Massachusetts General Hospital's Pre-Admission Testing Area (PATA)
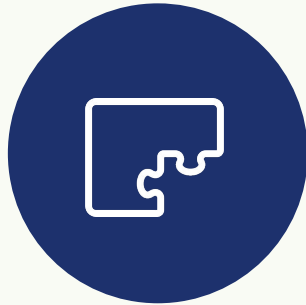
MBA 7150

Presented by: Sumaya Sheikh

Agenda

1. COMPANY OVERVIEW

2. CURRENT STATE PROCESS ANALYSIS

3. EVALUATION OF RECOMMENDATION
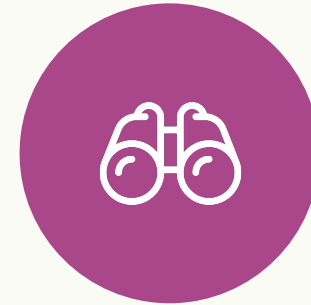
4. FUTURE STATE ANALYSIS

Company Overview

Mission and Vision

MISSION

PATA's mission is to ensure the patient's overall health and resilience are sufficient to safely undergo anesthesia prior to surgery.

VISION

MGH aims to provide high-quality, family-focused care to patients.

Company Overview

Background

FOUNDED IN 1811

this makes it the third oldest hospital in the US

OUTSTANDING REPUTATION

Due to its reputation, people travel all over the country to receive treatment
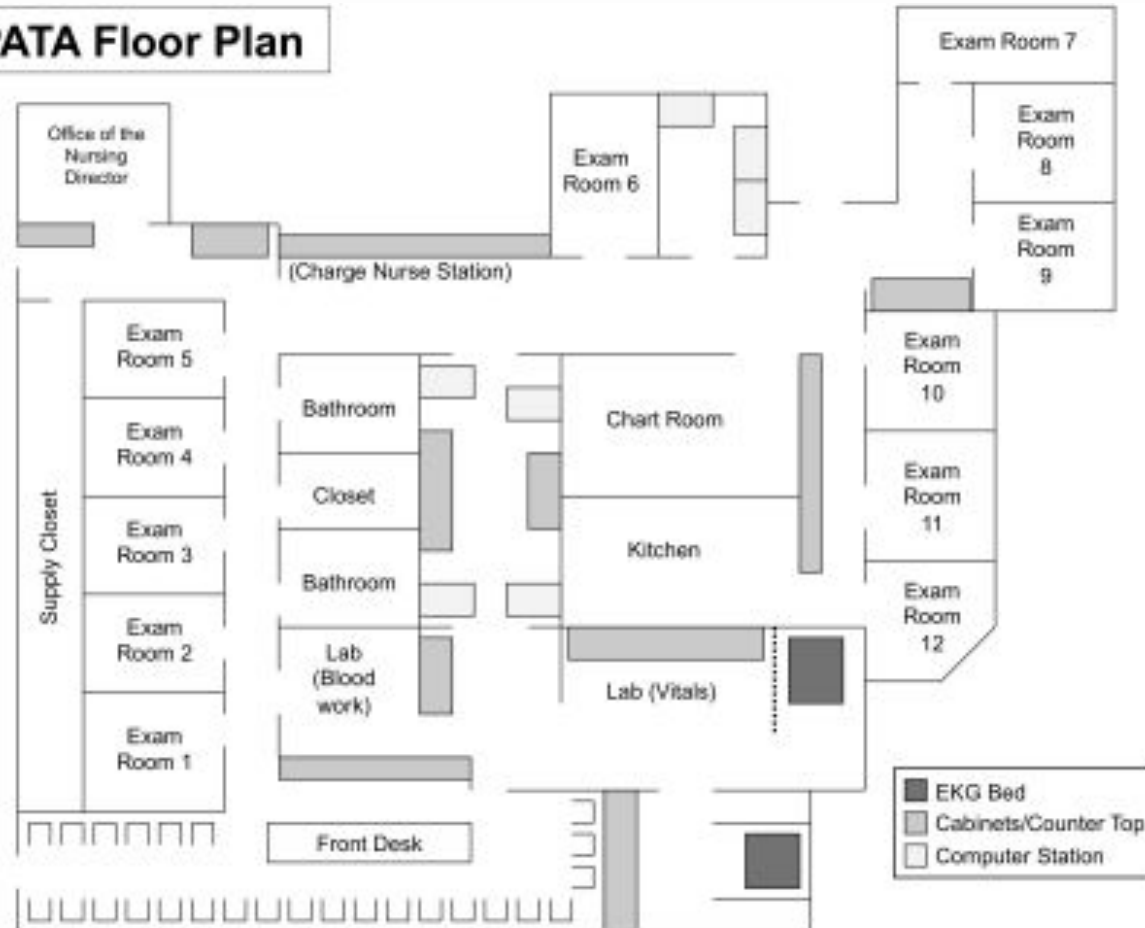
CAPACITY

More than 23,000 Employees and provide over 900 beds for patients

Company Overview

Stakeholders

- **SURGEONS**

- **RN AND MD**

- **PATA TASK FORCE**

- **PATIENTS**

- **CHARGE NURSE**

- **LAB TECHNICIAN**

- **FRONT DESK ATTENDEES**

PATA Floor Plan

Current State Analysis

Current Challenges of PATA

1 PATA EXPERIENCES EXTENDED WAIT TIMES OF UP TO 4 HOURS, WITH ONLY 1.5 HOURS DEDICATED TO DIRECT PATIENT INTERACTIONS DUE TO OVERCROWDING

