Microsoft Cloud for Healthcare **in a Day**

Lab 01: Care Management

Step-by-Step Lab

30 minutes

January 2022

Contents

Overview

Learning Objectives

In this lab, you will do the following:

- Explore the Healthcare Data Model
- Navigate the Care Management application
- Create a new Location record

Prerequisites

- None

Care Management Application

The **Care Management** application allows healthcare systems to provide coordinated care to each patient by quickly communicating the right information, at the right time, to the right people. Users can easily create, personalize, and enable new care plans for patients, manage care teams, and view patients' clinical timelines and care insights right within the application.

Key capabilities for Care Management include the following:

- **Care team:** View and collaborate with care teams to provide the best care for the patient.
- **Care plan:** Create and assign care plans and automate adherence to improve care coordination for your patients.
- **Clinical timeline:** Concise, sequential, and interactive view of patient's clinical occurrences.
- **Virtual clinic:** Provide your care team members the ability to perform virtual appointments with patients.
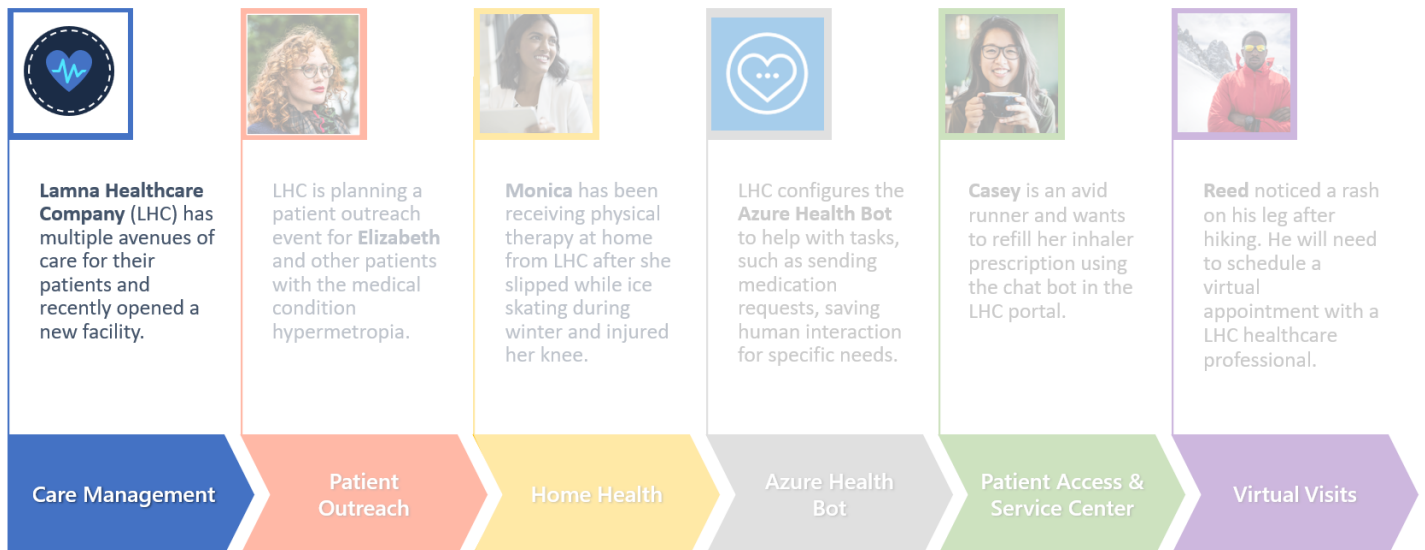
Industry Prioritized Scenarios

