# MediCare Connect — Phase 3: Data Modelling & Relationships

**Introduction**: Define and implement the data structure of MediCare Connect to link patients, appointments and medical cases. Configure record types, page layouts, navigation tabs and security so that each role (Admin, Doctor, Receptionist) can perform its tasks.

## 1. Standard & Custom Objects

- **Contact (Patients)** – standard object used to store patient information (DOB, MRN).

- **Appointment (Custom)** – tracks scheduled visits/teleconsultations with fields for date/time, duration, status, source, location, and lookups to Patient (Contact) and Doctor (User).

- **Medical Case (Custom)** – captures diagnosis and treatment details, including description, treatment plan, status, and lookups to Patient (Contact) and Doctor (User).

## 2. Fields

- Appointment fields include: Appointment Date/Time, Duration, Status, Source, Confirmation Sent, Reminder Sent, Location, Patient (lookup to Contact), Doctor (lookup to User).

- Medical Case fields include: Case Name, Description, Status, Treatment Plan, Patient (lookup to Contact), Doctor (lookup to User).
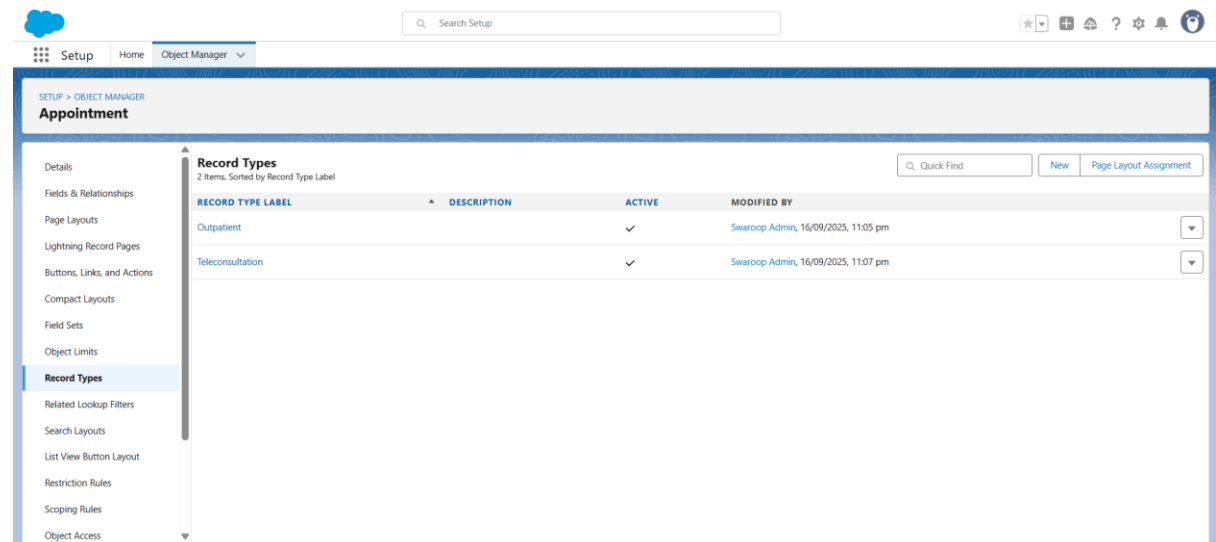


