

Optimising Outpatient Ultrasound Appointment Scheduling Efficiency

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Aim

The team explored strategies to safely eliminate the upstream vetting step, with the objective of reducing overall process time while maintaining a low error rate.

This change would benefit patients through obtaining earlier appointments and enhance staff efficiency by allowing for quicker processing and scheduling of ultrasound orders thereby improving both patient care and operational efficiency.

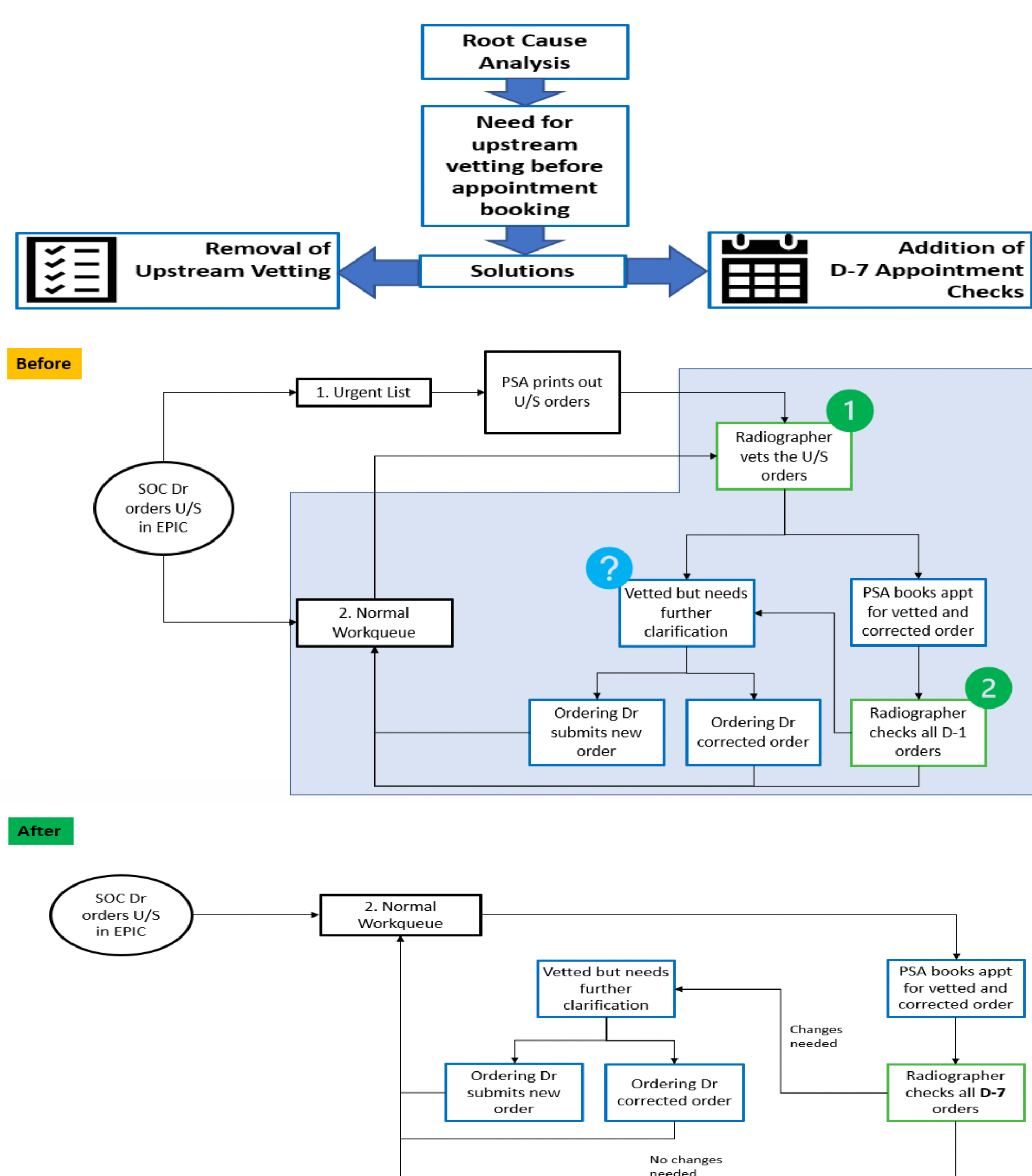
Background

A value streaming mapping exercise for DDR was carried out to assess the workflows across three modalities, aiming to decrease lead times and enhance efficiency. During this assessment, several non-value-added workflows were identified as opportunities for optimization. One specific workflow examined was the Outpatient Ultrasound (US) Vetting Workflow, which involved a lengthy process from the initial US order request to the appointment booking in EPIC by the PSA. The lead time for this workflow could extend to months due to pending clarifications.

