Hospital AT Home USERS GROUP

Tech Matters: Building the Right Digital Platform for your Hospital at Home Program

Jared Conley, MD, PhD, MPH | Massachusetts General Hospital

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

AAHCM AMERICAN ACADEMY OF HOME CARE MEDICINE

aahcm.org

American Hospital Association™

Advancing Health in America

aha.org

Webinar

February 2, 2021

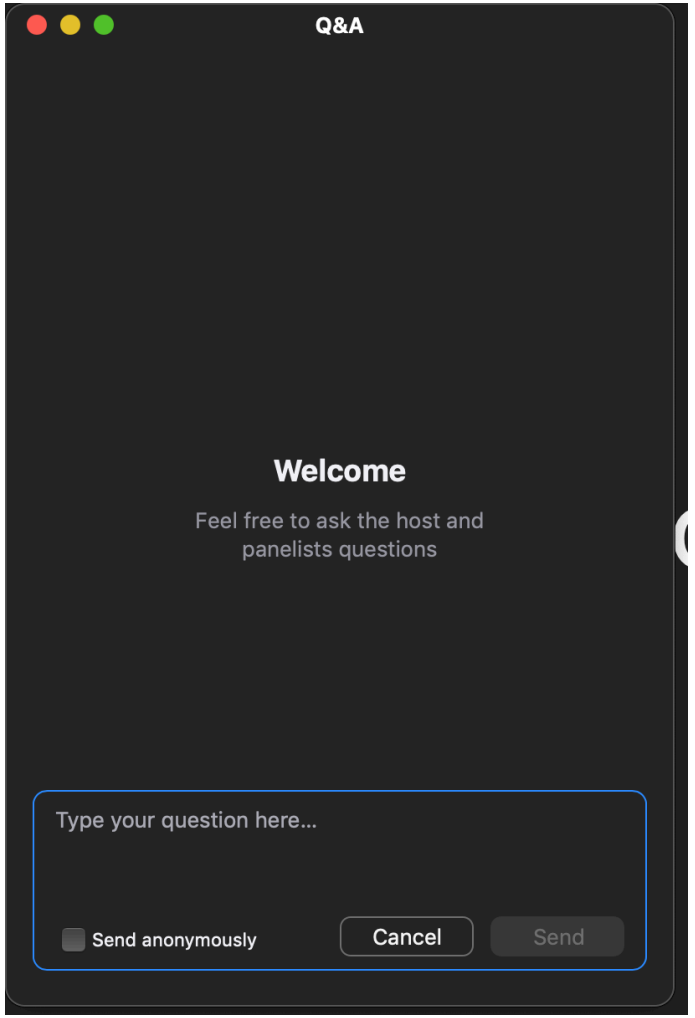
We appreciate the generous support of

The John A. Hartford Foundation

Hospital at Home USERS GROUP

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.



Bruce Leff, MD
Professor of Medicine
The Johns Hopkins School of Medicine

Hospital AT Home
USERS GROUP

Hospital AT Home
USERS GROUP

Web: hahusersgroup.org
Tw: @hahusersgroup

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 (today)**

- Efficient, Effective, Excellent: Issues in Hospital at Home Logistics and Operations (2/9)
- On Time, Every Time: Delivering Hospital at Home Ancillary Services (2/16)
- How Are We Doing? Evaluating Hospital at Home Quality and Safety (2/23)

See Events at HaHUsersGroup.org or the Users Group TA Center for more information…

Today's Webinar

Tech Matters

Building the Right Digital Platform for Your Hospital at Home Program

Hospital at Home USERS GROUP

Jared Conley, MD PhD MPH
Associate Director, MGH Healthcare Transformation Lab
Instructor in Emergency Medicine, Harvard Medical School

David Levine, MD MPH MA
Medical Director for Strategy and Innovation,
Brigham Health Home Hospital
Assistant Professor of Medicine, Harvard Medical School

Hospital AT Home
USERS GROUP

Disclosures

Jared Conley: Consultant, Biofourmis and Change Healthcare

David Levine: PI-initiated grants from Biofourmis and IBM

Hospital AT Home
USERS GROUP

Agenda

- Intro to digital platform
- Communication technology
- Monitoring technology
- Electronic health record
- Technology ecosystems
- Q&A

Hospital AT Home
USERS GROUP

Building the Right Digital Platform to Successfully Launch your HaH Program

Jobs to Be Done Framework:

- Seamless communication
- Transmission, monitoring/alerting of key physiologic metrics
- Documentation/billing
- Logistics management

Building Right Digital Platform: Human vs Tech

Communication Technology

Communication Technologies

Telemedicine in acute care at home is unique and high stakes.