**Fig.1 Appointment_Fields**



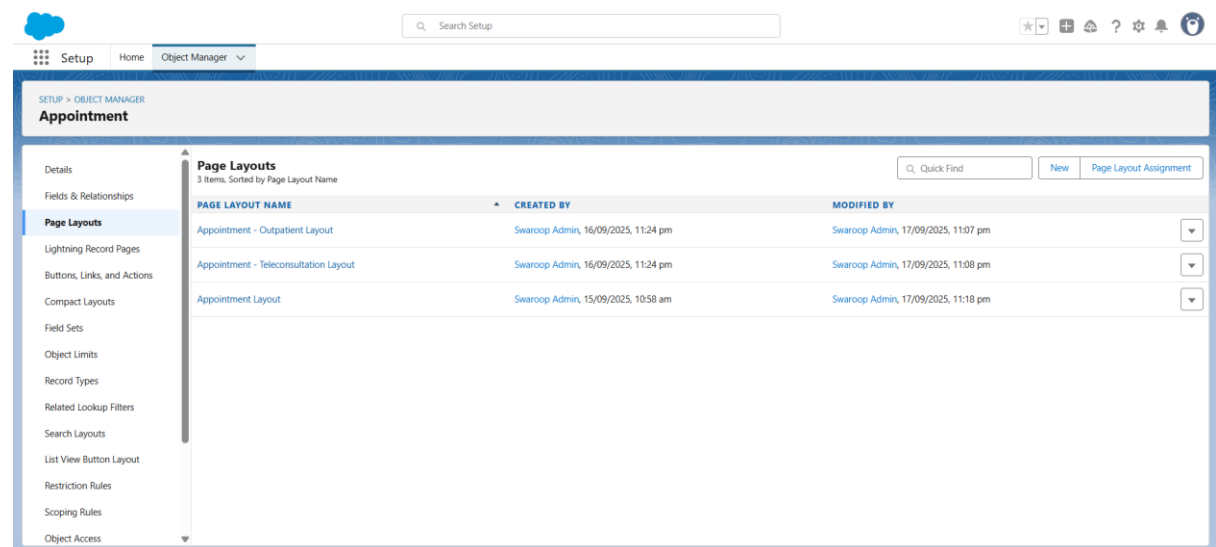**Fig.2 MedicalCase_Fields**

## 3. Record Types

- Appointment record types: **Outpatient** and **Teleconsultation** support different workflows.

- Separate page layouts exist for each record type to show relevant fields.



**Fig.3 Appointment record types**



**Fig.4 Appointment PageLayout Assignment**

## 4. Page Layouts & Related Lists

- Appointment layouts display patient and doctor information plus related Medical Cases.

- Contact (Patient) layout includes related lists for Appointments and Medical Cases to view all records linked to a patient.
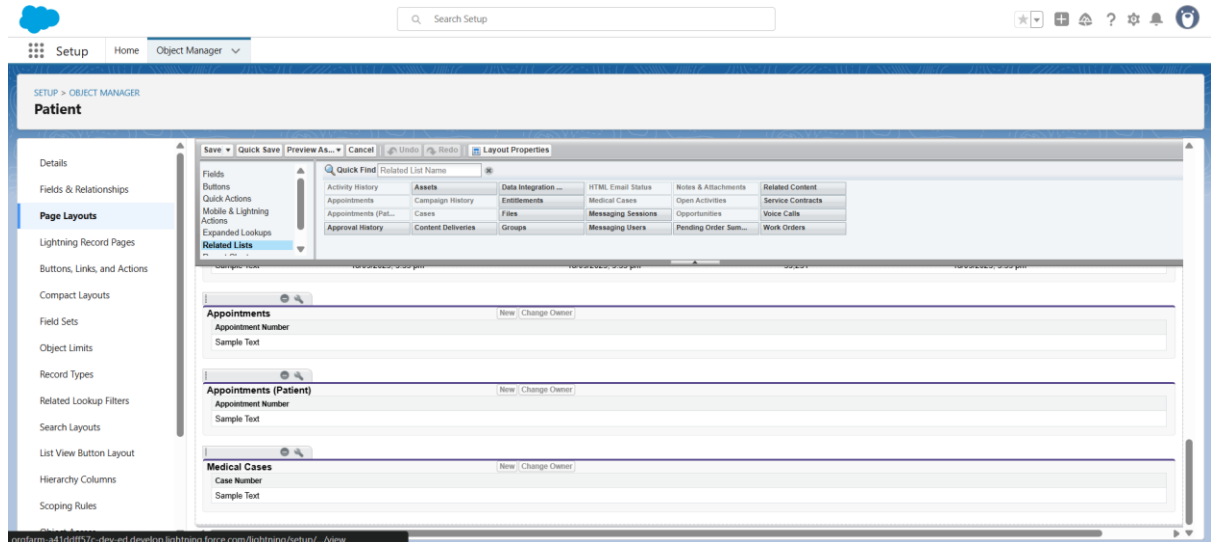


**Fig.5 Patient PageLayout RelatedLists**

## 5. Lightning Record Pages & Compact Layouts

- Custom Lightning Record Pages created for Appointment to give Doctors and Receptionists tailored views.