Team Members

Name	Designation	Department
Tan Hsien Khai	Senior Consultant	Diagnostic Radiology
Thit Thit Naing	Senior Radiographer	Diagnostic Radiology
Wong Shirley	Principal Radiographer	Diagnostic Radiology
Ang Patricia	Principal Radiographer	Diagnostic Radiology
Nur' Azela	Patient Service Associate Executive	Diagnostic Radiology
Teo Joshua	Executive	Diagnostic Radiology
Oh Claudine	Assistant Director	Operations Admin
Yim Vonnie	Executive	Operations Admin

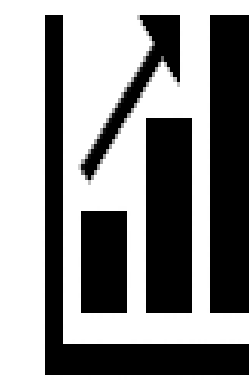
Interventions / Implementation



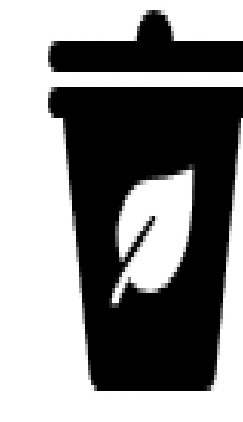
Onward 2026

The foundational pillars of Operational Resilience and Staff Well-Being are exemplified in this project.

