

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

David Levine, MD, MPH, MA | Brigham and Women's Hospital



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Webinar
February 23, 2021



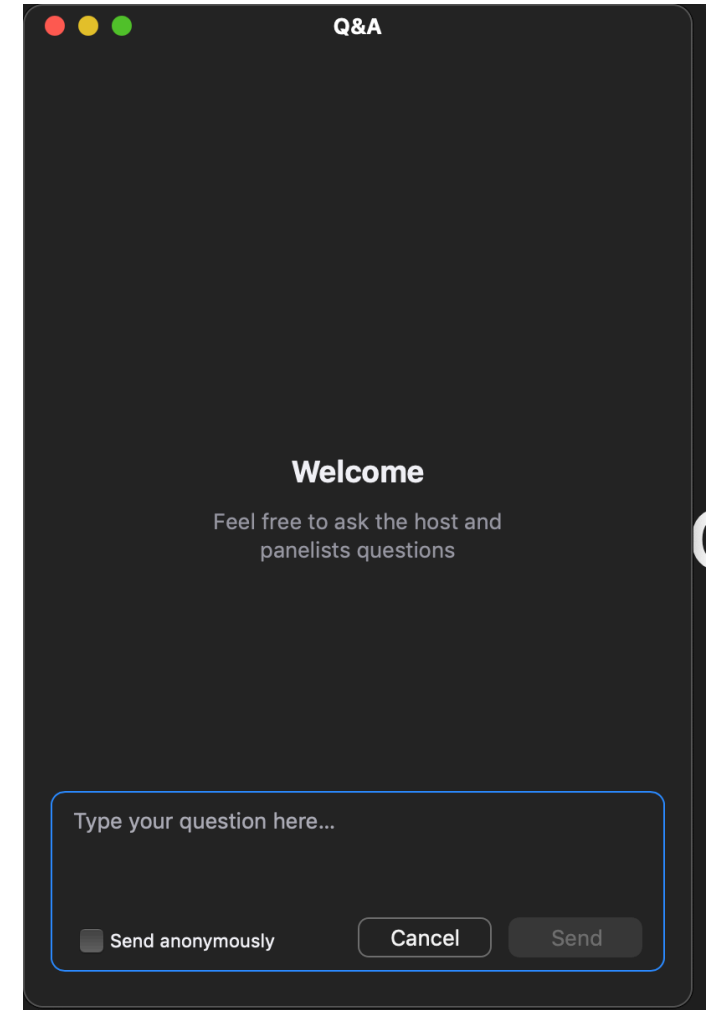
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ZOOM Webinar Housekeeping

- 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 Gabrielle Schiller (gabrielle.schiller@mssm.edu) or send her a message via the Zoom chat feature.
- Slides and webinar recording will be available at HaHUsersGroup.org and the TA Center.





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Geriatric Research, Education, and Clinical Center (GRECC) at the James J. Peters Veterans Affairs (VA) Medical Center

Hospital AT Home USERS GROUP

Web: hahusersgroup.org

Tw: [@hahusersgroup](https://twitter.com/hahusersgroup)

TA Center (beta): [www.capc.org/
strategies/acute-hospital-home](http://www.capc.org/strategies/acute-hospital-home)

The HaH Users Group Webinar Series

- The Hospital At Home Model and the CMS Acute Hospital Care At Home Waiver
- Building Support for Your Hospital at Home Program: Issues in Strategic Engagement
- Who's In, Who's Out? Deciding Which Patients Are Right for Your Hospital at Home Program
- Tech Matters: Building the Right Digital Platform for Your Hospital at Home Program
- Efficient, Effective, Excellent: Issues in Hospital at Home Logistics and Operations
- On Time, Every Time: Delivering Hospital at Home Ancillary Services
- **How Are We Doing? Evaluating Hospital at Home Quality and Safety**

See [Events](https://HaHUsersGroup.org) at HaHUsersGroup.org or the Users Group TA Center for more information...

[Learn more at HaHUsersGroup.org](https://HaHUsersGroup.org)

Today's Webinar

How Are We Doing?