- Compact Layouts show key Appointment fields (Patient, Date/Time, Status, Doctor) for quick glance.
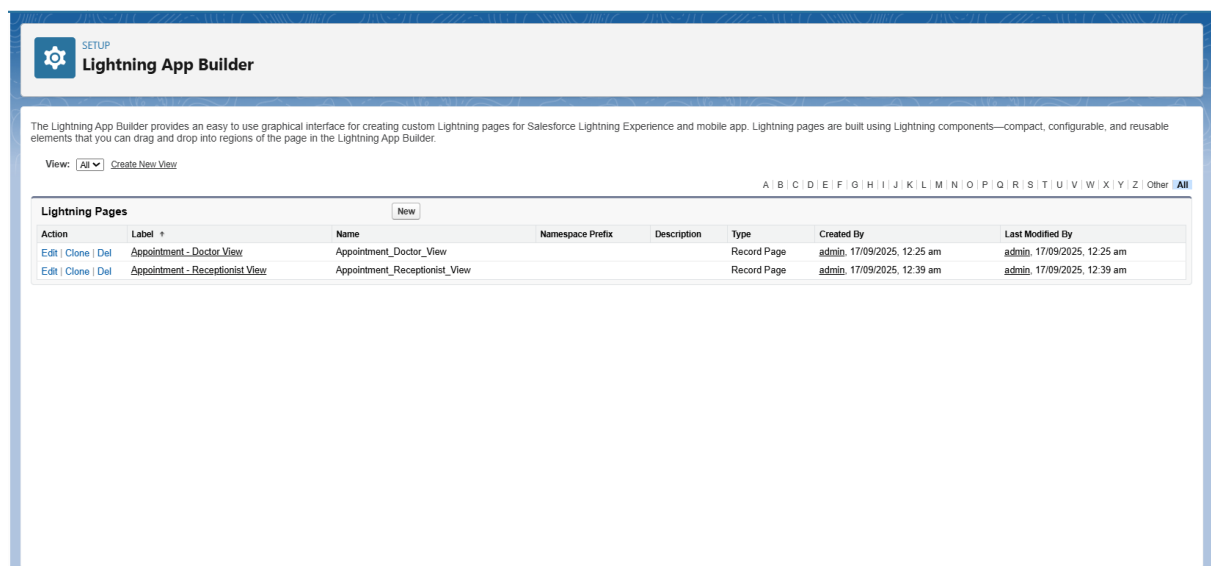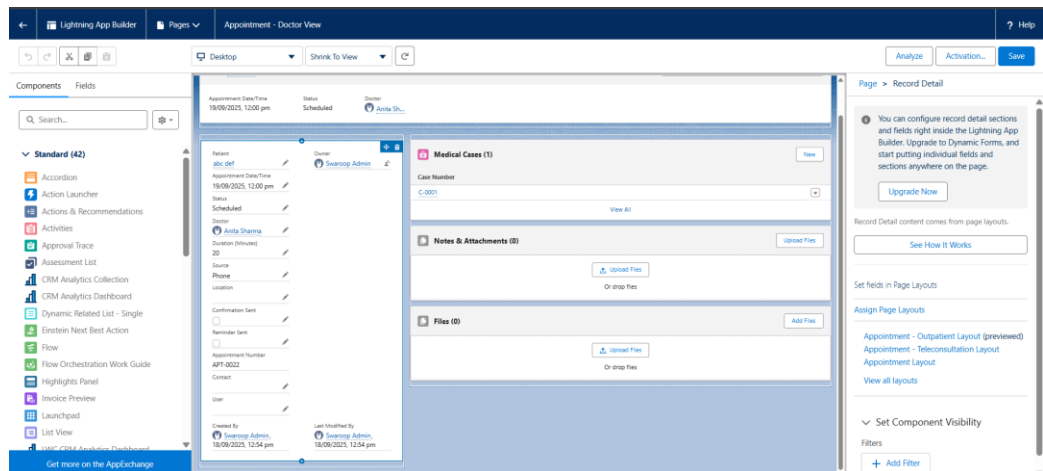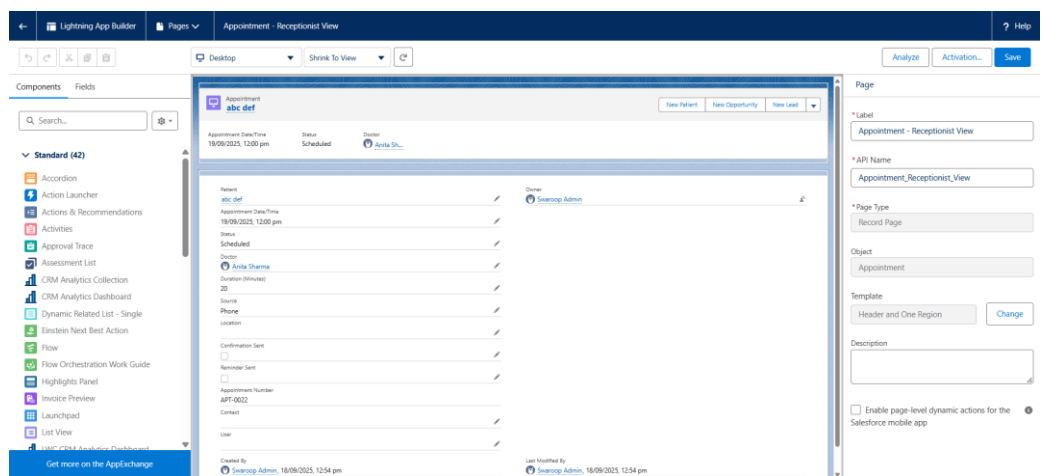

