

# Go Home and Go Big: Strategies for Scaling Hospital at Home Programs

**Trini Truong, MD** | Mount Sinai

**Daniel Davis, MD** | Atrium Health

**Karin Falkenberg, MSN RN** | Mass General Brigham

**Michael Nassif, MD** | St. Luke's Health System



The  
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**Webinar**  
January 30, 2024



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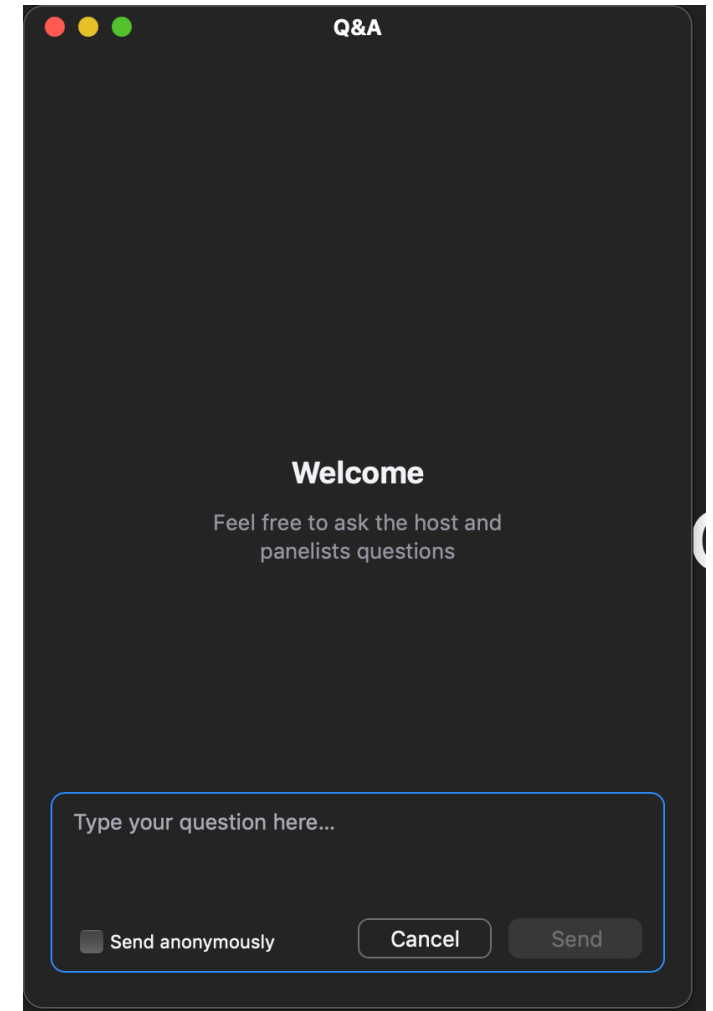
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# ZOOM Webinar Housekeeping

- 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 John Beilenson (jbeilenson@aboutscp.com) or send him a message via the Zoom chat feature.



# Hospital AT Home USERS GROUP™

**Website:** [hahusersgroup.org](https://hahusersgroup.org)

**Twitter/X:** @hahusersgroup

**TA Center:** [hahusersgroup.org/technical-assistance-center](https://hahusersgroup.org/technical-assistance-center)

# The HaH Users Group Webinar Series

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

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

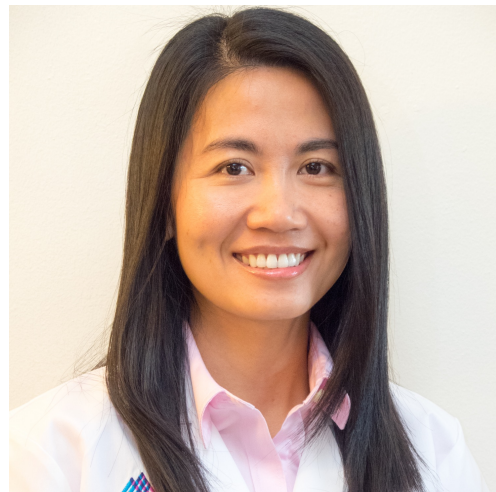
Can We Deliver Skilled Nursing Facility Care at Home? Should We?

See the full list of webinars on the [Events](#) page at [HaHUsersGroup.org](https://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](mailto:info@hahusersgroup.org)





**Trini Truong, MD**

Chief Medical Officer, Mount Sinai at Home  
Associate Professor of Medicine,  
Icahn School of Medicine at Mount Sinai

**Today's Webinar**

**Go Home and Go Big:  
Strategies for Scaling  
Hospital at Home Programs**



# Today's Speakers



**Daniel Davis, MD**

Medical Director, Internal Medicine Specialty  
Medical Director, Continuing Health  
Medical Director, Primary Care Connect  
Atrium Health



**Karin Falkenberg, MSN RN**

Executive Director,  
Nursing and Patient Services  
Mass General Brigham  
Healthcare at Home



