

2024 VIZIENT CONNECTIONS SUMMIT

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Operational Excellence and Optimization: Improving Access for Breast Patients

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Learning Objectives

- Describe how to build staffing models to match scheduling templates.
- Explain successful strategies to manage appointment lead times including monitoring demand and capacity.

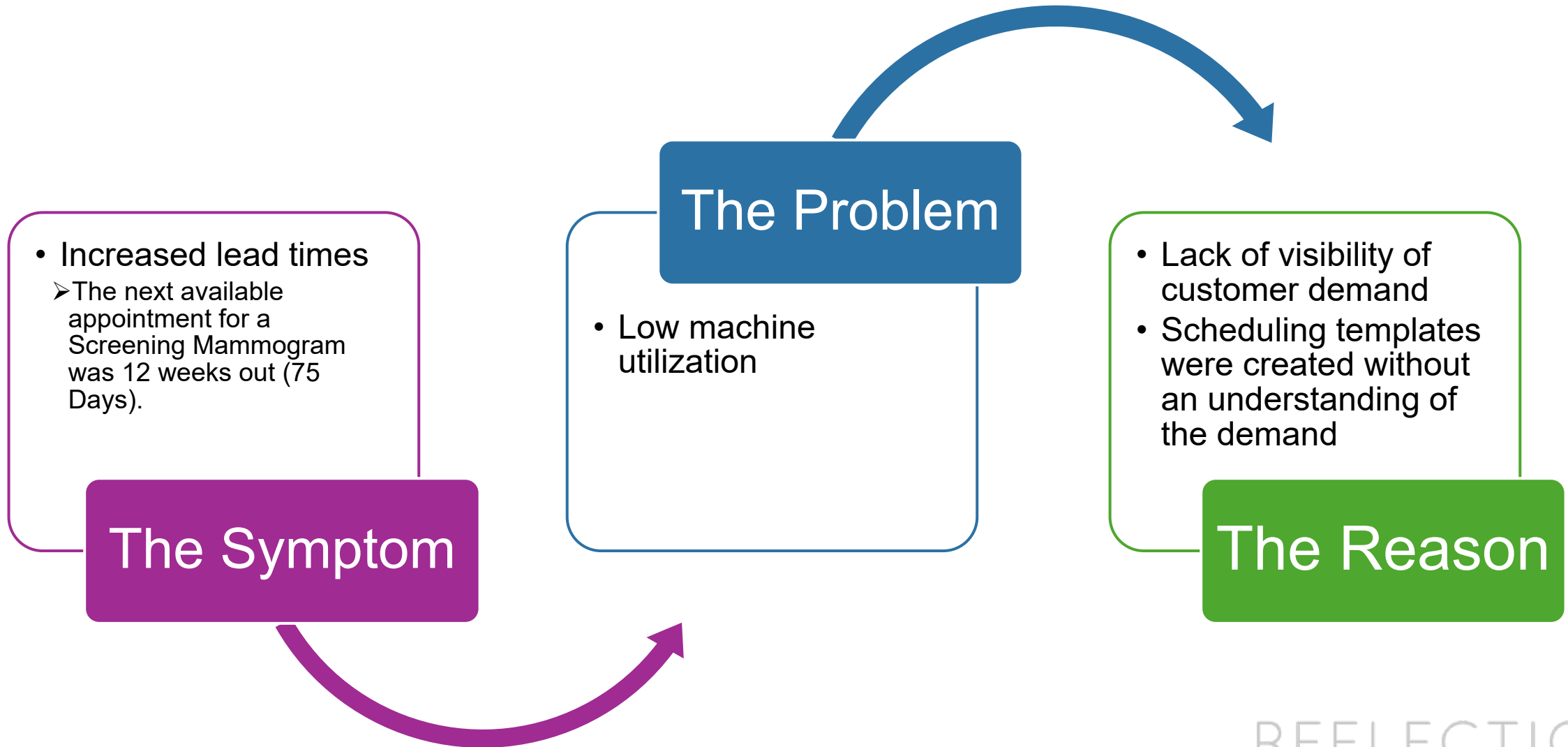
Operational Excellence and Optimization: Improving Access for Breast Patients

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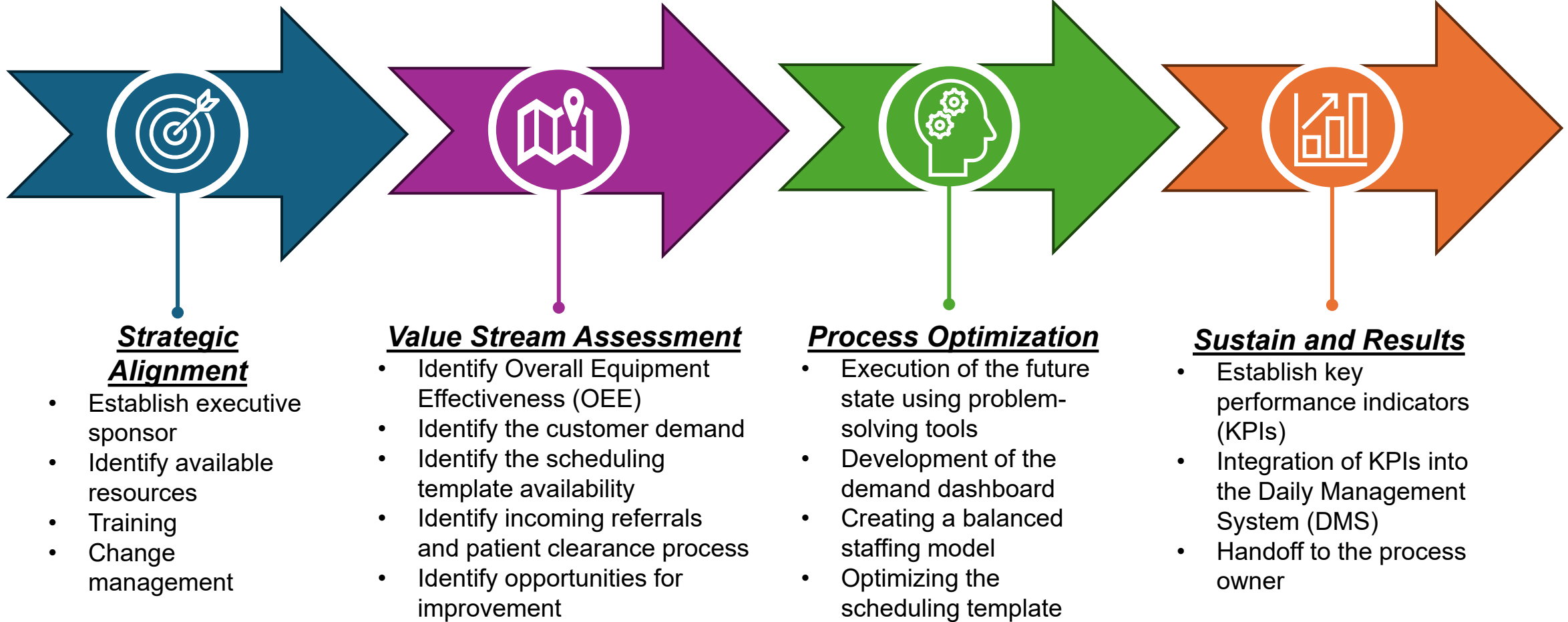
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The Background: What was our why?