**Evaluating Hospital at Home
Quality and Safety**



David Levine, MD MPH MA
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Brigham Health Home Hospital
Assistant Professor of Medicine, Harvard Medical School

Disclosures

David Levine: PI-initiated grants from Biofourmis and IBM

Agenda

- Defining Principles
- Measures
- How To Track
- How To Evaluate
- HaH National Data



Defining Principles on What to Measure



What you can do

BMJ

RESEARCH

 OPEN ACCESS

 Check for updates

Parachute from aircraft

Robert W Yeh
Jordan B Stro
Brahmajee K



Major trauma when jumping al

gyu Shen,¹ Daniel B Kramer,¹
rt M Domeier,³ Dhruv S Kazi,¹
investigators

[Learn more at: HaHUsersGroup.org](https://www.hausersgroup.org)

Fig 2 | Representative study participant jumping from aircraft with an empty backpack. This individual did not incur death or major injury upon impact with the ground

What You Do Need

High validity

Automated > manual



At least monthly feeds

EHR feeds when possible



Measures

Measures Required by CMS



Unanticipated mortality



Escalation

More Measures

During HaH

- Fall with serious injury
- Medication error with serious injury
- Delirium
- Pressure injury
- CAUTI
- Serious injury of staff 2/2 assault

After HaH

- 3-day readmission
- 30-day readmission
- 30-day ED presentation
- Days at home
- 14-day PCP visit
- Patient experience

A Q&S Measures Starter Set

Measure	Numerator	Denominator	Source
Unanticipated mortality	Patients with unanticipated death	Patients expected to live	HaH team
Escalation	Patients transferred back to the traditional hospital to continue their acute care	All patients	EHR
3-day readmission	Patients readmitted within 3 days of discharge	All patients	EHR
30-day readmission	Patients readmitted within 30 days of discharge	All patients	EHR
Days at home	Days spent at home between admission and 30-days later ¹	30	EHR

¹: not including patients expected to die

Some Guidance from the Literature

Measure	Annals IM 2005	JAMA IM 2018	Annals IM 2020
Unanticipated mortality	0% ¹	0.3% ¹	0%
Escalation	1.2%	11.2%	0%
3-day readmission	NR	NR	NR
30-day readmission	NR ²	8.6%	7.0%
Days at home	NR	NR	NR

¹: reported as all-cause mortality

²: only 60-day readmission reported as 28%

[Learn more at: HaHUsersGroup.org](https://www.hausersgroup.org)

Operational Measures

- Disposition time
- Daily utilization
- Visit time
- Travel time
- Overnight events
- Demographics
- Volume
 - Patients
 - ADC
 - Bed-days

More Guidance from the Literature

Appendix Table 1. Operational Process Measures

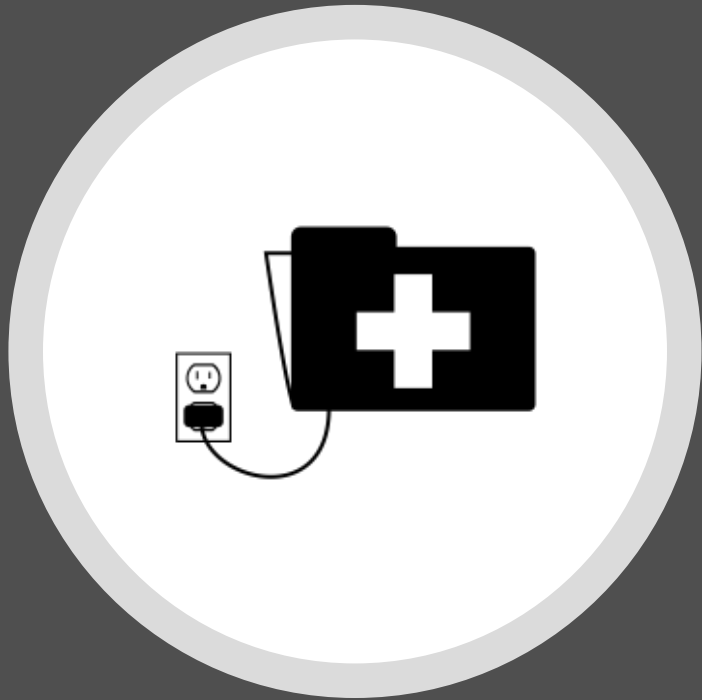
Process Measure	Home (n = 43)	Control (n = 48)
Mean time from admission decision to assessment by research assistant (95% CI), <i>min</i>	11 (0-25)	12 (4-20)
Mean time from research assistant assessment to completed enrollment (95% CI), <i>min</i>	29 (21-36)	27 (21-36)
Mean time from completed enrollment to dismissal from ED (95% CI), <i>min</i>	66 (54-78)	54 (28-80)

ED = emergency department.