Care Management focuses on both **Enhance patient engagement** and **Empower health team collaboration** priority scenarios. It creates a system that allows for enhanced care team collaboration and coordination, virtual care options, and a 360 view of patient healthcare data including patient insights.
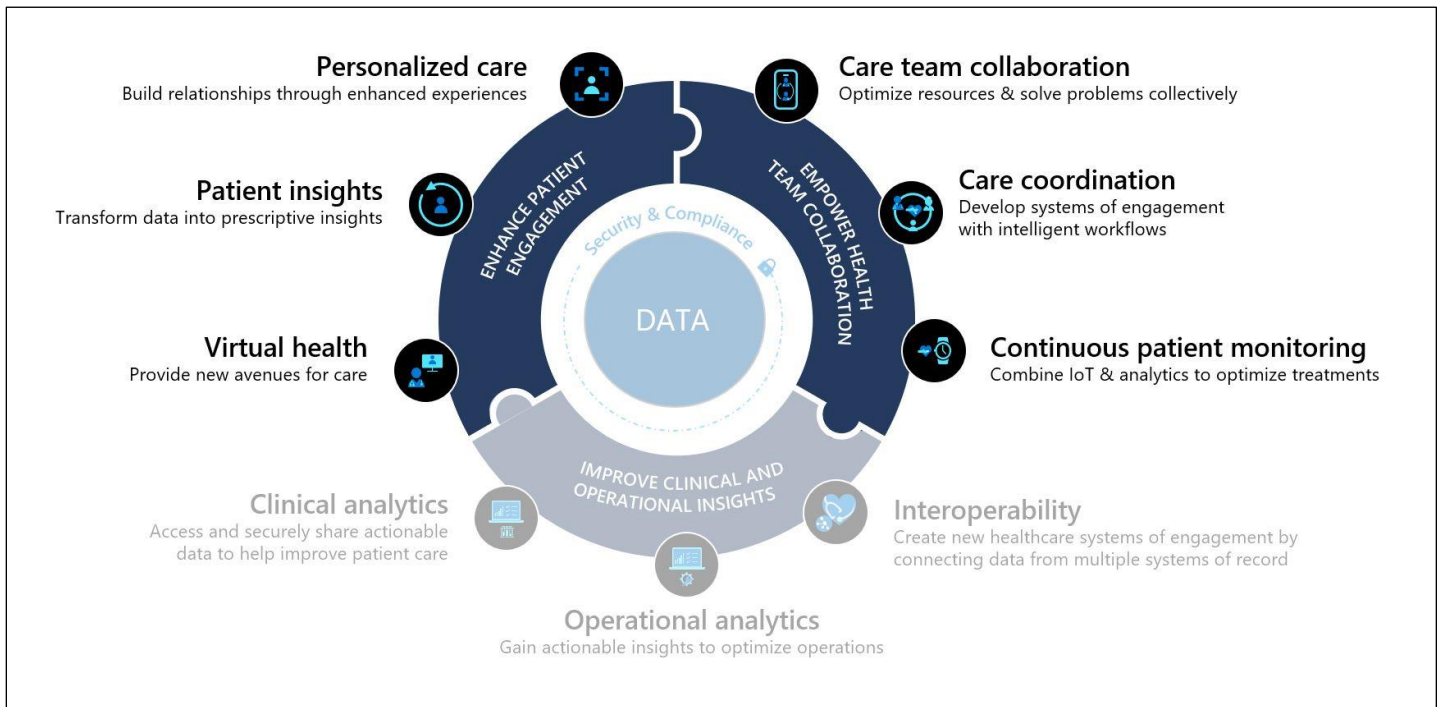
Healthcare Story

This lab will focus on the story of Lamna Healthcare Company, who is opening a new location in Redmond, WA.

Care Management	Patient Outreach	Home Health	Azure Health Bot	Patient Access & Service Center	Virtual Visits
Lamna Healthcare Company (LHC) has multiple avenues of care for their patients and recently opened a new facility.	LHC is planning a patient outreach event for **Elizabeth** and other patients with the medical condition hypermetropia.	**Monica** has been receiving physical therapy at home from LHC after she slipped while ice skating during winter and injured her knee.	LHC configures the **Azure Health Bot** to help with tasks, such as sending medication requests, saving human interaction for specific needs.	**Casey** is an avid runner and wants to refill her inhaler prescription using the chat bot in the LHC portal.	**Reed** noticed a rash on his leg after hiking. He will need to schedule a virtual appointment with a LHC healthcare professional.

Now that Lamna Healthcare Company's new location is ready to open, we need to ensure the new location record is in the system and that the employees understand the healthcare data model basics and how the tables and relationships are surfaced in the Care Management application.

Exercise 1: Explore the Healthcare Data Model

In this exercise, you will learn about the core care management data tables. If you'd like to explore the tables in deeper detail on Microsoft Docs, please visit Overview of Microsoft Cloud for Healthcare entities.

The healthcare data model uses some of the out-of-the-box tables from Dynamics 365 applications. The following Healthcare solutions use the built-in Dynamics 365 tables:

Healthcare solution	Dynamics 365 tables
Care Management	Account, Activities, Contact, Tasks
Home Health	Bookings, Incident, Products, Work Order
Patient Outreach	Lead/Lead Score, Marketing Emails, Contact, Tasks
Patient Service Center	Agent Script, Knowledge Article, Queues, Survey Response

Visit Healthcare data model overview on Microsoft Docs to learn more about the Healthcare data model.