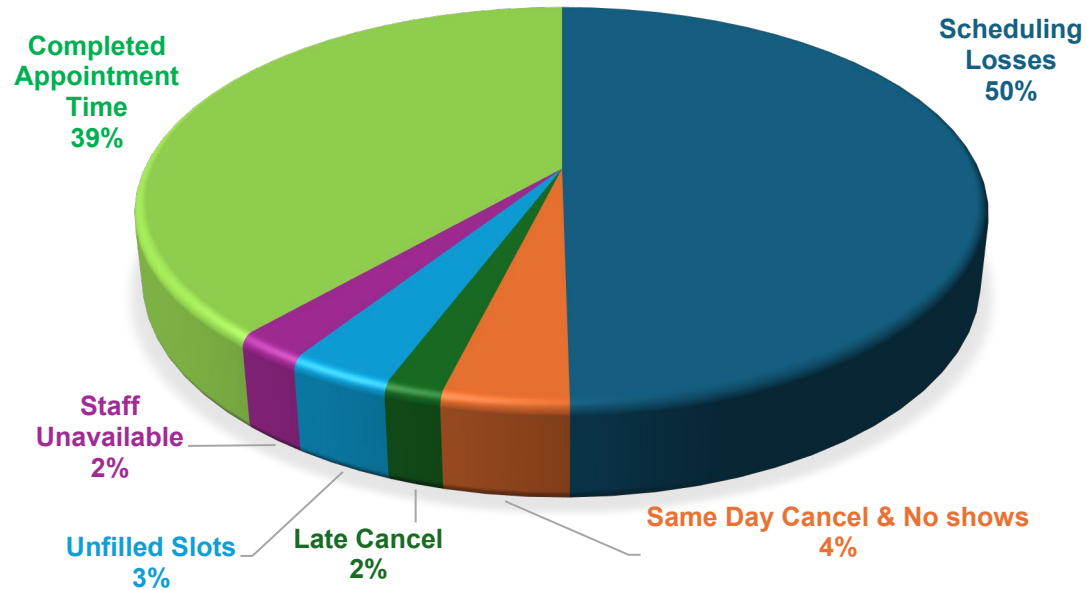
Breast Care Center (BCC) Operational Excellence Improvement Roadmap



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Value Stream Assessment: Identifying the Overall Equipment Effectiveness (OEE)

BCC OEE



Scheduling Losses:
50% of operational time is lost due to scheduling inefficiencies in template creation.
This could include gaps between appointments, scheduling blocks, or inefficient use of available slots.

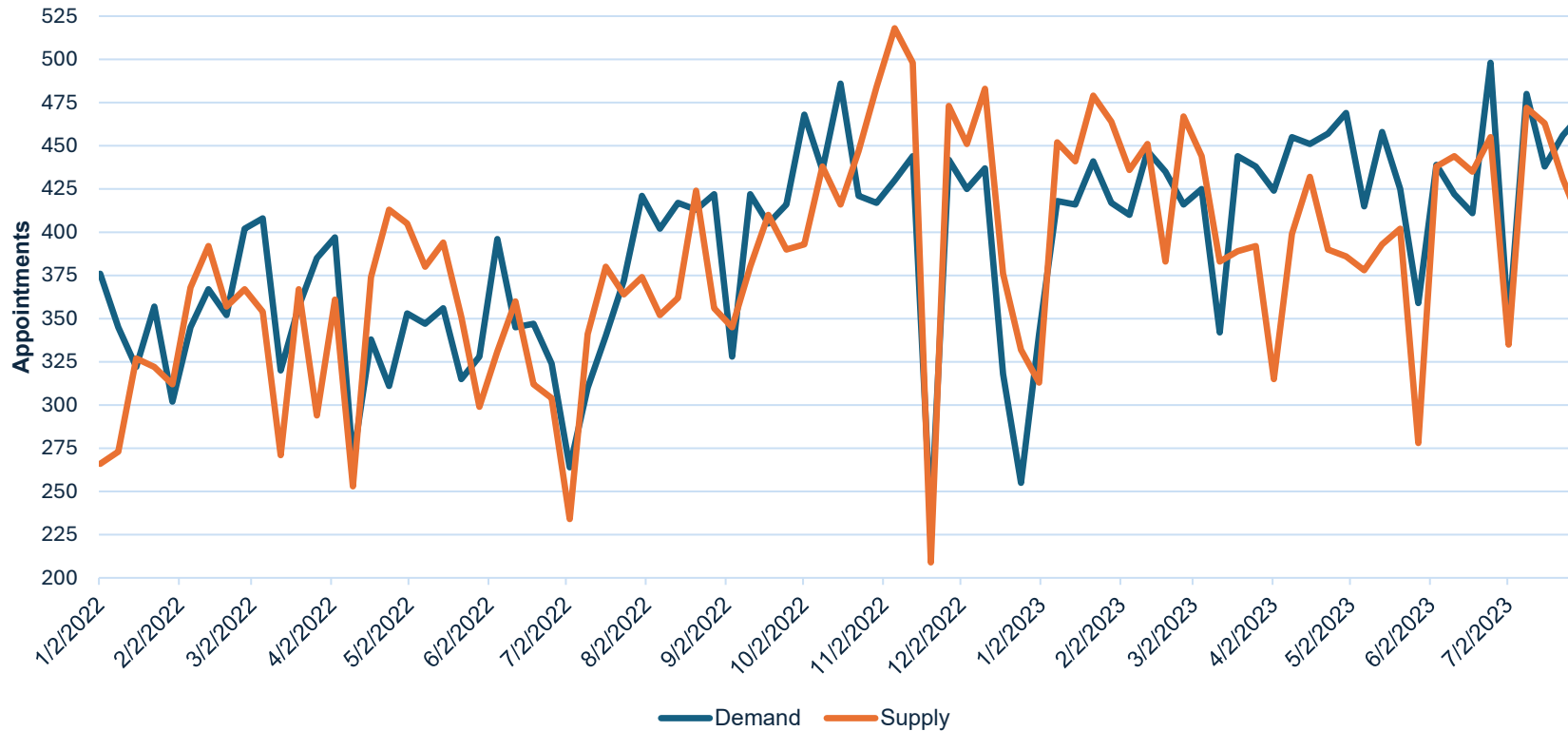
$$OEE = \frac{\text{Utilized Time}}{\text{Operating Hours}}$$



