

## Phase 8: Data Management

### Project Title: SmartCare CRM – Salesforce-Powered Healthcare Management & Patient Engagement Suite

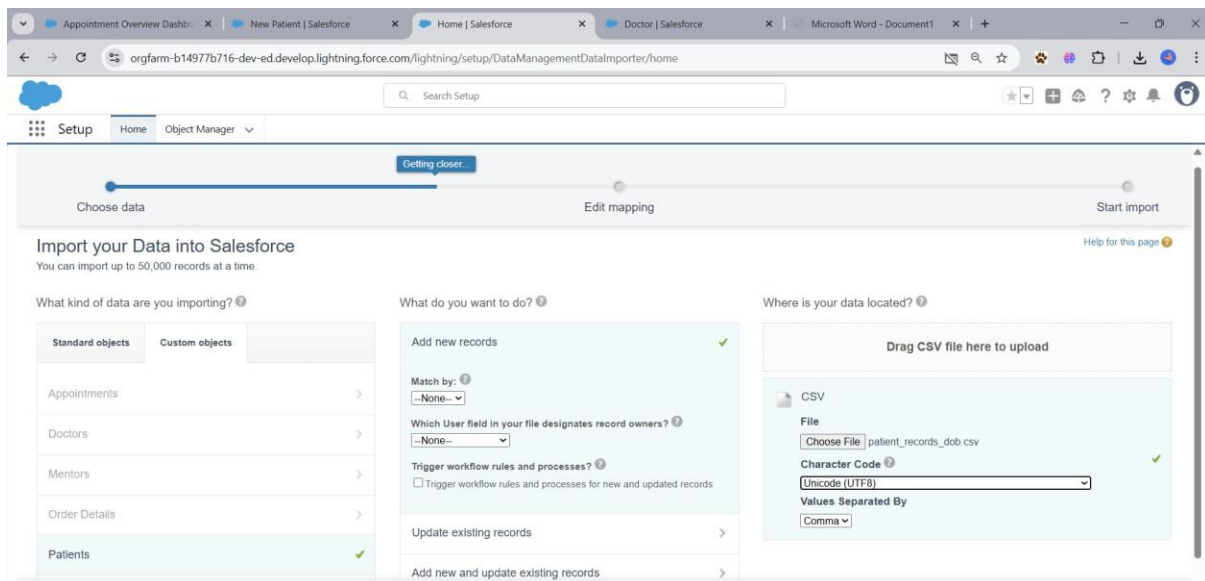
#### Purpose:

This phase focuses on ensuring data quality and security within the healthcare system. Key administrative tasks were performed to import patient records in bulk, prevent duplicate entries, and secure the data through regular backups.

#### Data Import using the Data Import Wizard

**Goal:** To efficiently add multiple new Patient records into the application from an external CSV file, demonstrating how the system can be populated with data in bulk.

**Implementation:** A CSV file containing 500 patient records was prepared, with fields including Name, Date of Birth, Gender, Email, Contact Number, Blood Group, Emergency Contact, and Medical History. The Data Import Wizard was launched, and the Patient custom object was selected for the import.

