported	579 (28.5)

Elevated Care at Home Episodic Care

Patient Served	5200	May 2020- October 2023
Average Episode Duration	4.5 Days	*Most patients continue with Home Health skilled nursing at time of discharge
Patient Experience	NPS 85	
30 day readmission rate	18.9%	*May 2022- January 2022
30 day mortality rate	2.8%	*May 2022- January 2022

Questions?

SNF at Home/Post- Acute Care at Home

November 2023

Swetha Gudibanda MD

Medical director HRC/ HaH

**Marshfield Clinic Health system Center,
Marshfield**



Marshfield Clinic and Contessa Have Partnered to Offer Home Recovery Care /Hospital at home model

Marshfield & Contessa launched Home Recovery Care in 2016 and have demonstrated significant outcomes. We have four different admitting models.

September 2019, we launched our SNF at home model.

The graphic is enclosed in a red border and features the following elements:

- At the top center is the Marshfield Clinic logo, a red cross with white stylized figures.
- Below the logo is the text "Marshfield Clinic®" in a large, bold, black font.
- Underneath that is "HEALTH SYSTEM" in a smaller, spaced-out, black font, separated by horizontal lines above and below.
- Below that is "HOME RECOVERY CARE" in a red font.
- At the bottom of this section is "POWERED BY CONTESSA" in a smaller, gold-colored font.
- Below this text is a wide, light gray trapezoidal shape that tapers at the top.
- At the bottom left is the Marshfield Clinic logo followed by the text "Marshfield Clinic Health System" in a black font.
- At the bottom right is the Contessa logo, a gold star inside a purple circle, followed by the text "CONTESSA HOME RECOVERY CARE" in a purple font.



Services Covered Under PACH (Post Acute Care at Home)

Care Delivery Team



- Nurses
- Therapists (PT/OT/ST)
- Pharmacists
- Personal Care Aides
- Virtual Doctors
- Pharmacy courier services
- Virtual care coordinators
- Social Worker
- Recovery Care Coordinator

Care Services Provided



- Around the clock skilled nursing care
- Around the clock home health aides/non-licensed caregiver support (if necessary)
- Virtual care from program MD
- Physical Therapy
- Occupational Therapy
- Speech Therapy
- Social work support
- Labs
- Diagnostic Imaging (Ultrasounds, EKGs, X-rays, ECHO, Dopplers)
- Echocardiograms
- Arrangement of visits with subspecialists
- Supplemental oxygen up to 4 liters per NC
- Established CPAP/BiPAP patients
- Respiratory treatments
- IV Diuretics
- IV antibiotics (continuous and intermittent)
- IV fluids
- PD/HD patients with established treatment plan
- Wound care + wound VACS
- Intermittent catheterizations
- PICC & Mid lines



HRC's Modernized Approach to Care Delivery

Outcomes for Marshfield's PACH/SNF at home Model

QUALITY METRICS

0%
COMPLICATIONS
OF CARE

<11%
ACUTE PHASE
HOSPITALIZATIONS

90%
PATIENT
SATISFACTION

100%
MEDICATION
RECONCILIATION

OPERATIONAL METRICS

91%
ACCEPTANCE
RATE

100%
TRANSITION TO
HEALTH PLAN

Benefits of HRC Post-Acute Program:



- Improved quality outcomes
- Better patient and provider experience
- Decreased mortality, morbidity rates, falls, and infection rates

Clinical Outcomes in Post-Acute at Home:



25%

Reduction in
60-Day Readmissions⁽¹⁾

(1): Mount Sinai CMMI Demonstration results: 91% acceptance rate, 27% reduction in 30-Day readmissions, 15 day average LOS.



