

# 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).

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Appointment Date/Time	Appointment_Date_Time_c	Date/Time		
Appointment Number	Name	Auto Number		✓
Confirmation Sent	Confirmation_Sent_c	Checkbox		
Contact	Contact_c	Lookup(Patient)		✓
Created By	CreatedById	Lookup(User)		✓
Doctor	Doctor_c	Lookup(User)		✓
Duration (Minutes)	Duration_Minutes_c	Number(3,0)		
Last Modified By	LastModifiedById	Lookup(User)		
Location	Location_c	Text(255)		✓
Owner	OwnerId	Lookup(User,Group)		✓

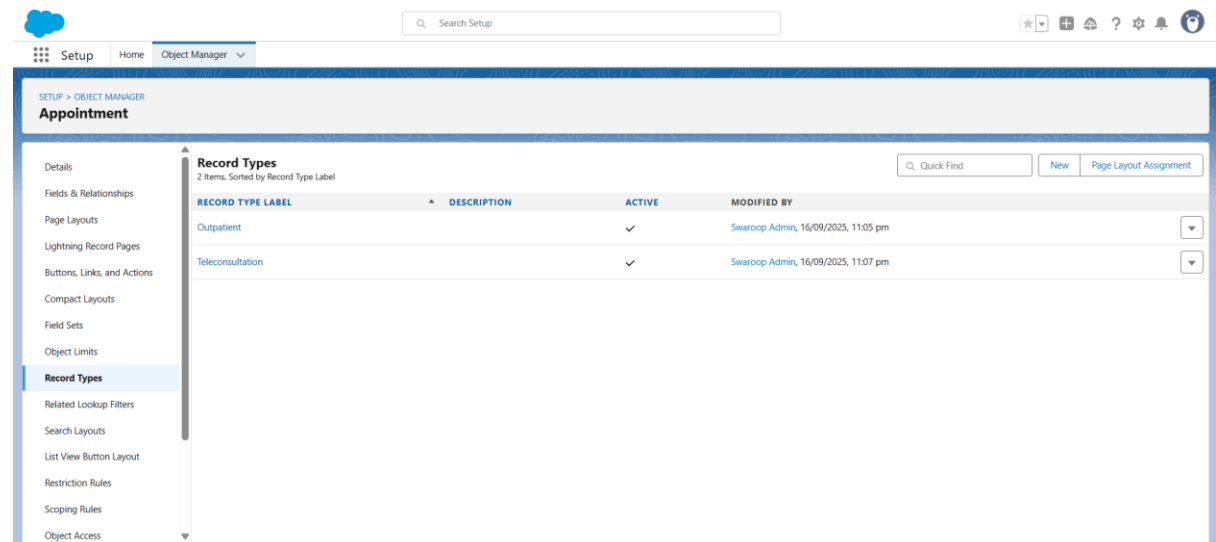
Fig.1 Appointment\_Fields

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Appointment	Appointment_c	Lookup(Appointment)		✓
Case Name	Case_Name_c	Text(50)		
Case Number	Name	Auto Number		✓
Created By	CreatedById	Lookup(User)		
Description	Description_c	Long Text Area(32768)		
Doctor	Doctor_c	Lookup(User)		✓
Last Modified By	LastModifiedById	Lookup(User)		✓
Owner	OwnerId	Lookup(User,Group)		✓
Patient	Patient_c	Lookup(Patient)		✓
Status	Status_c	Picklist		✓

Fig.2 MedicalCase\_Fields

### 3. Record Types

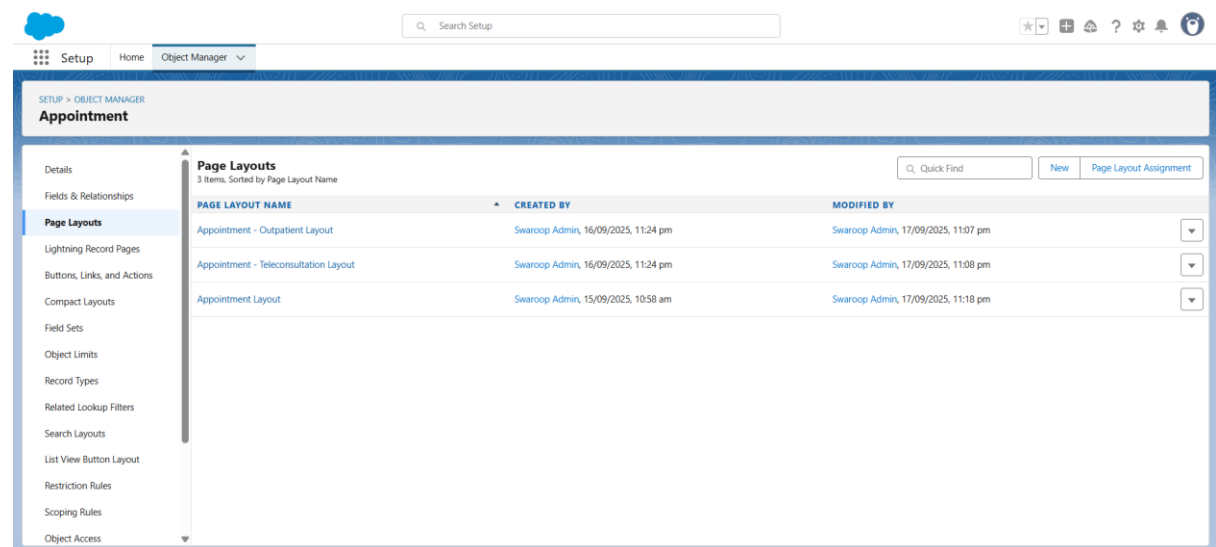
- Appointment record types: **Outpatient** and **Teleconsultation** support different workflows.
- Separate page layouts exist for each record type to show relevant fields.