Task 1: Navigate Patient Details Tables and Relationships

In this task, you will explore the main tables related to Patient Data. Select each table name to navigate to the Microsoft Docs page that goes into detail about each table.
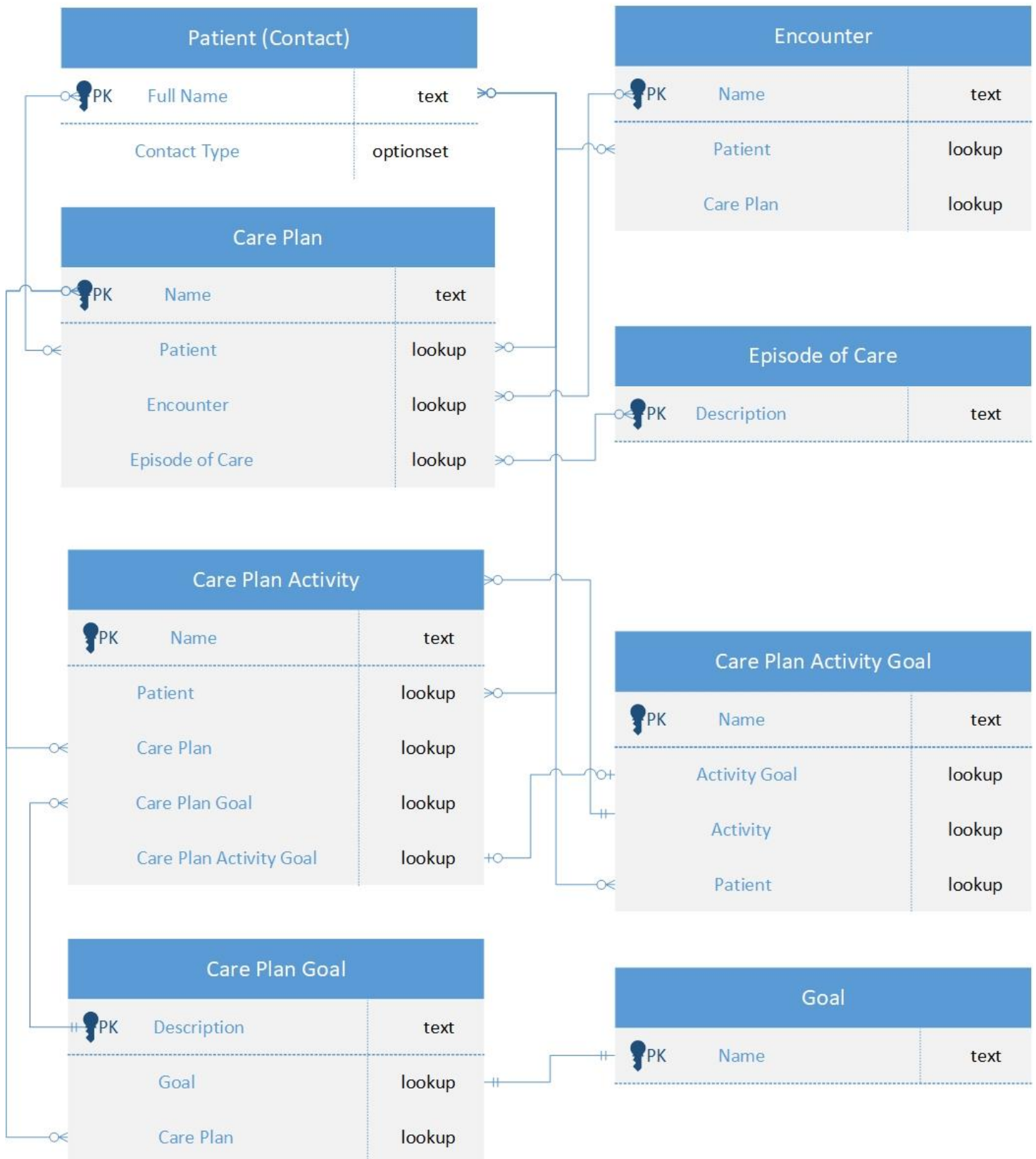
Patient Detail Table Definitions

Patient (Contact)	Person with whom a business unit has a relationship, such as customer, supplier, and colleague.
AllergyIntolerance	Risk of harmful or undesirable, physiological response which is unique to an individual and associated with exposure to a substance.
Condition	A clinical condition, problem, diagnosis, or other event, situation, issue, or clinical concept that has risen to a level of concern.
MedicationRequest	An order or request for both supply of the medication and the instructions for administration of the medication to a patient.
RelatedPerson	Information about a person that is involved in the care for a patient, but who is not the target of healthcare, nor has a formal responsibility in the care process.

See next page for the Patient Detail Entity Relationship Diagram.

Patient Details
Entity-Relationship Diagram

Patient (Contact)

PK	Full Name	text
	Contact Type	optionset

Practitioner (Contact)

PK	Full Name	text
	Contact Type	optionset

Allergy Intolerance

PK	Subject	text
	Patient	lookup
	Practitioner	lookup
	Location	lookup

Related Person

PK	Name	text
	Patient	lookup
	Related Person	lookup

Related Person (Contact)

PK	Full Name	text
	Contact Type	optionset

Condition

PK	Description	text
	Patient	lookup
	Practitioner	lookup
	Encounter	lookup
	Appointment (EMR)	lookup
	Care Plan	lookup

Medication Request

PK	Name	text
	Patient	lookup
	Practitioner	lookup
	Medication Type	optionset
	Medication Reference	lookup

Task 2: Navigate Clinical Data Tables and Relationships

In this task, you will explore the main tables related to Clinic Data. Select each table name to navigate to the Microsoft Docs page that goes into detail about each table.