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How to Track All Those Data



Tracking Systems



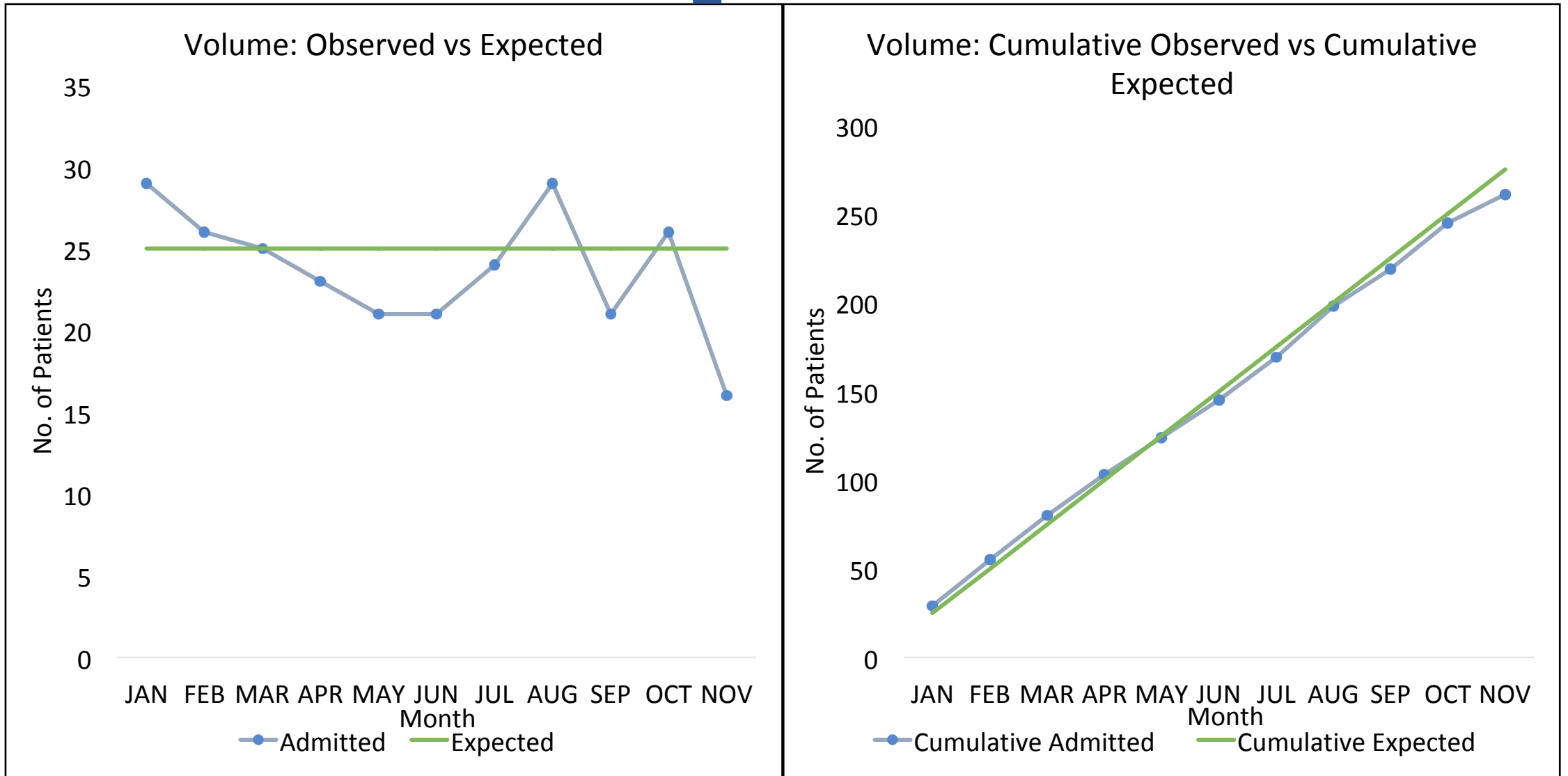
How to Evaluate Yourself



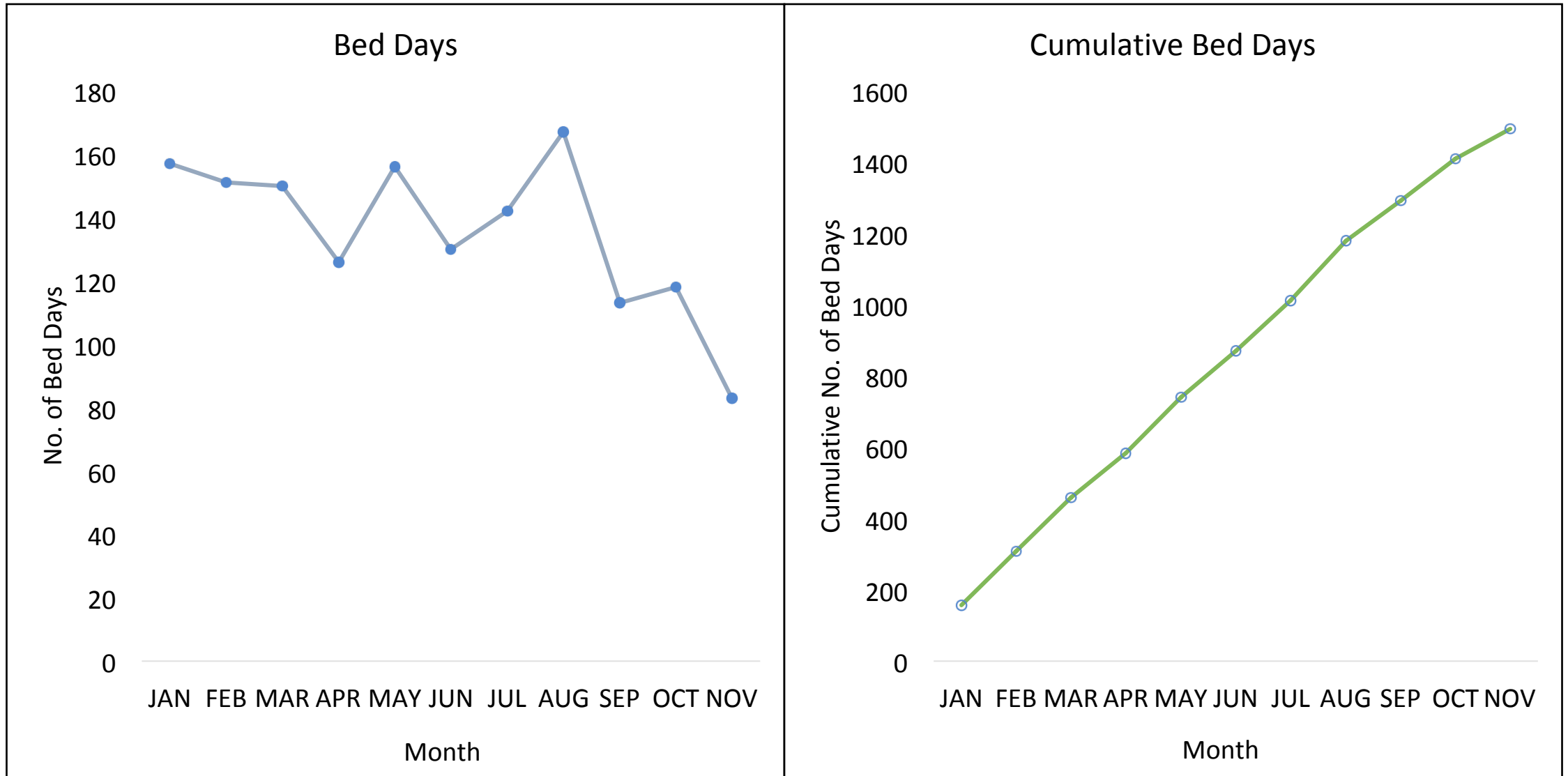
Your HaH Scorecard

Measure	Goal
Unanticipated mortality	
Escalation	
3-day readmission	
30-day readmission	
Days at home	
Volume	

Observed vs Expected



Run Charts



Summative Evaluation

7%

30-day readmission rate

3%

Escalation rate



HaH National Data Needs Your Program

Voluntary Data Collection Makes Us Stronger

- National evidence base
- Benchmarks
- Shared learning



QUESTIONS

Learn More

- Hospital at Home Users Group
<https://hahusersgroup.org/>
- Hospital at Home Users Group Technical Assistance Center
(Beta version, powered by CAPC)
<https://www.capc.org/strategies/acute-hospital-home/>
 - **Featured Resource – Annotated CMS Waiver** <https://www.capc.org/strategies/hospital-at-home-meeting-2020-cms-waiver-requirements/>

Watch Them Again...

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- On Time, Every Time: Delivering Hospital at Home Ancillary Services
- How Are We Doing? Evaluating Hospital at Home Quality and Safety (Up Soon)

See [Events at HaHUsersGroup.org](https://HaHUsersGroup.org) or the [Users Group TA Center](#) for more information...

More Soon

- Monthly webinars, starting at the end of March
- First topic = Pharmacy
- Please chat to us or put in the Q and A, topics you would like to see covered

Hospital AT **Home**
USERS GROUP

What Goes Here?

AAHCM
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Webinar
March, 2021



World Hospital at Home Congress

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Transforming Health Care

In today's environment, Hospital at Home is not just an opportunity to improve the delivery of health care, it is our responsibility. Providing high-quality, cost-effective and safe care for patients, hospital at home is the way of the future.



[Learn more at HaHUsersGroup.org](https://www.haHUsersGroup.org)

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