**Current Challenges Identified (As-Is Workflows)**

* **Appointment Scheduling**
  + Manual slot checking leads to delays and frequent double bookings.
  + Lack of integration between patient preferences and scheduling system.
  + IT support often reacts to problems rather than preventing them.
* **Patient Check-in and Resource Allocation**
  + Manual paperwork causes long queues and frustration.
  + Roles of front desk and clinical staff often overlap, causing miscommunication.
  + Resource availability (doctors, beds) is not tracked in real-time.
* **Discharge Planning**
  + Doctors and admin staff often work in silos, resulting in delayed discharges.
  + Billing clearance is not integrated with the discharge summary process.
  + Patient feedback collection is not timely or automated.

**Proposed Improvements (To-Be Workflows)**

* **Automated Scheduling with Conflict Detection**
  + Integrated platform to verify availability in real time.
  + Notifications to patients via SMS/email reduce manual communication overhead.
* **Streamlined Check-in via Kiosks**
  + Patients use self-service kiosks or mobile check-in to skip front-desk bottlenecks.
  + Automated notification to doctors and nurses on patient arrival.
* **Discharge Workflow Optimization**
  + Trigger-based workflows using BPMN to automate summary generation and billing.
  + Feedback captured immediately post-discharge using digital forms.
* **Clear Role Assignment via Swimlane Diagrams**
  + Defined responsibilities for patients, admin staff, doctors, nurses, and IT.
  + Reduced process ambiguity through visual workflows.

**3. Impact on Efficiency**

* **Time Savings**
  + Up to 40% reduction in appointment scheduling time.
  + Average check-in time reduced by 50% using kiosks.
* **Improved Communication**
  + Structured communication reduces missteps and delays.
  + Real-time dashboards promote faster decision-making between departments.
* **Higher Patient Satisfaction**
  + Patients experience smoother, faster service from entry to discharge.
  + Better feedback handling improves overall service delivery.
* **Swimlane Diagram**