Clinical Data Table Definitions

Patient or Practitioner (Contact)	Person with whom a business unit has a relationship, such as customer, supplier, and colleague.
Organization	Top level of the Microsoft Dynamics 365 business hierarchy. The organization can be a specific business, holding company, or corporation.
Location	Details and position information for a physical place where services are provided and resources and participants may be stored, found, contained or accommodated.
AppointmentEMR	A booking of a healthcare event among patient(s), practitioner(s), related person(s) and/or device(s) for a specific date/time. This may result in one or more Encounter(s).
Procedure	An action that is or was performed on a patient. This can be a physical intervention like an operation, or less invasive like counseling or hypnotherapy.
Encounter	An interaction between a patient and healthcare provider(s) for the purpose of providing healthcare service(s) or assessing the health status of a patient.
EpisodeOfCare	An association between a patient and an organization / healthcare provider(s) during which time encounters may occur.
Observation	Measurements and simple assertions made about a patient, device or other subject.
CodeableConcept	A Codeable Concept represents a value that is usually supplied by providing a reference to one or more terminologies, but may also be defined by the provision of text.

See next page for the Clinical Data Entity Relationship Diagram.

Healthcare Clinical Data
Entity-Relationship Diagram

Patient (Contact)

PK	Full Name	text
	Contact Type	optionset

Practitioner (Contact)

PK	Full Name	text
	Contact Type	optionset

Appointment (EMR)

PK	Subject	text
	Patient	lookup
	Practitioner	lookup
	Location	lookup

Location

PK	Description	text
	Managing Organization	lookup

Organization

PK	Account Name	text

Encounter

PK	Name	text
	Patient	lookup
	Appointment (EMR)	lookup
	Context (Episode of Care)	lookup

Procedure

PK	Description	text
	Patient	lookup
	Outcome	lookup
	Encounter	lookup
	Episode of Care	lookup

Observation

PK	Description	text
	Subject (Patient)	lookup
	Context Type	lookup
	Encounter	lookup
	Episode of Care	lookup

Codeable Concept

PK	Text	text
	Type	optionset
	Code	text

Episode of Care

PK	Description	text

Task 3: Navigate Care Plan Management Tables and Relationships

In this task, you will explore the main tables related to Care Plan Management. Select each table name to navigate to the Microsoft Docs page that goes into detail about each table.

Care Plan Management Table Definitions

Patient (Contact)	Person with whom a business unit has a relationship, such as customer, supplier, and colleague.
CarePlan	Describes the intention of how one or more practitioners intend to deliver care for a particular patient, group or community for a period of time, possibly limited to care for a specific condition
CarePlanActivity	Identifies a planned action to occur as part of the plan. For example, a medication to be used, lab tests to perform, self-monitoring, education, etc.
CarePlanActivityGoal	Internal reference that identifies the goals that this activity is intended to contribute towards meeting.
Goal	Target objective for a user or a team for a specified time period.
CarePlanGoal	Describes the intended objective(s) of carrying out the care plan.
Encounter	An interaction between a patient and healthcare provider(s) for the purpose of providing healthcare service(s) or assessing the health status of a patient.
Episode of Care	An association between a patient and an organization / healthcare provider(s) during which time encounters may occur.

See next page for the Care Plan Management Entity Relationship Diagram.

Care Plan Management
Entity-Relationship Diagram

Patient (Contact)

PK	Full Name	text
	Contact Type	optionset

Encounter

PK	Name	text
	Patient	lookup
	Care Plan	lookup

Care Plan

PK	Name	text
	Patient	lookup
	Encounter	lookup
	Episode of Care	lookup

Episode of Care

PK	Description	text

Care Plan Activity

PK	Name	text
	Patient	lookup
	Care Plan	lookup
	Care Plan Goal	lookup
	Care Plan Activity Goal	lookup

Care Plan Activity Goal

PK	Name	text
	Activity Goal	lookup
	Activity	lookup
	Patient	lookup

Care Plan Goal

PK	Description	text
	Goal	lookup
	Care Plan	lookup

Goal

PK	Name	text

Exercise 2: Navigate Care Management Features

In this exercise, you will navigate the patient record and explore all the detailed information that is captured about the patient by Microsoft Cloud for Healthcare. In this case, we will examine the healthcare information of Amber Rodriguez to see how a care team member would obtain a full view of the patient.

1. Navigate to http://make.powerapps.com/ in an In-Private or Incognito window. If you are in an official training class, sign in with your assigned user.

2. Select the proper **Environment** in the upper right. If you are in an official training class, select your assigned environment.