**Michael Nassif, MD**

Medical Director,  
Saint Luke's Hospital in Your Home



**Atrium Health.**<sup>©</sup>

# **Atrium Health Hospital at Home Scaling Experience**

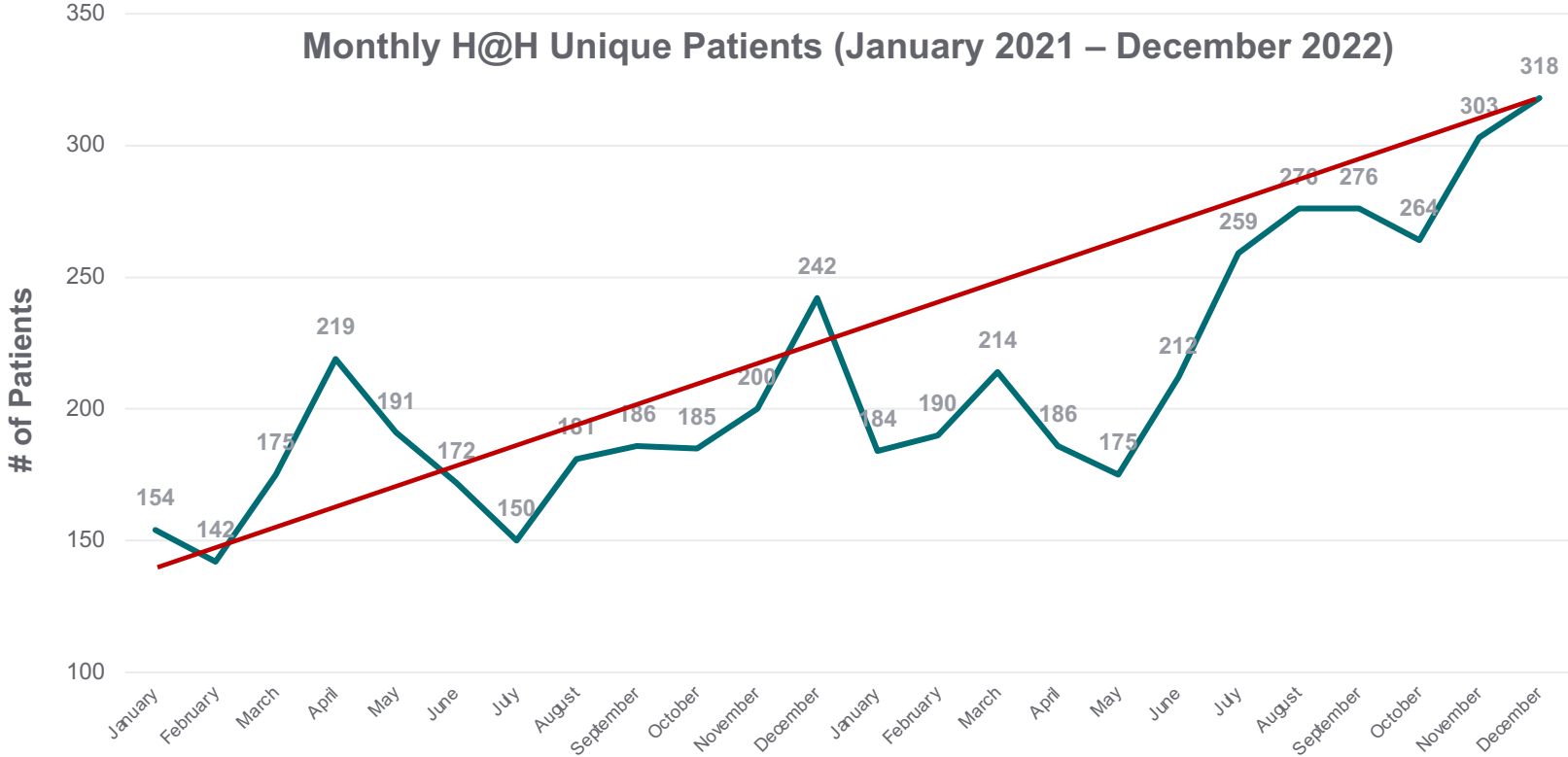
# Atrium Health Hospital at Home

- Implemented over 10 days in March 2020 in response to the pandemic-induced inpatient capacity crisis
- Leveraged existing Atrium resources and expertise to build and scale to Mecklenburg and 10 surrounding counties
- Permanently assigned staff and expansion to non-COVID diagnoses in September 2020
- Implemented the CMS Acute Care at Home Waiver in first 3 facilities in March 2021 with expansion to 10 facilities within 6 months
- Expansion of budgeted census to 60 in October 2023

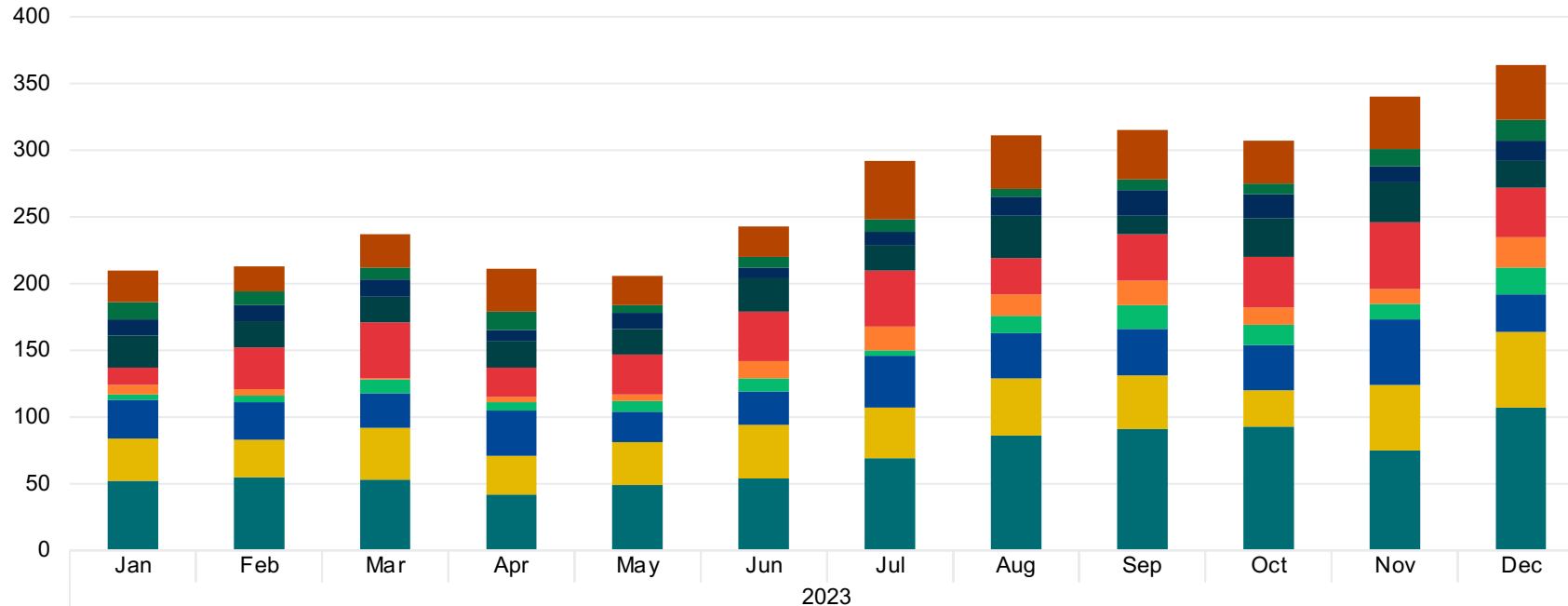


# Atrium Health Hospital at Home

Total Number of Unique Patients since Mar 2020: >9,400



# 2023 Monthly Volume by Facility



- AH University City
- AH Union West
- AH Union
- AH Southpark
- AH Pineville
- AH Mercy
- AH Lincoln
- AH Kings Mountain
- AH Cleveland
- AH Carolinas Medical Center
- AH Cabarrus

