

PHASE-4

Validation Rules

Object: Patient(Contact)

Name	Purpose	Formula
PrivateInsurancePolicy	If coverage_Type is private Insurance user needs to provide the Provider details and policy number	AND(ISPICKVAL(Coverage_Type__c, "Private Insurance"), OR(ISBLANK(Insurance_Provider__c), ISBLANK(Insurance_Policy_Number__c)))
GovtScheme	If the patient's coverage_type is a government scheme like CGHS, ECHS, etc, provide schemeID	AND(OR(ISPICKVAL(Coverage_Type__c, "CGHS"), ISPICKVAL(Coverage_Type__c, "ECHS"), ISPICKVAL(Coverage_Type__c, "ESIC"), ISPICKVAL(Coverage_Type__c, "State Health Scheme")), ISBLANK(Scheme_ID__c))
InvalidDOB	Date of Birth can't be in the future	Date_of_Birth >TODAY()
EmergencyContact	If the patient is a minor Emergency Contact is a must	(TODAY() - Date_of_Birth__c) / 365 < 18 && ISBLANK(EmergencyContact__c)

SETUP > OBJECT MANAGER

Patient

Details

Data Cloud Related List

Data Cloud Copy Field

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Validation Rules

4 Items, Sorted by Rule Name

NEW

RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY
EmergencyContact	EmergencyContact	An emergency contact is required for patients under 18	✓	anushka bhatt, 9/23/2025, 8:38 PM
GovtScheme	Scheme_ID	Please enter the Scheme ID for government health coverage patients.	✓	anushka bhatt, 9/19/2025, 11:21 AM
InvalidDOB	Date_of_Birth	Date of Birth cannot be in the future.	✓	anushka bhatt, 9/21/2025, 1:23 PM
PrivateInsurancePolicy	Insurance_Provider	"Please enter Insurance Provider and Policy Number when Coverage Type is Private Insurance.	✓	anushka bhatt, 9/19/2025, 11:19 AM

Object: Doctor__c

Name	Purpose	Formula
EmailValidation	Email should be valid	NOT(Regex(Email__c , "[A-Za-z0-9._%+-]+@[A-Za-z0-9.-]+\.[A-Za-z]{2,}\$"))
ValidPhoneNo	Phone must contain 10 digits	NOT(Regex(Phone__c , "^[0-9]{10}\$"))

Setup

Home

Object Manager

SETUP > OBJECT MANAGER

Doctor

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Validation Rules

2 Items, Sorted by Rule Name

NEW

RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY
EmailValidation	Email	Enter valid email	✓	anushka bhatt, 9/23/2025, 8:41 PM
ValidPhoneNo	Availability_Status	Enter valid 10 digit number	✓	anushka bhatt, 9/23/2025, 9:04 PM

Object: Appointment__c

Name	Purpose	Formula
AppointmentDate	It can't be of past	Appointment_DateTime__c < NOW()
DoctorOnLeave	An appointment can't be made for a date on which the Doctor is on leave	ISPICKVAL(Doctor__r.Availability_Status__c, "On Leave")

SETUP > OBJECT MANAGER

Appointment

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Validation Rules

2 Items, Sorted by Rule Name

RULE NAME

AppointmentDate

ERROR LOCATION

Appointment_DateTime

ERROR MESSAGE

Appointment time cannot be in the past

ACTIVE

✓

MODIFIED BY

anushka bhatt, 9/23/2025, 8:42 PM

▼

DoctorOnLeave

Appointment_DateTime

Doctor is not available for this appointment

✓

anushka bhatt, 9/23/2025, 8:43 PM

▼

New

Approval Process:

System contains custom object Treatment__c , approval process if based on it .

Entry Criteria

If EstimatedCost__c for treatment > 0

Conditions:

If estimatedCost is less than 50,000 → Automatically approve

Else: need Hospital Manager approval

Step2:

If estimated cost is greater than 100000 → need Director Approval



SETUP

Approval Processes

Process Name	TreatmentCost	Active	✓
Unique Name	TreatmentCost	Next Automated Approver Determined By	Manager of Record Submitter
Description			
Entry Criteria	Treatment: EstimatedCost GREATER THAN 0		
Record Editability	Administrator ONLY	Allow Submitters to Recall Approval Requests	✓
Approval Assignment Email Template	<u>CostApproval</u>		
Initial Submitters	Appointment Owner, <u>User: Henry William</u> , <u>User: Kevin Joshep</u> , <u>User: Sarah Roger</u> , <u>User: Tony Stark</u>		
Created By	<u>anushka bhatt</u> , 9/24/2025, 9:42 AM	Modified By	<u>anushka bhatt</u> , 9/24/2025, 9:56 AM

