

## Background/Problem

Hospital capacity challenges are often driven by delays in patient discharges. When patients are not discharged in a timely manner, it disrupts hospital throughput, limits bed availability, and creates bottlenecks throughout the system. This is especially critical in the Emergency Department (ED), where bottlenecks delay timely access to care. Departure Lounges (DL) are used to improve patient flow by increasing available bed time by providing a safe location for patients waiting for rides. Improving the flow of patients through earlier discharges can improve ED efficiency with less boarding time and fewer patients leaving without receiving care (Gromlovits, 2025). However, at a large urban academic medical center, the existing DL was underutilized for several years, preventing full realization of its intended benefits. Optimizing its use reflects the AONL critical theme of navigating complexity by strengthening operational efficiency, access, capacity, and flow, while highlighting the meaningful application of nurse-led innovations.

## Objective

To increase the average monthly DL utilization by 25%, from 358 patients per month (July 2024-Nov 2024) to 448 patients per month by June 2025, as measured by the hospital's patient flow dashboard.

## Method/Implementation

In November 2024, the team used the Plan-Do-Study-Act (PDSA) framework to make rapid improvements to Departure Lounge (DL) workflows and environment. Nursing leaders and key stakeholders implemented targeted interventions to increase DL utilization:

- Implemented an AI-powered predictive tool to automatically identify eligible patients.
- Created standardized nurse-led workflows to validate patient eligibility for the DL.
- Extensive interdisciplinary alignment with workflows including nursing, informatics, transport, lobby services, patient experience and parking.
- Implemented unit-based nursing champions to support lounge engagement with staff.
- The DL environment was enhanced to create a more visually appealing and sensory-mindful patient experience.
- Strong communication and endorsement from senior leadership.

