



Advising the Congress on Medicare issues

Medicare's Acute Hospital Care at Home program

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Today's presentation

- 1 Hospital-at-home delivery model
- 2 Medicare's Acute Hospital Care at Home (AHCaH) program
- 3 Considerations for future AHCaH policy

Acute Hospital Care at Home program evolved from hospital-at-home model of care

- HaH programs substitute in-home care for some or all of an inpatient stay at a brick-and-mortar hospital
- Health systems in foreign countries operate HaH programs
- Limited adaptation in the U.S. before pandemic; mostly pilots and small trials

Note: HaH (hospital at home)

Acute Hospital Care at Home program established to address inpatient capacity during the coronavirus pandemic

- Began operation in November 2020; permits hospitals to deliver FFS Medicare inpatient acute care services in a beneficiary's residence
- Beneficiary must be assessed at hospital
 - Early-supported discharge: Shortened hospital stay followed by AHCaH
 - Admission avoidance: No in-facility stay; beneficiary receives all inpatient care at home
- AHCaH discharges receive standard IPPS payment; no additional payment if beneficiary is "escalated" from home to hospital
- AHCaH extended by Congress until December 31, 2024

Note: FFS (fee for service), AHCaH (Acute Hospital Care at Home).

MedPAC interviews with hospitals active in the AHCaH program

- MedPAC interviewed several AHCaH hospitals
 - Many had HaH programs that predated the pandemic
- Interviews addressed operational and policy challenges of implementing HaH/AHCaH
- Key insights from interviews:
 - Programs reflect local context of hospital/health system
 - AHCaH volume have increased since PHE
 - Positive view of providing inpatient care at home

Note: AHCaH (Acute Hospital Care at Home); HaH (Hospital at home)

Common elements of AHCaH programs

Clinical population

- Clinical criteria (e.g. chronic conditions or surgical conditions)
- Require inpatient level of care
- Exclusions for patients that require intensive monitoring or are too severe
- Safe home environment

In-home clinical care

- Admission avoidance or early-supported discharge
- Daily in-person visits from nurse or paramedic
- In-home physician visit (often virtual)
- Digital monitoring/remote patient monitoring
- 24/7 on-demand audio/video communication for hospital staff and patient

Ancillary and other acute care services

- Transportation
- Pharmacy/infusion
- Laboratory and radiology services
- Food/nutrition services
- Personal care services
- Durable medical equipment/medical supplies
- Other clinical services (social work, physical/speech/occupational therapy)

Geographic service area

- Typically a certain radius from the hospital
- Focus of care delivery network for in-home services
- Rapid response in emergent situations

Note: AHCaH (Acute Hospital Care at Home)

Source: MedPAC analysis of CMS AHCaH waiver application; Levine, D. M., K. Ouchi, B. Blanchfield, et al. 2020. Hospital-level care at home for acutely ill adults: A randomized controlled trial. *Annals of Internal Medicine* 172, no. 2 (January 21): 77-85.

Flexibility in AHCaH program results in differences in patients and services offered

- Participating hospitals select their own clinical conditions and other program criteria for AHCaH services
- Reflects the context of the hospital
 - Capacity challenges for inpatient beds/emergency room
 - Hospital resources available for implementation
 - Interest of other payors
- Programs can evolve with implementation
 - Increase discharge volume, expand clinical conditions and services provided

Note: AHCaH (Acute Hospital Care at Home)

Assessing the impact of hospital at home

	Two systematic reviews of 19 HaH trials	Brigham and Women's Hospital study
Mortality	HaH comparable to usual care	HaH comparable to usual care
Length of stay	Mixed	0.7 days longer for HaH
Readmissions to hospital	Mixed; one review found lower readmissions for HaH; other no difference	Lower readmissions rate for HaH
Patient function	No difference in most trials; two trials found improved function	No difference
Cost of care	Not assessed in most studies; 2 trials provided weak evidence for some savings	HaH cost per discharge 19% lower
Patient experience	Reviews found that experience was comparable or better	HaH comparable to usual care

Note: HaH (Hospital at home)

Source: Arsenault-Lapierre, G., M. Henein, D. Gaid, et al. 2021. Hospital-at-home interventions vs in-hospital stay for patients with chronic disease who present to the emergency department: A systematic review and meta-analysis. *JAMA Network Open* 4, no. 6 (June 1): e2111568.; Shepperd, S., S. Iliffe, H. A. Doll, et al. 2016. Admission avoidance hospital at home. *Cochrane Database of Systematic Review* 9, no. 9 (September 1): CD007491; Levine, D. M., K. Ouchi, B. Blanchfield, et al. 2020. Hospital-level care at home for acutely ill adults: A randomized controlled trial. *Annals of Internal Medicine* 172, no. 2 (January 21): 77-85.