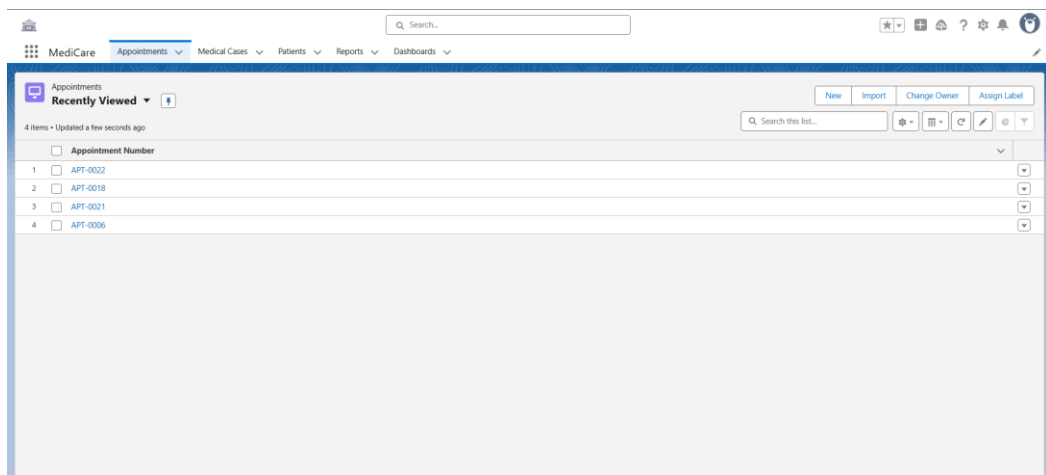
**Fig.6 AppBuilder Views**

**Fig.7 Appointment - Doctor View**



**Fig.8 Appointment - Receptionist View**

**6. Tabs & App Navigation**

- MediCare Lightning app navigation includes: Patients (Contacts), Appointments, Medical Cases, Reports and Dashboards.

- Custom tabs added for Medical Cases to enable direct access.



**Fig.9 MediCare App Custom Tabs View**

### 7. Schema Builder (ERD)

- Schema Builder displays Contact, Appointment, Medical Case and User objects with lookup relationships.

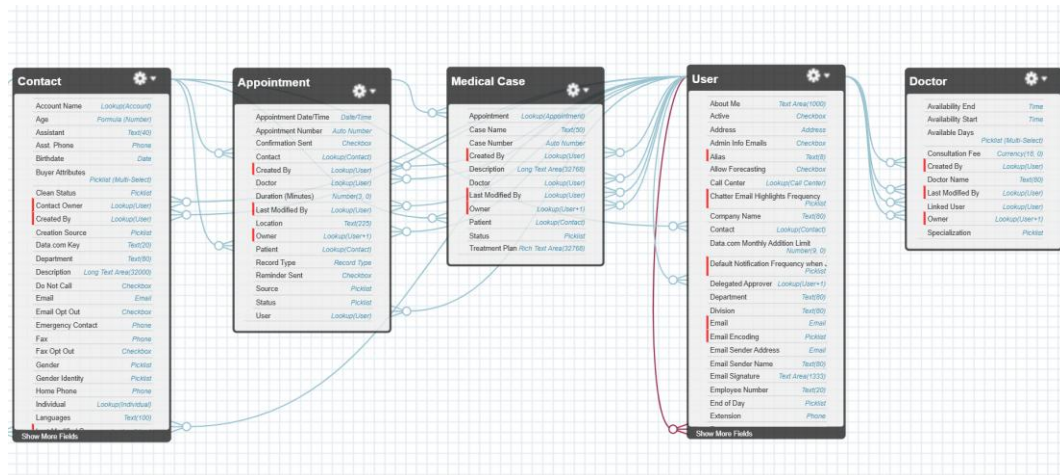- Boxes arranged to show Patient in the centre with Appointment and Medical Case linked to it.



**Fig.10 Schema Builder ERD view**

### 8. Security & Field-Level Visibility

- Doctor profile has Read/Create/Edit on Appointment and Medical Case.

- Receptionist profile has Read/Create/Edit on Appointment but read-only on Medical Case.

- Treatment Plan and Description fields hidden from Receptionist profile.

### 9. Sample Data & Testing

- Sample Contacts (patients) created with DOB and MRN.

- Appointments created by Receptionist, linked to patients and Doctor users with record type Outpatient.

- Medical Cases created and linked to the same patients and doctors.

- Doctor login view shows Appointments and Medical Cases; Patient record shows related lists.

### 10. Current System Behaviour

- Appointments link both Patient (Contact) and Doctor (User) for scheduling and tracking.

- Medical Cases hold diagnosis/treatment information linked to the same Patient and Doctor.

- Outpatient and Teleconsultation record types display appropriate layouts.

- Contact records show all related Appointments and Medical Cases.

- Doctors can view Appointments and Medical Cases assigned or shared to them.

- Receptionists can create Appointments and view limited Medical Case data.

- The Schema Builder ERD reflects the current relationships.