Clinical Eligibility Guidelines for Post Acute Care at Home (PACH)

All conditions where patients can be treated safely at home, that require post-acute rehabilitation and would otherwise be appropriate for SNF level care

Illustrative Clinical Guidelines

- Adequate home support and is not a resident of a SNF
- Must meet utilization criteria for an SNF placement for SHP
- Non-ventilator dependent
- Absence of additional significant clinical factors not described above as determined by the treating physician
- Home safety (firearms, drug use, smoking & oxygen use) Proper utilities to support home care



Examples of Potential Patients

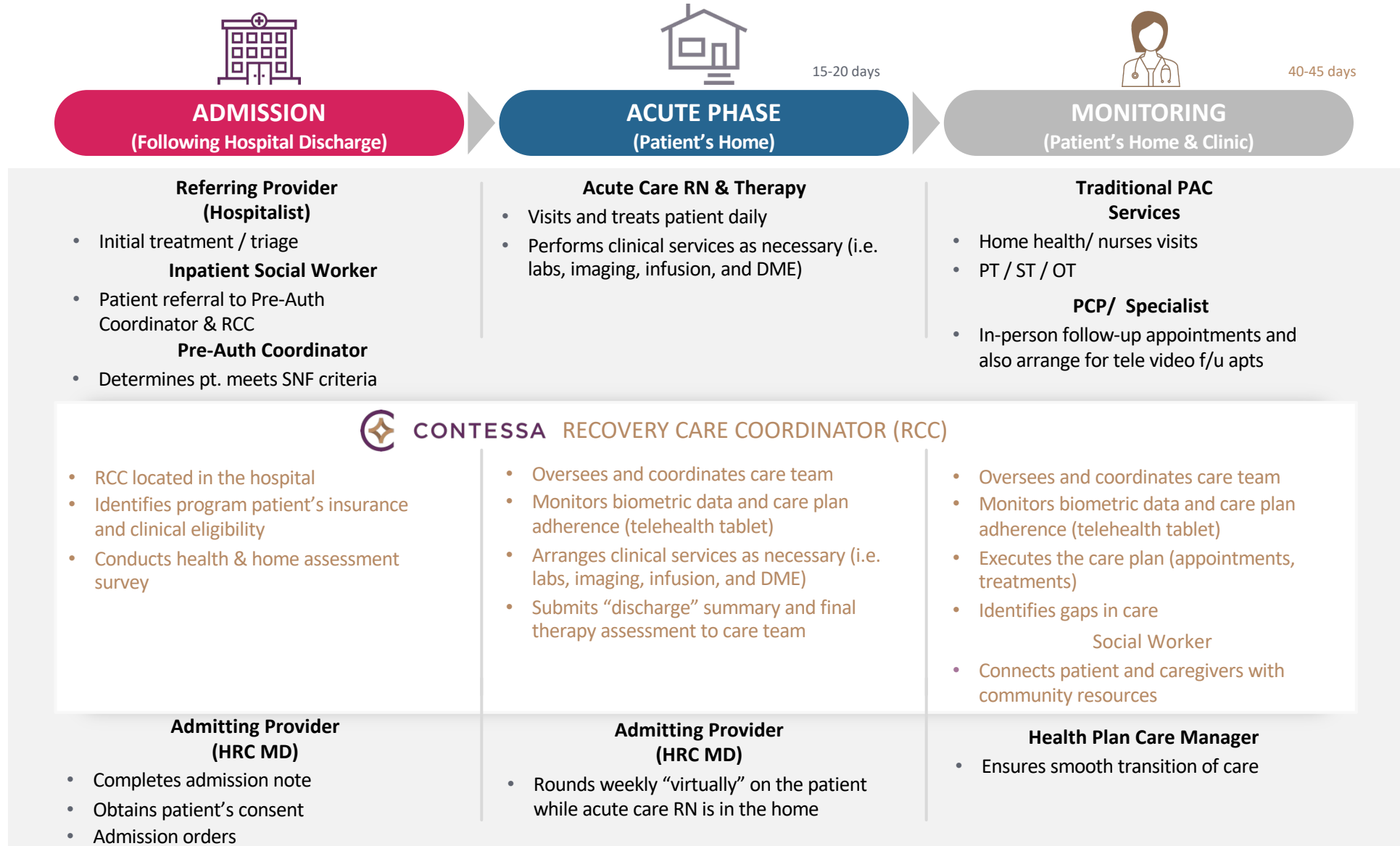


- ▶ Myocardial Infraction
- ▶ Sepsis
- ▶ Stroke
- ▶ Surgical Procedures
- ▶ Trauma