Data Source: Houston Methodist Sugar Land (HMSL) Electronic Medical Record

Value Stream Assessment: Identify the Customer Demand

Demand vs. Supply



Lack of Visibility on Demand

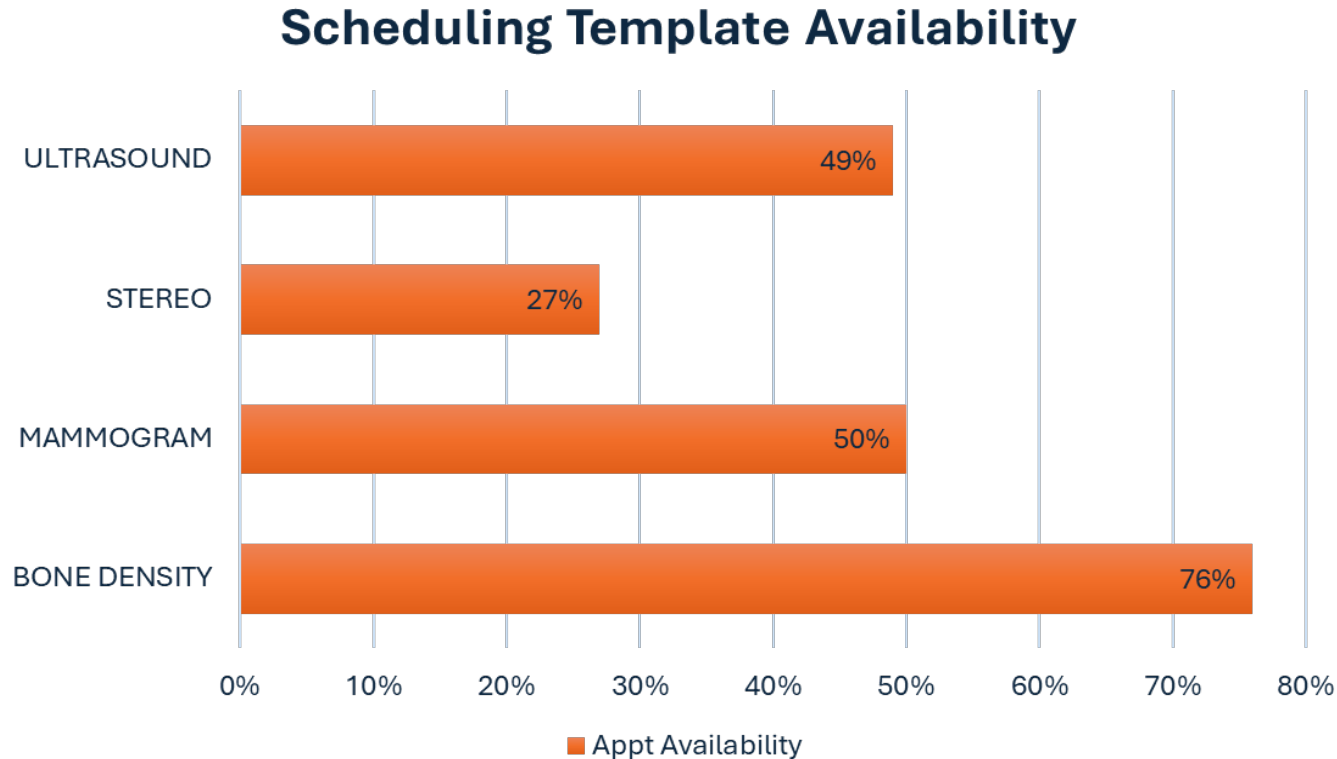
- Templates did not align with real demand patterns
- Mismatched scheduling templates created a gap between patient needs and available appointments



Data Source: Houston Methodist Sugar Land (HMSL) Electronic Medical Record

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Value Stream Assessment: Identify the Scheduling Template Availability



Low Template Availability

- There were several blocks in the schedule limiting appointment availability
- Schedulers were unable to book appointments during blocked times



Data Source: Houston Methodist Sugar Land (HMSL) Electronic Medical Record

Value Stream Assessment: Implementation Plan

Optimization: Phased Approach

- Lead Time Management
- Scheduling Template Re-Design
 - Phase 1: Improve the Number of Completed Screening Mammograms Daily
 - Phase 2: Improve the Number of Completed Diagnostic Mammograms, Breast Ultrasounds, and Bone Density Exams Daily
 - Phase 3: Improve the Number of Completed Invasive Procedures (Biopsy) Daily

Staffing

- Ensure Manager and Team Lead Presence (Mon-Fri)
- Secure PRN Staffing (weekend/LOA coverage)
- Leave of Absence Management
- Full Time Tech Navigator Fast Track Patients
- Breast Radiologist Support for Increased Volume

Balance Load Review

- Breast Care Center Hours of Operation
- Exam Duration Assessment
- Workflow Improvements
 - Leader Standard Work Review (Manager and Team Lead)
 - Standard Work Instruction and Assignment Review (Staff and Team Lead)

