



# Microsoft Cloud for Healthcare **Industry Labs**

## Lab 01: Care Management

Step-by-Step Lab

September 2021

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# Overview

## Learning Objectives

In this lab, you will learn how to do the following:

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

## Prerequisites

- None

## Care Management Application

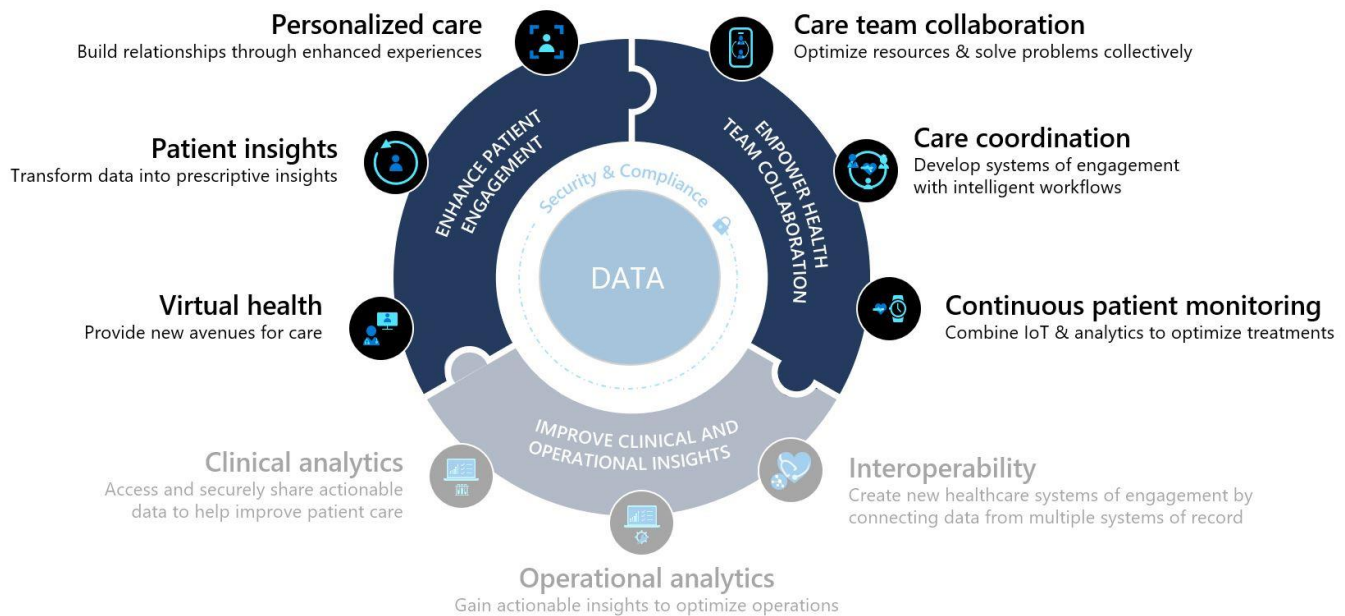
The **Care Management** application allows healthcare systems to provide coordinated care to each patient by quickly communicating the right information, at the right time, to the right people. Users can easily create, personalize, and enable new care plans for patients, manage care teams, and view patients'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

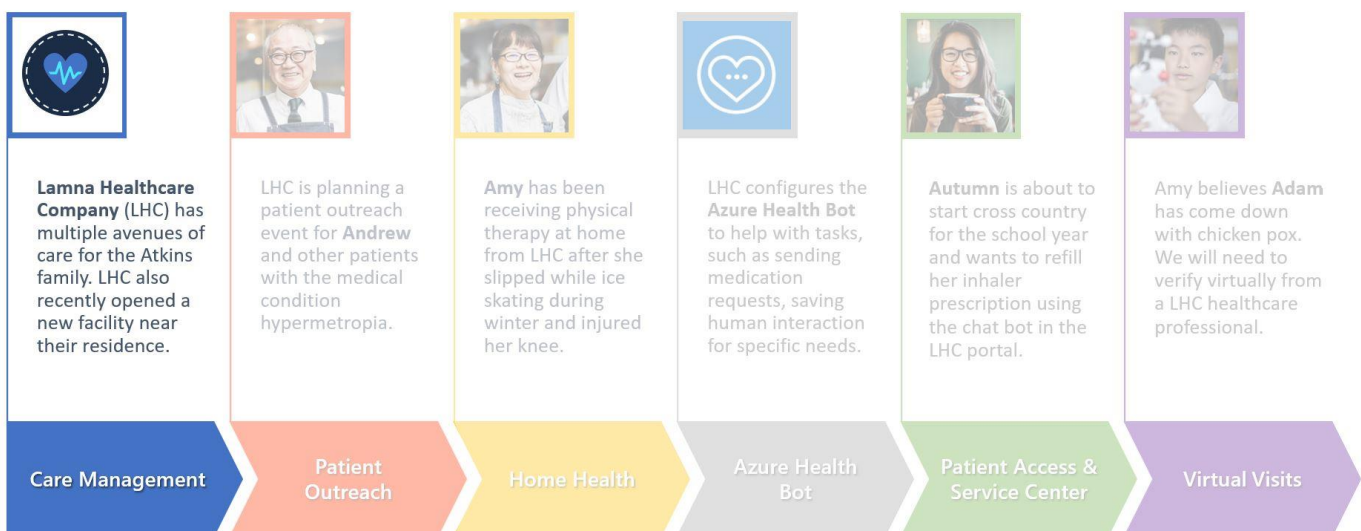
## Industry Prioritized Scenarios

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.



## Atkins Family Healthcare Story

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



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.