- Patient population factors
- Clinician factors
- Care model factors

Navigating the HaH Telemedicine Frontier

HaH x Telemedicine Compass

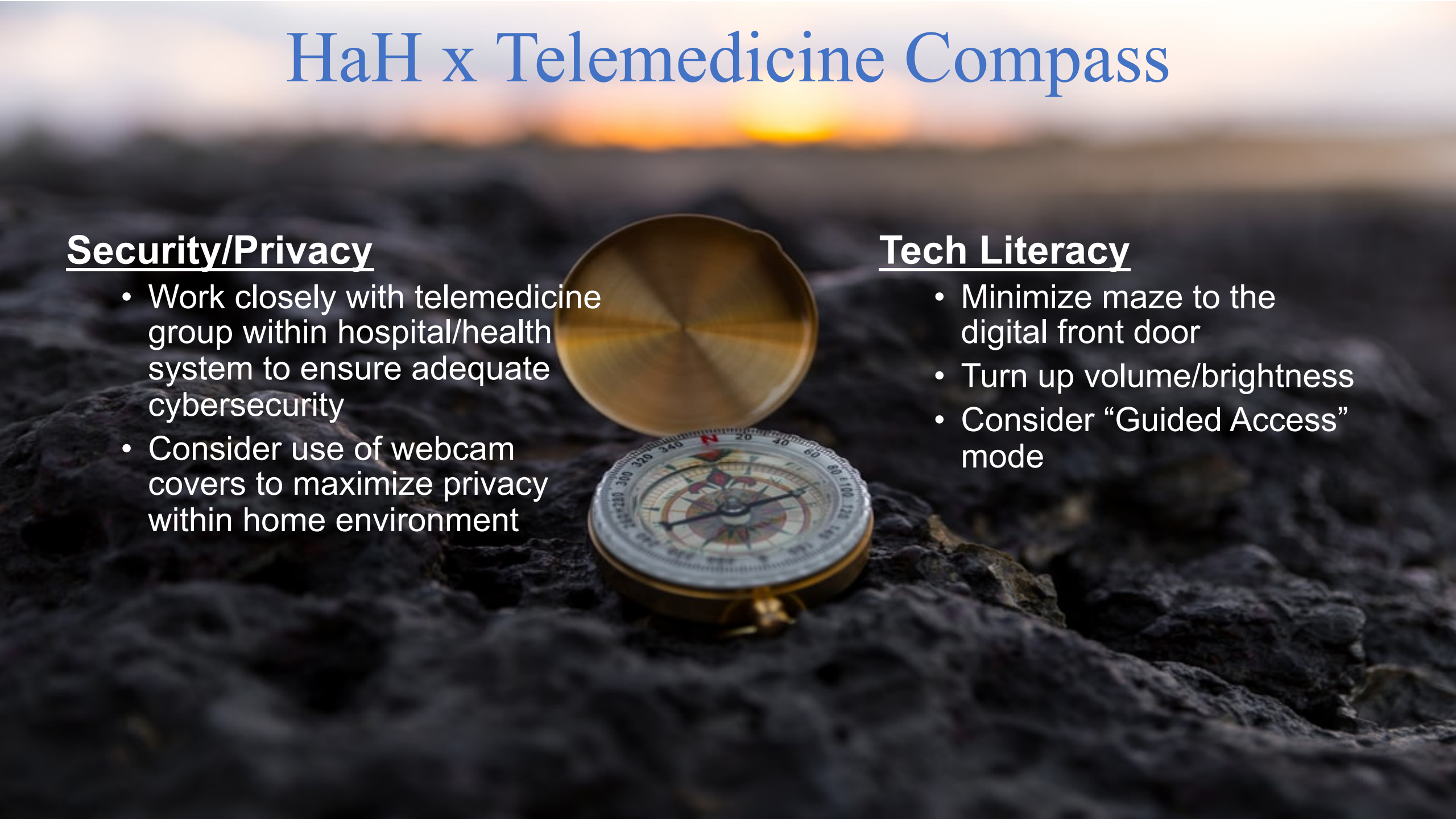
Clinical Data Retrieval

- Virtual visits
  - Understand appropriate patient populations and timing within episode of care
- Determine appropriateness of audio vs video
- Train clinicians in virtual acute care physical exams

Home/Car Environment

- Generate home tech screening tool
  - Wi-Fi genotype/phenotype
  - Assessing best location for tablet placement
  - Test connection BEFORE you leave home
- Develop video-based telemedicine solutions that function across the diversity of home/car environments
  - Consider use of LTE-enabled devices vs. mobile hotspot vs. Wi-Fi extenders

HaH x Telemedicine Compass



Security/Privacy

- Work closely with telemedicine group within hospital/health system to ensure adequate cybersecurity
- Consider use of webcam covers to maximize privacy within home environment

Tech Literacy

- Minimize maze to the digital front door