Just Do Its/ Pilots/ Kaizens

- 5S Event (Sort, Store, Shine, Standardize, Sustain)
- Improvements in Daily Management System (DMS) and Key Performance Indicator (KPI) Visibility
- Physician Protocols for Invasive Procedures
- Enhance Communication Between the Technologist and Physicians for Diagnostic Readings
- Streamlined Front Desk and Registration Activities- Optimization Kaizen
- Technologist Daily Room Assignment- Pilot
- Imaging Tech Assistant escorting patients to and from the Exam Room- Pilot



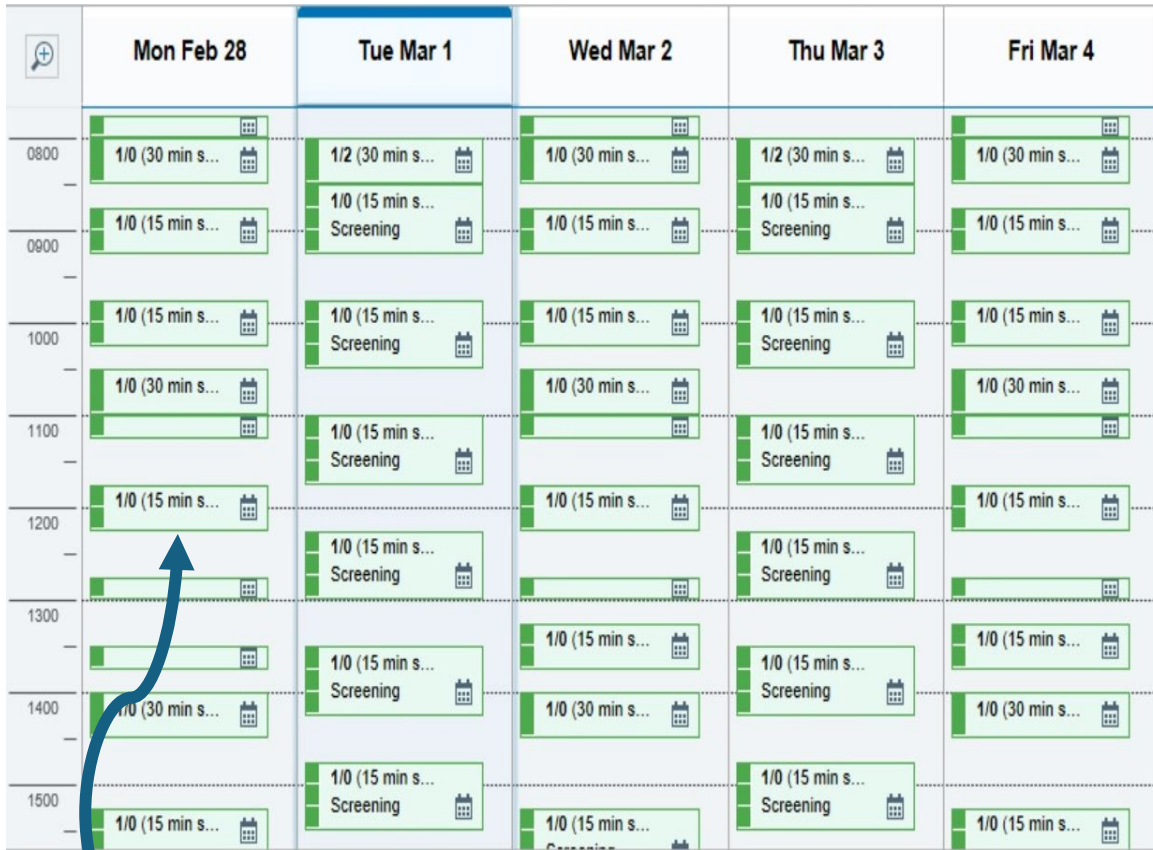
Abbreviations:

PRN = pro re nata; LOA = Leave of absence

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Process Optimization: Utilizing Problem Solving Tools