The screenshot shows the Salesforce Data Import Wizard interface in a web browser. The browser tabs include 'Appointment Overview Dashb...', 'New Patient | Salesforce', 'Home | Salesforce', 'Doctor | Salesforce', and 'Microsoft Word - Document1'. The address bar shows the URL 'orgfarm-b14977b716-dev-ed.develop.lightning.force.com/lightning/setup/DataManagementDataImporter/home'. The interface has a top navigation bar with 'Setup', 'Home', and 'Object Manager' tabs. Below this is a progress bar with three steps: 'Choose data', 'Edit mapping', and 'Start import'. The 'Choose data' step is active. The main content area is titled 'Import your Data into Salesforce' and includes a sub-header 'You can import up to 50,000 records at a time.' There are three columns: 'What kind of data are you importing?', 'What do you want to do?', and 'Where is your data located?'. The first column has 'Standard objects' and 'Custom objects' tabs. Under 'Standard objects', 'Appointments', 'Doctors', 'Mentors', 'Order Details', and 'Patients' are listed. 'Patients' is selected and marked with a green checkmark. The second column has three options: 'Add new records' (selected and marked with a green checkmark), 'Update existing records', and 'Add new and update existing records'. The 'Add new records' option has sub-options for 'Match by' (set to '-None-'), 'Which User field in your file designates record owners?' (set to '-None-'), and 'Trigger workflow rules and processes?' (unchecked). The third column has a 'Drag CSV file here to upload' area. A CSV file named 'patient\_records\_dob.csv' is shown, with 'Character Code' set to 'Unicode (UTF8)' and 'Values Separated By' set to 'Comma'. A 'Getting closer.' progress indicator is at the top of the main content area.

#### Bulk Data Load Jobs

After uploading the file and completing the mapping process, the import job was submitted. Once completed, its status was verified under the “Bulk Data Load Jobs” page, confirming that all new records had been successfully inserted. The new patients were then visible under the Patients tab in the SmartCare CRM app.

The screenshot shows the Salesforce Bulk Data Load Jobs page. The left sidebar contains navigation links for Setup, Home, and Object Manager. The main content area displays the 'Bulk Data Load Job Detail' for a specific job. Below this, a table lists the batches processed.

Bulk Data Load Job Detail											
Job ID	750gK00000Dsc8r					Job Type	Bulk V1		Status	Closed	
Submitted By	Hospital Admin					Operation	Insert		Total Processing Time (ms)	756	
Start Time	9/26/2025, 5:07 AM PST					Queued Batches	0		API Active Processing Time (ms)	428	
End Time	9/26/2025, 5:07 AM PST					In Progress Batches	0		Apex Processing Time (ms)	0	
Time to Complete (hh:mm:ss)	00:05					Completed Batches	1				
Object	Patient					Failed Batches	0				
External ID Field						Progress	100%				
Content Type	CSV					Records Processed	500				
Concurrency Mode	Parallel					Records Failed	49				
API Version	64.0					Retries	0				

Batches											
View Request	View Result	Batch ID	Start Time	End Time	Total Processing Time (ms)	API Active Processing Time (ms)	Apex Processing Time (ms)	Records Processed	Records Failed	Retry Count	Status
<a href="#">View Request</a>	<a href="#">View Result</a>	751gK00000BEsJx	9/26/2025, 5:07 AM	9/26/2025, 5:07 AM	756	428	0	500	49	0	Completed

## Data Backup using the Data Export Service

**Goal:** To establish a regular data backup strategy, ensuring that patient data is always protected and recoverable.

**Implementation:** The Salesforce Data Export service was used to schedule a weekly export of all healthcare data, including Patients, Appointments, and Doctors. This provides administrators with downloadable backup files for offline storage and recovery purposes.

The screenshot shows the Salesforce Data Export 'Schedule Data Export' page. The left sidebar contains navigation links for Setup, Home, and Object Manager. The main content area displays the 'Schedule Data Export' form with various configuration options.

**Schedule Data Export**

Export File Encoding:

Include images, documents, and attachments: ☐

Include Salesforce Files and Salesforce CRM Content document versions: ☐

Replace carriage returns with spaces: ☒

Schedule Data Export

Frequency: ☒ On day 1 of every month ☐ On the 1st Sunday of every month

Start: 9/26/2025 [ 9/26/2025 ]

End: 10/26/2025 [ 9/26/2025 ]

Preferred Start Time: 1:00 AM

Exact start time will depend on job queue activity.

## Conclusion:

Through this phase, essential data management processes were successfully implemented. The Patient object was populated with bulk data using the Import Wizard, duplicate records were prevented with validation rules, and a reliable data export strategy was established. This strengthens the overall reliability and security of the healthcare management application.