

# **Project Title: Healthcare Appointment & Patient Engagement System**

**Problem Statement:** Healthcare clinics and hospitals often face challenges in managing patient appointments and communication due to:

- Manual scheduling leading to double bookings or missed slots.
- Lack of automated reminders causing high no-show rates.
- Limited visibility into doctor availability and patient history.
- No centralized system for appointment tracking, treatment follow-ups, and patient engagement.

## **Proposed Solution:**

### **Requirement Gathering:**

- Manage patient records (demographics, history, contact details).
- Manage doctor records (specialty, availability, working hours).
- Enable patients to book/cancel appointments via guided Flows.
- Automate email/SMS reminders before appointments.
- Track treatment follow-ups and feedback.
- Provide dashboards for doctors (appointments) and admins (overall performance).
- Integrate with Google Calendar for slot management.
- Ensure scalability and user-friendliness.

### **Stakeholder Analysis:**

#### **Primary Stakeholders (Direct Users):**

1. Front Desk / Reception Staff – Create patient records, book appointments, reschedule/cancel slots.

2. **Nursing / Care Coordinators** – Track follow-ups, assign patients to doctors, manage treatment notes.
3. **Customer Support / Patient Helpdesk** – Handle incoming calls/messages, answer FAQs, log issue
4. **Hospital Administration Team** – Monitor daily appointments, patient flow, and staff workload.

### **Secondary Stakeholders (Indirect Users):**

5. **Doctors / Specialists** – Consume appointment schedules (sync'd via calendar/email), receive summaries (but not direct Salesforce users).
6. **Hospital Management / Executives** – Review dashboards on patient volumes, cancellations, and engagement metrics.
7. **IT/Support Teams** – Maintain system integrations (Google Calendar, SMS APIs, Agentforce bots).

## **Business Process Mapping:**

- Patient record is created (Account/Contact).
- Appointment record is created and linked to doctor + patient.
- System sends confirmation email + reminder before visit.
- Doctor conducts consultation and updates treatment record.
- Follow-up tasks/appointments are auto-created if required.
- Feedback email is sent to patient.
- Dashboards display doctor schedules, patient engagement, and appointment trends.

## **Use Case:**

### **1.Patient Onboarding & Management**

- Capture patient details via self-service flow or front-desk entry.
- Maintain medical history and contact information.

### **2.Appointment Scheduling**

- Screen Flow allows booking based on doctor availability.
- Auto-blocks slots in Google Calendar..

### 3. Reminders & Notifications

- Email/SMS reminders 24 hrs before appointment.
- Notify doctor of last-minute cancellations.

### 4. Treatment & Follow-up

- Doctors add notes/prescriptions after consultation.
- Auto-create follow-up appointment or task.

### 5. Reporting & Dashboards

- Doctor's daily schedule dashboard.
- Appointment trend reports (weekly/monthly).
- Patient engagement dashboard (no-shows, cancellations, follow-ups).

## AppExchange Exploration:

1. **Smart Calendar (Astrea IT Services)** – To provide staff with calendar views and reminders for upcoming patient appointments, reducing missed slots.
2. **Docs Made Easy (HIC Global Solutions)** – To generate PDF or DOCX visit summaries, prescriptions, or appointment confirmations directly from Salesforce.
3. **Time Warp** – To visualize patient history and doctor appointments on interactive timelines, improving case tracking.
4. **Events (Salesforce Labs)** – To manage internal events like health camps or patient workshops alongside standard appointments.
5. **User Access and Permissions Assistant (Salesforce Labs)** – To simplify managing role-based access for front desk, coordinators, and support staff.
6. **Field Trip** – To analyze data completeness in patient and appointment records, ensuring reliable reporting.