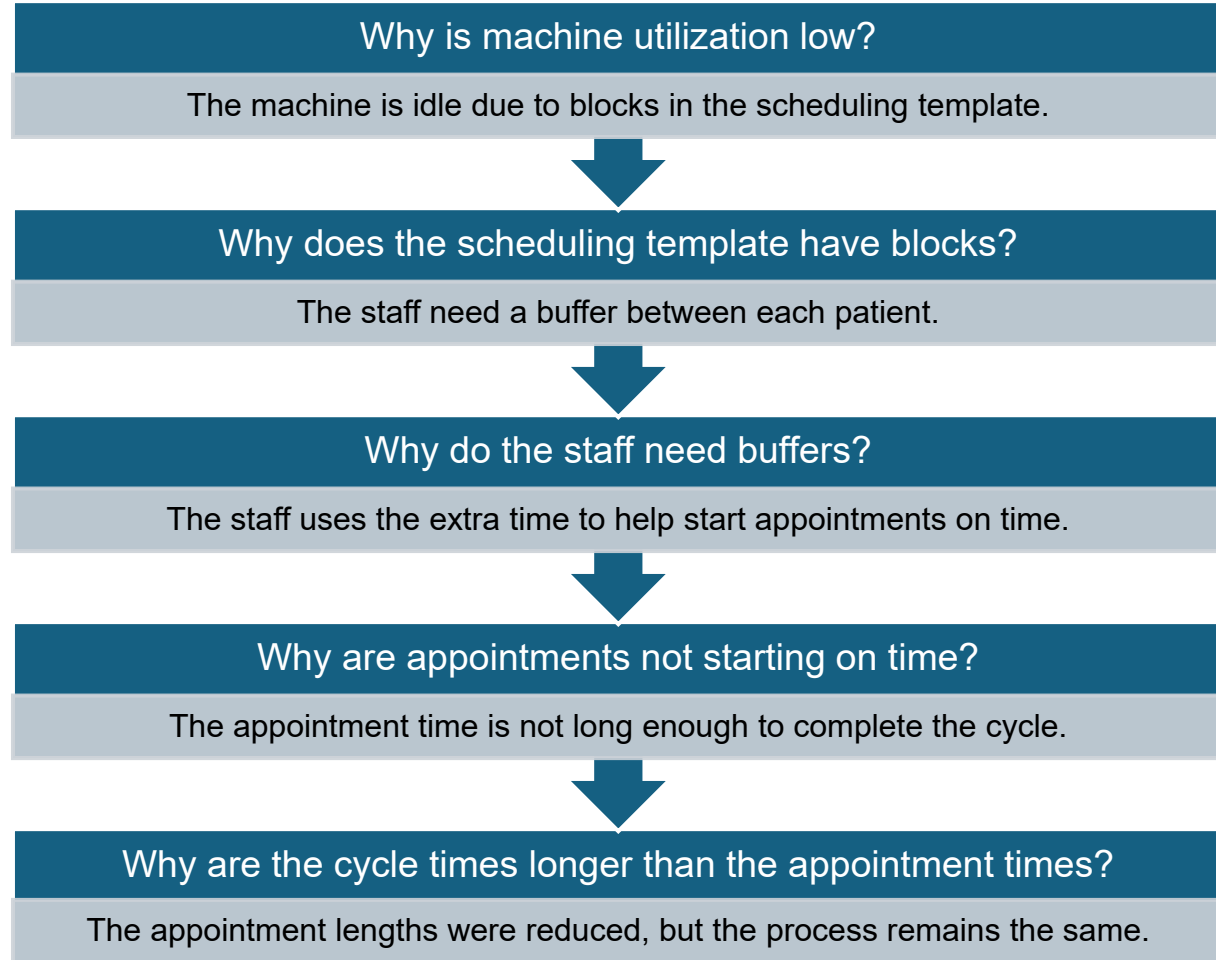


* The grey area represents blocks in the schedule. The scheduling department cannot schedule in the grey area.



Data Source: Houston Methodist Sugar Land (HMSL) Electronic Medical Record

5 Why's



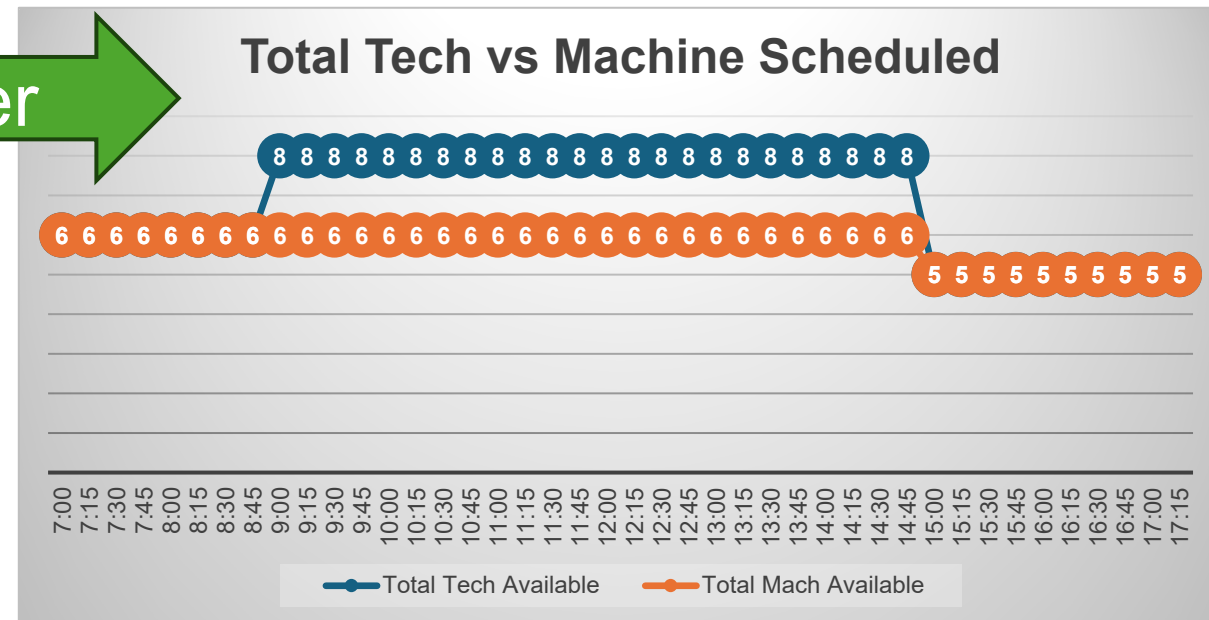
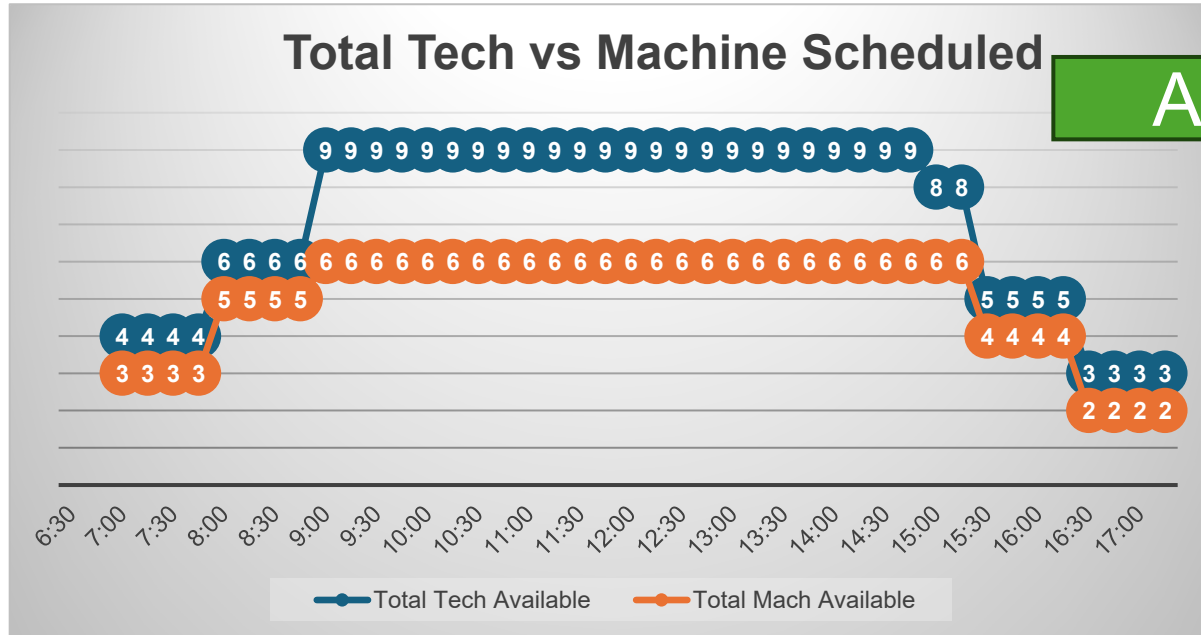
Process Optimization: Standardizing the Scheduling Template



Technologists feel passionate about helping patients but struggled visualizing the new template design. This visual represents the number of patients the Technologists will now be caring for, per machine daily.



