

Optimization of Outpatient Interventional Radiology Scheduling and Approval Process

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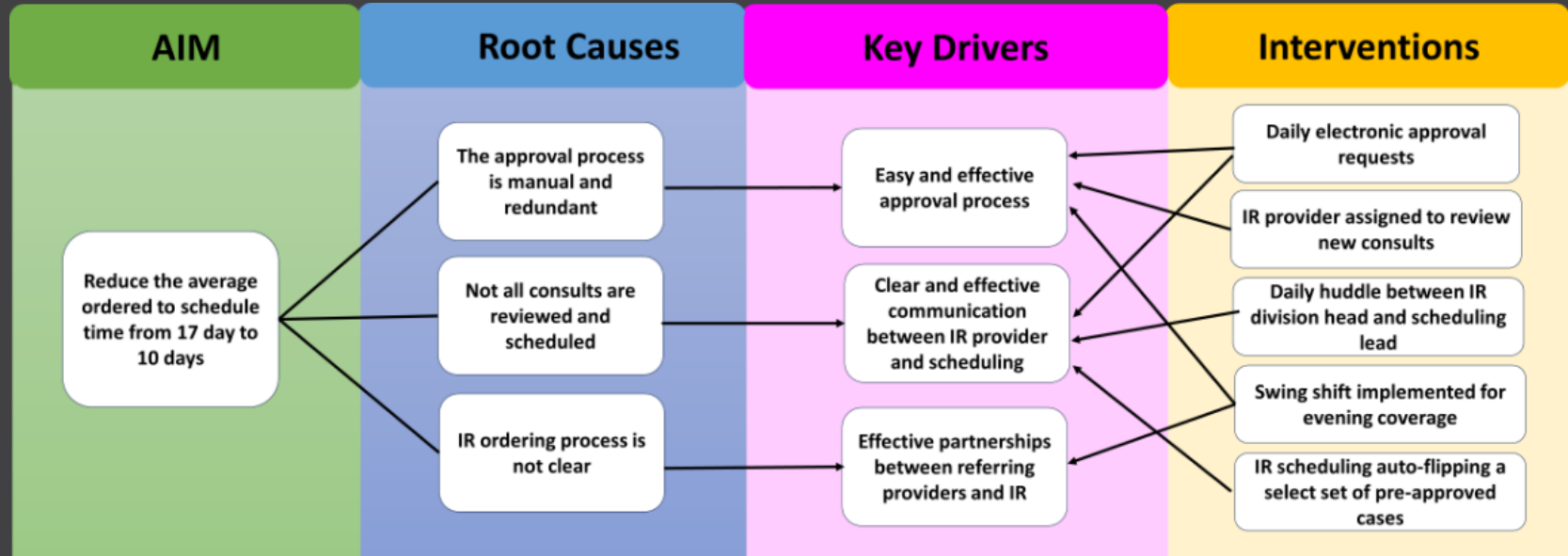
Background

- Interventional Radiology (IR) is a multifaceted subspecialty that performs a wide array of minimally invasive procedures, including both vascular and non-vascular interventions
- IR services span the full spectrum of patient populations across outpatient, inpatient, and emergency room (ED) settings.
- The convergence of these variables poses a unique challenge in the workflow of IR, to schedule and perform procedures in a timely manner.