3. In Power Apps, select **Apps** in the left sitemap. Select and open **Care Management**.
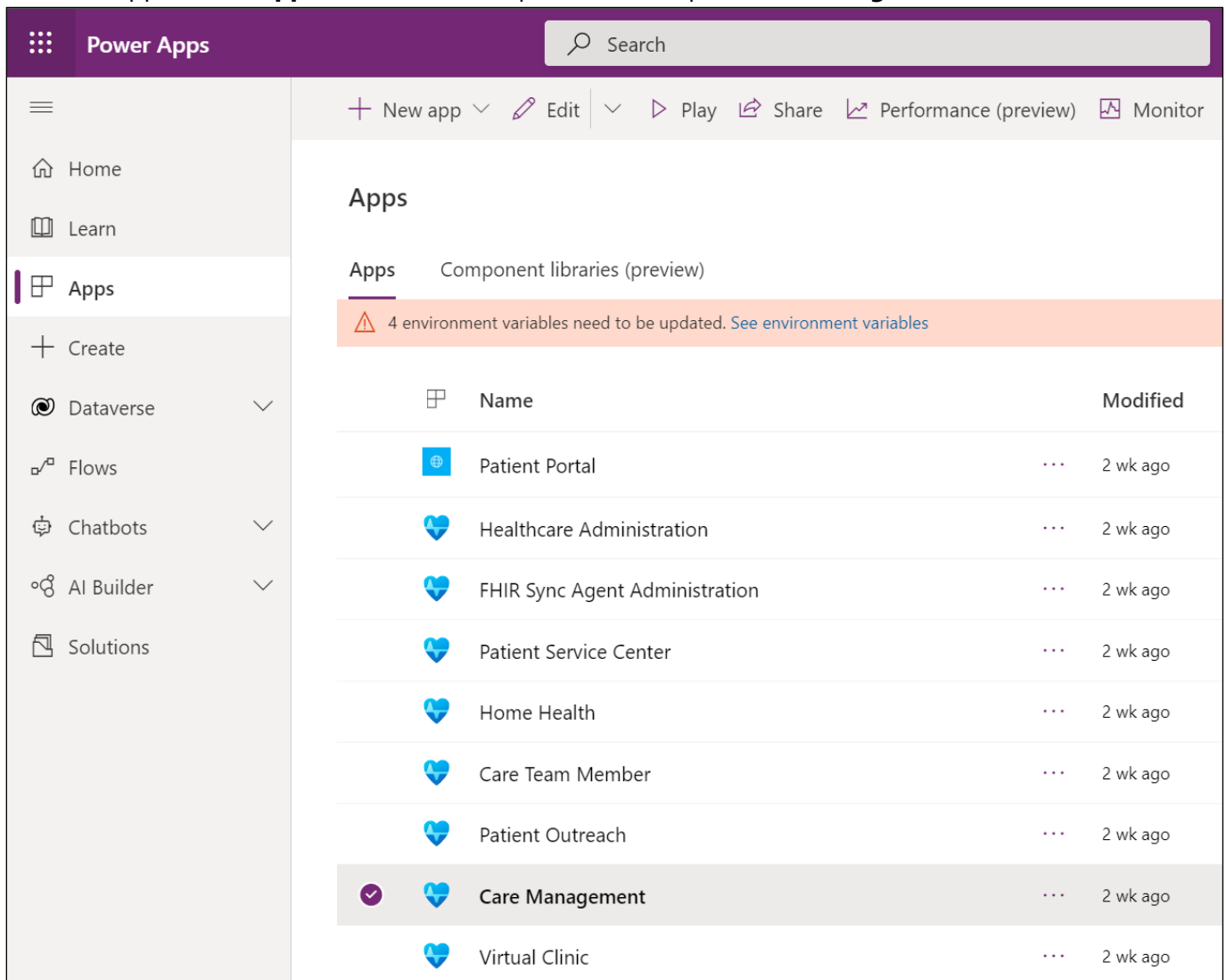
4. You will be landed in the **Health Analytics** section showing the **Care Coordinator Dashboard**. This is a helpful tool for care coordinators to get a complete view of their healthcare organization data, including care plans, care plan activities, care plan goals, appointments (EMR), and activity timeline.

5. Select **People** in the left Site Map.

6. Find and select **Amber Rodriguez** from the Active Patients view. Open the record by double clicking or selecting Edit in the command bar.

7. Take a moment to examine the **Summary** tab on Amber's patient record. The purpose of the patient record is to give a comprehensive view of Amber's latest information at a glance. In the summary tab, the care team member will have a full view of Amber's **Conditions**, **Test Results**, **Patient Relationships**, **Allergies and Sensitivities**, **Clinical Data**, and **Patient Interactions**.

8. In the **Conditions** section, the care provider can get a view of all of Amber's pre-existing conditions.

9. In the **Patient Relationships** section, you can see Amber's related people in the system.

10. In the **Allergies and Sensitivities** section, you can get a singular point of view of all the reported allergies that the care givers need to be aware of for the patient.