Process Optimization: Staff Allocation Matrix



The number of Technologists was greater than the number of resources (machines) available. Due to the uneven staffing distribution, there was low staff productivity (<50%).

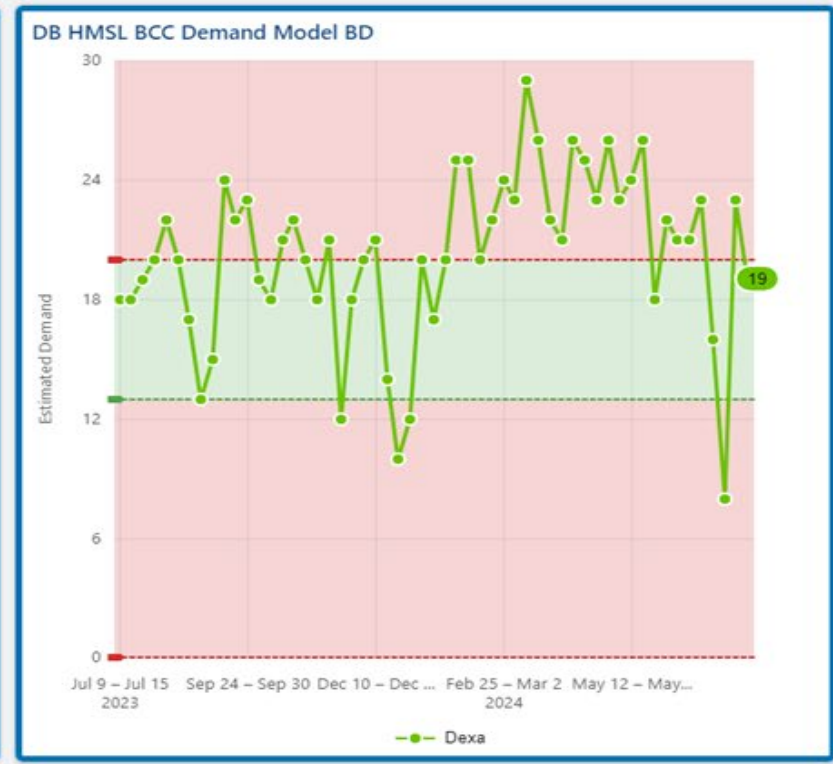
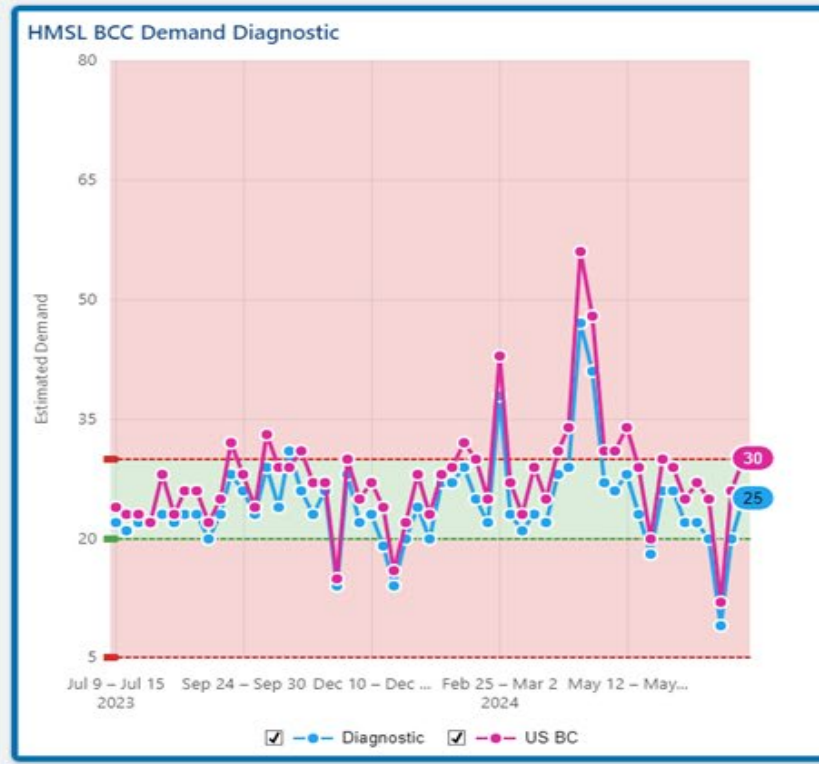
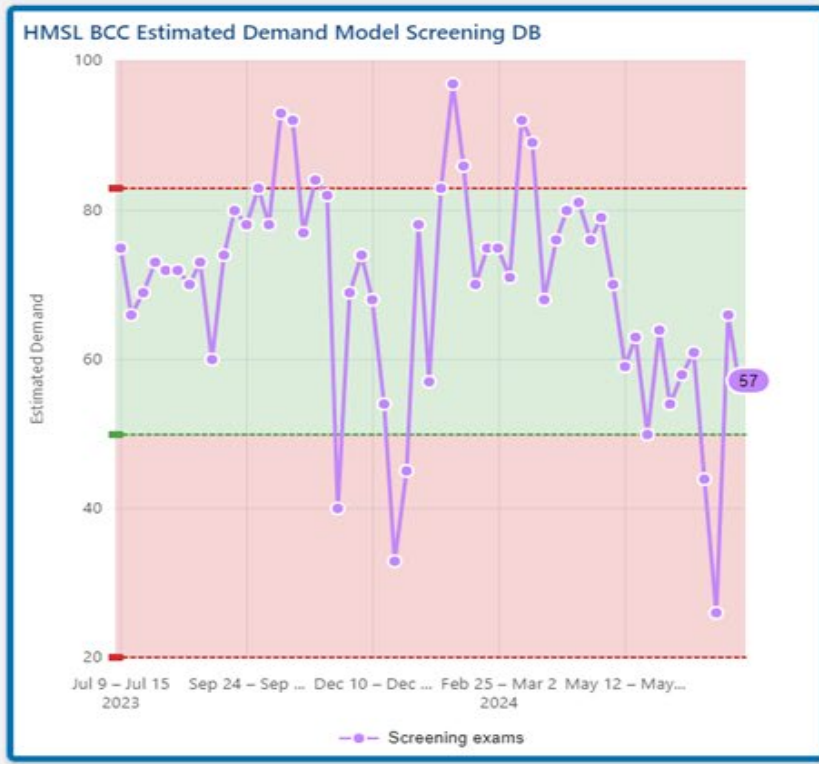
The number of Technologists remained the same, however staff schedules were changed to reflect the new operational hours. We also created the new role of Tech Navigator. Staff productivity was shifted to meet a target of 80%.