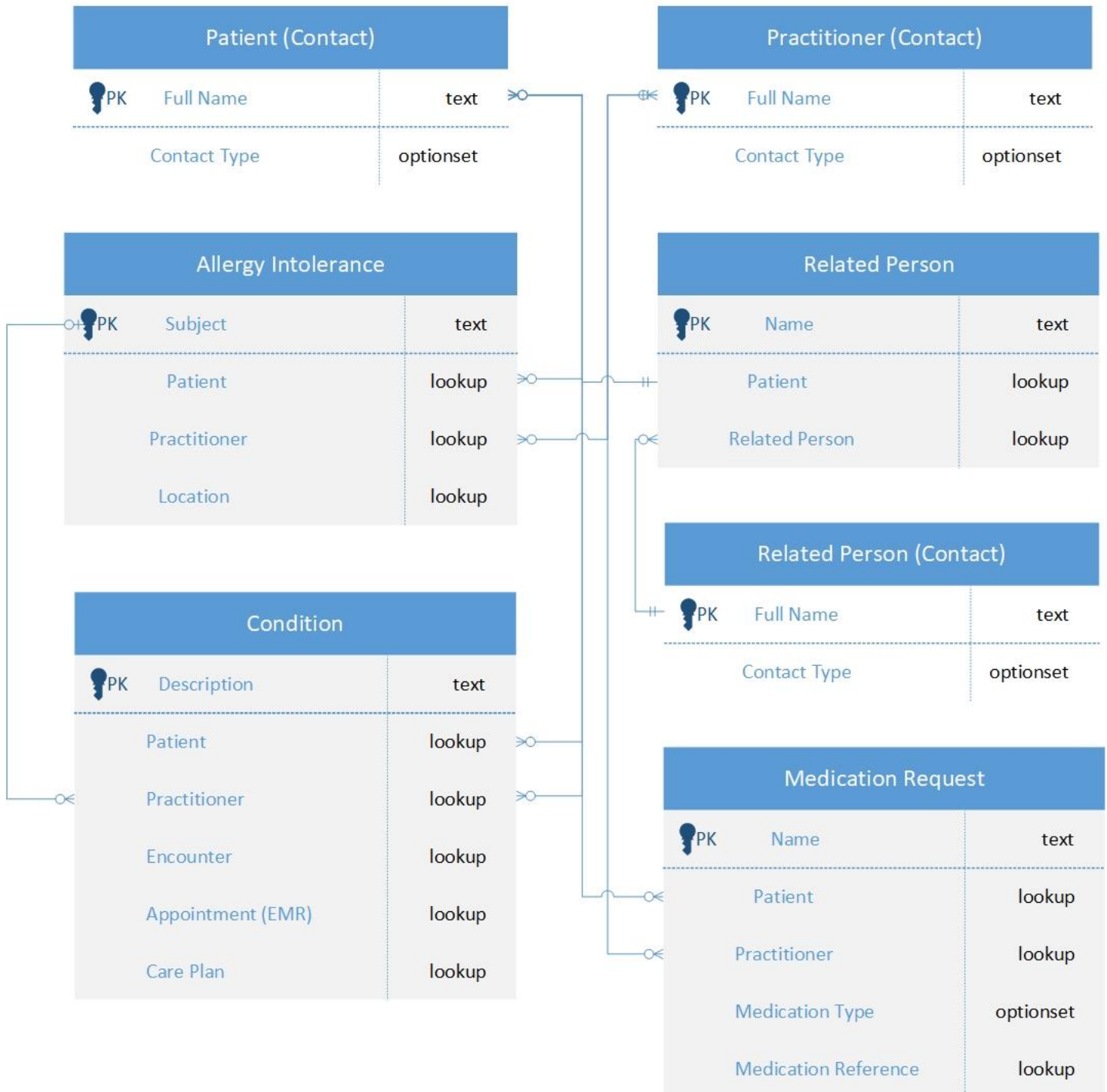
### Patient Detail Table Definitions

<a href="#">Patient (Contact)</a>	Person with whom a business unit has a relationship, such as customer, supplier, and colleague.
<a href="#">AllergyIntolerance</a>	Risk of harmful or undesirable, physiological response which is unique to an individual and associated with exposure to a substance.
<a href="#">Condition</a>	A clinical condition, problem, diagnosis, or other event, situation, issue, or clinical concept that has risen to a level of concern.
<a href="#">MedicationRequest</a>	An order or request for both supply of the medication and the instructions for administration of the medication to a patient.
<a href="#">RelatedPerson</a>	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



## 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

<a href="#">Patient or Practitioner (Contact)</a>	Person with whom a business unit has a relationship, such as customer, supplier, and colleague.
<a href="#">Organization</a>	Top level of the Microsoft Dynamics 365 business hierarchy. The organization can be a specific business, holding company, or corporation.
<a href="#">Location</a>	Details and position information for a physical place where services are provided and resources and participants may be stored, found, contained or accommodated.
<a href="#">AppointmentEMR</a>	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).
<a href="#">Procedure</a>	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.
<a href="#">Encounter</a>	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.
<a href="#">EpisodeOfCare</a>	An association between a patient and an organization / healthcare provider(s) during which time encounters may occur.
<a href="#">Observation</a>	Measurements and simple assertions made about a patient, device or other subject.
<a href="#">CodeableConcept</a>	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





