Business Requirements Document

Project name: HealthFirst Operational Efficiency and Patient Experience Enhancement

Project Overview

This project focuses on identifying and addressing key operational inefficiencies at HealthFirst Care, a multi-specialty hospital. The core areas of improvement include appointment scheduling, resource allocation, patient communication, and interdepartmental coordination. Insights from stakeholder feedback and system data is used to define clear, actionable business requirements to improve patient satisfaction and staff productivity.

Background and Problem Statement

HealthFirst is experiencing challenges that compromise both operational performance and patient experience. Patients report long wait times, inconsistent communication, and confusing scheduling systems. Doctors and nurses face limited resource availability and delays in inter-departmental communication. Administrative staff struggle with outdated scheduling and record-keeping systems, while the IT team highlights system downtimes, siloed data, and lack of integration. Together, these issues highlight the urgent need for systemic improvements across departments.

Project scope

In-scope

- Evaluation and redesign of the appointment scheduling system
- Integration of patient record and billing systems
- Implementation of automated notifications and status updates for patients
- Dashboard creation for real-time resource availability
- Enhancement of interdepartmental communication mechanisms

Out-of-scope

- Hiring new medical personnel
- Physical infrastructure upgrades
- Changes to regulatory or legal procedures

Stakeholders

- **Patients**: Require timely appointments, clear communication, and transparency
- **Doctors and Nurses**: Need access to real-time resource information and improved inter-departmental coordination
- Administrative Staff: Require accurate scheduling tools and streamlined record management
- IT Team: Responsible for system reliability, security, and integration
- Hospital Management: Oversight of strategic implementation and resource approval

Business objectives

- Reduce average patient wait times by 20% within 6 months
- Improve patient satisfaction scores to 8+/10
- Decrease appointment no-show rate by 25%
- Ensure 90%+ availability of critical resources during operating hours
- Enhance data access and communication across all departments

Requirements

Functional requirements

- Automate appointment scheduling and reduce double bookings
- 2. Centralized Hospital Information System (HIS)
- 3. Automated patient notifications via SMS/email
- 4. Real-time dashboard for resource tracking (staff, rooms, equipment)
- 5. Secure internal messaging system for staff communication

Non-functional requirements

- System uptime of 99.9% during operational hours
- 2. Scalable architecture with cloud integration
- 3. Compliance with healthcare data privacy regulations
- 4. Mobile and desktop compatibility with accessibility features

Assumptions

- Users (staff and patients) will be trained on new systems
- Adequate funding and resources will be provided
- Legacy data will be successfully migrated
- Stakeholder feedback will continue throughout implementation

Constraints

- 1. Budget limitations for system upgrades
- 2. Legacy systems may limit integration
- 3. Downtime during data migration must be minimized
- 4. Compliance with regulations (e.g., HIPAA) must be maintained

Supporting Data

- **Patient Feedback**: Long wait times, poor communication, and lack of real-time updates
- Appointment Data: High rates of no-shows, rescheduling, and cancellations
- Resource Usage: Bottlenecks in equipment and staff availability, especially during peak hours
- **Stakeholder Interviews**: Need for a more intuitive, transparent, and integrated system

Conclusion

Addressing the inefficiencies in scheduling, communication, and resource management at HealthFirst is essential for enhancing both patient satisfaction and operational effectiveness. Implementing the proposed requirements will provide a scalable, integrated solution to meet these goals while preparing the hospital for future growth and digital transformation.