Allergies and Sensitivities   + New

^127^Antimony   2,3-Dihydroxybe...
Confirmed   Confirmed
Unable to Assess Risk   Low Risk

Phosphoenolpyr...
Unconfirmed
Low Risk

View all

11. In the **Clinical Data** section, you can cycle through the various icons to see different medical details including **medical requests**, **encounters**, **procedures**, and **observations**. This is a simple and efficient way to observe a patient's medical details.

Clinical Data

Medication Requests   ⊟ Select   ⋮

1   100MG chewables. Tables   ⋮
     Cancelled
     11/25/2020 10:21 PM

An   Anksterail   ⋮
     Stopped
     10/7/2020 11:34 AM

Be   Bealesters   ⋮
     On Hold
     10/19/2020 12:04 AM

Bl   BlankZi Inc   ⋮
     Stopped
     11/10/2020 3:02 PM

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Clinical Data

Encounter   ⊟ Select   ⋮

PE   Patient Encounter - Amber Rodriguez - for MRN0133-...   ⋮
     Amber Rodriquez
     Amber Rodriguez - Appointment for MRN4884-2684

PE   Patient Encounter - Amber Rodriguez - for MRN2830-...   ⋮
     Amber Rodriquez
     Amber Rodriguez - Appointment for MRN4884-2684

PE   Patient Encounter - Amber Rodriguez - for MRN3456-...   ⋮
     Amber Rodriquez
     Amber Rodriguez - Appointment for MRN1522-6564

PE   Patient Encounter - Amber Rodriguez - for MRN3515-...   ⋮
     Amber Rodriquez
     Amber Rodriguez - Appointment for MRN8852-4208

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Clinical Data

Procedures   ⊟ Select   ⋮

Bm   Benzodiazepine measurement - for MRN2372-5173   ⋮
     Aborted
     9/4/2021 7:58 AM

Cr   Closed reduction of coxofemoral joint dislocation wit...   ⋮
     Entered in Error
     9/10/2021 8:25 PM

Ea   Esophagoenteric anastomosis, intrathoracic - for MR...   ⋮
     Aborted
     10/20/2021 10:03 PM

Eo   Excision of varicose vein - for MRN2814-0353   ⋮
     Unknown
     10/19/2021 4:25 AM

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Clinical Data

Observations   ⊟ Select   ⋮

Ob   Observation based on - MRN2120-0613-1   ⋮
     Amber Rodriquez
     Three tripod testers

Ob   Observation based on - MRN2120-0613-2   ⋮
     Amber Rodriquez
     Single catheter

Ob   Observation based on - MRN3630-6762-1   ⋮
     Amber Rodriquez
     Ice skate

Ob   Observation based on - MRN3630-6762-2   ⋮
     Amber Rodriquez
     Ice skate

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12. The **Patient Interactions** section shows any activity, note, or post and can be filtered or sorted.

13. Click on the Profile Tab to get **Patient, Address, and Insurance Information.** In the Patient Information, notice that the key patient data such as Date of Birth and Primary Practitioner are shown. The healthcare data model uses the contact entity from the Common Data Model and defines the type of contact as patient, practitioner, or related person. This determines the type of form shown.

14. Select the **Clinical Timeline** tab. On this tab, a care team member will be able to view a weekly calendar of the patient's clinical information as well as a list of any upcoming or previous events.