### 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.

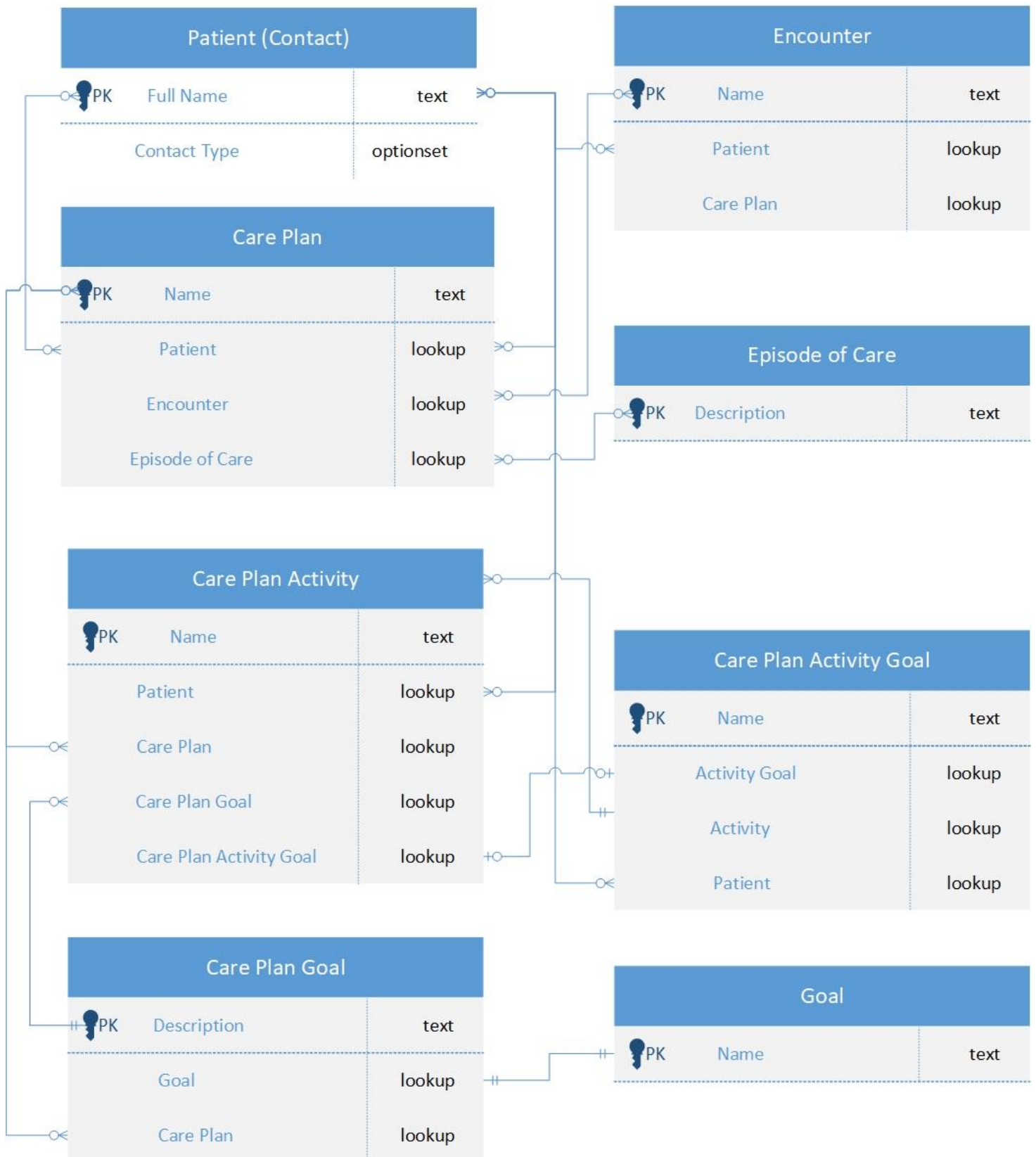
#### Care Plan Management Table Definitions

<a href="#">Patient (Contact)</a>	Person with whom a business unit has a relationship, such as customer, supplier, and colleague.
<a href="#">CarePlan</a>	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
<a href="#">CarePlanActivity</a>	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.
<a href="#">CarePlanActivityGoal</a>	Internal reference that identifies the goals that this activity is intended to contribute towards meeting.
<a href="#">Goal</a>	Target objective for a user or a team for a specified time period.
<a href="#">CarePlanGoal</a>	Describes the intended objective(s) of carrying out the care plan.
<a href="#">Encounter</a>	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.
<a href="#">Episode of Care</a>	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

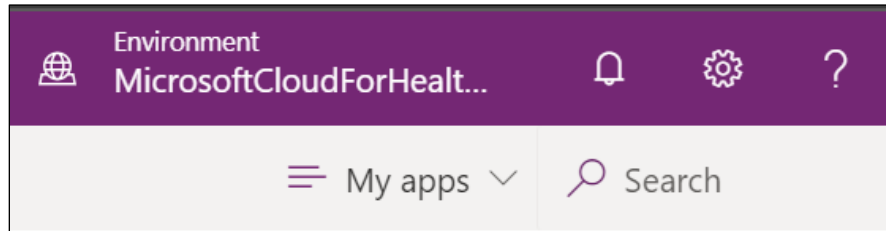
## Entity-Relationship Diagram



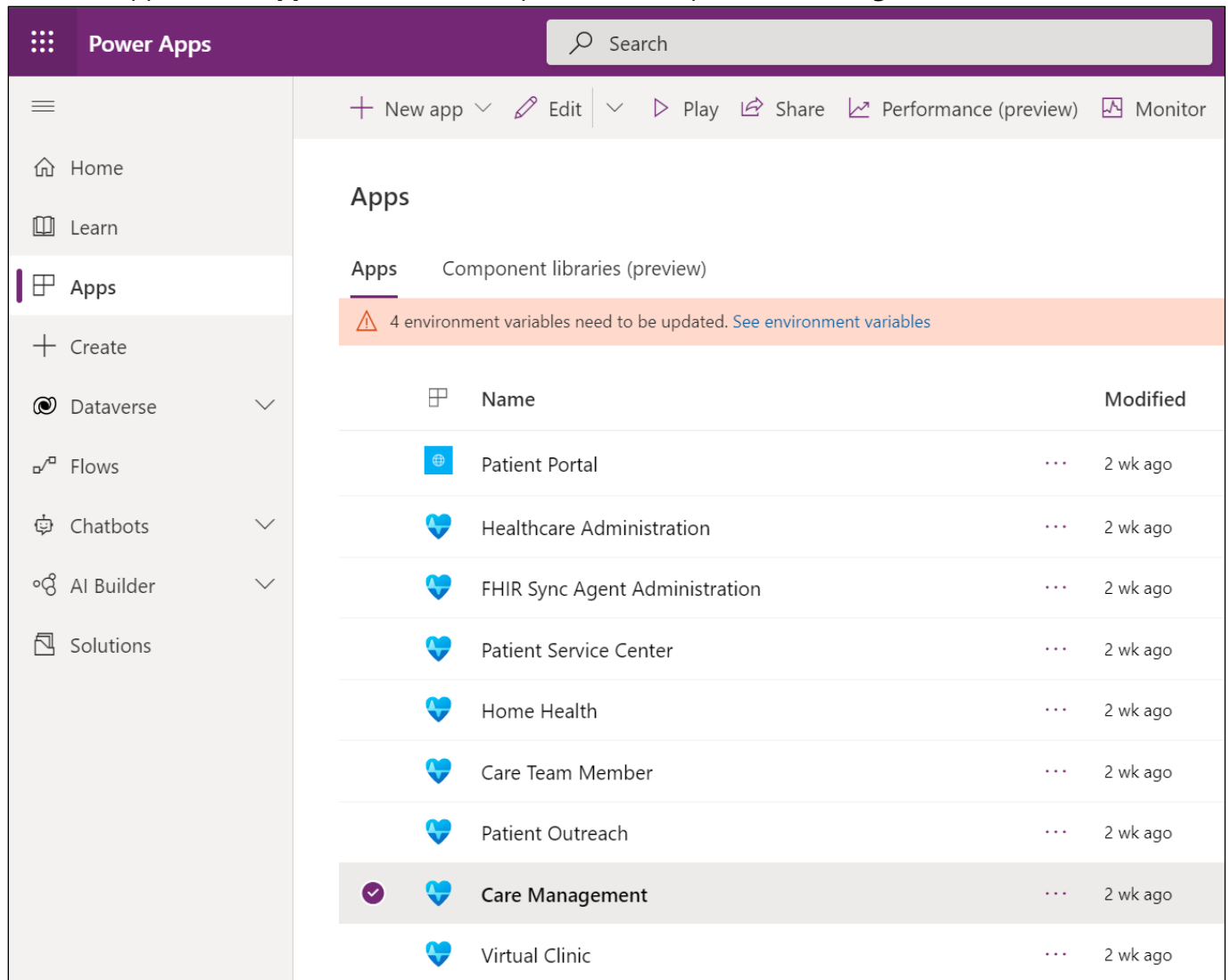
## Exercise 2: Navigate Care Management Features