- Turn up volume/brightness
- Consider “Guided Access” mode

Monitoring Technology

Monitoring is Like Your Beach Umbrella

Human Interface Decisions

VS

Passive

Active

Spatial Decisions

vs

vs

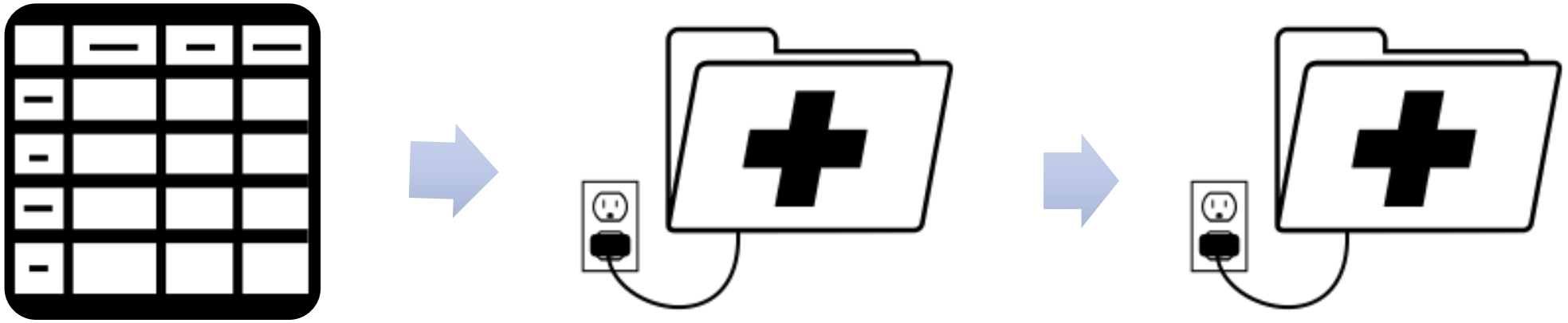
Ambient Wearable Intermittent

Clinical Decisions

- Tune your criteria to your monitoring capabilities
- Check response capabilities
  - Timeliness
  - Training of responder
  - Remote vs on-site
- Right monitoring for the right patient
  - Be ready for the immature static alarm

The Electronic Health Record

Progress?



Spreadsheet EHR

- Custom
- Disconnected

Outpatient EHR

- Clunky
- Connected

Inpatient EHR

- Less clunky
- Connected

Inpatient EHR Tools

- Visibility for your home hospital program
- Pharmacy
  - Pharmacy safety checks
  - Pharmacist review
  - Familiar drugs and doses
- Familiar admission pathways
- Order sets
- Consultation
- Encounter-based roll-up

Supplementing the EHR

- Handoff
  - Hospital team -> home team
  - Home clinician -> home clinician
- Shared tasks
- Built for mobile

