**Process Model**

**Project name:** Enhancing Operational Efficiency in a Multi-Specialty Hospital

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**Summary analysis of current processes, key challenges, and rationale for proposed optimizations**

The current workflow in the hospital involves many disconnected systems for appointment scheduling, patient records, communication, and resource allocation. These systems lack integration, often leading to inefficiencies and frequent service issues.

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| **Area** | **Problem** |
| Appointment Scheduling | Long wait times, frequent double bookings, manual rescheduling |
| Communication | Fragmented communication between nurses, doctors, and admin |
| Record Management | Siloed systems that delay access to patient history |

Which optimization goals are as follows:

* Improve system integration between scheduling and record systems
* Automate appointment booking with conflict detection
* Real-time notifications to patients and staff
* Support dynamic resource allocation for nurses
* Provide online feedback systems for improvement

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| Proposed Solution | Rationale | Expected Impact |
| Automated Appointment Scheduling System | Replaces manual entry with a smart, user-friendly system that reduces double-booking and admin burden. | - Faster booking process  - Fewer staff hours spent on admin work |
| Real-Time Notification System | Notifies patients about appointment confirmations, delays, and reminders to reduce no-shows. | - Improved patient satisfaction  - More accurate scheduling adjustments |
| Automated Reminders and Confirmations | System sends alerts to confirm attendance or reschedule. | - Better appointment adherence  - Higher throughput |

**As-Is process models**

Appointment scheduling process

**A diagram of a diagram

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Patient check-in process

**A diagram of a flowchart

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Interdepartmental communication

**A diagram of a flowchart

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**To-Be process models**

Automated appointment scheduling

A diagram of conflict validation

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Streamlined patient check-in

A diagram of a computer

AI-generated content may be incorrect.

Improved interdepartmental communication

A diagram of a system

AI-generated content may be incorrect.