# Ambulance Offload Time (AOT) Optimization


- **Organization:** William Osler Health System — www.williamoslerhs.ca/
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## Overview


William Osler Health System (Osler) implemented a quality improvement initiative focused on optimizing Ambulance Offload Time (AOT). This is a 2025/26 Quality Improvement Plan priority indicator linked to access, flow, patient safety, emergency department (ED) capacity, and emergency medical services (EMS) availability. The initiative aimed to reduce delays between ambulance arrival and transfer of care to hospital teams by identifying process barriers, improving offload capacity, and strengthening collaboration between EMS and emergency department partners. Using Lean methods, process mapping, time studies, environmental assessments, operational data review, and Plan-Do-Study-Act cycles, the team tested and refined changes such as standardized offload processes, designated transition-of-care spaces, rapid nursing assessment, streamlined transfer workflows, and daily operational reviews. The project led to measurable improvement in AOT, including a reduction in the 90th percentile AOT from 38 minutes in FY24/25 to 36 minutes in FY25/26.


## Key Elements of Initiative

### Change Ideas Tested or Implemented

Standardized ambulance offload protocol; designated offload or transition-of-care spaces during high-demand periods; rapid nursing assessment and streamlined transfer processes; enhanced EMS–ED communication; daily operational reviews; Plan Do Study Act (PDSA) cycles to test and refine changes.

### Objective of Change Ideas

Improve ambulance offload efficiency, increase offload capacity, support faster disposition and bed availability, optimize patient movement through the ED, and maintain patient safety, quality of care, and positive patient and staff experience.

### Team Members Involved

Frontline staff, physicians, emergency services leaders, access and flow leaders, organizational performance teams, patients, Peel Regional Paramedic Services, and Toronto Paramedic Service.

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### Target Population

Patients arriving to the emergency department by EMS.

### Measurement Progress

AOT performance; ambulance offload beds; RN vacancy rates; pilot expansion; discharges by 11 a.m.; weekend discharge rates; over-census patients at 11 a.m.; gridlock and extreme gridlock indicators.

# Implementation Experience: Successes & Challenges

### Results/Early Wins

AOT improved by 5%, decreasing from 38 minutes in FY2024/25 to 36 minutes in FY2025/26, supported by enhanced collaboration between EMS and Emergency Department teams.

### Enablers of Success

Strong multidisciplinary collaboration engaged frontline teams, physician and medical leadership, EMS partnership, Lean/PDSA methodologies, transparent performance data, regular reviews, escalation processes, timely problem-solving, increase in offload bed capacity which required increased staffing, and implementation of Nurse Practitioner support at BCH.

### Challenges and Solutions

Fluctuating ED volumes and space constraints impacted offload capacity and patient flow. This was addressed through expanded offload bed capacity, and ongoing capacity planning. Manual data entry variability highlighted the need for education and standardization. Discharge and communication barriers were addressed through weekend rounds, team collaboration, physician engagement, earlier escalation, hallway capacity planning, and a medicine manager-on-call process.

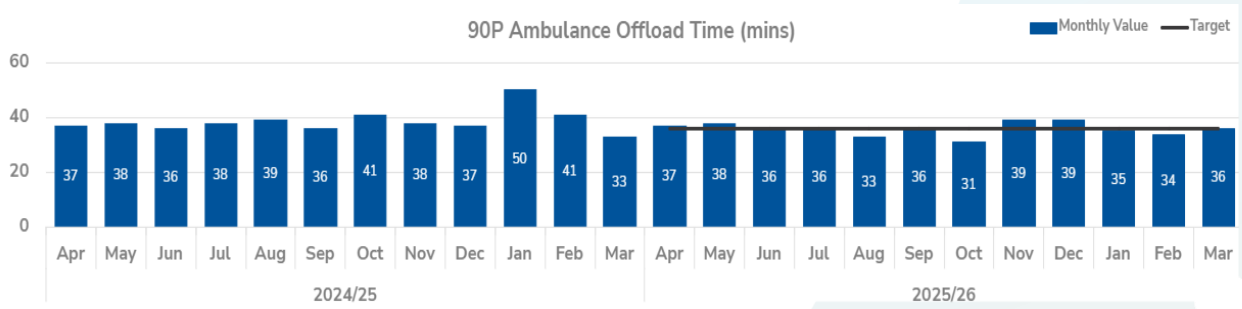
**Advice for Other Teams:** Start by mapping the current-state patient journey; use data and frontline input to understand delays; build flexibility into the model; engage partners early; and use regular performance review and PDSA cycles to monitor, learn, and adjust.

# Future Steps & Sustainability

## Next Steps and Embedding into Practice

- **Next Steps:** Scale successful interventions across additional sites, continue monitoring AOT and related operational measures, and maintain collaboration with EMS partners to support timely offload and system capacity.
- **Embedding into Practice:** Sustain standardized offload processes, designated offload spaces, enhanced EMS–ED communication, daily operational reviews, monitoring, and escalation processes.

## The Data




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