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2023												
■ AH University City	24	19	25	32	22	23	44	40	37	32	39	41
■ AH Union West	13	10	9	14	6	8	9	6	8	8	13	16
■ AH Union	12	12	13	8	12	8	10	14	19	18	12	15
■ AH Southpark												
■ AH Pineville	24	20	19	20	19	25	19	32	14	29	30	20
■ AH Mercy	13	31	42	22	30	37	42	27	35	38	50	37
■ AH Lincoln	7	5	1	4	5	13	18	16	18	13	11	23
■ AH Kings Mountain	4	5	10	6	8	10	4	13	18	15	12	20
■ AH Cleveland	29	28	26	34	23	25	39	34	35	34	49	28
■ AH Carolinas Medical Center	32	28	39	29	32	40	38	43	40	27	49	57
■ AH Cabarrus	52	55	53	42	49	54	69	86	91	93	75	107

# Outcomes To Date...

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## Operations

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- Total Unique Patients: **>9,400**
- Total B&M Days Saved: **>33,000**
- ALOS: **4.6**

## Quality

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- Readmissions O/E: **0.8**
- Mortality: **<1%**
- Return to B&M: **5.0%**

## Patient Experience

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- Overall Rating: **84.7%** (B&M: 68.7%)
- Likely to Recommend: **88.3%** (B&M: 72%)

# Key Scaling Factors and Priorities

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- Ongoing Acute Care Facility capacity constraints
- Necessary infrastructure maintained for other Care at Home strategies
- Flexible staffing model developed for census variations
- Financial model based on capacity creation and cost savings
- Incremental growth plan developed for expansion to 100 beds by end of 2024
- Multi-pronged approach to census growth
  - Facility specific internal marketing
  - Expanded scope of services
  - Development of outpatient component
  - Development of integrated Care at Home strategy

# Provider Team Structure By Census

(example scale plan)

	30-45	46-60	61-75	76-90	91-105
Daily Need	<ul style="list-style-type: none"> <li>• 2 Rounding Physicians</li> <li>• 1 QB Physician (M-F)</li> <li>• 1 APP</li> </ul>	<ul style="list-style-type: none"> <li>• 3 Rounding Physicians*</li> <li>• 1 QB Physician (M-F)</li> <li>• 1 APP</li> </ul>	<ul style="list-style-type: none"> <li>• 3 Rounding Physicians*</li> <li>• 1 QB Physician (M-F)</li> <li>• 2 APPs</li> </ul>	<ul style="list-style-type: none"> <li>• 4 Rounding Physicians*</li> <li>• 1 QB Physician (M-F)</li> <li>• 3 APPs</li> </ul>	<ul style="list-style-type: none"> <li>• 5 Rounding Physicians*</li> <li>• 2 QB Physicians (M-F)</li> <li>• 3 APPs</li> </ul>
Total FTE	<ul style="list-style-type: none"> <li>• 4 Rounding Physicians</li> <li>• 1 QB Physician</li> <li>• 2 APPs</li> </ul>	<ul style="list-style-type: none"> <li>• 6 Rounding Physicians*</li> <li>• 1 QB Physician (M-F)</li> <li>• 2 APPs</li> </ul>	<ul style="list-style-type: none"> <li>• 6 Rounding Physicians*</li> <li>• 1 QB Physician (M-F)</li> <li>• 4 APPs</li> </ul>	<ul style="list-style-type: none"> <li>• 8 Rounding Physicians*</li> <li>• 1 QB Physician (M-F)</li> <li>• 6 APPs</li> </ul>	<ul style="list-style-type: none"> <li>• 10 Rounding Physicians*</li> <li>• 2 QB Physicians (M-F)</li> <li>• 6 APPs</li> </ul>

\*Additional Rounding Physician Covered by Moonlighting Until Max Census Reliably Met