Operational Resilience

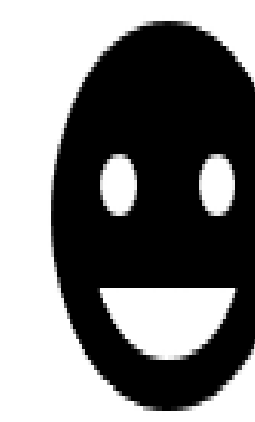


Increase Efficiency
Better manage patient loads and reduce bottlenecks



Resource Optimization
Reduce waste and improve resource utilization

Staff Well-Being

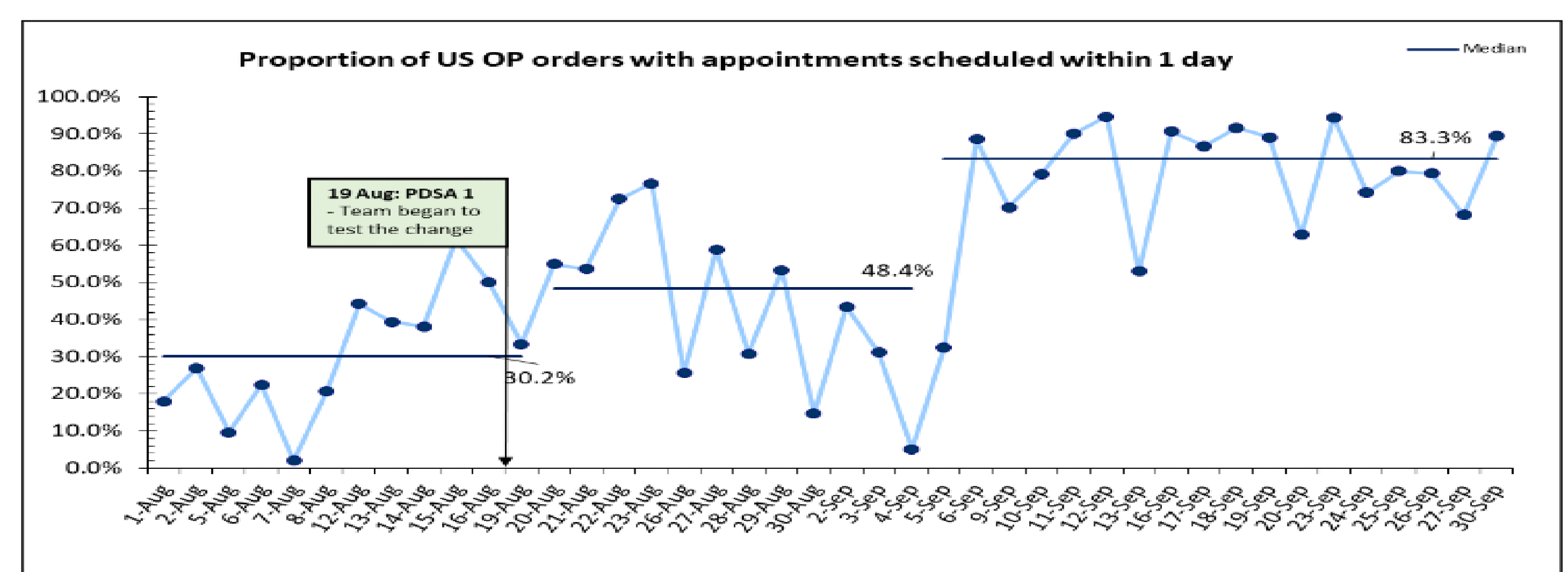


Reduce Workload Stress
Faster processing time leads to more manageable workload

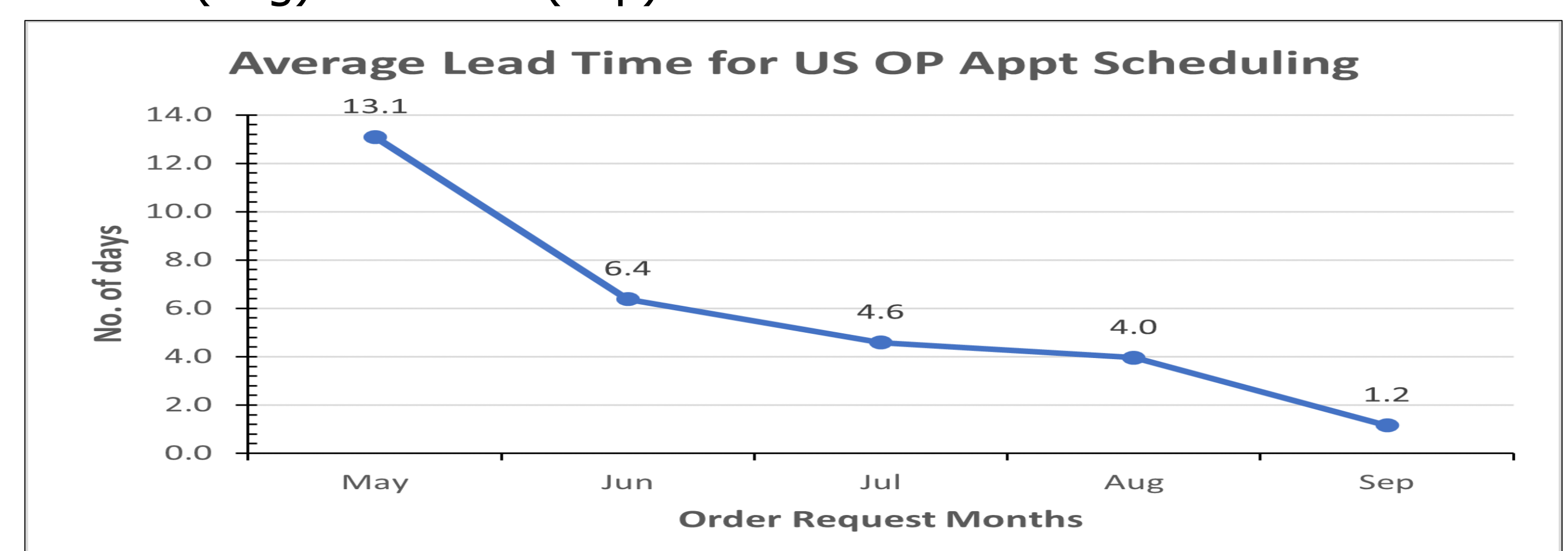


Job Satisfaction
Streamlined process leads to greater staff satisfaction

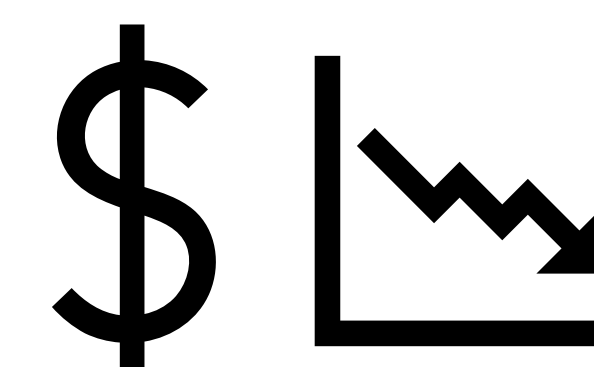
Results & Outcomes



Significant increase in appointments being scheduled within 1 day from 30.2% (Aug) to 83.3% (Sep).



Significant decrease in lead times from 13.1 days (May) to 1.2 days (Sep).



Significant time savings equivalent to reduction of 0.46 Full-Time Equivalent (FTE) for a Radiographer in a week.

Conclusion

By removing upstream vetting and adding downstream D-7 checks, the proportion of appointments scheduled within 1 day has improved significantly to 83.3% and average lead time has been reduced to 1.2 days. Patients and staff have benefited from this streamlined process resulting in reduction in waiting times for appointments and enhancing operational efficiency. Continuous effort in optimizing workflow is required to manage the lead time to improve overall patient care and operational efficiency.