



# Hospital at Home for Dialysis Patients: A patient-centric approach to hospital capacity management

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## Background

Oregon Health & Science University (OHSU) has long faced hospital capacity issues, more recently compounded by the COVID-19 pandemic.

Additionally, there have been outpatient dialysis chair shortages in the state of Oregon due to workforce staffing issues. This has led to many patients waiting weeks or even months in the hospital to secure a new chair for community dialysis. Without a chair, these patients are unable to discharge, further exacerbating our capacity constraints.

## Innovation

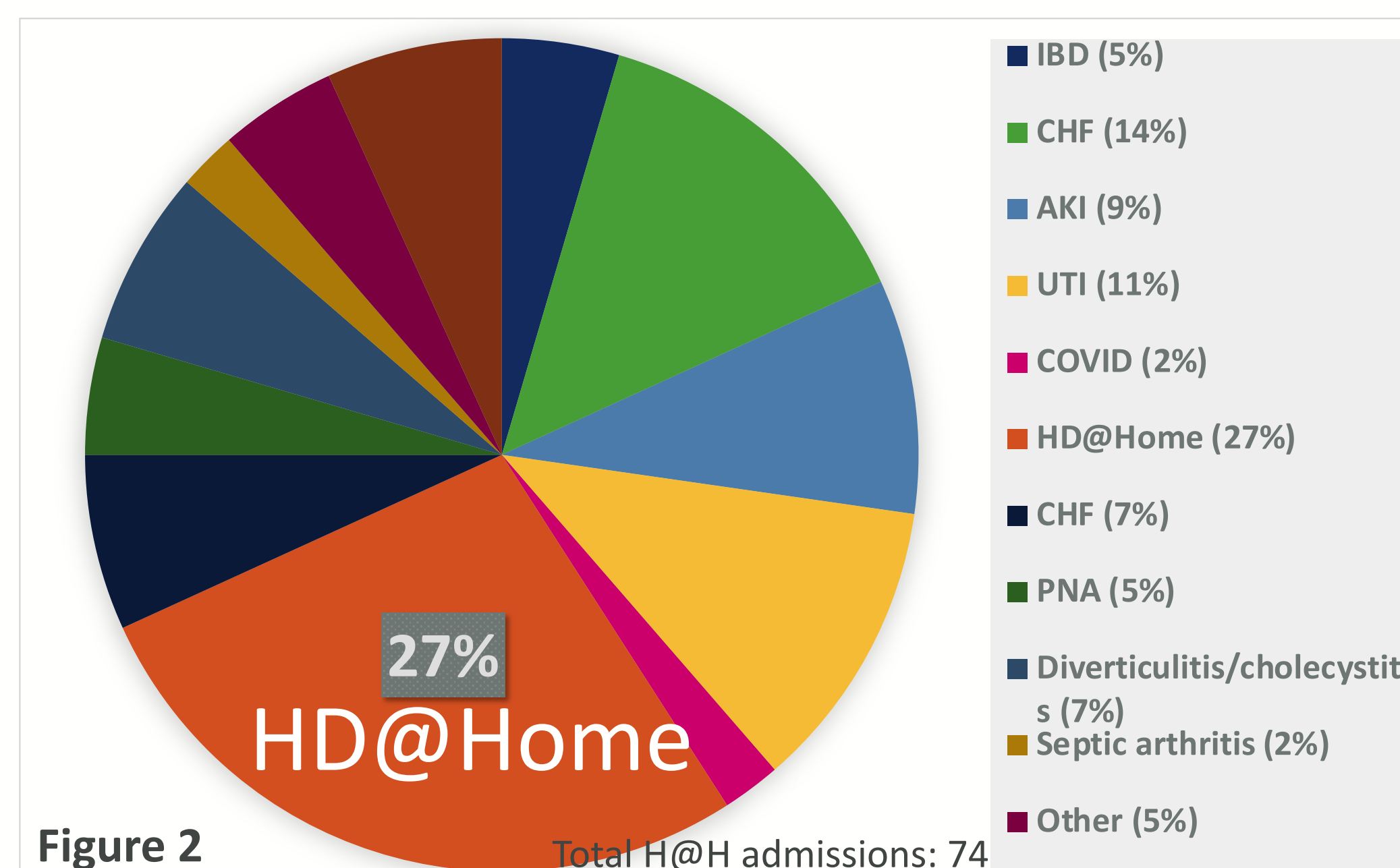
- OHSU established a Hospital at Home (H@H) program in November 2021 to increase needed acute care capacity.
- Although H@H was designed for acute care hospitalizations, our leadership elected to transfer some of these patients awaiting a hemodialysis (HD) chair to the program.
- In January 2022, H@H was expanded to include patients on chronic dialysis, "HD@Home."