**Thank You!**

# MGB Home Hospital

## *Scalability and Managing Census Variability*

Karin Falkenberg, MSN RN

*Executive Director of Nursing and Patient Services*

*Mass General Brigham Healthcare at Home*



# Mass General Brigham Home Hospital at a glance

1

Unified MGB  
Home Hospital service



75%

Of eligible patients are  
in our serviceable area



6

Days on average spent  
in Home Hospital

5

MGB Hospitals with  
Home Hospital services  
MGH, BWH, BWFH, NWH  
And SLM

66

Neighborhoods served  
across Greater Boston



2,400+

Home Hospital  
Admissions Since  
Jan. 2022



40

Current Home Hospital  
Bed Capacity

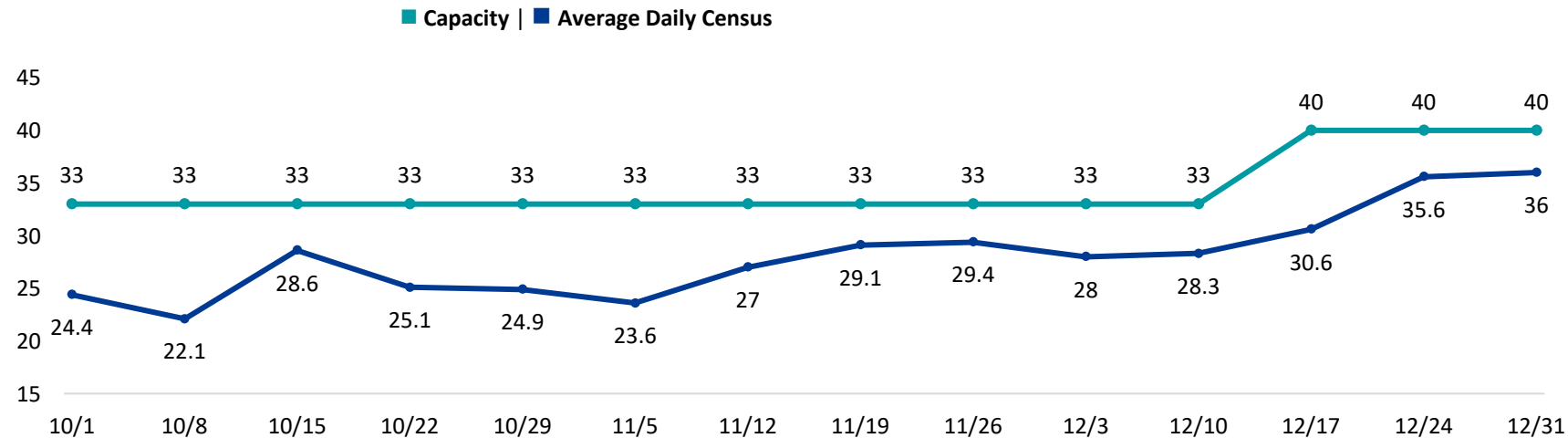


12,700+

Acute Care Facility-  
Based Bed Days Saved  
Since Jan. 2022

# Weekly ADC growing steadily over the first quarter of the fiscal year, on track to reach 60+ ADC by end of year

## Home Hospital Staffed Capacity and Weekly Average Daily Census



## Plan for continued growth to achieve 60+ ADC by end of year

- Capacity expansion
- Increasing eligible patient populations
- Driving census

# Considerations for Scale....

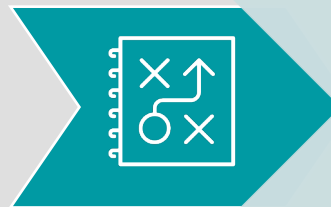
- ✓ Operational workflow adjustments will be needed to coincide with growth
- ✓ The model you design to fit census, may not fit as you scale
- ✓ Address operational gaps as you grow



## Key elements in building for scale



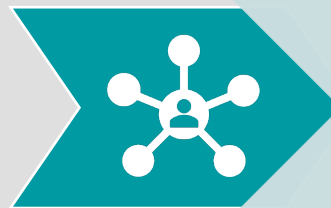
Developing tools to support visibility into clinical operations



Cross functionality within role groups to provide stretch



Models that allow flexibility and can toggle to meet surge demands



High touch point interdisciplinary communication

# Cross Functionality



Baking in cross functionality to role groups allows the team to stretch safely to meet the demands. The team design allows for the ability to surge and can cascade back down as needed.

**Physical Therapy** can evaluate patients, virtually or in person. Our PTs also have the cross functionality of navigating (patient identification) as part of their role. This allows us stretch our patient finding and combine PT screening in one encounter if needed.



**Medical Assistants** can co-visit with the teams to optimize efficiency, provide hands on support for virtual visits, act as bridge for HHA's, and assist with administrative and supply chain support.

# Cross Functionality

## Charge Nurses

- Pivotal role in daily operations
- Can be flexed to provide home based care as needed for surge.
- Charge Nurses can provide at elbow support to team
- Our Charge roles are a mixed combination of staffing throughout the day of in person and virtual.
- Flexibility allows us to stretch and meet the real time demands of our patients and team.

## Field Team

- MIH and RN model – One Team
- Complementary skills with ability to cover and support

## APP/Provider Team

- Working within a new model of mixed modality that includes both virtual and in home support.
- Allows Providers to increase their capacity by 8-9 patients a day without increasing staffing.

# High Touch Communication

A day in the life.....