Surgical	39%	Sepsis	6%
Pneumonia	11%	COPD	6%



HRC's Post-Acute Model Provides SNF-Equivalent Services to Patients Post-Hospitalization



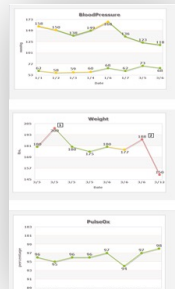
Telehealth System Allows Patient and Care Team to Easily Connect

Patients are equipped with a telehealth system allowing them to connect seamlessly with their provider, registered nurse and Recovery Care Coordinator



TELEHEALTH PLATFORM

- **High resolution audio/visual capabilities**
- **Biometric data monitoring** (data is pushed into native EMR)
 - Blood pressure
 - Pulse
 - Pulse oximetry
 - Glucose
 - Weight
- **Virtual stethoscope**
- **Contessa specific assessments**
- **Patient health summary**



VIRTUAL ASSESSMENTS

- **Virtual rounding with Admitting Provider**
 - Acute Care RN in home during rounding
- **RCC coordinates scheduling for patients / providers**
- **24/7 on-call coverage:**
 - Admitting Provider
 - Acute Care RN
 - RCC
- All providers document in native EMR systems
- Telehealth platform data pushed to other provider EMRs (as system capability allows)



Benefits

Patients	Hospital/Health Plan	Providers/RN
High Acuity SNF level rehab care at home without contributing towards their Nursing home days.	High Acuity Value based care at reduced costs	Flexibility to providers / nurse work hours
Patients receive all services, under bundle payment	Contracted bundle payment model.	autonomy
	Saves 15-30% reduced cost per episode.	
	Decreased readmission rates Increased patient satisfaction rates.	
	Overcome nursing homes bed and staff shortages	



Challenges

Patients	Health plan	Home health	Technology
Preference for hands-on, in person care by physician	Many health plans don't offer hospital at home program to their members	Staff shortage - RNs and ancillary staff	Poor access to internet or cellular connectivity
Lack of family support			
Prefer privacy / avoid RNs at home			
Not comfortable with technology			



Thank you



Marshfield Clinic Health System



QUESTIONS

HaH Caregiver Experience Study

Scan the QR code or contact info@hahusersgroup.org



The HaH Users Group Webinar Series

On Time, Every Time: Delivering Hospital at Home Ancillary Services

How Are We Doing? Evaluating Hospital at Home Quality and Safety

Mastering Meds: Exploring Issues of Pharmacy in Hospital at Home

Finding Your People: Issues in Patient Identification, Recruitment and Referral

Looking Ahead: Hospital At Home Beyond the Public Health Emergency

By the Numbers: Financial Models, Value Propositions, and Projections for the Next Generation of Hospital at Home Programs

Hospital at Home for Cancer Care: Current Innovations, Opportunities, and Challenges

Building Your Dream Team: Strategies for Staffing Your Hospital at Home Program

Hospital at Home for COVID-19: What We've Learned and What We're Learning

Are We Ready?: Preparing Your Clinical Team For Delivering Hospital At Home Care

Measuring Up: Meeting Program Standards for Hospital at Home

What's Needed Next? Hospital at Home During the Extended Waiver and Beyond

Always Prepared: Ensuring Your Hospital at Home Program is Ready for Any Emergency, Large or Small

Nurses at the Forefront: Essential Clinicians in Hospital at Home Programs

Hospital at Home, Medicaid, and Equity: Lessons from Three States

See the full list of webinars on the [Events](#) page at HaHUsersGroup.org

For More Information

- Hospital at Home Users Group
<https://hahusersgroup.org/>
- Hospital at Home Users Group Technical Assistance Center
<https://www.hahusersgroup.org/technical-assistance-center/>
 - **Featured Resource – Annotated CMS Waiver**
<https://www.hahusersgroup.org/technical-assistance-center/cms-waiver-requirements/options-for-addressing-the-2020-cms-waiver-requirements/>

THANK YOU



The
John A. Hartford
Foundation



Hospital AT **Home**
USERS GROUP™