Technology Ecosystems

Architecture of HaH Tech System

Architecture of HaH Tech System

Tech Foundation Principles

- Map out human vs. tech architecture
  - Consider tiered approach to patient populations based on clinical risk profile and geography
  - Lenses of interest: **patient safety**, patient/clinician experience, cost
- Early engagement with hospital/system telemedicine, RPM, EHR leaders/groups
- Recognize level of market maturity of tech x HaH
- Understand digital platform options:
  - integrated, turn-key solutions vs. compilation of best individual products vs. something in between

Architecture of HaH Tech System

Communication

- Minimize telemedicine platforms but realize diversity of communication needs might still require two vendors

Monitoring

- One device vs. one device with peripherals
- Software platforms agnostic to device
- Alert communication pathways

EHR

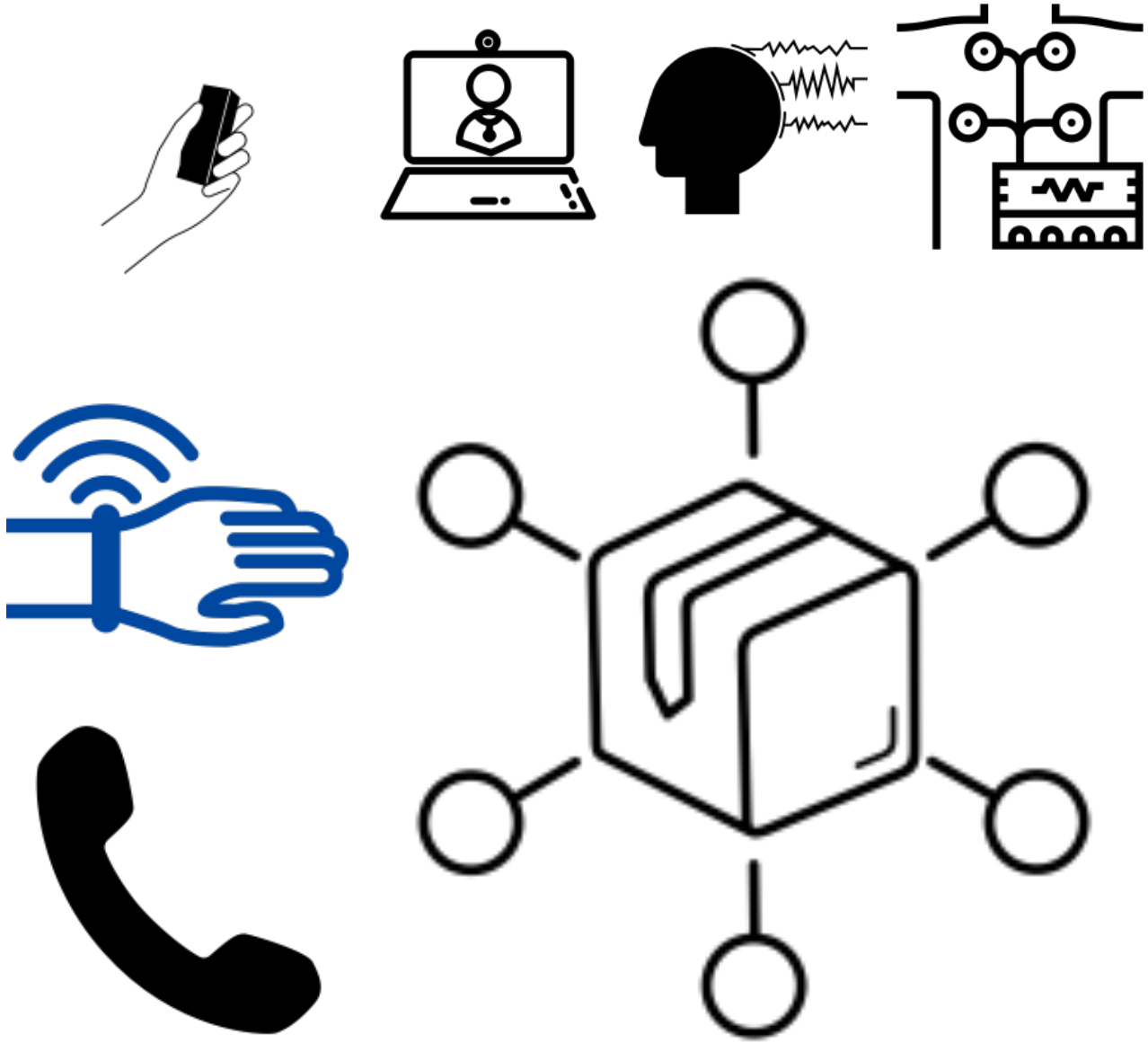
- Hub of digital platform integration
- When not feasible, ensure seamless information transfer across digital platform