7am Overnight Handoff

8am North Interdisciplinary Round Huddle

830am South Interdisciplinary Round Huddle

11am Capacity Huddle

1230pm Care Progression Rounds

4:00pm North Interdisciplinary Round Huddle

4:30pm South Interdisciplinary Round Huddle

5:00 Geography Huddle

7:00pm Overnight Handoff

On Demand





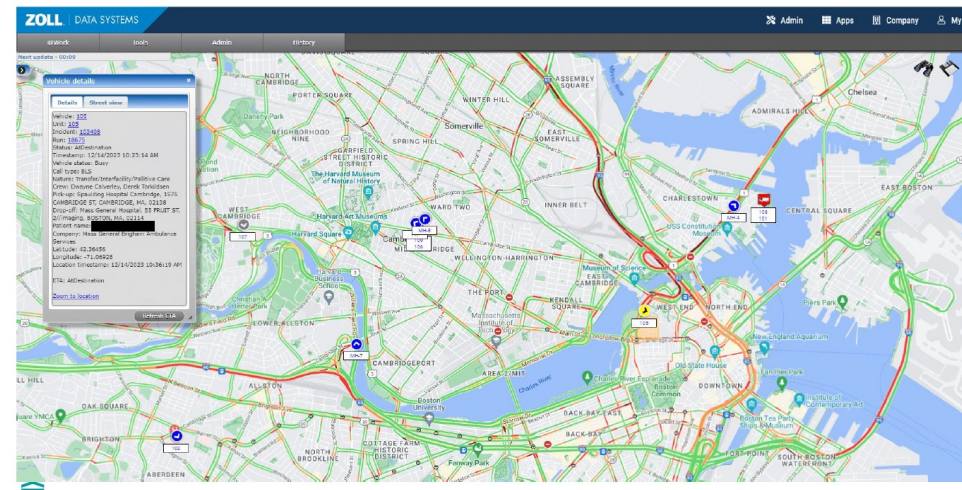
# High Touch Communication



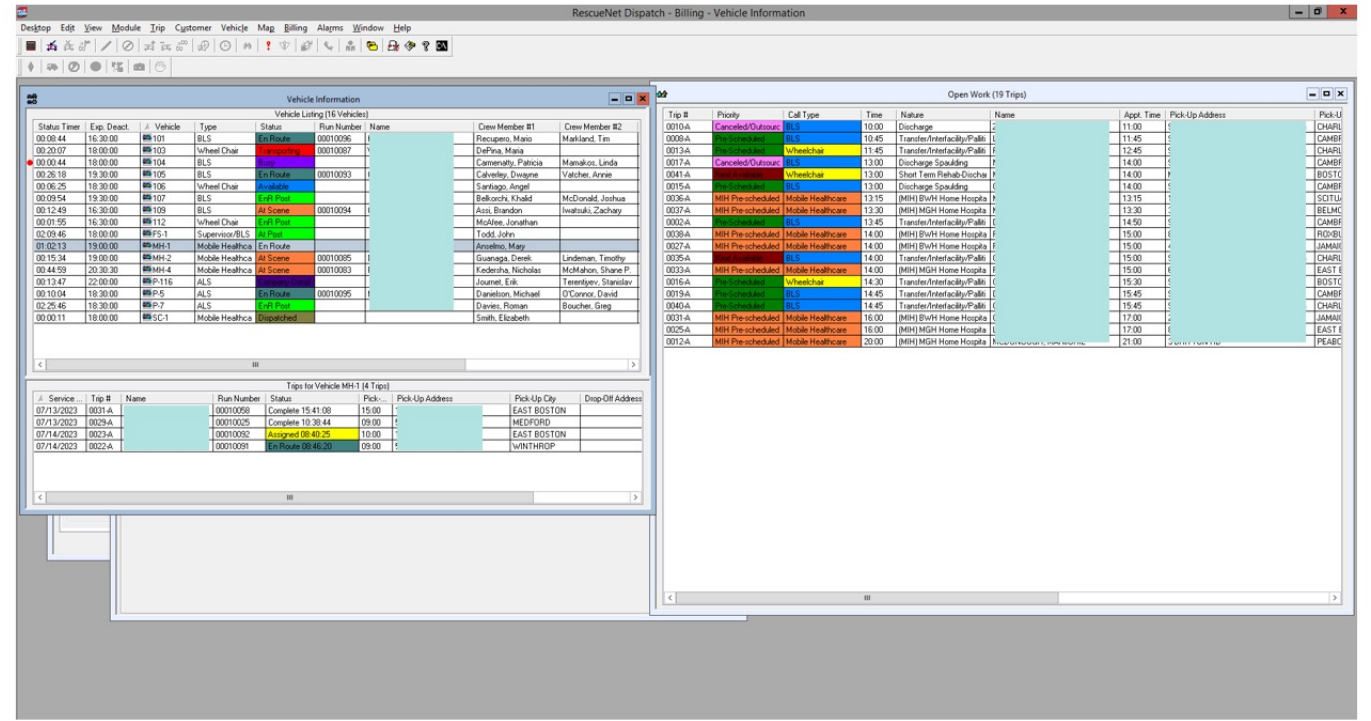
## Benefits of High Touch Communication

- Real-time visibility into ground operations
- Ability to provide unified messaging to the team
- Coaching opportunities
- Fosters teamwork, trust and collaboration
- Developing tools to support visibility into clinical operations

# Tools



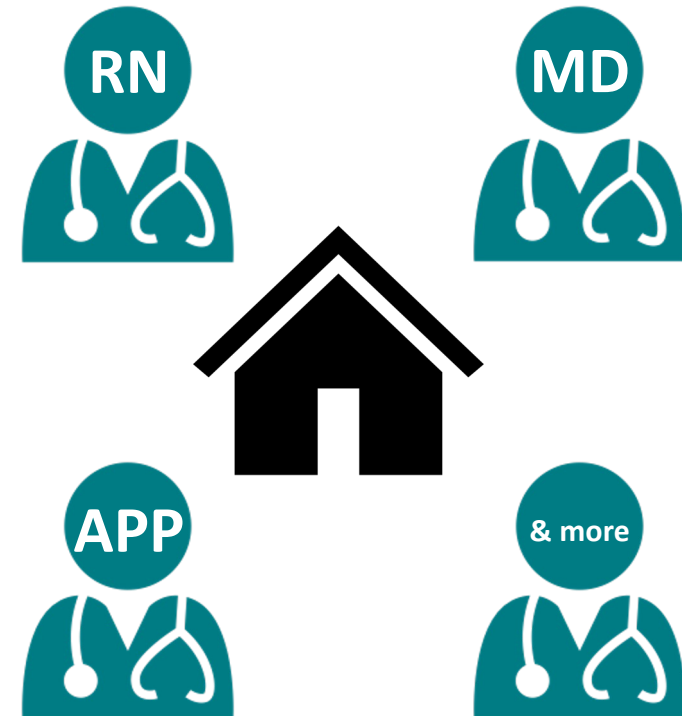
Assignment			Visits			
Nurse	Role	Name	AM	PM	Total	%
1	Charge	Bridget Hemmer	0	0	0	
2	Staff Nurse and Trainee	Marissa Pepicelli	1	2	3	
3	Staff Nurse	Kim Tierney	2	2	4	
4	Staff Nurse	Marclyn Morice	2	2	4	
5	Staff Nurse	Heidi Buckley	2	2	4	
6	Staff Nurse	Kristen Valanzola	1	2	3	
7	Staff Nurse	Siobhan O'Brien	2	2	4	
8	Trainee	Shana Farrell	1	2	3	
9		0	0	0	0	
10		0	0	0	0	
11		0	0	0	0	
12		0	0	0	0	
4			MIH	0	1	4%
Surge MIH						
Sum RN			11	14	25	96%
Sum MIH			0	1	1	
Sum All			11	15	26	
			Staffed	# Pts	13	
			AM	PM		
Overall Nursing Capacity:			17	17		
Percent Nursing Capacity Used:			65%	82%		
Overall MIH Capacity:			4	6		
Capacity for Additional Visits:			10	8		
Today's Patient Capacity Cap:					18	
Tomorrow's Patient Capacity Cap:					18	
Notes:			Marissa w/ Shana			



# Part of a Large Team



- Administrative
- Supplies
- Laboratory
- Biomed
- Financial services
- Quality & safety
- Patient/Family relations
- Risk
- Billing
- Compliance
- Care coordination
- Pharmacy
- And more!