15. Select the **Upcoming events** dropdown in the right pane and switch to **previous events**.

16. See the list of events Amber had previously including **Appointments**, **Care Plans**, **Encounters**, and **Medication Requests**.
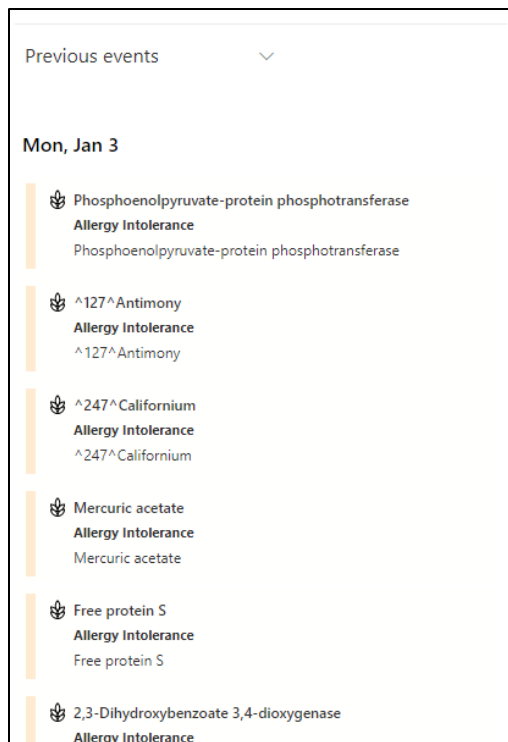
17. Select the **Care Team** tab. On this tab, the care team member can find other members who may be providing care to the patient for any current conditions and care plans.
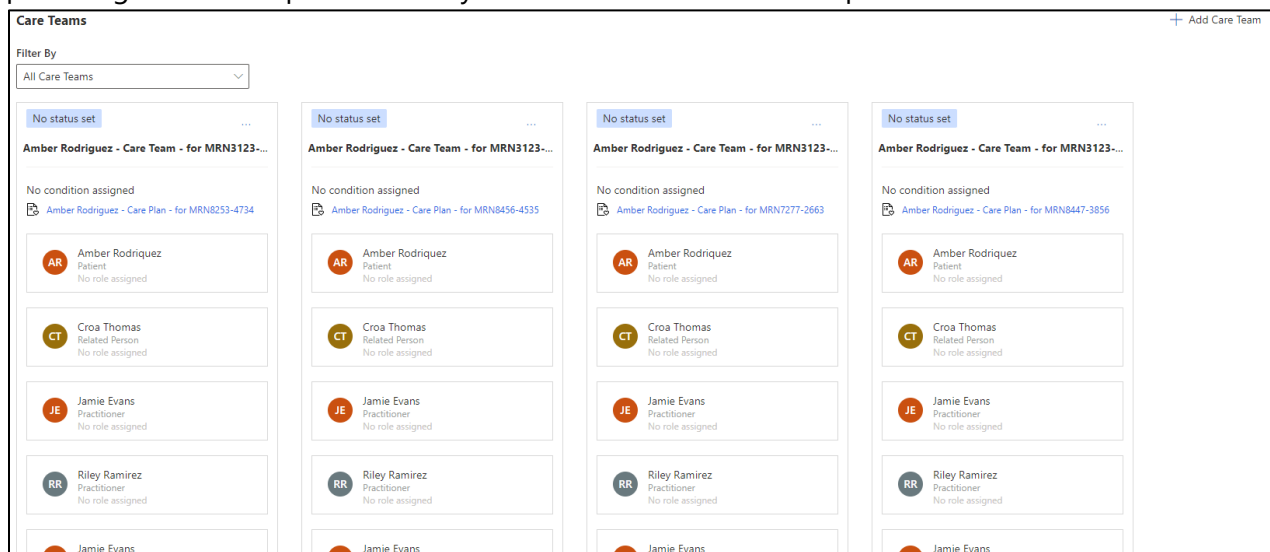
18. Select the **Care Plan** tab. On this tab, the care team member will be able to see a full view of all the Care Plans associated to the patient. This includes a list of their care plan activities and statistics for completed activities and goals. You can create a new care plan or filter by care plan type in this view.

19. Finally, select the **Related** tab to see any additional details related to the patient record.
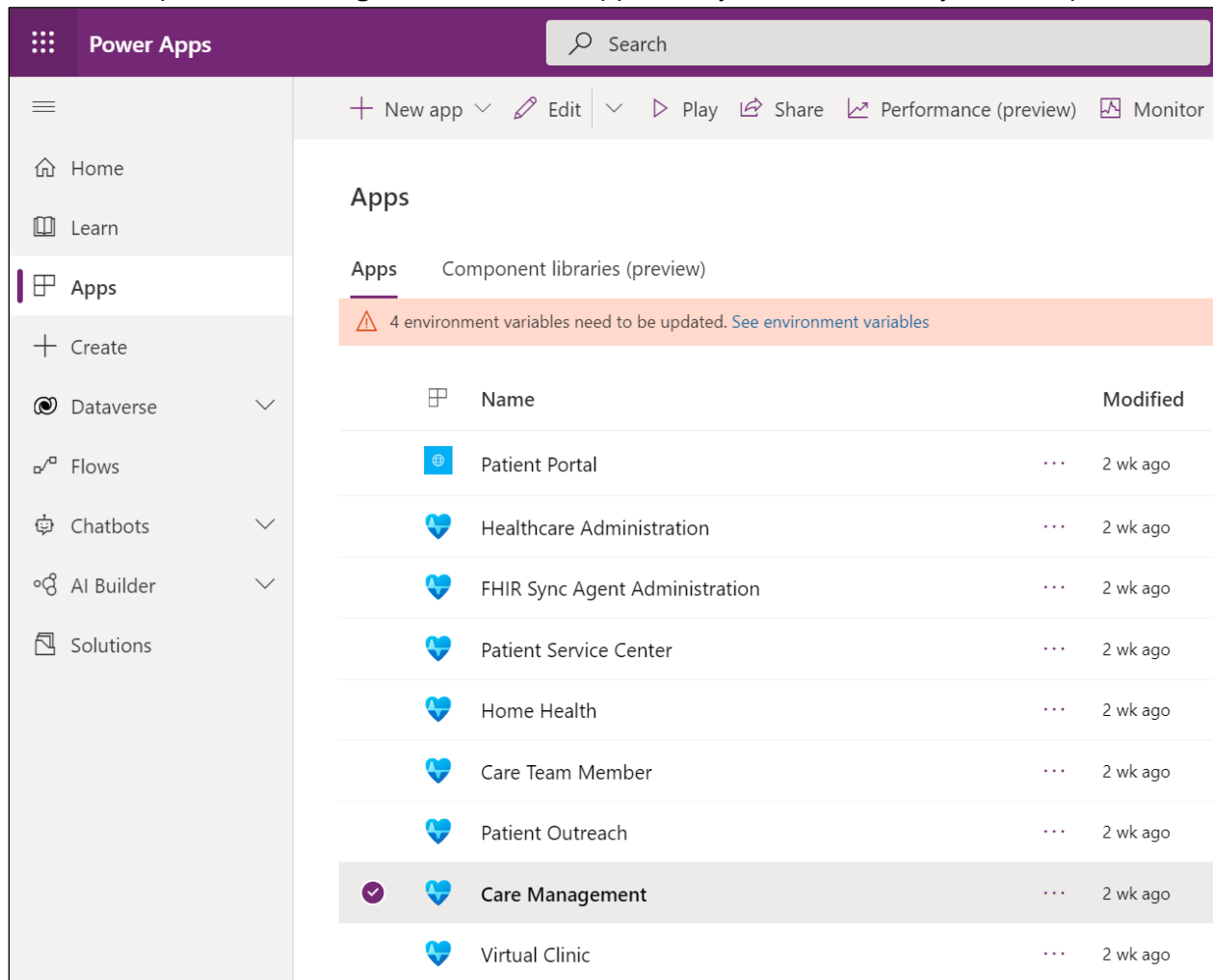
Congratulations! You have explored the Care Management app and its featured data within a patient record.