Initial Submission Actions

Add Existing

Add New ▼

Action	Type	Description
	Record Lock	Lock the record from being edited

Approval Steps

Action	Step Number	Name	Description	Criteria	Assigned Approver	Reject Behavior
Show Actions Edit	1	ManagerApproval		Treatment: EstimatedCost GREATER THAN 50000 , else Approve	<u>User:Henry William</u>	Final Rejection
Show Actions Edit	2	DirectorApproval		Treatment: EstimatedCost GREATER THAN 100000	Approval based on first response <u>User: anushka bhatt</u> , <u>Cassie Thompson</u>	Go Back 1 Step

Care Team can submit the approval request

Treatment
TRT-0001

Related Details

Treatment Name
TRT-0001

Visit Date
25/09/2025, 12:00 pm

Diagnosis
need surgery

Prescription

Followup_Required
☐

Appointment
[APT-0002](#)

Doctor
[DOC-0003](#)

EstimatedCost
59,000.00

Created By
 Sarah Roger, 24/09/2025, 11:14 am

Last Modified By
 Sarah Roger, 24/09/2025, 11:14 am

Treatment
TRT-0001

Related Details

Notes & Attachments (0) [Upload Files](#)

[Upload Files](#)
Or drop files

Approval History (2) [Recall](#)

Step Name	Date	Status	Assigned To
ManagerApproval	24/09/2025, 11:18 am	Pending	Henry William
Approval Request S...	24/09/2025, 11:18 am	Submitted	Sarah Roger

[View All](#)

If the manager agree to approve he /she approves

If Cost is > 100000 goes to the director for approval

The screenshot shows a web application interface for a medical treatment record. At the top, there is a header bar with a green icon and the text 'Treatment TRT-0003'. Below this, there is a tabbed interface with 'Related' and 'Details' tabs. The 'Details' tab is active, showing a list of fields with their values and edit icons. The fields are: Treatment Name (TRT-0003), Visit_Date (17/09/2025, 12:00 pm), Diagnosis, Prescription, Followup_Required (checkbox), Appointment (APT-0003), Doctor (DOC-0004), EstimatedCost (1,55,000.00), and Created By (Sarah Roger, 24/09/2025, 12:11 pm).

Field	Value	Edit Icon
Treatment Name	TRT-0003	
Visit_Date	17/09/2025, 12:00 pm	
Diagnosis		
Prescription		
Followup_Required	<input type="checkbox"/>	
Appointment	APT-0003	
Doctor	DOC-0004	
EstimatedCost	1,55,000.00	
Created By	Sarah Roger, 24/09/2025, 12:11 pm	

Agent using agentforce

The goal of this Agent is to streamline patient registration and doctor appointment booking in the **CuraForce App**.

- Patients or staff can interact with the chatbot to **create a new patient record**.
- The chatbot will ask for basic patient details (name, age, gender, health issue).
- Based on the **health issue description**, the bot uses an **Apex-powered NLP-like keyword matcher** to **suggest a suitable doctor specialty** (e.g., Cardiologist for chest pain, Dermatologist for skin issues, General Physician for other conditions).
- The chatbot then shows a list of **available doctors** in that specialty.
- If the patient confirms, the chatbot books an **appointment** (DoctorPatient record) with the selected doctor.

This automation reduces manual data entry for staff and provides patients with quick doctor recommendations.

Current Implementation (Prototype Stage)

Apex Class for Doctor Suggestion

Implemented **HealthIssueDoctorService** class which:

- Reads patient health issue text.
- Maps keywords → suggested specialty.
Queries doctors with **Availability__c = 'Available'**.
- Returns a formatted list of doctor names & IDs.

```

// HealthIssueDoctorService.apex
public with sharing class HealthIssueDoctorService {
    // Invocable Request (input)
    public class Request {
        @InvocableVariable(required=true)
        public String healthIssue;
        @InvocableVariable
        public Integer maxResults; // number of doctors return
    }

    public class Response {
        @InvocableVariable
        public String suggestedSpecialty;
        // doctorListCsv is "Id|Doctor Name;Id|Doctor Name;..."
        @InvocableVariable
        public String doctorListCsv;
    }

    @InvocableMethod(label='Suggest Specialty & Doctors' description='Return suggested specialty and small list of doctors based on health issue text')
    public static List<Response> suggest(List<Request> requests) {
        List<Response> outputs = new List<Response>();
        for(Request req : requests) {
            String issue = (req.healthIssue == null) ? '' : req.healthIssue.toLowerCase();
            Integer maxR = (req.maxResults == null || req.maxResults <= 0) ? 5 : req.maxResults;
            String spec = 'General Physician';

            // keyword rules
            if(issue.contains('chest') || issue.contains('heart') || issue.contains('angina') || issue.contains('palpiti')) {
                spec = 'Cardiologist';
            } else if(issue.contains('skin') || issue.contains('rash') || issue.contains('itch') || issue.contains('eczema') || issue.contains('psoriasis')) {
                spec = 'Dermatologist';
            } else {
                spec = 'General Physician';
            }

            // Querying doctors for that specialty
            List<Doctor__c> doctors = new List<Doctor__c>();
            try {
                doctors = [
                    SELECT Id, Name, Specialty__c, Availability_Status__c
                    FROM Doctor__c
                    WHERE Specialty__c = :spec
                    AND Availability_Status__c = 'Available'
                    LIMIT :maxR
                ];
            } catch (Exception e) {
                // if the Doctor__c object/fields not matched, fallback to empty list
                doctors = new List<Doctor__c>();
            }

            String csv = '';
            for(Doctor__c d : doctors) {
                if(csv != '') csv += ';';
                csv += String.valueOf(d.Id) + '|' + (d.Name == null ? '' : d.Name);
            }

            Response out = new Response();
            out.suggestedSpecialty = spec;
            out.doctorListCsv = csv;
            outputs.add(out);
        }
        return outputs;
    }
}

// Test class
List<HealthIssueDoctorService.Request> reqs = new List<HealthIssueDoctorService.Request>();
HealthIssueDoctorService.Request r = new HealthIssueDoctorService.Request();
r.healthIssue = 'I have chest pain and difficulty breathing';
r.maxResults = 3;
reqs.add(r);

List<HealthIssueDoctorService.Response> res = HealthIssueDoctorService.suggest(reqs);
System.debug(JSON.serializePretty(res));
```

Tested apex class using executing this in anonymous window

```

List<HealthIssueDoctorService.Request> reqs = new List<HealthIssueDoctorService.Request>();
HealthIssueDoctorService.Request r = new HealthIssueDoctorService.Request();
r.healthIssue = 'I have chest pain and difficulty breathing';
r.maxResults = 3;
reqs.add(r);

List<HealthIssueDoctorService.Response> res = HealthIssueDoctorService.suggest(reqs);
System.debug(JSON.serializePretty(res));
```


Result return Doc 004 and 007 are cardiologist that are available.

CuraForce

13 Items • Sorted by Doctor ID ↑ • Updated a few seconds ago

	Doctor ID ↑	Full Name	Specialty	Availability Status
1	<input type="checkbox"/> DOC-0001	Joey Macow	Cardiologist	Available <input type="button" value="▼"/>
2	<input type="checkbox"/> DOC-0002	Ragini Mishra	Dermatologist	Available <input type="button" value="▼"/>
3	<input type="checkbox"/> DOC-0003	R K Ghosh	General Physician	Available <input type="button" value="▼"/>
4	<input type="checkbox"/> DOC-0004	J P Narayan	Cardiologist	Available <input type="button" value="▼"/>
5	<input type="checkbox"/> DOC-0005	Dr.Bighi Parmar	General Physician	On Leave <input type="button" value="▼"/>
6	<input type="checkbox"/> DOC-0006	Dr.Sheeta Singh	Dermatologist	Booked <input type="button" value="▼"/>
7	<input type="checkbox"/> DOC-0007	Dr Alia Sharma	Cardiologist	Available <input type="button" value="▼"/>
8	<input type="checkbox"/> DOC-0009	Rodson	Cardiologist	<input type="button" value="▼"/>
9	<input type="checkbox"/> DOC-0010	Yin Su	Cardiologist	<input type="button" value="▼"/>
10	<input type="checkbox"/> DOC-0011	Choe	Dematologist	On Leave <input type="button" value="▼"/>
11	<input type="checkbox"/> DOC-0012	Jin Su	Dermatologist	<input type="button" value="▼"/>
12	<input type="checkbox"/> DOC-0014	Kin Su	Dermatologist	Available <input type="button" value="▼"/>
13	<input type="checkbox"/> DOC-0015	Alia Cruise	Cardiologist	<input type="button" value="▼"/>

I already have all my agent permissions active so I directly head to creating new agent.