2 PATA'S CAPACITY CAN ACCOMMODATE ONLY 65% OF THE TOTAL NUMBER OF OUTPATIENTS THEY RECEIVE.

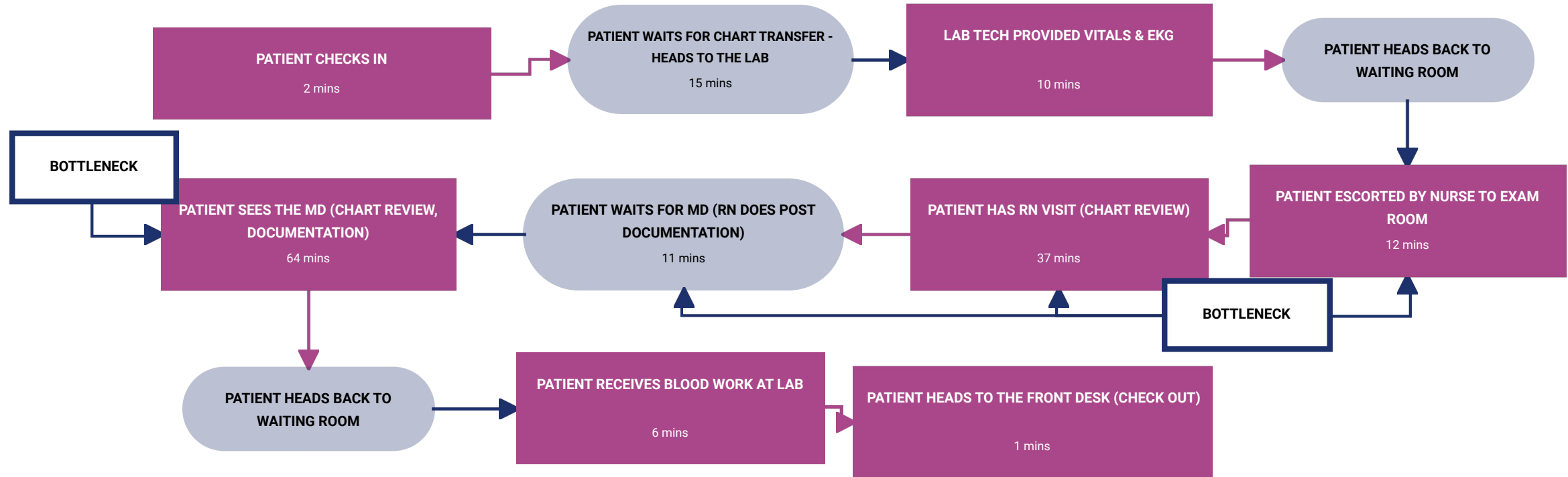**3** NURSES AND MEDICAL DOCTORS ARE DISSATISFIED DUE TO WORKING LONG HOURS

4 PATA DOES NOT GENERATE REVENUE, IT IS UNLIKELY TO RECEIVE ADDITIONAL RESOURCES.

5 DELAYS IN OPERATING ROOM LED TO PRODUCTIVITY LOSS

Current State Analysis

PATA Process Flow Map

Current State Analysis

Capacity and Utilization

Non-Lunch Hours

Providers	Time (min)	Capacity (patients/h)	Implied Utilization
1 Attendant	2	30	27%
2 Lab Technicians	10	12	67%
5 Registered Nurses	43	6.98	115%
8 Medical Doctors	64	7.5	107%
3 Lab Technicians	5	36	22%
1 Attendant	1	60	13%

Current State Analysis

Capacity and Utilization

Lunch Hours

Providers	Time (min)	Capacity (patients/h)	Implied Utilization
1 Attendant	2	30	13%
1 Lab Technicians	10	6	67%
2 Registered Nurses	43	2.79	143%
4 Medical Doctors	64	3.75	107%
2 Lab Technicians	5	24	20%
1 Attendant	1	60	7%

Recommendations

ADD MORE TIME BETWEEN APPOINTMENTS

Pro: Eliminates build up at RN

Pro: Reduces wait times at other points

Con: RN and MDs will work longer days

Con: Wait times will still be prevalent

ADD MORE ROOMS

Pro: More patients can be scheduled

Con: Patients will still be waiting on physicians in the rooms

Con: Too expensive to add more rooms

Con: You have to hire more physicians if there are more rooms

ADD MORE PHYSICIANS

Pro: Staff won't work long hours, reduced burnout

Pro: More patients can be scheduled

Con: Too expensive to hire more physicians

Con: More space needed if more physician are added

Recommendations

MERGING RNS AND MDS PROCESS

Implementing a unified service for RN and MD assessments
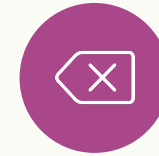
Hiring Nurse Practitioners

COMPUTERIZED SYSTEM SOLUTIONS

Implementing a system that enables storage and patient data

Implementing web-services that utilize pre-arrival web questionnaire
Implementing an automated queue-routing system

REMOVAL OF LAB TECHNICIAN

Redistribute tasks to the Registered Nurses

Future State Analysis

Benefits of Recommendations

MERGING RNS AND MDS

- Reduced wait times
- Optimal resource utilization
- Increased capacity
- Cost-Savings
- Workflow efficiency

COMPUTERIZED SYSTEM SOLUTIONS

- Reduced wait times
- Enhanced data sharing
- Streamlined operations
- Increased efficiency
- Improved accuracy and quality of care

REMOVAL OF LAB TECHNICIAN

- Reduced wait times
- Optimal resource utilization
- Workflow efficiency
- Improved coordination and communication
- Cost savings

Summary

1. **MERGING RN AND MD PROCESS = ELIMINATING REDUNDANCY**

2. **COMPUTERIZED SYSTEM SOLUTIONS = INCREASED EFFICIENCY**

3. **REMOVING LAB TECHNICIANS = OPTIMIZING UTILIZATION OF RESOURCES**

THANK YOU