Important limitations in evaluating HaH/AHCaH evidence

- Most of the HaH trials included in systematic reviews were not conducted in the United States
- Brigham and Women's Hospital reflects experience of HaH at one health system and a small sample (n=91)
- In practice, beneficiaries are not randomized to AHCaH
 - No refusal data for AHCaH, but past experience indicates can be substantial (e.g. 63% rejected offer of HaH in Brigham and Women's study)
 - Unfamiliarity with HaH, patient expectation of inpatient services mentioned as factors by hospitals operating AHCaH program
- Hospital participation in AHCaH is voluntary
 - 285 hospitals approved in 2022, only 105 reported any volume

Note: AHCaH (Acute Hospital Care at Home); HaH (Hospital at home)

AHCaH discharges concentrated among a minority of active hospitals

- About 6,200 total AHCaH discharges in 2022 (less than 0.01% of FFS Medicare discharges)
- 26 largest programs (>75 discharges) accounted for 71% of volume
- Claims data for AHCaH discharges in FY2022 indicated longer length of stay, fewer lab and radiology services (not risk adjusted)

Source: MedPAC analysis of CMS AHCaH data

Note: AHCaH (Acute Hospital Care at Home)

Hospitals active in AHCaH tended to be higher volume, non-profit teaching hospitals, 2022

- About 37% of approved hospitals reported at least one AHCaH discharge
- Active AHCaH hospitals tended to be urban, teaching, non-profit, higher volume, higher occupancy
- Major factors that may limit participation:
 - Hospital resources for establishing new service line
 - Regulatory issues (state/local requirements may limit or prohibit AHCaH)
 - Engaging clinical staff to support new service

	AHCaH hospitals	Other hospitals
Number of hospitals	103	3,190
Urban (percent)	91	76
Teaching hospital (percent)	68	36
For-profit (percent)	2	25
Median:		
Inpatient beds	314	217
Admissions:		
All-payer	16,896	5,320
Medicare	4,089	1,396
Occupancy (percent)	81	61
Total (all-payer) profit margin (percent)	3.0	1.1

Source: MedPAC analysis of AHCaH data, hospital cost reports, and hospital impact file, 2022 data; at least one AHCaH discharge in 2022 required to be classified as an AHCaH hospital

Note: AHCaH (Acute Hospital Care at Home)

AHCaH discharges receive fewer services, but unclear if total cost of a discharge is lower than usual care

- Comparisons stymied by differences in participating beneficiaries and hospitals
- AHCaH beneficiaries receive fewer of some medical services (e.g., lab, physician consults) than other hospitalized beneficiaries
- Other aspects of AHCaH may be more expensive due to inefficiencies of delivering care in-home (practitioner travel time, additional hospital infrastructure to operate and oversee the care)
- Not clear that savings from fewer services offset higher per-unit costs
 - AHCaH hospitals had mixed views on cost
- Lower AHCaH readmissions could result in some savings but difficult to measure this effect due to challenges in measuring outcomes

Note: AHCaH (Acute Hospital Care at Home).

Source: MedPAC analysis of Medicare AHCaH data.

Important aspects of AHCaH model are still under development

- Current program regulations were established during the PHE
- Assessing current AHCaH operational practices could be useful for shaping future policy
 - Remote patient monitoring
 - Substitution of virtual physician visits for in-person visits
 - Timeliness of hospital response to urgent care
 - Impact of AHCaH on informal caregivers

Note: AHCaH (Acute Hospital Care at Home), PHE (public health emergency).

Key considerations for the future of AHCaH

- Comparing outcomes of AHCaH to usual care will be challenging
- Potential concerns for the Medicare program

Note: AHCaH (Acute Hospital Care at Home)

Comparing AHCaH outcomes to those of usual inpatient care will be challenging

- Beneficiaries have not been randomized to AHCaH and may decline the service
- Hospitals have flexibility to set inclusion/exclusion criteria and costs, so there will be variation across facilities
- Hospitals participating in AHCaH represent 3% of IPPS hospitals; experience of program will reflect large, non-profit teaching hospitals
- Previous CMS-funded HaH pilot could not assess key outcomes because administrative data did not capture severity differences for treatment and control populations

Note: AHCaH (Acute Hospital Care at Home)

Source: Gilman, B., D. Whicher, R. Brown, et al. 2020. *Evaluation of the Health Care Innovation Awards, round 2: Final report*. Mathematica. <https://innovation.cms.gov/data-and-reports/2020/hcia2-round-2-final-eval-report-sept-2020-0>.

AHCaH: Potential concerns for the Medicare program

- Requirements for AHCaH admission leave substantial room for clinical judgment; could allow admission of beneficiaries who are not appropriate candidates
- Potential risk for Medicare if AHCaH is used instead of other, lower-cost, services (e.g., home health, hospice, nursing facility, home infusion)
 - Early-supported discharge model, which includes a regular hospital stay, may pose less risk
 - Models with no prior hospitalization required likely pose greater risk
 - Admission avoidance (assessed at hospital but receives acute care services at home)
 - No prior hospital stay or visit (not currently permitted in AHCaH) (highest risk)

Note: AHCaH (Acute Hospital Care at Home)

Discussion

- Questions?
- Considerations regarding extension of the AHCaH model
 - Potential impact of participation of broader range of hospitals?
 - Should CMS better define the AHCaH care model?
 - Use of virtual visits for physician services
 - Requirements for caregiver
 - Improved data for tracking services provided and beneficiaries served
 - Other program safeguards?
- June 2024 report chapter



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