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 Amy Atkins to see how a care team member would obtain a full view of the patient.

1. Navigate to [Power Apps](#) in an In-Private or Incognito window.
2. Select the proper **Environment** in the upper right.



3. In Power Apps, select **Apps** in the left sitemap. Select and open **Care Management**.



4. You should 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.

The screenshot shows the Dynamics 365 Care Management interface in a sandbox environment. The left sidebar contains navigation options: Home, Recent, Pinned, Administration, Health Analytics (selected), People, Organizations, Locations, Care Management, Care Plans, Care Plan Activities, Care Plan Goals, Clinical Data, Observations, Encounters, Procedures, Appointments (EMR), Templates, and Care Plan Templates. The main area displays the 'Care Coordinator Dashboard' with several panels: 'Active Care Plan Activities' (listing activities for Adam Atkins and Amber Rodriguez), 'All Open Appointments (EMR)' (listing appointments for Amy Atkins, Andrew Atkins, Amber Rodriguez, Jessie Irwin, Kayla Lewis, and Elizabeth Moore), 'Timeline' (showing a list of appointments with 'Overdue' status), 'Active Care Plans' (showing a list of active plans), and 'Active Care Plan Goals' (showing a list of active goals).

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

The screenshot shows the left Site Map of the Dynamics 365 interface. The 'People' option is highlighted with a blue bar, indicating it is the selected view.

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

Active Patients						
Group By: (no grouping)						
✓ Date of Birth	Full Name	Gender	Deprecated - Medical Record Num...	Emergency Contact Name	Primary Practitioner	Mobile Phone
7/7/2011	Adam Atkins	Male	MRN7835-4571	---	Jamie Evans	425-555-0195
11/15/1965	Amber Rodriguez	Male	MRN2631-2120	Kai Carter	Jamie Evans	555-555-0100
✓ 2/20/1970	Amy Atkins	Female	MRN7835-4569	---	Jamie Evans	425-555-0197
3/15/1965	Andrew Atkins	Male	MRN7835-4568	---	Jamie Evans	425-555-0198
10/10/2005	Autumn Atkins	Female	MRN7835-4570	---	Jamie Evans	425-555-0196

7. Take a moment to examine the **Summary** tab on Amy's patient record. On this tab, the care team member will have a full view of Amy's primary **information**, **relationships**, healthcare **details**, and patient **interactions**.

The screenshot shows the 'Summary' tab for Amy Atkins' patient record. The interface is divided into three main sections: Patient Information, Medical Identifiers, and Patient Details.

**Patient Information:** This section contains fields for Contact Type (Patient), First Name (Amy), Last Name (Atkins), Primary Practitioner (Jamie Evans), Household (Atkins Household), Email (Amy.Atkins@contoso.com), Home Phone (425-555-0199), Mobile Phone (425-555-0197), and Business Phone.

**Medical Identifiers:** This section shows a table with columns for Identifier, Type, and a search bar. It currently displays 'No data available.'

**Patient Relationships:** This section shows a table with columns for Name, Mobile Phone (Name), and Email (Name). It lists three family members: Andrew Atkins (425-555-0198, Andrew.Atkins@contoso.com), Autumn Atkins (425-555-0196, Autumn.Atkins@contoso.com), and Adam Atkins (425-555-0195, Adam.Atkins@contoso.com).

**Patient Details:** This section shows a list of conditions, including 'Amy Atkins - Knee Sprain 2021' and 'Amy Atkins'.

8. In the **Patient Information** section, notice that the **Contact Type** field is **Patient**. 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. Here we see the patient form.

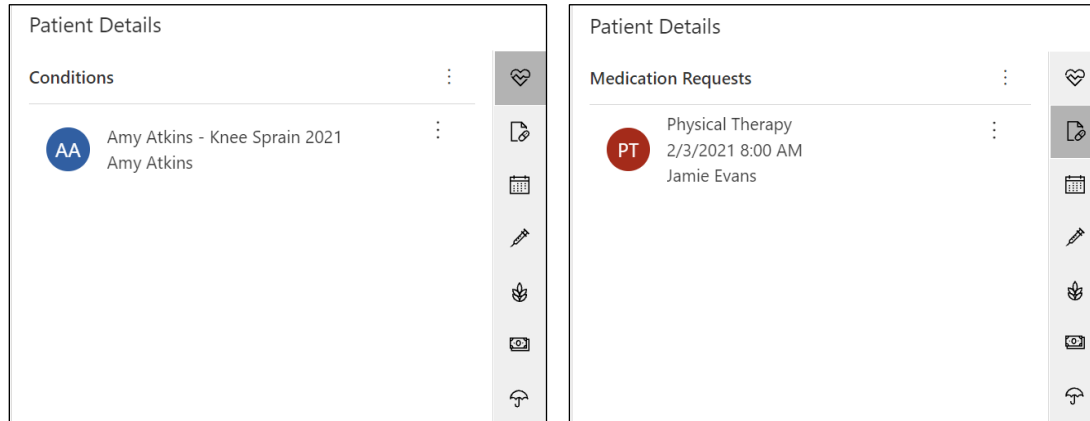
This close-up view of the 'Patient Information' section shows the 'Contact Type' field set to 'Patient'. The patient's name 'Amy Atkins' and the 'Summary' tab are also visible.