## Implementation

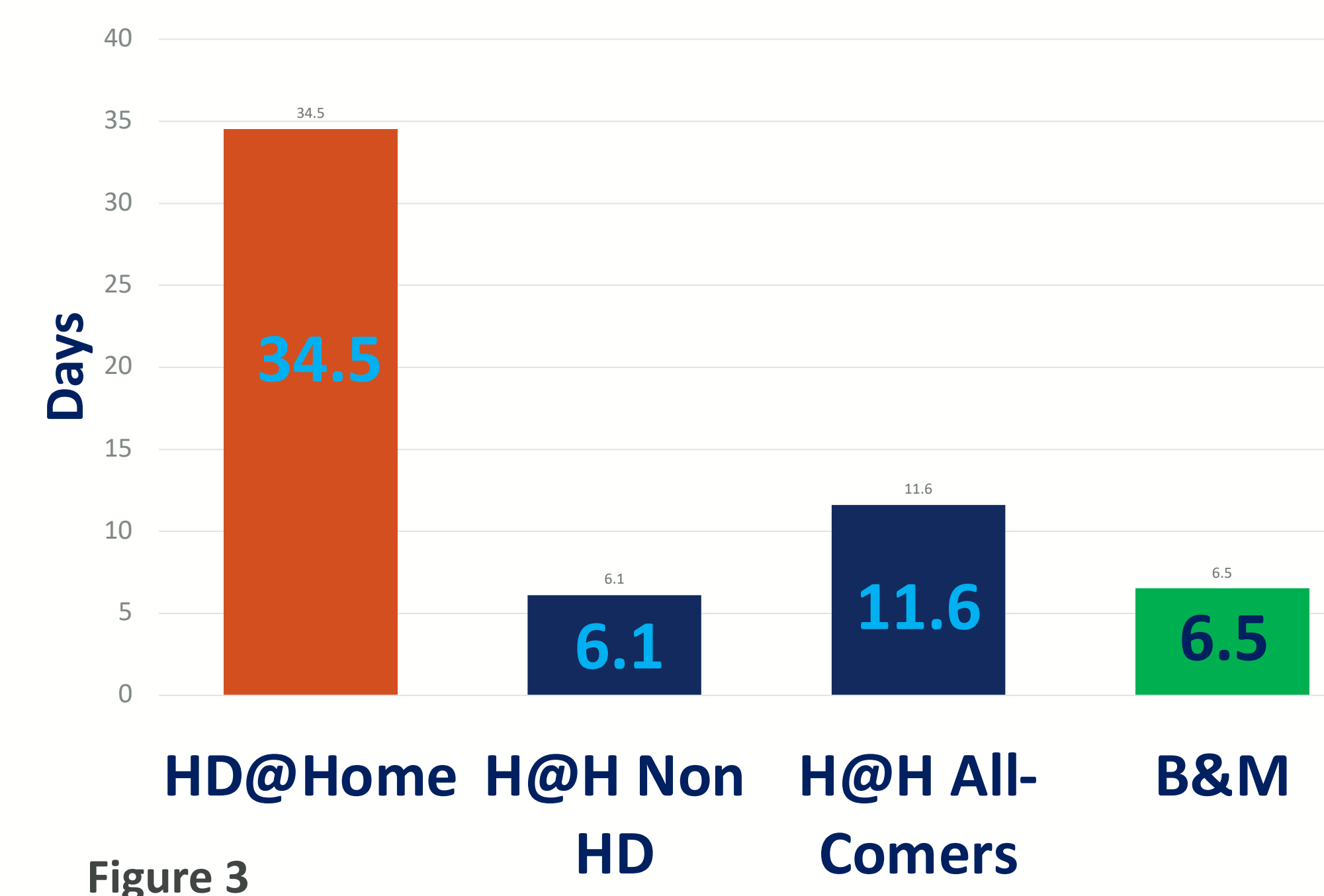
### HD@Home:

- Interdisciplinary collaboration between the virtual command center, inpatient (IP) dialysis unit, paramedicine transport (Fig. 1)
- IP dialysis unit provided dedicated time slots for HD@Home patients (2 in the morning, 2 in the afternoon), three times weekly
- Maximum of 4 HD@Home patients are admitted at a time
- Paramedic team provides roundtrip transportation to brick-and-mortar (B&M) dialysis
- Asymptomatic COVID screening every 72 hours was implemented in light of increased community exposure risk
- Hospital case manager continues to facilitate and follow up on outpatient dialysis chair referrals

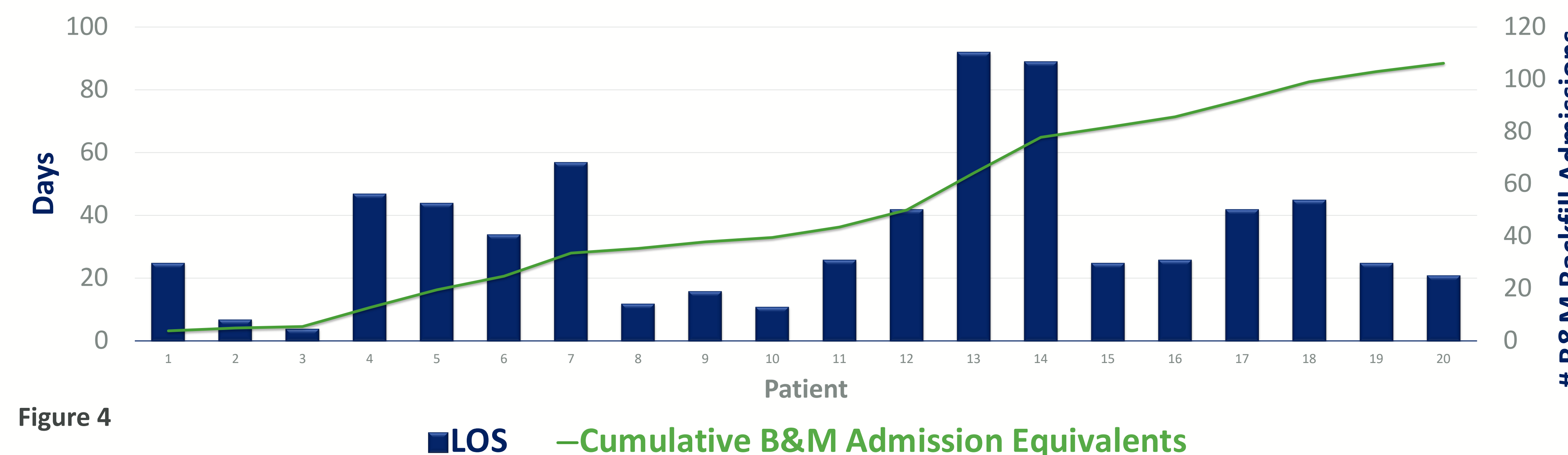
## OHSU Hospital At Home Admission Diagnoses



## Comparison of LOS



## HD@Home Length of Stay (LOS) and B&M Backfill



## Outcomes

- Thus far, there have been 20 admissions to HD@Home (Fig 2)
- Long waits for community dialysis chairs are reflected in the average LOS of HD@Home patients: 34 days (range 7 to 92 days) (Fig 3)
- Total H@H dialysis patient days: 690
- HD@Home admissions have allowed for 106 B&M patient admissions (based on average LOS at OHSU 6.5 days) (Fig 4)

## Discussion

- HD@Home is an innovative way to address community dialysis shortages and maximize inpatient bed availability
- Advanced planning and excellent coordination of care between the H@H command center and transportation services are essential for success
- Scheduled dialysis time-slots for H@H patients has maintained flexibility of our dialysis unit to accommodate urgent dialytic needs of B&M patients
- In-person consultations, imaging, and procedures have been facilitated when the patient is in the IP dialysis unit
- Patients have greatly enjoyed the opportunity to return home to their families
- Prolonged HD@Home admissions can be isolating; we saw that our patients whom lived with family or friends did better with that social support

## Next Steps

- Our partner hospitals suffer from similar dialysis chair-related capacity issues. We are considering transferring dialysis-dependent patients awaiting a community chair to OHSU for these patients to enter the program