The screenshot shows the Salesforce Setup interface for the 'Appointment' object. The left sidebar contains a navigation menu with options like Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, Restriction Rules, Scoping Rules, and Object Access. The 'Record Types' section is selected. The main content area displays a table with 2 items, sorted by Record Type Label. The table has columns for Record Type Label, Description, Active status, and Modified By. The 'Outpatient' and 'Teleconsultation' record types are listed, both marked as active and modified by Swaroop Admin on 16/09/2025.

RECORD TYPE LABEL	DESCRIPTION	ACTIVE	MODIFIED BY
Outpatient		✓	Swaroop Admin, 16/09/2025, 11:05 pm
Teleconsultation		✓	Swaroop Admin, 16/09/2025, 11:07 pm

Fig.3 Appointment record types



The screenshot shows the Salesforce Setup interface for the 'Appointment' object, specifically the 'Page Layouts' section. The left sidebar is the same as in Fig.3, but 'Page Layouts' is selected. The main content area displays a table with 3 items, sorted by Page Layout Name. The table has columns for Page Layout Name, Created By, and Modified By. Three page layouts are listed: 'Appointment - Outpatient Layout', 'Appointment - Teleconsultation Layout', and 'Appointment Layout', all created by Swaroop Admin on 16/09/2025.

PAGE LAYOUT NAME	CREATED BY	MODIFIED BY
Appointment - Outpatient Layout	Swaroop Admin, 16/09/2025, 11:24 pm	Swaroop Admin, 17/09/2025, 11:07 pm
Appointment - Teleconsultation Layout	Swaroop Admin, 16/09/2025, 11:24 pm	Swaroop Admin, 17/09/2025, 11:08 pm
Appointment Layout	Swaroop Admin, 15/09/2025, 10:58 am	Swaroop Admin, 17/09/2025, 11:18 pm

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.