9. In the **Patient Relationships** section, you can see the rest of the Atkins family is listed since they are linked as **related persons** in the system.

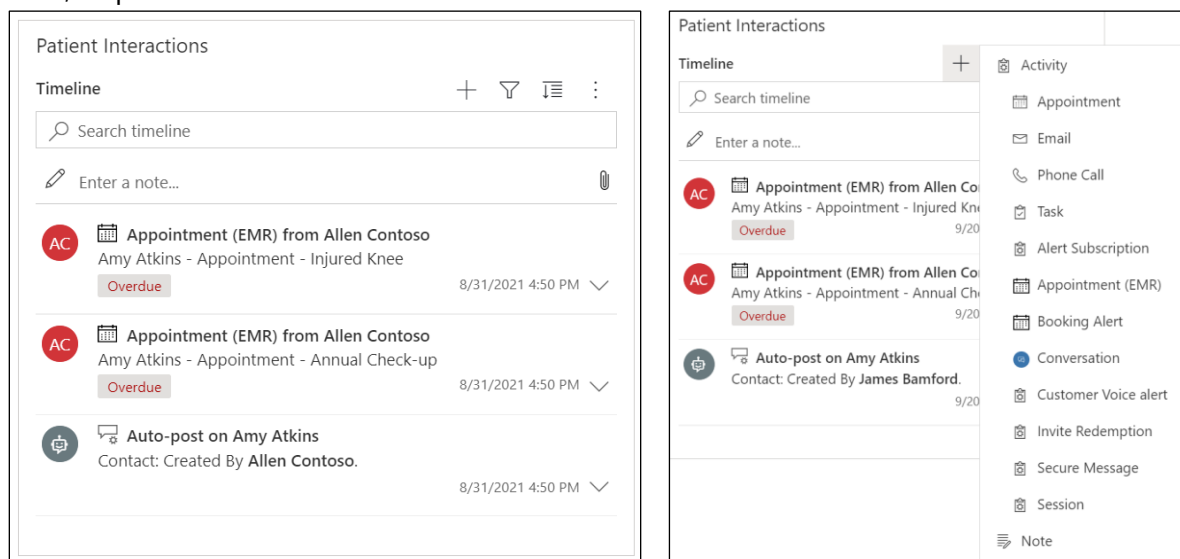
This close-up view of the 'Patient Relationships' section shows a table listing family members: Andrew Atkins, Autumn Atkins, and Adam Atkins, each with their mobile phone number and email address.

Name	Mobile Phone (Name)	Email (Name)
Andrew Atkins	425-555-0198	Andrew.Atkins@contoso.com
Autumn Atkins	425-555-0196	Autumn.Atkins@contoso.com
Adam Atkins	425-555-0195	Adam.Atkins@contoso.com

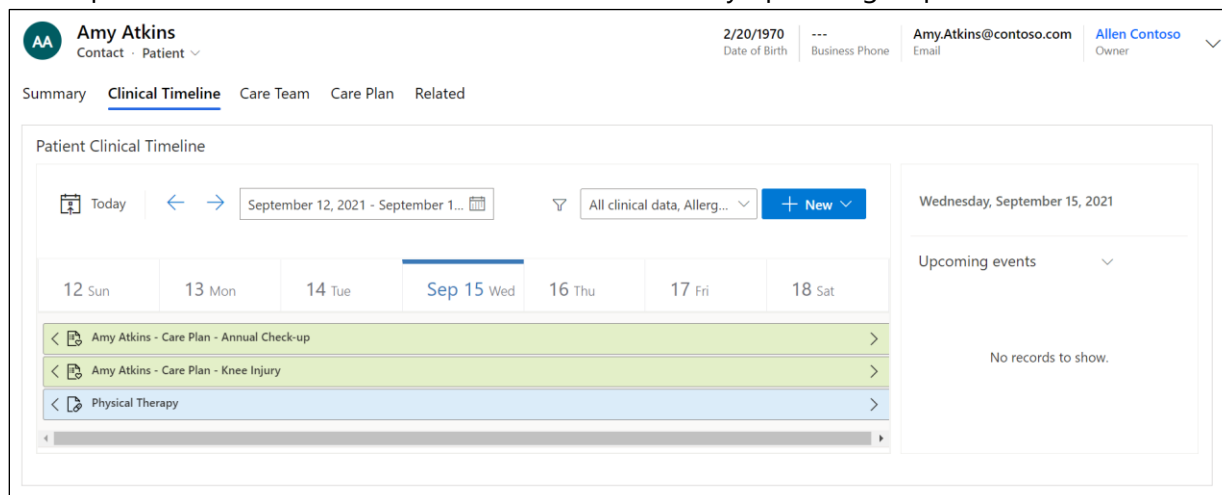
10. In the **Patient Details** section, you can cycle through the various icons to see different medical details including **conditions**, **medication requests**, **appointments (EMR)**, **procedures**, **allergy intolerances**, **claims**, and **coverages**. This is a simple and efficient way to observe patient healthcare details.



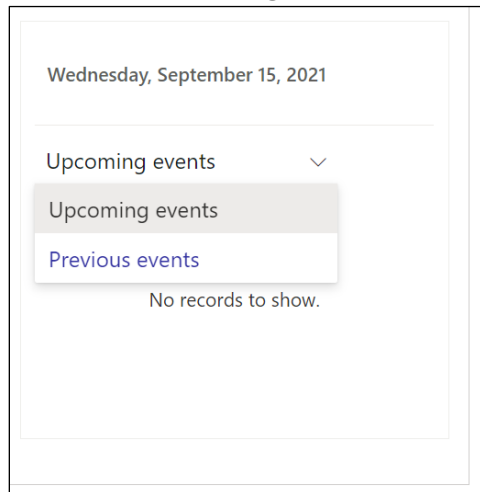
11. If you scroll down on the page, you will see the **Patient Interactions** section. This shows any activity, note, or post and can be filtered or sorted.