# Hospital In Your Home: Scaling Whac-a-mole

HAH Users Group  
Jan 30, 2024





**Status Quo Brick and Mortar Hospital**

# General Stats

Admissions since go-live (7/19/22): 900

- 33% from the ED, median time in ED prior to HIYH admission - 5 hrs
- 66% from an inpatient floor, median time on IP unit prior to HIYH admission - 12 hrs

Average daily census: 9.3

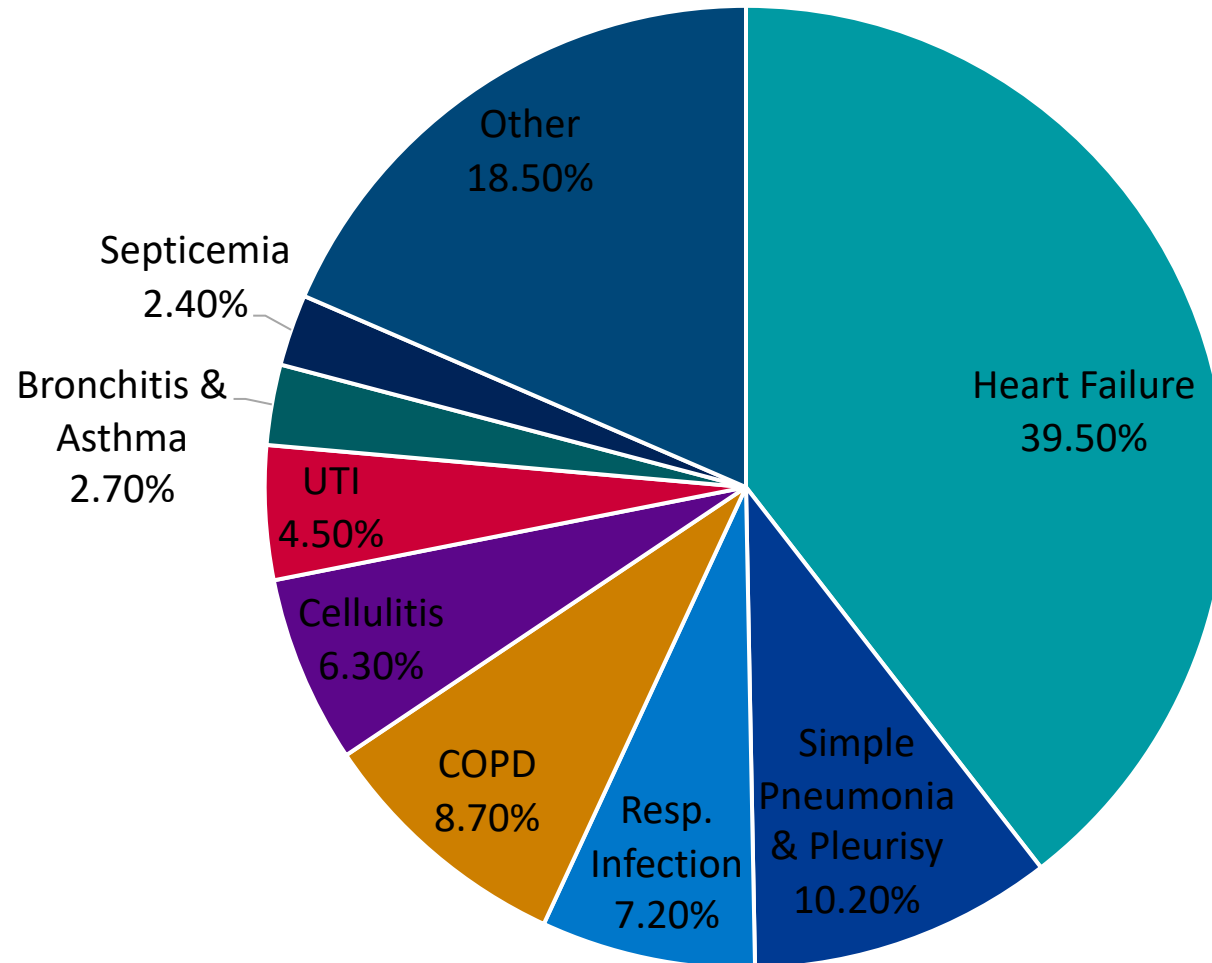
Peak census: 15

ALOS: 4 days

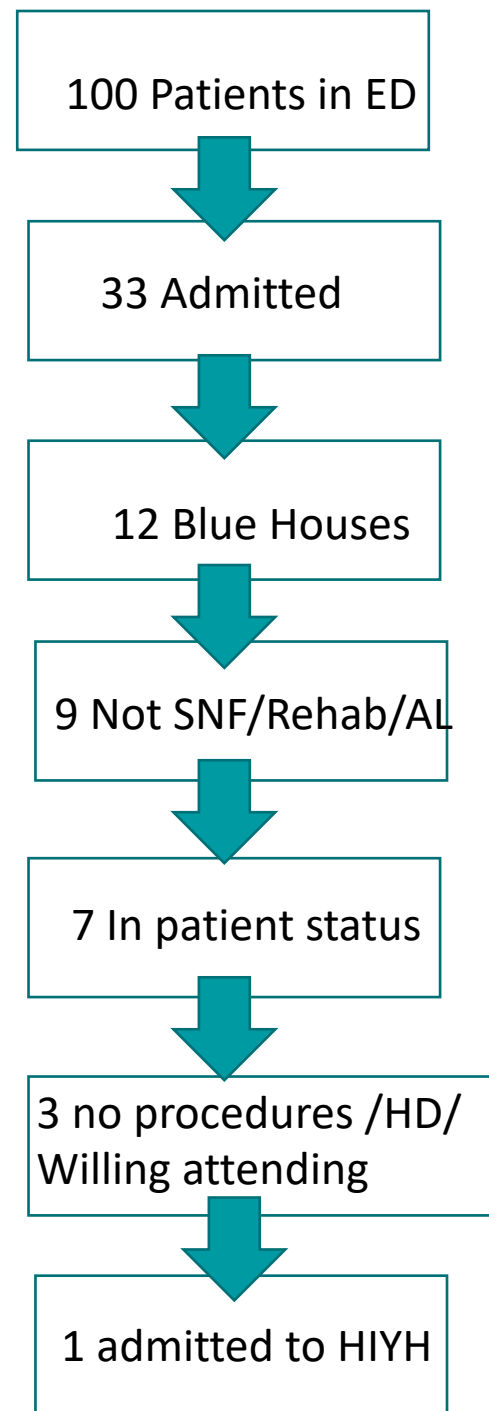
Medicare and Medicare Advantage Only

# HIYH Final Billing DRG

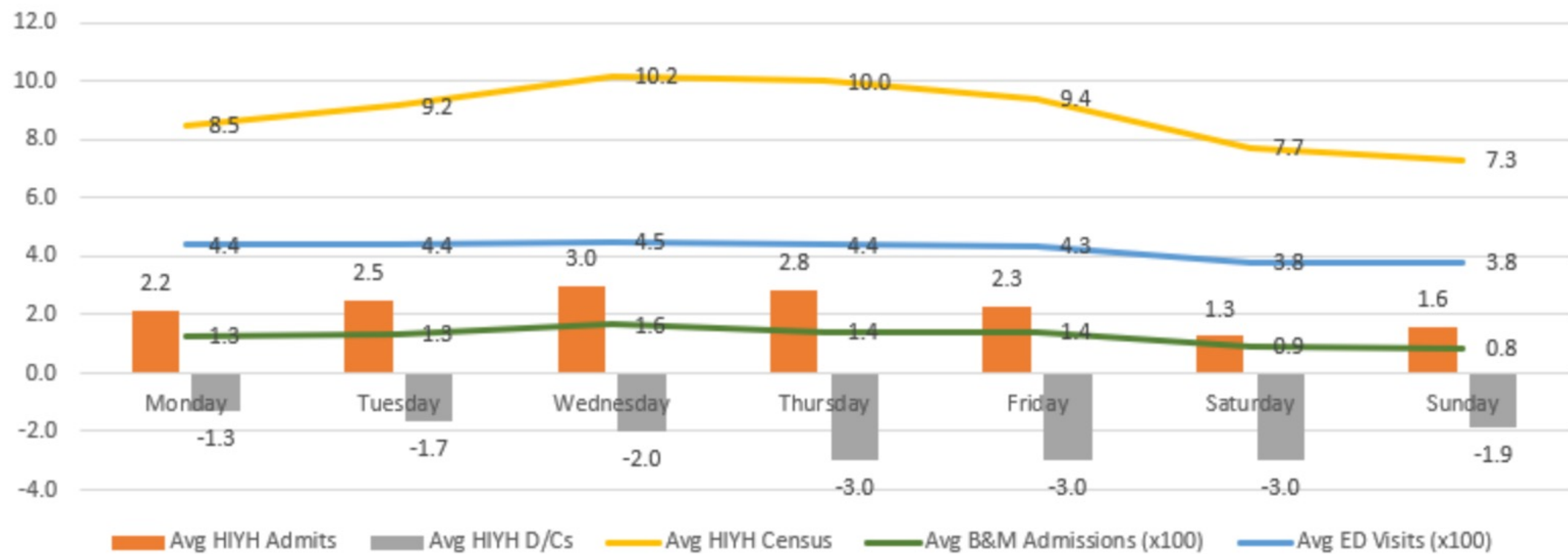
*Heart failure, infections, and upper respiratory illnesses are ideal for this care model*