Exercise 3: Create a New Location

In this exercise, you will be creating a new Location record for the **Lamna Healthcare Company** Organization. They have opened a new branch in **Redmond, WA** and we need to ensure this location is in the system.
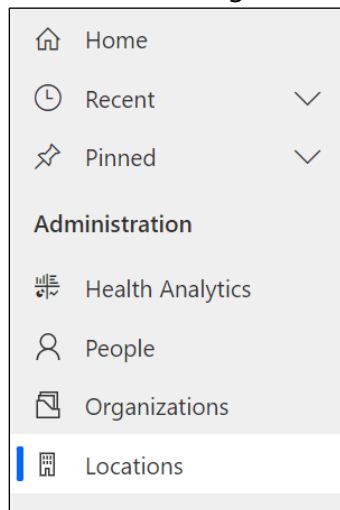
1. Select and open **Care Management** from the Apps list if you do not already have it open.

2. In the Care Management sitemap on the left, select **Locations**.

3. In the **All Locations** view, select **+New**.
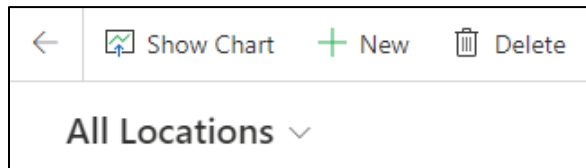
4. Fill in the following information for the new location:
   a. **Name:** Lamna Healthcare – Redmond, WA
   b. **Address City:** Redmond
   c. **Address State:** WA
   d. **Managing Organization:** Lamna Healthcare Company

5. Click **Save & Close**. Now let's see the new location in the Managing Organization record.

6. In the sitemap on the left, select **Organizations**.
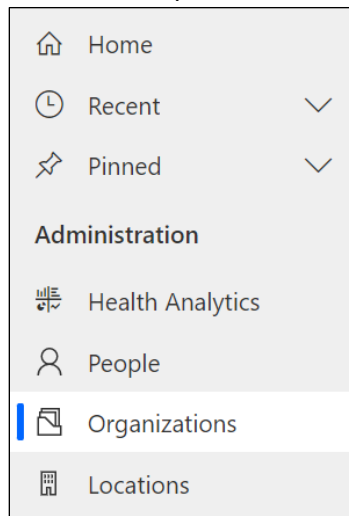
7. Change the grid view in the drop-down from "My Active Accounts" to "**Active Accounts**".

8. Once in the **Active Accounts** view, select the **Lamna Healthcare Company** Organization.

9. On the Lamna Healthcare Company record, click the **Related** tab and scroll down to select **Locations**.

10. You will see the newly created **Lamna Healthcare – Redmond, WA** location associated to the record.

Congratulations! You created a new location in Redmond, WA for Lamna Healthcare Company using the Care Management application.

Summary

Nice work! You have completed **Lab 01 - Care Management.**

In this lab, you learned how to do the following:

1. Explore the healthcare data model
2. Navigate Care Management application and patient records to discover their clinical data
3. Create a new branch location record associated with an organization