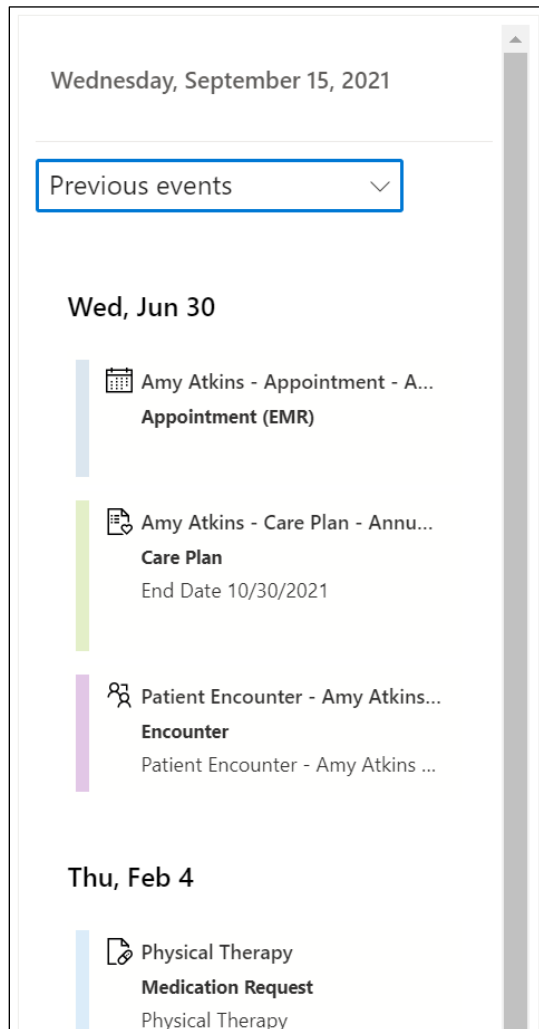
12. Select the **Clinical Timeline** tab. On this tab, a care team member will be able to view a weekly calendar of the patient's clinical information as well as a list of any upcoming or previous events.



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



14. See the list of events Amy had previously including Appointments, Care Plans, Encounters, and Medication Requests.



15. 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.

The screenshot shows the 'Care Team' tab for a patient named Amy Atkins. The page has a header with the patient's name and a dropdown menu. Below the header are tabs for 'Summary', 'Clinical Timeline', 'Care Team' (selected), 'Care Plan', and 'Related'. The main content area is titled 'Care Teams' and includes a 'Filter By' dropdown set to 'All Care Teams'. There are two columns of care team members. Each column has a 'No status set' button and a title: 'Amy Atkins - Care Team - Annual Check-up' and 'Amy Atkins - Care Team - Knee Injury 2021'. Below each title, it says 'No condition assigned' and 'No care plan assigned'. The members listed are Jamie Evans (Practitioner, No role assigned) and Andrew Atkins (Related Person, No role assigned).

16. 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.

The screenshot shows the 'Care Plan' tab for a patient named Amy Atkins. The page has a header with the patient's name and a dropdown menu. Below the header are tabs for 'Summary', 'Clinical Timeline', 'Care Team', 'Care Plan' (selected), and 'Related'. The main content area is titled 'CARE PLANS' and includes a 'Filter By' dropdown set to 'Active'. There are three summary cards: 'Assigned Care Plans' (2), 'Activities Complete' (33%), and 'Goals Complete' (33%). Below the summary cards is a table of care plan activities. The table has columns for Name, Description, Care Plan, Activity Status, and Activity End Date. There are three rows of data.

✓ Name	Description	Care Plan	Activity Status	Activity End Date
Care Plan Activity - Amy Atkins - Annual		Amy Atkins - Care Plan - Annual Check-up	In Progress	12/31/2021
Care Plan Activity - Amy Atkins - Knee Inj		Amy Atkins - Care Plan - Knee Injury	Completed	8/31/2021
Care Plan Activity - Amy Atkins - Knee Inj		Amy Atkins - Care Plan - Knee Injury	In Progress	12/31/2021

17. Finally, select the **Related** tab to see any additional details related to the patient record.

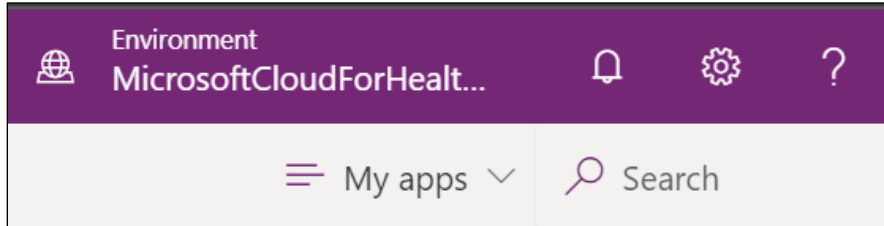
**Congratulations!** You have explored the Care Management app and its featured data within a patient record.