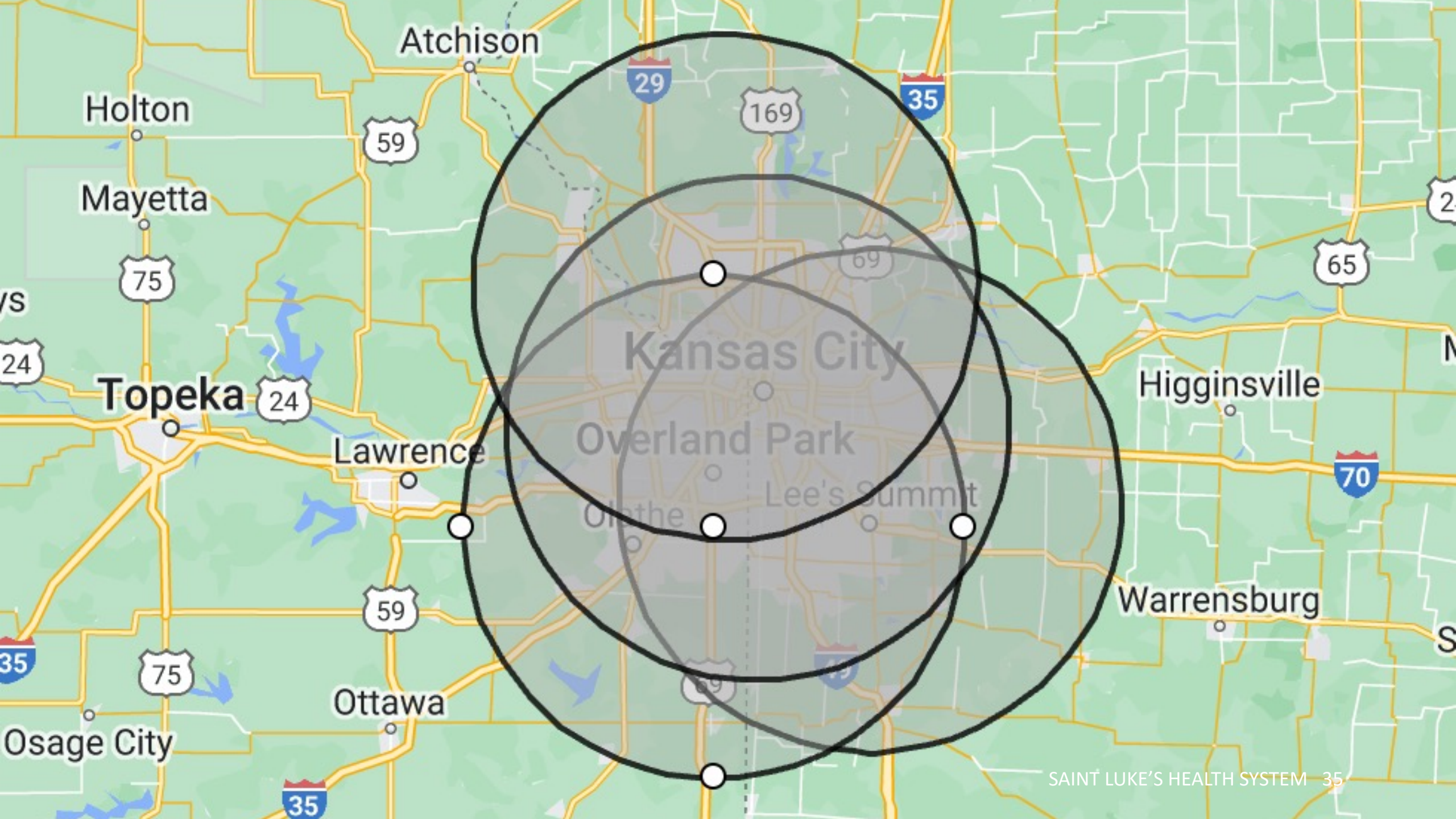






### HIYH Census 12/1/23 - 1/14/24





# Theory of Constraints



## Systems & Chains

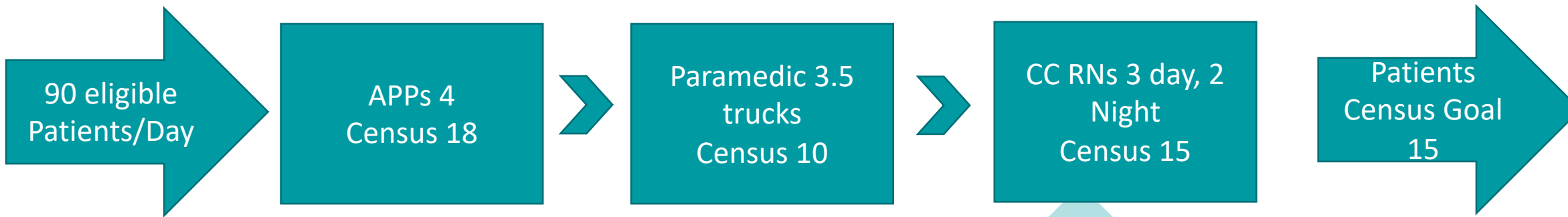
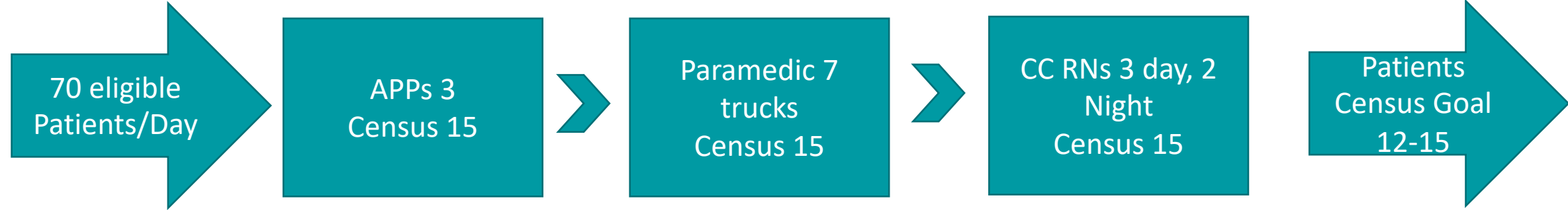
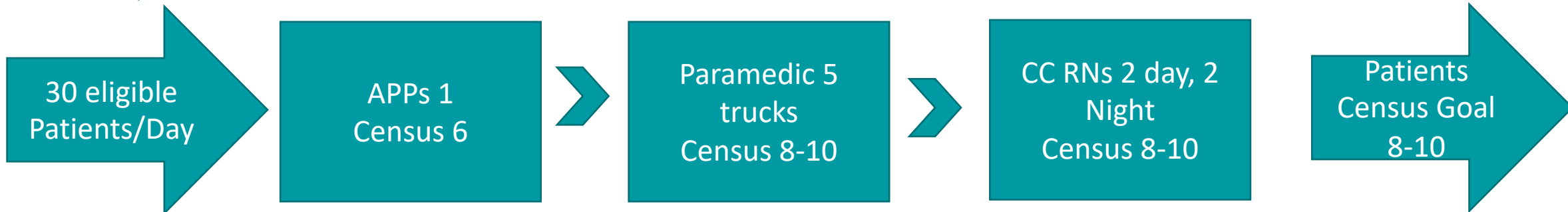
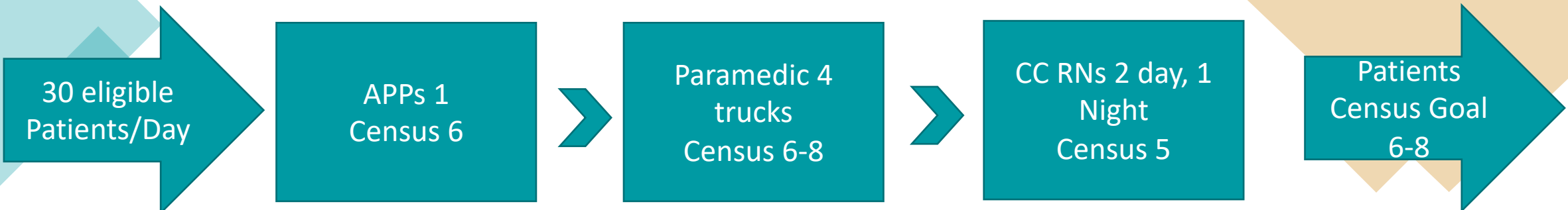
A system (the chain) is a collection of interrelated, independent processes that work together to turn inputs into outputs in the pursuit of some goal.

## Weakest Link

A chain always has one weakest link. If one applies force to the chain at an increasing rate, it eventually breaks at the weakest link. Therefore, the weakest link is the constraint that prevents the system (chain) from doing any better at achieving its goal.

## Improving Constraints

After strengthening one constraint, the system is stronger. However, the system does not become infinitely stronger. The constraint simply migrates to a different component of the system. Some other link is now the weakest, and all the other links are nonconstraints.





QUESTIONS

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- 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/>

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