

# Evaluating and Streamlining an Urban Academic Medical Center's Hospice Referral and Discharge Process

Margaret Krasne MD MPH<sup>1</sup>, Elys Bhatia MSCS<sup>2</sup>, Allyson Mitchell LCSW-C<sup>3</sup>, Michelle Churchill MSN CRNP ACHPN<sup>3</sup>, Catherine Boyne MHA<sup>4</sup>, Danielle Doberman MD MPH HMDC FAAHPM<sup>3</sup>

<sup>1</sup>Division of Hospital Medicine, Department of Medicine, The Johns Hopkins University School of Medicine, Baltimore, MD

<sup>2</sup>Quality and Clinical Analytics, Johns Hopkins Health System, Baltimore, MD

<sup>3</sup>Section of Palliative Medicine, Division of General Internal Medicine, Department of Medicine, Johns Hopkins University School of Medicine, Baltimore, MD

<sup>4</sup>The Johns Hopkins Hospital

## Background

- 1 in 6 patients referred to hospice at our hospital dies prior to discharge without enrolling in hospice
- Average lead time from hospice referral order placement to patient discharge is over three days.
- Prolonged time to discharge can be detrimental to this vulnerable patient population, who spend their final hours and days in the hospital and sometimes miss a safe window for discharge to their ideal location.
- Delayed discharges are detrimental to the health system, increasing length of stay, decreasing hospital capacity, and increasing in-hospital mortality.
- We developed a workgroup to evaluate the hospice referral and discharge process at our hospital, seeking to identify key drivers of delays and to implement interventions addressing these key drivers to ensure patients are discharged efficiently and with optimal services.

## Methods

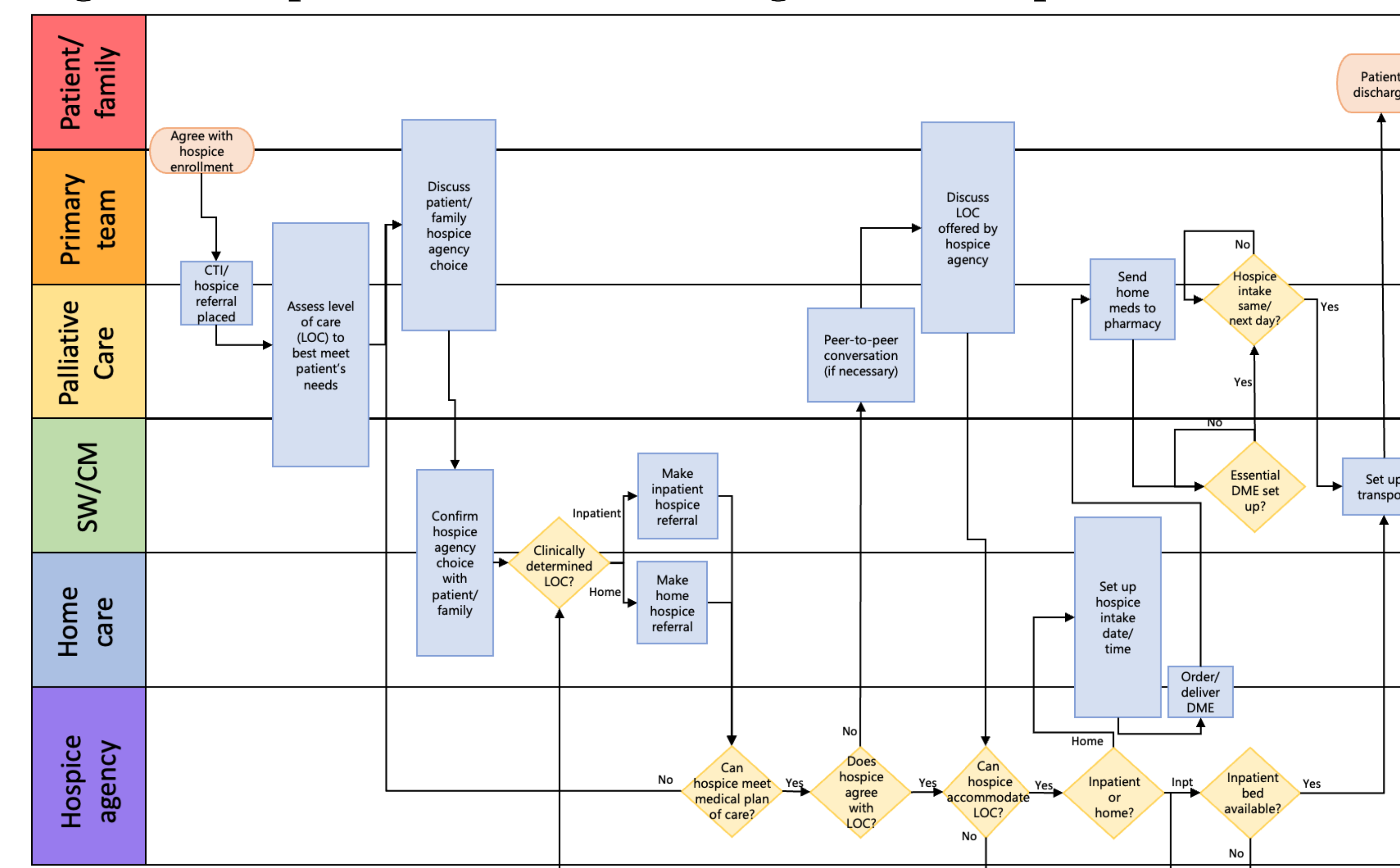
- To evaluate the mean lead time (hours) from placement of a hospice referral order to patient hospital discharge, we extracted electronic health record (EHR) time stamps, including those for a hospice referral order and discharge time.
- We focused our evaluation on two general medicine units and developed a multidisciplinary workgroup based in these units with representation from case management, home care, palliative care medicine teams, internal medicine teams, and social work.
- Using lean sigma principles, a comprehensive analysis of the current hospice referral and discharge process on these units was performed.
- We evaluated the current workflow and involved parties, performed root cause analysis, and identified key drivers of delays

- Based on these findings, we implemented an intervention to address key drivers.
- Our work required close partnership with hospital leadership in care management, home care coordination, and palliative medicine.