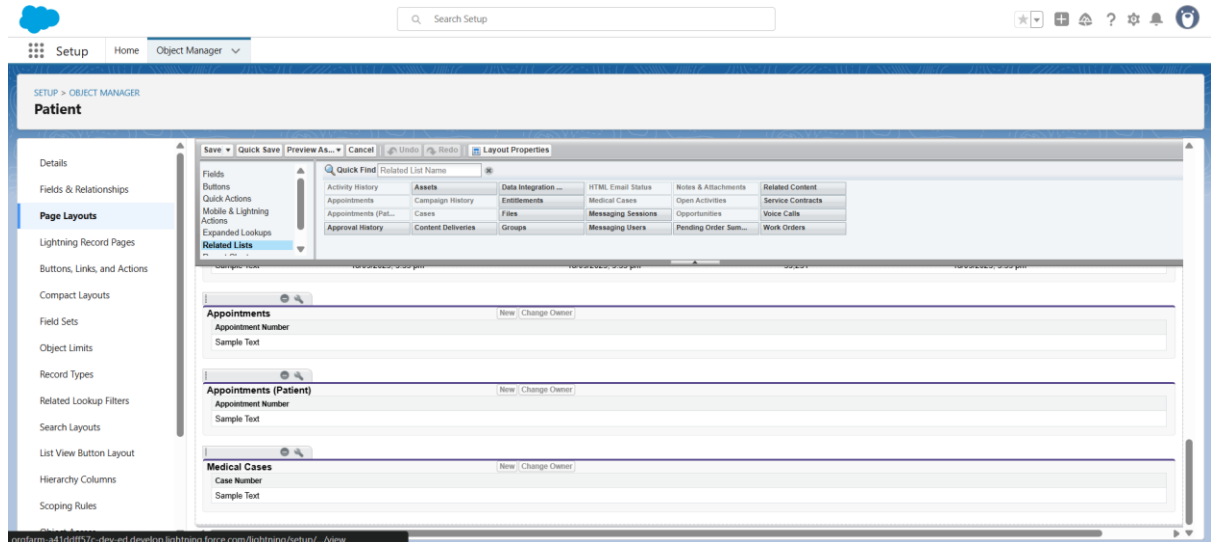


Fig.5 Patient PageLayout RelatedLists

## 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.

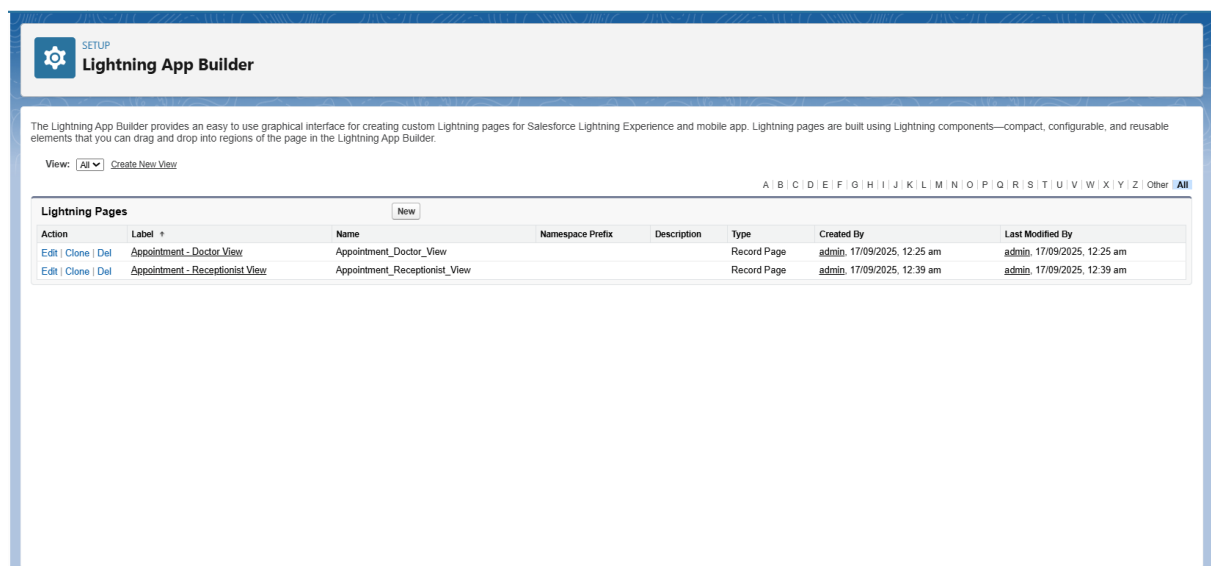
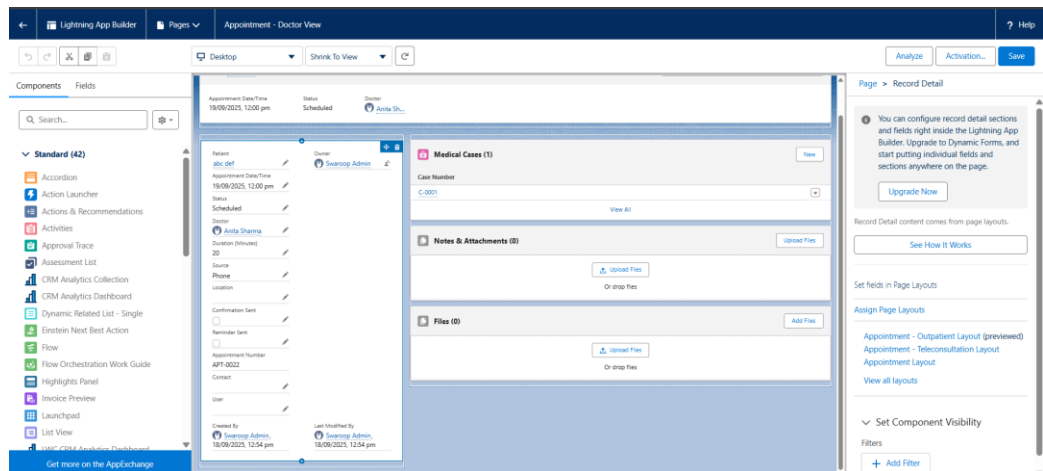
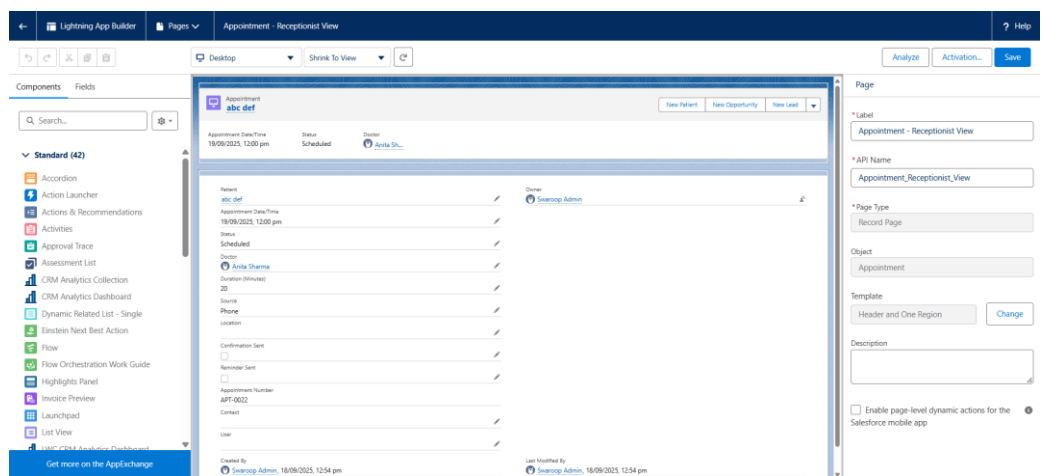