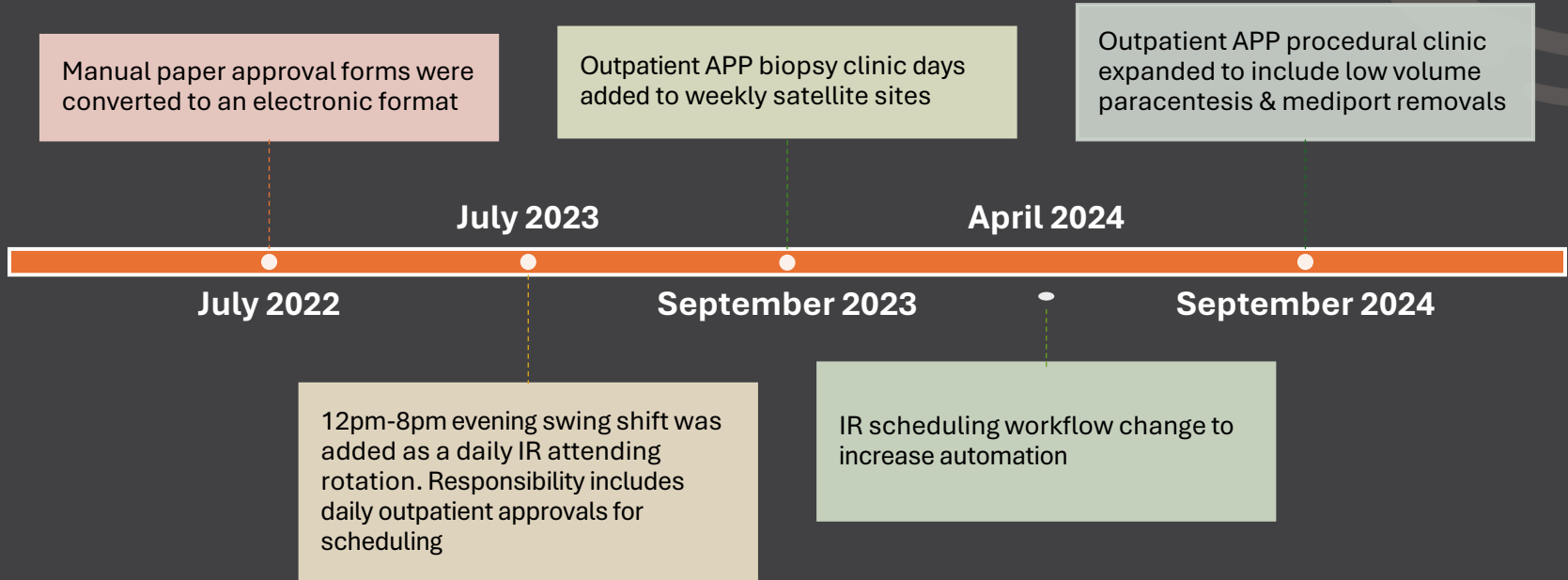
The purpose of this project was to streamline the current outpatient approval process IR procedures with the goal to improve turnaround time (TAT) resulting in increased patient satisfaction and access to care.

SMART Goal :

Decrease the average TAT for outpatient order review and procedural completion from June 2022 to June 2024