SETUP > AGENT DETAILS

Healthcare Service Agent

Version 1

Open in Builder

API Name	Type	Active
Healthcare_Service_Agent	Service Agent	<input type="checkbox"/>

Details

Topics

System Messages

Language Settings

Connections

* Name

Healthcare Service Agent

Created On

September 25, 2025 at 11:51 PM

* API Name

Healthcare_Service_Agent

Created By

anushka bhatt

* Description ⓘ

You are an AI Agent whose job is to help patients with registration, health issue analysis, doctor recommendations, and appointment scheduling for CuraForce.

Last Modified By

anushka bhatt


* Role ⓘ

Assists patients with registration, health issue analysis, doctor recommendations, and appointment scheduling.

* Company ⓘ

CuraForce

* Agent User

 EinsteinServiceAgent User (healthcare_service_agent@)

Keep a record of conversations with enhanced event logs to review agent behavior ⓘ

☒

Set the topics for agent so that it give relevant answers

The screenshot shows the Agentforce Builder interface for a "Healthcare Service Agent". The "Topics" panel on the left lists four topics: "Appointment Scheduling Support", "Doctor Recommendation System", "Health Records Retrieval", and "Patient Registration Assistance". The "Conversation Preview" panel on the right shows a chat interface with a cartoon robot character and the text "Let's chat! Hi, I'm an AI assistant. How can I help you?".

This detailed screenshot shows the reasoning process for a patient registration request. The "Topics" panel on the left is the same as in the previous image. The "Conversation Preview" panel on the right shows a chat history with a user asking for help with patient registration. The "Reasoning" section in the center shows the agent's internal process: "no allergies" (User Prompt), "Reasoning: Topic Selection" (0.36 sec), "Topic Selected: Patient Registration Assistance" (a_16jgL000...), "Reasoning: Action Selection" (1.44 sec), and "Reasoning" (GROUND: The response accurately summarizes the information provided by the user in the conversation history and aligns with the context of assisting with patient registration). The "Agent Response" section shows the final output: "Thanks for confirming! Here's the patient registration form for your confirmation".

Topics

Manage the topics assigned to your agent. To make changes, your agent must be deactivated.

Search topics...

4 Items • Sorted by Topic Label(asc)

Topic Label ↑

Appointment Scheduling Support

Doctor Recommendation System

Health Records Retrieval

Patient Registration Assistance

yes

Reasoning: Action Selection0.21 sec

Prompt Used

Action Launched: Finalize Reservation (FinalizeRe...0.27 sec

Books and finalizes a reservation for the time designated by the customer.

Input

Output

Reasoning: Action Selection0.79 sec

Prompt Used

Reasoning

GROUNDING: The response accurately reflects the outcome of the function call, which indicated that no reservation was made due to the absence of a customer account. It also aligns with the context that the assistant can guide but not directly register patients.

Plan ID: 8b94eb61112e

Conversation Preview

3. Contact Information: 8521475241

4. Medical Concern: High fever

5. Address: Madhya Pradesh, India, 482005

Lastly, do you have any known allergies or ongoing medications that we should note? Once I have that, I can guide you on the next steps for registration.

no allergies

Thanks for confirming! Here's the final information for your registration:

1. Full Name: Abhay Awasthi

2. Date of Birth: 2004/09/04

3. Contact Information: 8521475241

4. Medical Concern: High fever

5. Address: Madhya Pradesh, India, 482005

6. Allergies: None

You're all set for registration! I recommend visiting the nearest healthcare facility or contacting a doctor immediately for your high fever. If you need help finding a doctor or scheduling an appointment, let me know!

yes find a doctor a general physician

I couldn't retrieve specific doctor recommendations at the moment. However, I suggest visiting a nearby hospital or clinic in Madhya Pradesh, India, or using a trusted healthcare app to find a general physician. Let me know if you need further assistance!

okay can you register me now

It looks like I can only guide you through the registration process.

The agent is asking me as a patient to give information for required fields so that can create my patientaccount or check if i am already there. But I am working on functionality to book appointment and suggeting doctor.Right now the agent is under development.