Leveraging AI and Automation to Help Scale a Hospital at Home Program

Kevin G. Munjal and Allen Dine | Care2U — Hospital at Home

PRACTICE PROBLEM & OBJECTIVES

Hospital at Home programs face significant scalability barriers: high documentation burden, communication inefficiencies, and labor-intensive care coordination and next-day scheduling. Non-waiver programs face compounding pressure, operating without the bundled payment model and administrative infrastructure.

Care2U identified that administrative and operational burdens were consuming clinician and coordinator time that should be redirected toward patient care. Beginning in 2025, we implemented targeted AI and automation in each domain to reduce administrative burden and free staff time for direct patient care.

DESCRIPTION OF INTERVENTION

Care2U is a non-waiver Hospital at Home and ED at Home program serving 9 counties in lower New York State, providing same day appointments for new high-acuity care needs in the home as an alternative to hospitalization. Our interdisciplinary team includes physicians, APPs, nurses, and paramedics. We deployed AI across three domains:

Communication
Voice AI agents — inbound , outbound ETA, post discharge check-in calls

Documentation
Ambient scribe — automated clinical note capture

Care coordination
Automated next-day task and appointment generation

MEASURES OF SUCCESS

We evaluated AI impact across three metrics:

- Time to chart closure — days from encounter to finalized note, a proxy for physician documentation time
- Administrative time spent on next-day scheduling
- Volume and minutes of AI agent phone communication

AI DEPLOYMENT TIMELINE

Technical foundation to drive innovation using AI for Acute Care at Home model in place since July 2023

May 2025
Automated next-day scheduling launch & task automation

Jan 2026
Ambient scribe deployed

Feb 2026
Voice AI agents live (ETA, Discharge Check-in)

Jul 2026
AI-led Dispatch & Logistics

FINDINGS TO DATE

After ambient scribe deployment (Jan 2026) in one market, average chart closure improved from 6.0 to 4.2 days — a 30% reduction, suggesting meaningfully lower documentation burden. Since automated next-day scheduling and task generation launched (Aug 2025), 12,967 visits were auto scheduled, 490 hours of dispatcher time saved. Voice AI adoption began Feb 2026: 10,346 outbound ETA calls and 11,528 text message notifications (1,034 hours of agent phone time) and 490 inbound calls managed by AI (437 min saved for on-call coordinators).

Days to chart closure (pre-post Jan 2026)



Hours saved by tool

Dispatcher scheduling 12,967 visits auto scheduled	**1080 h**
Voice AI outbound ETA 10,346 calls, Text messages 11,528	**1034 h**
Voice AI inbound calls 490 calls · 437 min	**7.3 h**

Total ≈ 950 hours of staff time saved

12,967	visits auto scheduled since May 2025
10,346	outbound AI Voice Agent calls since Feb 2026
35,278	Automation driven tasks since May 2025
490	Inbound calls handled by AI Voice Agent since Feb 2026
30%	Faster chart closure since Jan 2026

Together, these tools represent a practical AI deployment framework for non-waiver Hospital at Home programs.

Acknowledgement: Special thanks to Azodha, for assistance and deployment of AI features.