Interventions

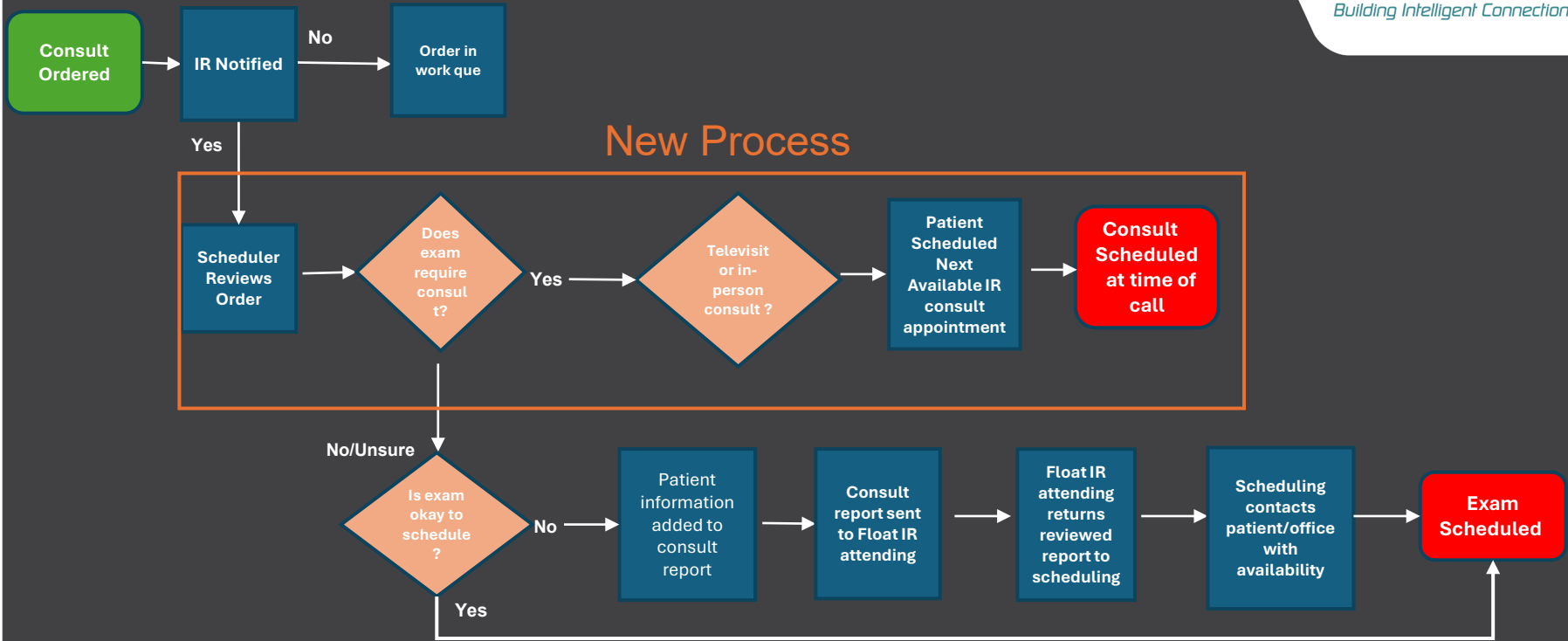


Procedure Review Automation

IR scheduling staff were trained in workflow changes allowing immediate scheduling of procedures and consults with clearly defined exceptions requiring review.

Okay to Schedule	Schedule as <u>Tele-Visit Consult</u> (APP)	Schedule <u>In-Person Consult Clinic</u> (Attending/APP/Resident)	<u>Needs Review</u> Before Scheduling (Attending/APP)
<ul style="list-style-type: none"> • Tunneled Central Line Placement/Removal • Mediport placement/removal • Feeding tube exchange/removal • Biliary Tube Exchange • Nephrostomy Tube Exchange • Paracentesis/Thoracentesis • Thyroid biopsy 	<ul style="list-style-type: none"> • Lung Biopsy • Liver Biopsy (Lesion/Random) • Renal Biopsy (Lesion/Random) • Nephrostomy Tube Placement • Suprapubic Tube Placement 	<ul style="list-style-type: none"> • TIPSS • Sclerotherapy • Ablations • Feeding Tube Placements • Biliary Tube Placement • Angiography • Embolization 	<ul style="list-style-type: none"> • Soft Tissue Biopsy • Bone Biopsy • Percutaneous Drainage • Unclear orders