Data Source: Houston Methodist Sugar Land (HMSL) Electronic Medical Record

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Process Optimization: Creating the Demand Dashboard



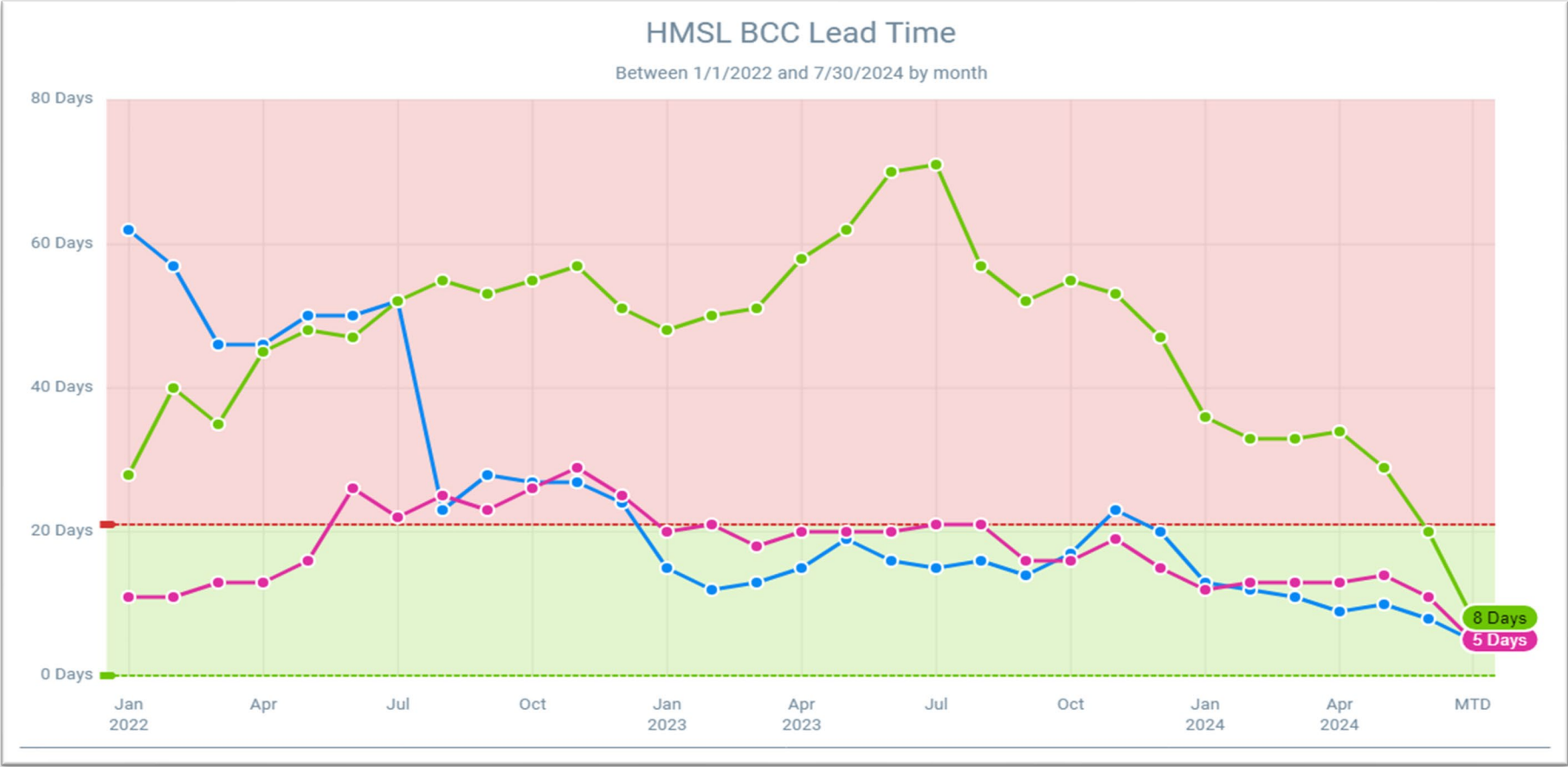
Real time visibility of demand assists the imaging leadership team to make operational decisions.



