

# Front End Redesign – A Spin on ED Provider in Triage

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## BACKGROUND

### Learning Objectives:

- Identify key performance metrics and challenges facing the care of lower acuity emergency department patients.
- Describe a novel approach to the popular provider in triage model for providing emergency department evaluation and management with space and capacity constraints.

### Goals/ Objective:

Conduct a redesign of the front-end process within the University Hospital Emergency Department that prioritizes the utilization of a split flow model to keep patients vertical & moving forward and providers further up in the patient flow process to improve patient throughput, door to provider time, and left without being seen (LWBS).

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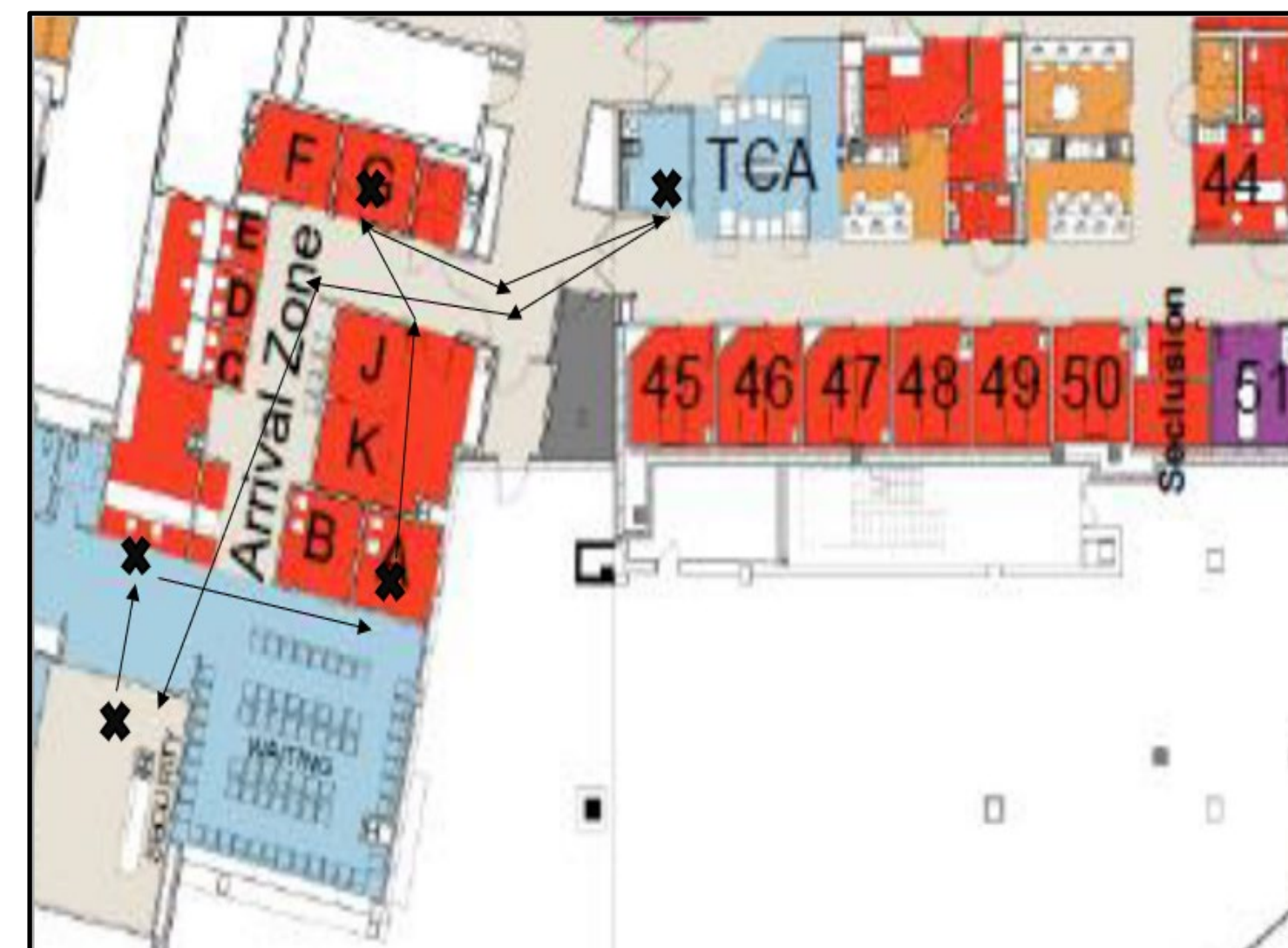
## METHODS

### Situation:

- **OSUWMC** University Hospital's 98 bed ED experienced high patient boarding (30% increase) and capacity constraints leading to elevated throughput metrics which had the potential to impact quality and patient outcomes.

