



# Mastering Meds

**Exploring Approaches to Pharmacy in Hospital at Home**

**Linda DeCherrie, MD** | Mount Sinai Hospitalization at Home

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

**Donald Mashni, PharmD** | Mount Sinai Health System



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**Webinar**  
March 30, 2021



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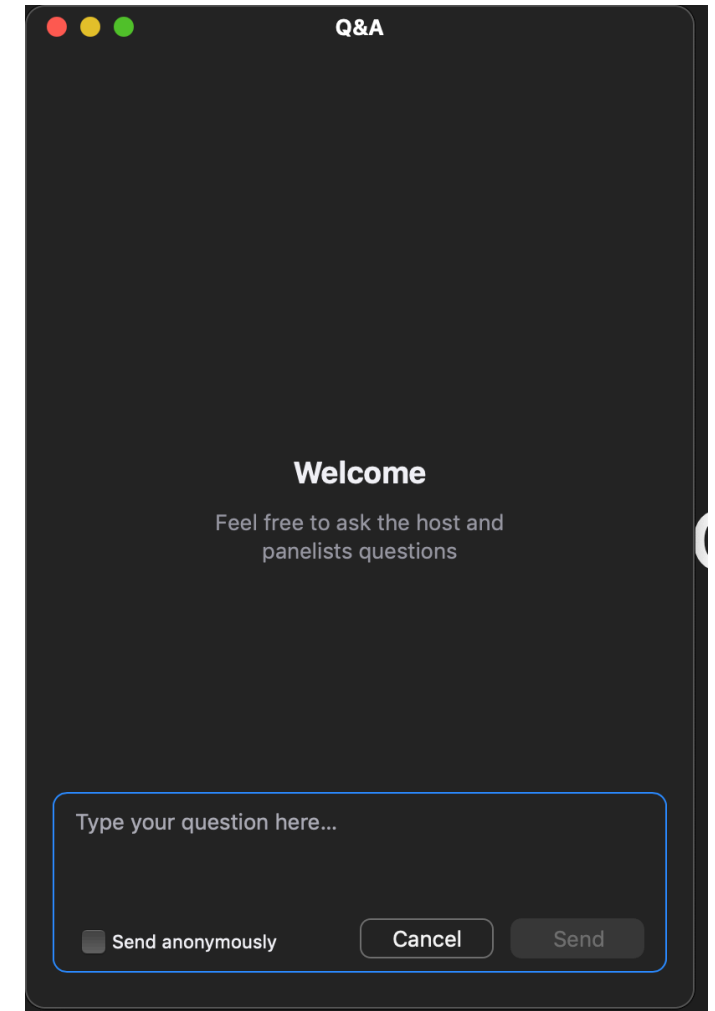
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# ZOOM Webinar Housekeeping

- 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 Gabrielle Schiller ([gabrielle.schiller@mssm.edu](mailto: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

Web: [hahusersgroup.org](http://hahusersgroup.org)

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

# More Soon

- Monthly webinars
- Next topic = Patient Identification
- Please chat to us or put in the Q and A, topics you would like to see covered



**Hospital AT Home**  
USERS GROUP

**Building Support for Your  
Hospital at Home Program:  
Issues in Strategic Engagement**

**Ryan Thompson, MD** | Massachusetts General Hospital  
**Karen Titchener, MS** | Huntsman

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**Webinar**  
January 19, 2021

**Today's Webinar**

# **Mastering Meds**

## **Exploring Approaches to Pharmacy in Hospital at Home**



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# Disclosures

**David Levine:** PI-initiated grants from Biofourmis and IBM

**Linda DeCherrie:** is a full-time employee of the Icahn School of Medicine, which in turn has an ownership interest in a joint venture with Contessa Health, a venture that manages acute care services provided to patients in their homes through prospective bundled payment arrangements. Dr. DeCherrie has no personal financial interest in the joint venture.