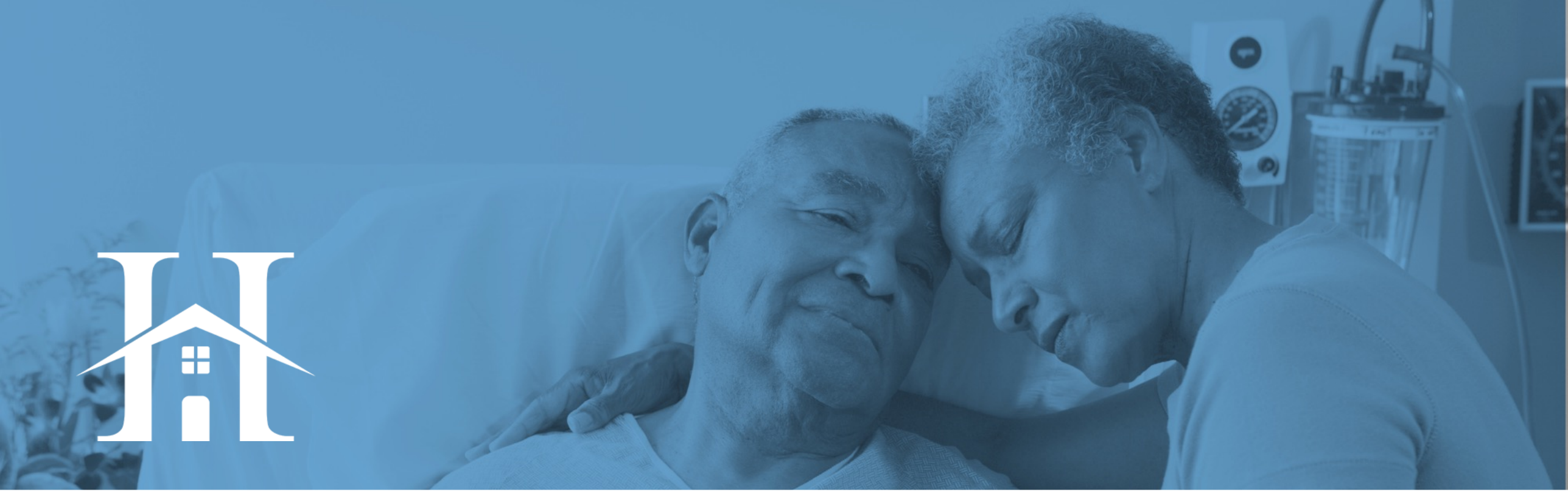
Logistics Management

- Tech offerings aiming to improve efficiency in scheduling
- Geotracking/geolocation opportunities to maximize efficiency and minimize equipment loss

What you really don’t need…

…but what you might want…





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/

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 (today)**

- Efficient, Effective, Excellent: Issues in Hospital at Home Logistics and Operations (2/9)
- On Time, Every Time: Delivering Hospital at Home Ancillary Services (2/16)
- How Are We Doing? Evaluating Hospital at Home Quality and Safety (2/23)

See Events at HaHUsersGroup.org or the Users Group TA Center for more information…

THANK YOU

AAHCM
AMERICAN ACADEMY OF HOME CARE MEDICINE

American Hospital Association™
Advancing Health in America

The John A. Hartford Foundation

Please make sure to join our next webinar:

Efficient, Effective, Excellent:
Issues in Hospital at Home Logistics and Operations

February 9, 2021 - 4pm – 5pm ET

Hospital AT Home
USERS GROUP