## Results

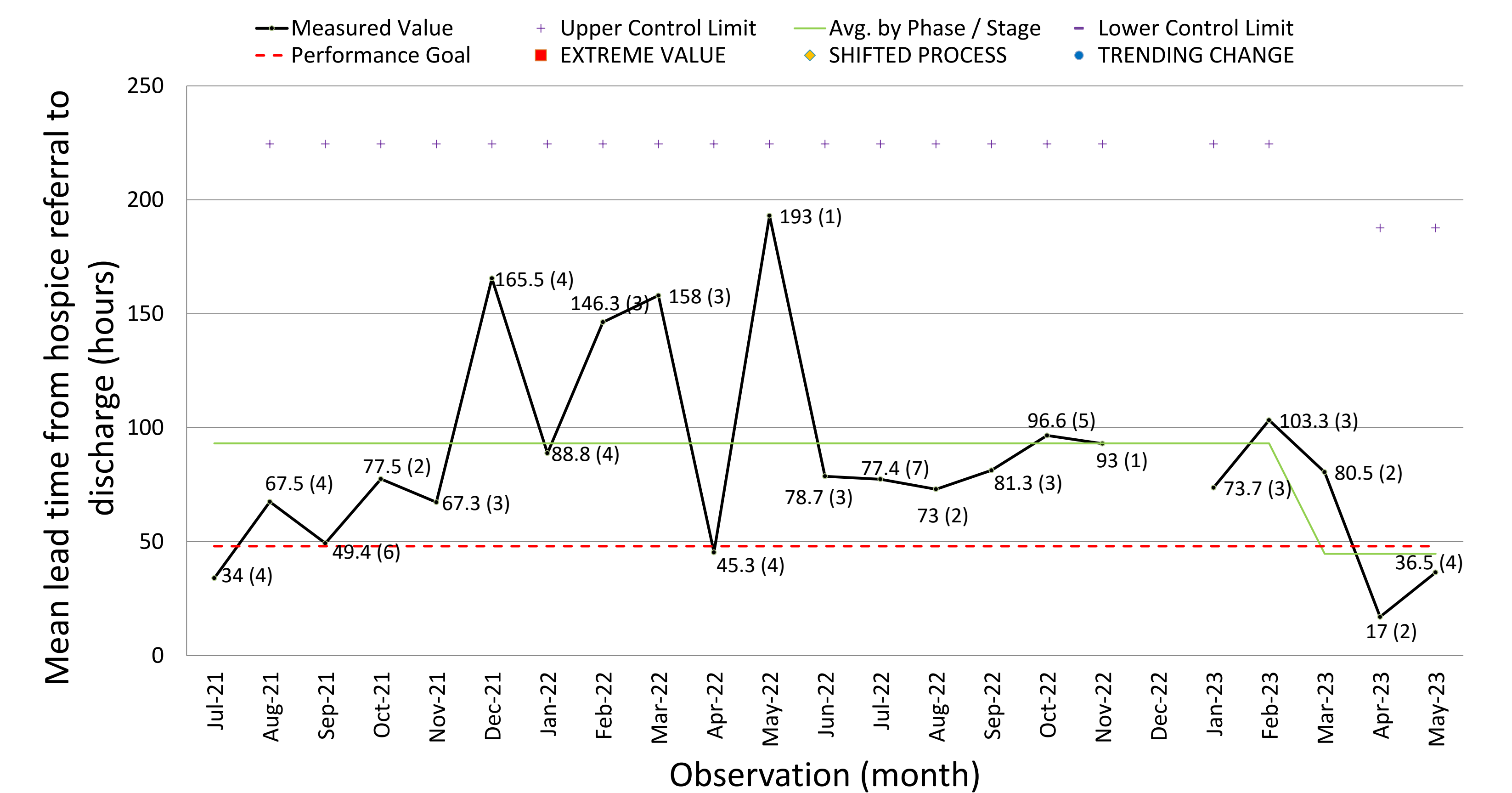
- From 9/2021 through 2/2023, 57 patients on two general medicine units were discharged to an inpatient hospice unit or home with hospice services. Mean lead time from hospice referral to discharge was 92 hours.
- Process mapping (Figure 1) revealed the complexity of the referral and discharge process, involving the coordination of up to five different teams to complete many steps.
- Identified key drivers include lack of clarity around hospice level of care, lack of shared knowledge around medical capabilities of specific hospice agencies, and many multi-disciplinary team members requiring significant coordination efforts.

Figure 1: Hospice Referral and Discharge Process Map



- While hospice agencies determine level of care (i.e. home or general inpatient (GIP) care), the hospice referral process was split between care management and home care coordination based on the medical team's presumed level of care.
- We enacted an intervention to streamline the referral process, whereby care management would perform all hospice referrals and home care coordination would remove themselves from this step.
- The intervention launched in early 3/2023, with eight hospice discharges in the first months (Figure 2). Data collection is ongoing.

Figure 2: Hospice Referral and Discharge Pilot Lead Time by Month



## Conclusions and Future Directions

- It is essential for both patients and the health system for the hospice referral and discharge process to be accurate, efficient, and effective.
- Our evaluation identified potential areas for intervention, and we launched a pilot seeking to streamline the overall hospice discharge process and number of disciplines involved, with ongoing data collection and positive frontline feedback thus far.