### Interventions:

- Leadership identified an area of opportunity to impact lower acuity patients while streamlining ED bed placement of higher acuity patients
- A multidisciplinary team developed a novel plan to redesign the front-end processes to better address the care of lower acuity patients and mitigate capacity constraints outside of ED clinical leadership control
- Process saw the creation of the universal assessment spaces (UAS) allowing physicians to rapidly evaluate discharge eligible patients based on chief complaint
- Protection of beds allowed for direct bedding process for higher acuity patients
- Leveraged high degree of care coordination between physicians, nurses, APP's and other care providers within the emergency department



| Space      | Function   |
|------------|--|
| Quick Look | • Initial sick not sick determination  |
| A, B, C    | • Initial triage (full triage except for medications)<br>• Sort patients that need direct admit utilization of J,K                                       |
| D,E        | • Universal Assessment Space (UAS)<br>• Patients not needing a cot for initial evaluation<br>• Initial assessment (IV / Therapeutics Started)            |
| F,G        | • Universal Assessment Space (UAS)<br>• Patients needing a cot for initial evaluation<br>• Initial assessment (IV / Therapeutics Started)                |
| J, K       | • Protocol/ Triage (not appropriate for Front End)   |
| HC 1-13    | • Internal waiting space   |
| 44-50      | • Consults/ Procedures<br>• Registration<br>• Fluids / Antibiotics<br>• Dedicated space for low acute 4/5's (including inmates)<br>• Discharge Education |
| Buckeye A  | • Consults/ Procedures<br>• Fluids/ Antibiotics<br>• Discharge Education   |

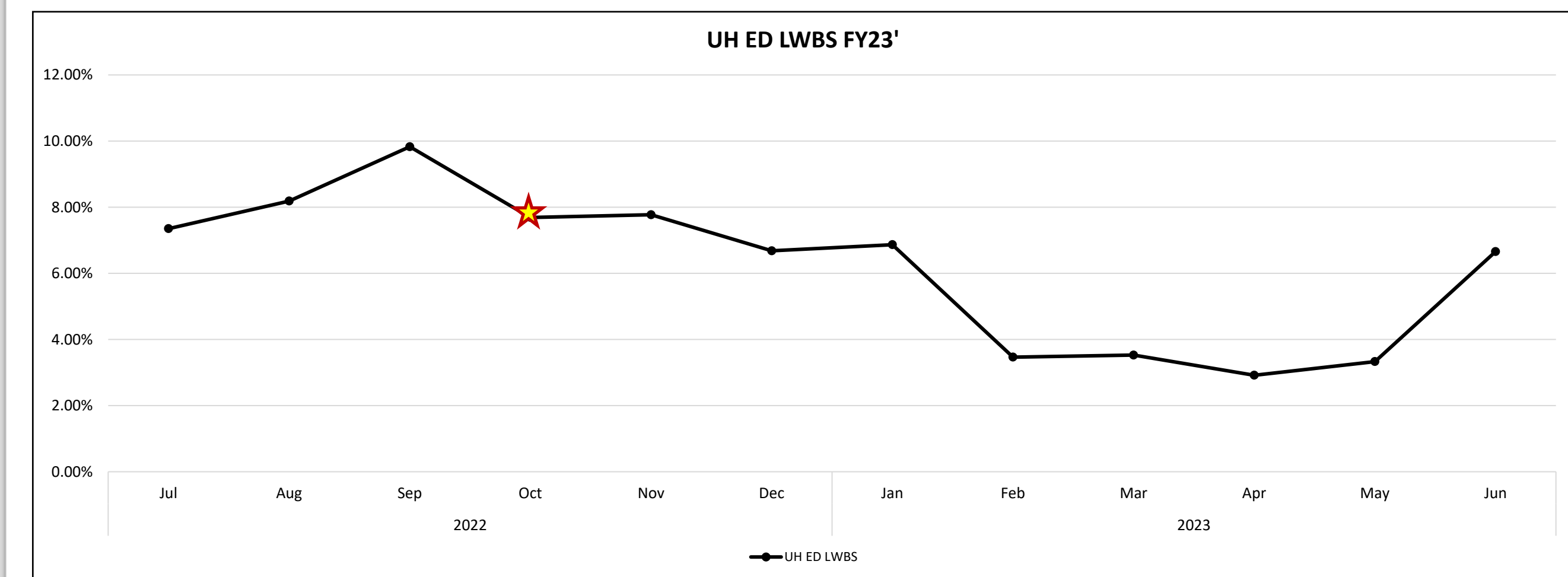
## RESULTS

### Summary of Results:

Post go live on October 1st, 2022, we saw several key performance indicators with marked improvement including:  
**Left Without Being Seen (LWBS):** Improved from **8.46%** in Q1 to **4.3%** in Q4 **with 4 months below 4%**

**Discharged Patient LOS: 40-minute** improvement from Q1(331 minutes)→Q4 (291 minutes)

**Door to Provider: 4-minute** improvement pre front end redesign to post go live (25 min →21 min)



## CONCLUSIONS

### Key Takeaways:

Emergency departments are heavily influenced by health system capacity and throughput challenges, but implementing an innovative aggressive approach to triage can positively impact key ED throughput KPI's and positively impact patients.