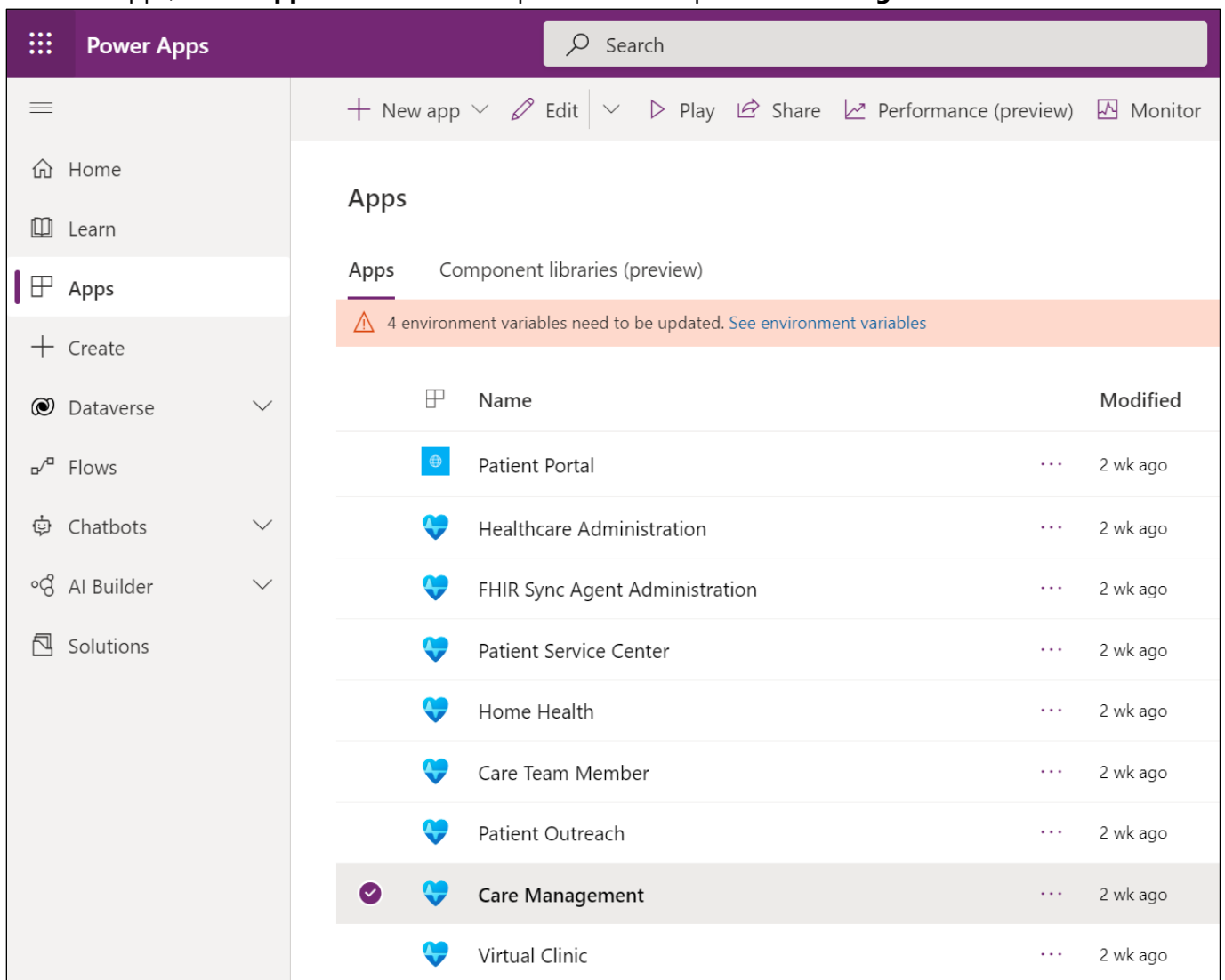
## Exercise 3: Create a New Location

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.

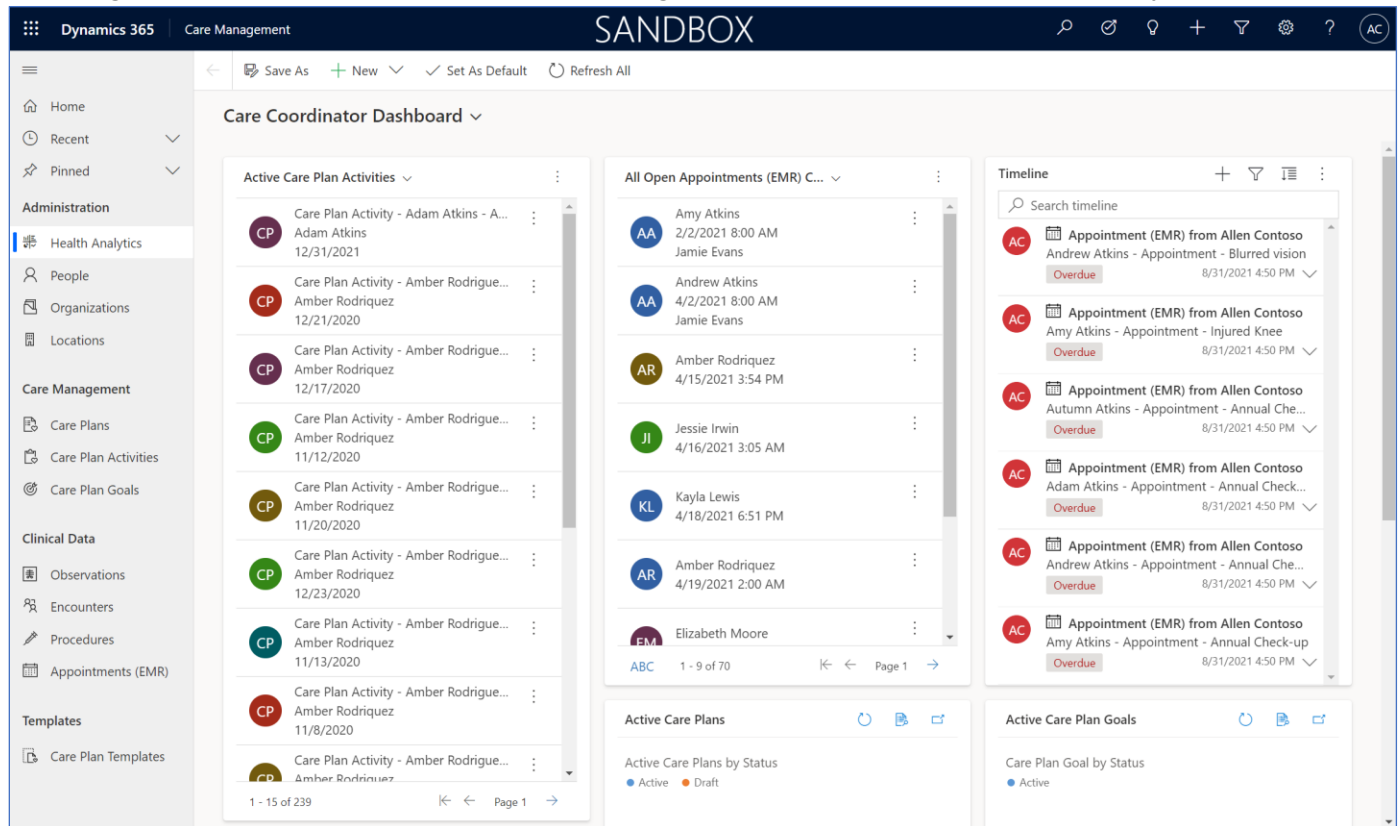
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2. Select the proper **Environment** in the upper right.



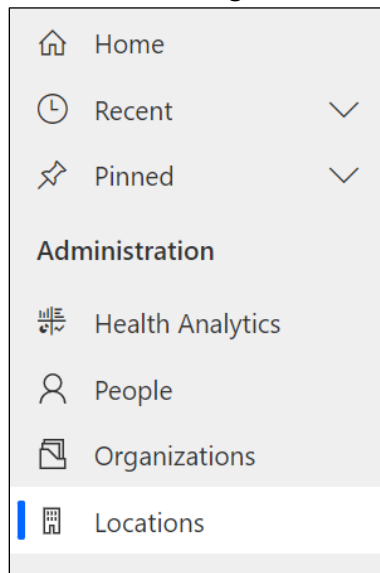
3. In Power Apps, select **Apps** in the left sitemap. Select and open **Care Management**.