# Agenda

- Pharmacy at Sinai
- Pharmacy at Brigham
- Pharmacy considerations



# Pharmacy at Sinai

# History of Pharmacy at Mount Sinai Hospitalization at Home

# History

Years	Category	Meds	Concerns
2014-2017- CMMI Grant	Faculty outpatient practice	<ul style="list-style-type: none"><li>• Purchased Meds from Mount Sinai Outpatient pharmacy to stock in practice</li><li>• Meds at home could be used</li><li>• Some meds prescribed to outpatient pharmacy and paid through patients' pharmacy benefit</li></ul>	Not labeled per patient

# History

Years	Category	Meds	Concerns
2017-2020	Faculty outpatient practice  Payor contracts required Part D oral/injectables to be processed usual way	<ul style="list-style-type: none"><li>• IV meds from Infusion pharmacy</li><li>• Allowed pumps/balls</li><li>• Meds at home could be used</li><li>• Oral/Injectables from retail pharmacy</li></ul>	<ul style="list-style-type: none"><li>• Patients could not always arrange pickup from local pharmacy or pay co-pays</li><li>• Infusion pharmacy not as rapid as needed</li></ul>

# History

Years	Category	Meds	Concerns
3/2020-present - Completing Hospitalization at Home (CHAH)	Faculty outpatient practice  No utilization of pharmacy benefit	<ul style="list-style-type: none"><li>• IV meds from Infusion pharmacy</li><li>• Allowed pumps/balls</li><li>• Meds at home could be used</li><li>• Oral/Injectables from outpatient hospital pharmacy</li></ul>	<ul style="list-style-type: none"><li>• Infusion pharmacy not as rapid as needed</li></ul>

# History

Years	Category	Meds	Concerns
11/2020-present – FFS Medicare Waiver	Inpatient unit  No utilization of pharmacy benefit	<ul style="list-style-type: none"><li>• IV meds from IP pharmacy</li><li>• pumps/balls from infusion pharmacy</li><li>• Meds at home could be used</li><li>• Oral/Injectables from IP pharmacy</li></ul>	<ul style="list-style-type: none"><li>• Dispensing 5 days at a time</li><li>• Controlled medications</li></ul>

# IP Order Set Allowing IP Pharmacy or OP Pharmacy Choices

## ▼ Angiotensin Converting Enzyme Inhibitor, Angiotensin Receptor Blockers or Angiotensin Receptor Neprilysin

### ☒ ⓘ IP pharmacy dispense

Duration defaulted to 5 days. May be changed to a max of 7 days as needed.

- ☐ enalapril (VASOTEC) tablet  
for 5 days, Hospitalization at Home
- ☐ lisinopril (PRINIVIL,ZESTRIL) tablet  
for 5 days, Hospitalization at Home
- ☐ losartan (COZAAR) tablet  
for 5 days, Hospitalization at Home
- ☐ valsartan (DIOVAN) tablet  
for 5 days, Hospitalization at Home
- ☐ sacubitril-valsartan (ENTRESTO) 24-26 mg per tablet  
for 5 days, Hospitalization at Home
- ☐ sacubitril-valsartan (ENTRESTO) 49-51 mg per tablet  
for 5 days, Hospitalization at Home
- ☐ sacubitril-valsartan (ENTRESTO) 97-103 mg per tablet ⓘ  
for 5 days, Hospitalization at Home

### ☒ ⓘ OP pharmacy dispense

Duration defaulted to 5 days. May be changed to a max of 7 days as needed.

- ☐ enalapril (VASOTEC) 5 mg tablet ⓘ  
Disp-5 tablet, R-0
- ☐ lisinopril (PRINIVIL,ZESTRIL) 5 mg tablet  
Disp-5 tablet, R-0
- ☐ losartan (COZAAR) 25 mg tablet  
Disp-5 tablet, R-0
- ☐ valsartan (DIOVAN) 80 mg tablet  
Disp-5 tablet, R-0
- ☐ sacubitril-valsartan (ENTRESTO) 24-26 mg tablet tablet  
Disp-10 tablet, R-0
- ☐ sacubitril-valsartan (ENTRESTO) 49-51 mg tablet tablet  
Disp-10 tablet, R-0
- ☐ sacubitril-valsartan (ENTRESTO) 97-103 mg tablet tablet  
Disp-10 tablet, R-0

# Administration of Medications at Mount Sinai Hospitalization at Home

# Medication Administration

- IV meds/fluids – administered by RN in the home or on a pump
  - Patient not expected to start/stop/disconnect
  - Taught alarms on pumps and what to call for
- SQ lovenox – RN administers
- Oral meds – pre-poured into pill box
- All meds documented by RN in an MAR

# Technical Issues

# Pre-Admit Status

- ED patients about to go to HAH have orders placed in a pre-admit status, which are not able to be released until patient physically leaves ED.
- Pharmacy can now be notified of pre-admit orders and run a report and start to prepare meds.
- Dispense meds once orders are released.