Fig.6 AppBuilder Views



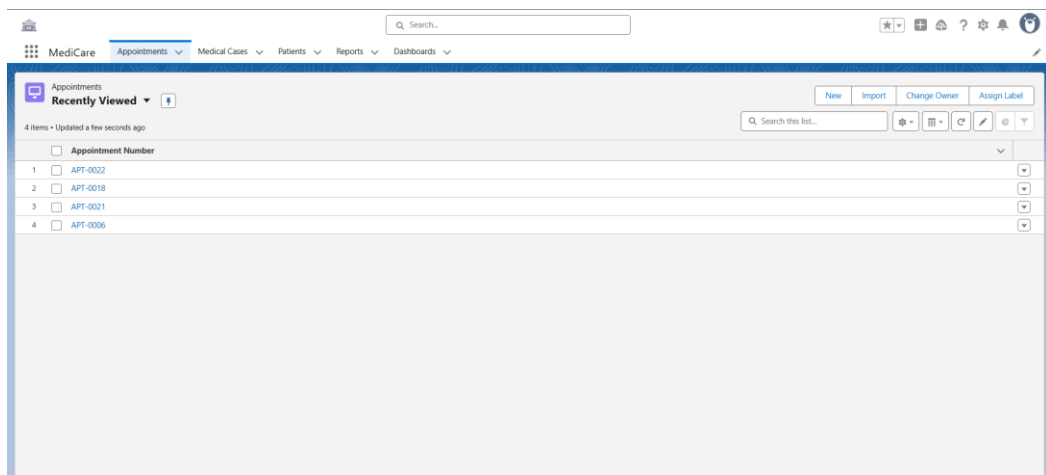
**Fig.7 Appointment - Doctor View**



**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.

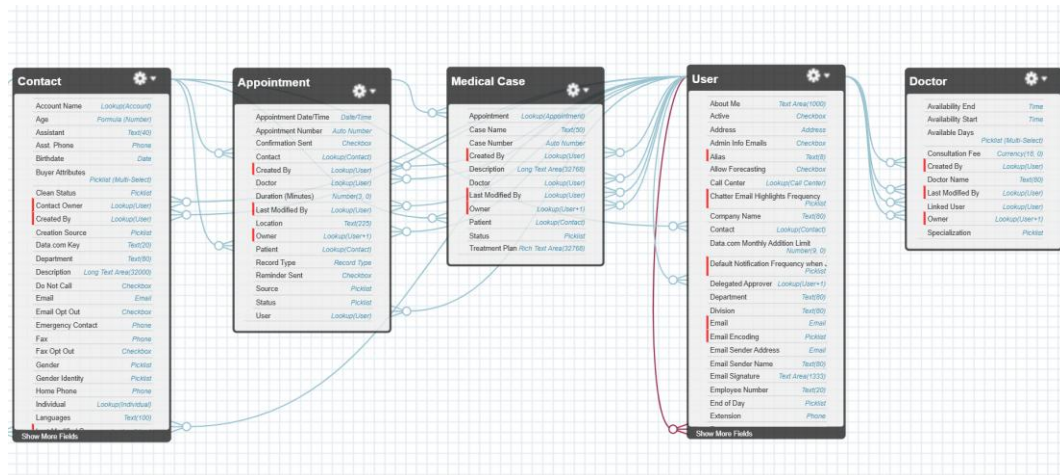


Fig.10 Schema Builder ERD view

## 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.