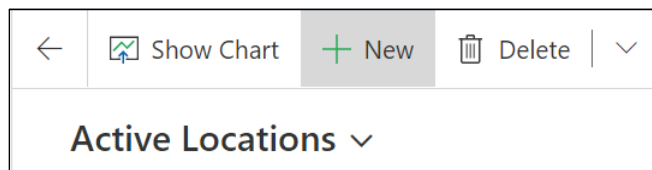
4. You should be landed in the **Health Analytics** section showing the **Care Coordinator Dashboard**. This is a helpful tool for care coordinators to get a complete view of their healthcare organization data, including care plans, care plan activities, care plan goals, appointments (EMR), and activity timeline.



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



6. In the Active Locations view, select **+ New**.



7. 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

New Location																																									
<b>General</b>																																									
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Name</td> <td style="width: 10%;">*</td> <td style="width: 70%;">Lamna Healthcare – Redmond, WA</td> </tr> <tr> <td>Address City</td> <td></td> <td>Redmond</td> </tr> <tr> <td>Address Country</td> <td></td> <td>---</td> </tr> <tr> <td>Address Distinct</td> <td></td> <td>---</td> </tr> <tr> <td>Address Period End</td> <td></td> <td>--- </td> </tr> <tr> <td>Address Period Start</td> <td></td> <td>--- </td> </tr> <tr> <td>Address Postal Code</td> <td></td> <td>---</td> </tr> <tr> <td>Address State</td> <td></td> <td>WA</td> </tr> </table>	Name	*	Lamna Healthcare – Redmond, WA	Address City		Redmond	Address Country		---	Address Distinct		---	Address Period End		---	Address Period Start		---	Address Postal Code		---	Address State		WA	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Alias 1</td> <td style="width: 50%;">---</td> </tr> <tr> <td>Alias 2</td> <td>---</td> </tr> <tr> <td>Alias 3</td> <td>---</td> </tr> <tr> <td>Description</td> <td>---</td> </tr> <tr> <td>Location Number</td> <td>---</td> </tr> <tr> <td>Managing Organization</td> <td> Lamna Healthcare Company</td> </tr> <tr> <td>Operational Status</td> <td>---</td> </tr> <tr> <td>Mode</td> <td>---</td> </tr> </table>	Alias 1	---	Alias 2	---	Alias 3	---	Description	---	Location Number	---	Managing Organization	Lamna Healthcare Company	Operational Status	---	Mode	---
Name	*	Lamna Healthcare – Redmond, WA																																							
Address City		Redmond																																							
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Operational Status	---																																								
Mode	---																																								

8. Click **Save & Close**. Now let's see the new location in the Managing Organization record.
9. In the sitemap on the left, select **Organizations**.

Home

Recent
▼

Pinned
▼

**Administration**

Health Analytics

People

Organizations

Locations

10. Change the grid view in the drop-down from "My Active Accounts" to "**Active Account**".

**My Active Accounts** ▾

System Views

- My Active Accounts
- Accounts Being Followed
- Accounts I Follow
- Accounts: Influenced Deals That We Won
- Accounts: No Campaign Activities in Last 3 Months
- Accounts: Responded to Campaigns in Last 6 Months
- Active Accounts**
- All Accounts
- Excluded Accounts Campaigns
- Inactive Accounts
- My Connections
- Selected Accounts Campaigns
- Service Account

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

Active Accounts ▾					
Search this view 🔍					
✓	Account Name ↑ ▾	Main Phone ▾	Address 1: City ▾	Primary Contact ▾	Email (Primary Contact) ▾
	Butler Household	555-555-0102	---	Madison Butler	Madison.Butler@contoso.com
	Contoso, Ltd.	417-547-4423	Stark City	---	---
	Endoscopy and Surgicenter	---	Elma	---	---
	Endoscopy Center	---	Bayamon	---	---
	Eye Care Surgery Center	---	Glen Easton	---	---
	Fabrikam Inc	423-555-0100	Loyal	---	---
	Humongous Insurance	423-555-0100	Middlefield	---	---
	Irwin Household	555-555-0100	---	Jessie Irwin	Jessie.Irwin@contoso.com
	Jensen Household	555-555-0101	---	Casey Jensen	Casey.Jensen@contoso.com
✓	<b>Lamna Healthcare Company</b>	423-555-0100	Elko New Market	---	---
	Moore Houshold	555-555-0105	---	Elizabeth Moore	Elizabeth.Moore@contoso.com

12. Select the **Related** tab and then scroll down to select **Locations**.

The screenshot shows the 'Lamna Healthcare Company' account page. The 'Related' tab is selected, and a dropdown menu is open, highlighting the 'Locations' option. The 'ACCOUNT INFORMATION' section on the left lists details for the company, including its name, phone number (423-555-0100), and website. The 'Timeline' section on the right shows a list of events, including 'Appointment Review' and 'Procedure Requests'.

**ACCOUNT INFORMATION**

Field	Value
Account Name	Lamna Healthcare Company
Phone	423-555-0100
Fax	---
Website	---
Parent Account	---
Ticker Symbol	---

**Related**

- Locations
- Medication Requests
- Medication Requests
- Medication Requests
- Practitioner Roles
- Procedure Requests
- Procedure Requests
- Procedure Requests
- Referral Requests
- Referral Requests
- Referral Requests
- Medications

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

The screenshot shows the 'Lamna Healthcare Company' account page with the 'Locations' tab selected. A table titled 'Location Associated View' displays a list of locations. The table includes columns for Name, Created On, Physical Type, Address Use, Address State, Address Period, Address City, and Type. The newly created location, 'Lamna Healthcare – Redmond, WA', is highlighted in blue.

**Location Associated View**

Name	Created On	Physical Type	Address Use	Address State	Address Period	Address City	Type
Contoso Pharmaceuticals	8/19/2021 3:46 PM	---	Home	PA	9/28/2020 5:2...	Ringtown	---
Fabrikam Residences	8/19/2021 3:46 PM	---	Home	IL	9/28/2020 5:2...	Galesburg	---
Lamna Healthcare – Redmond, WA	9/14/2021 4:50 PM	---	---	WA	---	Redmond	---

**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