# Pharmacy at Brigham

# Phase 1

Years	Category	Meds	Concerns
2016-2020	Research project ↓ BWPO project ↓ BWH service line  No use of pharmacy benefit	All meds: inpatient -> outpatient pharmacy	<ul style="list-style-type: none"><li>• Outpatient pharmacy closed at 5 pm and on Sundays</li><li>• No use of inpatient EHR tools</li><li>• No default pharmacist check</li><li>• Outpatient pharmacists lack inpatient expertise</li></ul>

# Phase 2

Years	Category	Meds	Concerns
2020 – present	BWH service line No use of pharmacy benefit	All meds: inpatient pharmacy	None?

# Physician Pharmacy



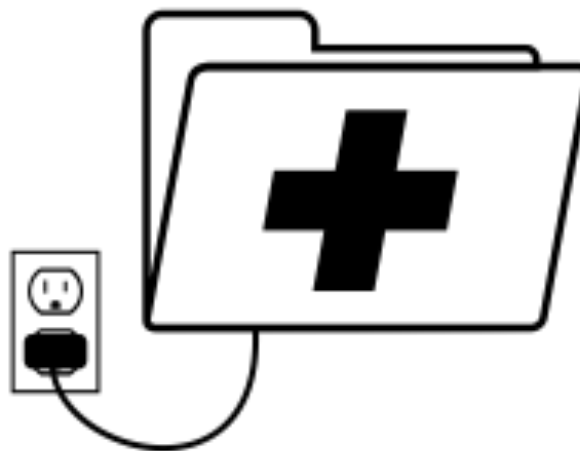
Physicians carry first- and urgent-dose medications

# Patient-Administered Medications



Let patients take meds, but check and document carefully

# Inpatient Pharmacy



Inpatient EHR build – we can't go back!



# Pharmacy Considerations

# Develop Policies and Procedures to Guide Growth of HaH Pharmacy Services

- Patient education
- Control substances
- Self-administered and infused medications
- Storage of medications at home
- Labeling requirements
- Documentation of medication administration
- Disposal of unused medications

# Optimize EHR

- Develop HaH specific order sets
  - Avoid off processes to optimize pharmacy operating efficiencies and minimize provider disruptions to EHR workflow with adherence to formulary
- Develop workflows and documentation to accommodate decentralized pharmacy services
- Capture pharmacy charges upon med administration or dispensation

# Medication Administration Records

- Patients self-report oral self-administered meds
  - RN documents upon visit
- RN administers and documents infused/injected meds
- Mobile Health Technologies
  - Dose alerts, drug education, administration documentation, symptoms and side effects reporting

# Storage of Medications

- Consider OTC meds and Rx meds already in home
- Refrigerated Meds
  - Ideal: temperature monitored refrigerator dedicated to meds
  - Practical: segregate meds in home fridge (protect in plastic food storage bags)
- Room Temp Meds
  - Cool, dry space (not in bathroom), room temp (68-77 F) with excursions permissible (59-86 F)

# Legal and Regulatory

- Labeling requirements differ for inpatient and outpatient Rx's
- State boards of pharmacy requirements may evolve differently for HaH patients
- Consider “outpatient” labels for self-administered meds
- Inpatient labeling requirements for infused meds are probably adequate
- Err on the side of caution for controlled substances and adhere to outpatient labeling requirements

# Payer Considerations

- Pharmacy Benefit Administrators (Outpatient Rx Benefit) prohibit billing for outpatient meds while patients are hospitalized.
- Billing Rx benefit for HaH patients may be a gray area for MA patients with a Part D plan.
- May be appropriate to avoid use of outpatient pharmacy benefit for patients receiving HaH services.

# IVP Opportunities for HaH Antibiotics

- Aztreonam
  - Administer by slow IV push over 3 to 5 minutes
- Cefazolin
  - Administer 1 gram by slow IV push over 3 to 5 minutes
- Ceftriaxone
  - Administer by slow IV push over 3 to 5 minutes
- Cefoxitin
  - Administer by slow IV push over 3 to 5 minutes
- Cefepime
  - Administer slow IV push over 3 to 5 minutes
- Cefuroxime
  - Administer by slow IV push over 3 to 5 minutes
- Daptomycin
  - Administer by IV push over 2 minutes
- Meropenem
  - Administer by slow IV push over 3 to 5 minutes



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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## Transforming Health Care

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

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