Data Source: Houston Methodist Sugar Land (HMSL) Electronic Medical Record



Sustain and Results: Reducing Lead Times to ≤ 8 Days



- Screening
- Diagnostic
- Bone Density

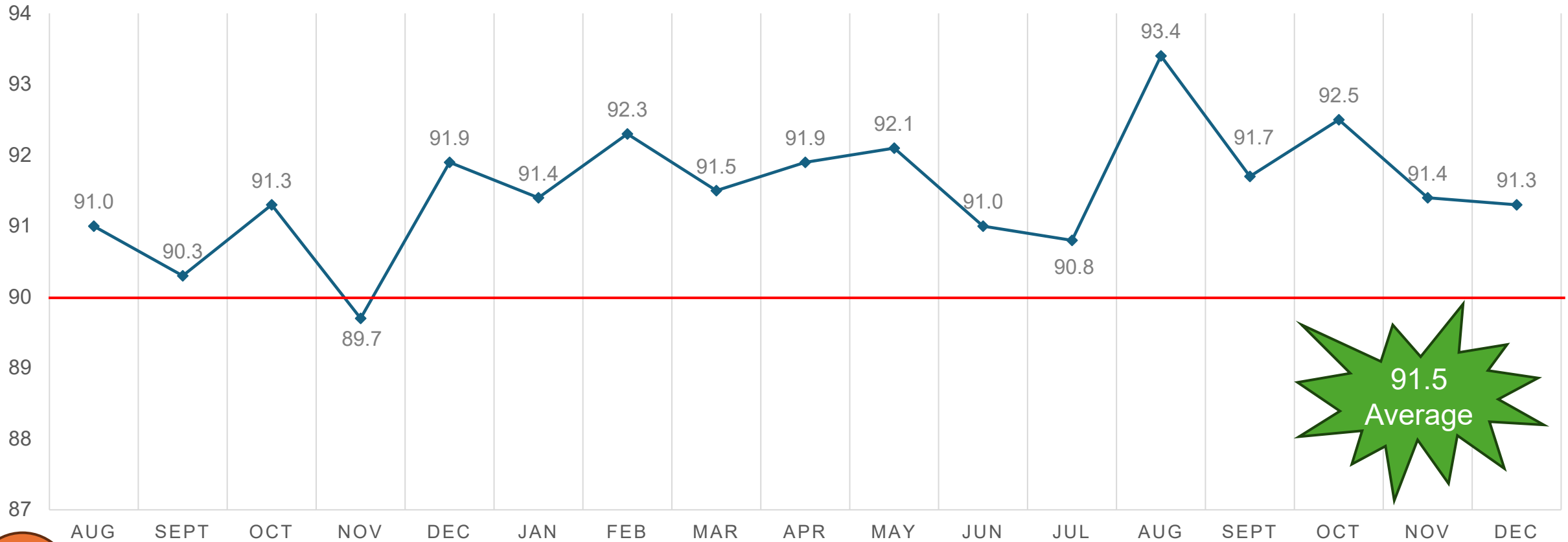


Data Source: Houston Methodist Sugar Land (HMSL) Electronic Medical Record

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Sustain and Results: Maintaining Superior Patient Experience Scores

2022-2023 PATIENT EXPERIENCE



91.5
Average

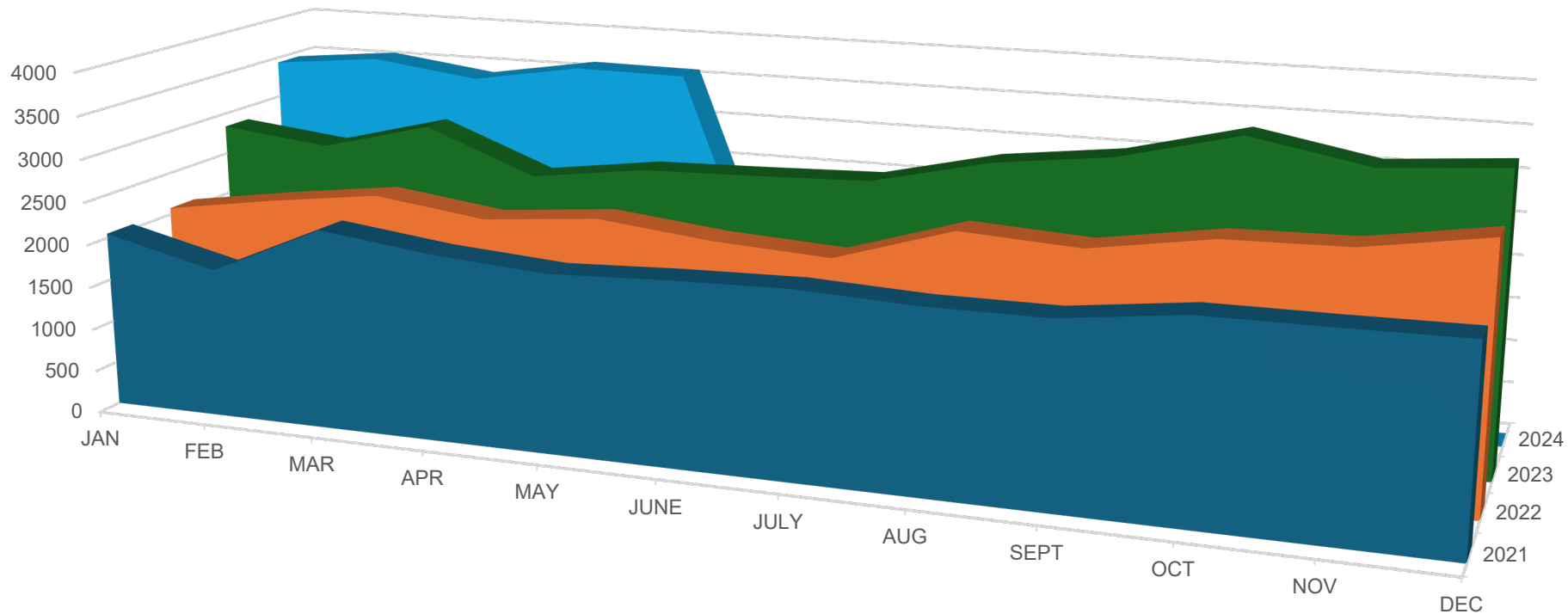


Data Source: Houston Methodist Sugar Land (HMSL) Patient Experience Data

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Sustain and Results: Increasing Volume and Opening Access to 12,908 Appointments

Year over Year Volume Growth



Data Source: Houston Methodist Sugar Land (HMSL) Electronic Medical Record

■ 2021 ■ 2022 ■ 2023 ■ 2024

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Lessons Learned

- Deploy a change management plan at the beginning of the project
- Promote transparency and creativity when displaying information to all key stakeholders
- Set milestones and checkpoints to monitor success
- Understand the roles and responsibilities of each team member to optimize operations
- Stabilize staffing when implementing change and creating training plans
- Additional equipment and/or staffing resources is not always the answer

Key Takeaways

- Understanding the “why” and being able to articulate that to your key stakeholders is important for change management
- Utilizing a holistic approach has shown positive outcomes for the patient’s experience and operational excellence
- Repeatable best practices and standardized workflows were created for the replication of similar improvements to other Breast Care Centers
- Redesigning the scheduling template maximized machine utilization and reduced lead time
- Customer demand is critical to designing a patient-centric schedule

Questions?



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