New Process for Outpatient IR Consult



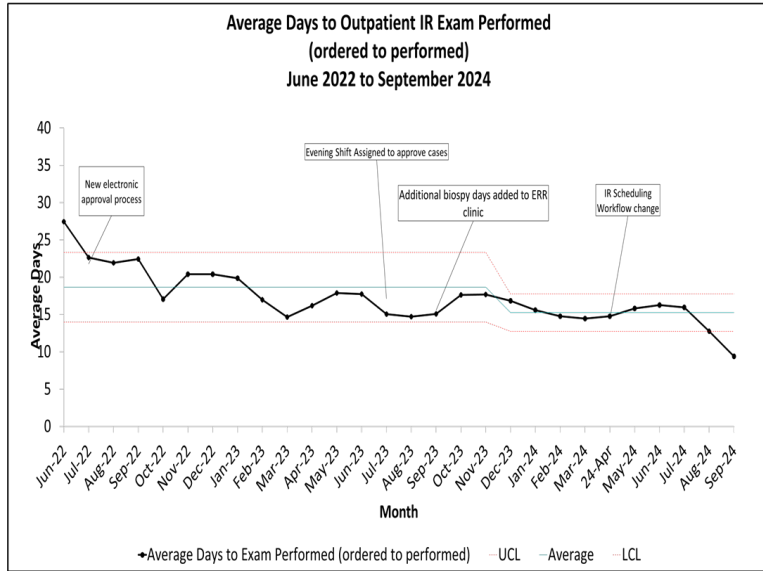
Data

Average Procedure Completion TAT:	Average IR Order Review TAT:
21.1 days (June 22-Dec 22)	8.21 days (June 22-Dec 22)
17.1 days (Jan 23-June 23)	5.79 days (Jan 23-June 23)
16.0 days (July 23-Dec 23)	4.9 days (July 23-Dec 24)
15.3 days (Jan 24-June 24)	4.9 days (Jan 24-June 24)
13.0 days (July 24-Sept 24)	3.6 days (July 24-Sept 24)
Overall decrease of 38% (p < 0.0001)	Overall decrease of 56% (p < 0.0001)

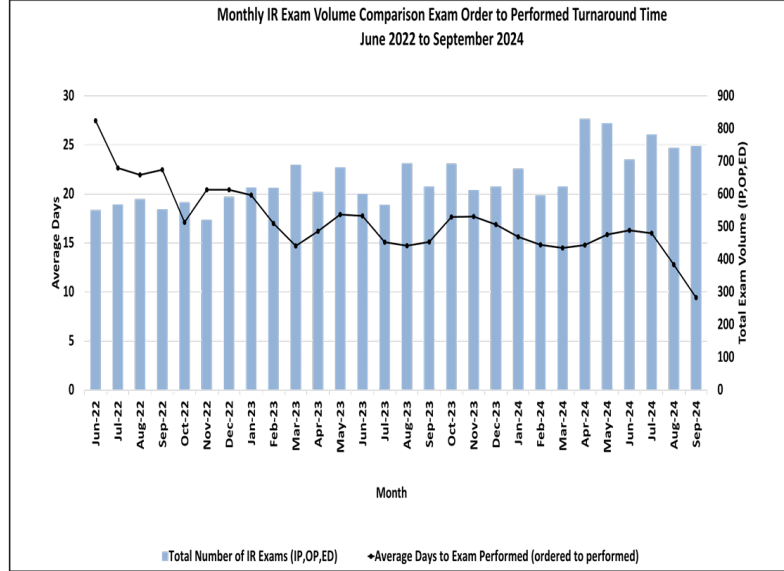
During this period, 18,064 procedures were performed, 9,358 (52%) were from the outpatient population. The average outpatient case volume also increased from an average of 279 to 413 (48%)

Data

**Average Days to Outpatient IR Exam Performed
(ordered to performed)
June 2022 to September 2024**



**Monthly IR Exam Volume Comparison Exam Order to Performed Turnaround Time
June 2022 to September 2024**



Improving the TAT process, outpatient procedural volumes ultimately increased 18% during this time-period.

Summary

- During the 28-month period, 18,064 procedures were performed, 9,358 (52%) of which were from the outpatient population.
- The average time for outpatient IR order review was reduced by 56% ($p < 0.0001$)
- The average wait time for outpatient IR procedure completion was reduced by 38% ($p < 0.0001$)
- These reductions occurred as average outpatient monthly case volume increased from 279 to 413 (48%)

Key Learning Points

- Implementation of procedural scheduling automation process increases access to care
- Redistribution of responsibilities suitable for support staff, including scheduling and APPs results in increased patient throughput.
- Reallocation of attending coverage to an evening swing shift allows for both reductions in wait times and increased procedural volumes.
- Continued efforts to enhance outpatient workflows are vital for improving timely access to IR services. Improving TAT for IR Scheduling requires balancing patient populations across multiple settings and workflows



Thank You

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