## Departure Lounge Utilization

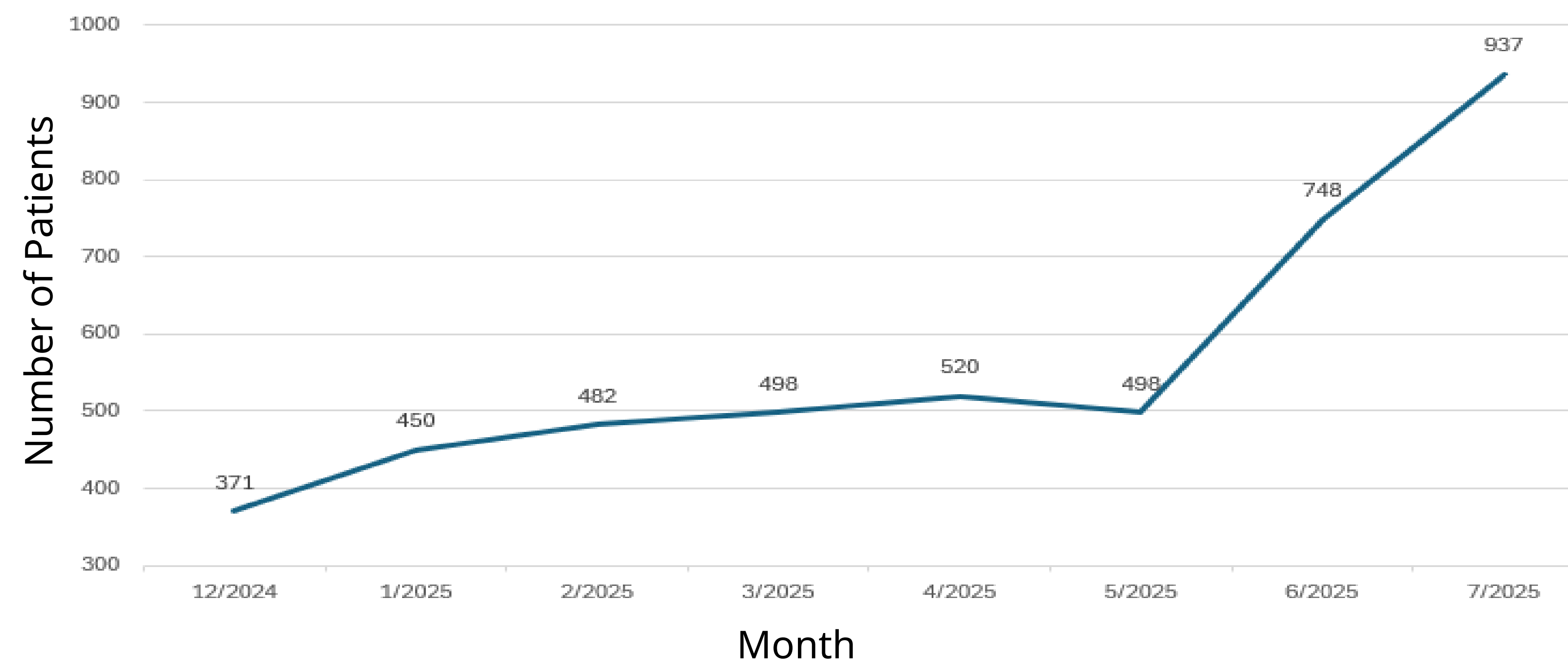


Figure 1. Departure Lounge Utilization



## Departure Lounge Utilization Post-Intervention

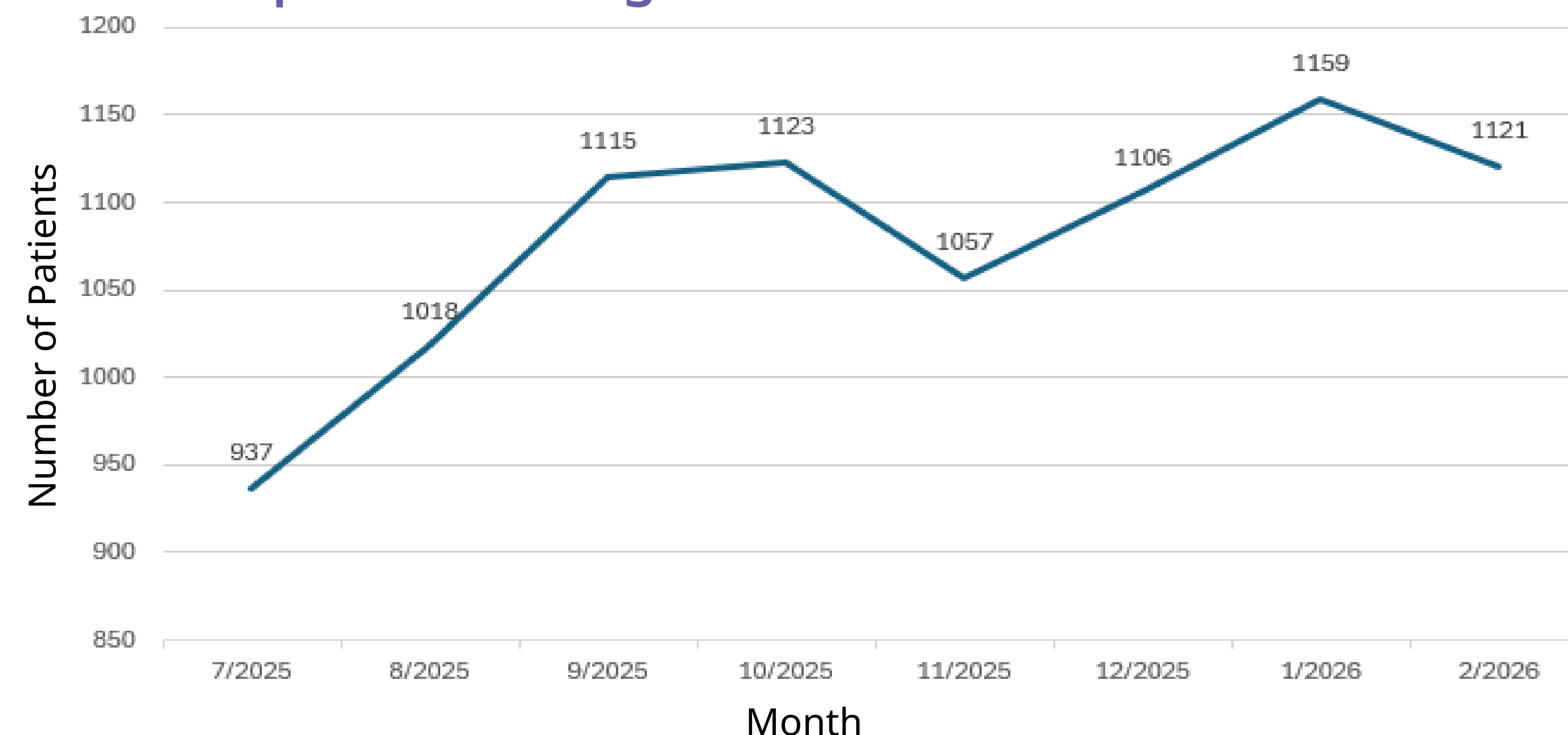


Figure 2. Departure Lounge Utilization Post-Intervention

## Results

- Utilization increased from a baseline of 358 patients per month to 937 patients in July 2025 – a 162% increase.
- In July alone, patients spent over **21,000 minutes** in the lounge, **saving 15 bed days**
- Utilization increased over the initial 3-month period (Figure 1) and remained elevated throughout the 8-month follow-up (Figure 2)
- Patients discharged through the lounge left **58 minutes sooner** than patients discharged home who did not utilize the lounge.
- Total time saved could reach **50,000 hours**, equivalent to nearly **35 bed days saved**.
- During the same period:
  - ED boarding time decreased by **6.5%**
  - Patients leaving without being seen decreased by **2.3%**

## Conclusion

A comprehensive nurse-led PDSA cycle incorporating a suite of Departure Lounge (DL) enhancements resulted in exponential improvements in DL utilization. The integration of an AI tool improved patient visibility, reduced administrative burden, and streamlined discharge coordination for DL staff and charge nurses. Sustained utilization over an 8-month period supports successful integration of the Departure Lounge into routine workflow (Figure 2).

## Discussions/Implications

Integrating an AI tool within a structured, nurse-led PDSA framework significantly improved discharge workflow efficiency and coordination. Enhanced real-time visibility of discharge-ready patients allowed for proactive planning, reduced manual tracking, and improved communication between DL staff and charge nurses. These findings highlight that technology is most effective when intentionally embedded within an established quality improvement strategy. Sustained utilization over eight months suggests durable cultural adoption and operational integration. This scalable approach may benefit facilities experiencing capacity constraints, particularly those unable to expand physical space, by optimizing discharge lounges to improve patient throughput, increase bed availability, and maximize existing infrastructure.

Gromlovits, K. (2025). Implementation of a discharge lounge: Improve patient throughput and capacity management. *American Nurse Journal*, 20(9), 54-57. <https://doi.org.yale.idm.oclc.org/10.51256/ANJ092554>