
Health Cloud Implementation Guide

Salesforce, Spring '16



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WELCOME TO HEALTH CLOUD

Deliver Collaborative, Connected Patient Care with Health Cloud

Delivering outstanding patient care means more than simply managing the information and events that involve your patients. Health Cloud reinvents the way that care coordinators engage with patients. The Health Cloud Console gives you a consolidated view of critical patient records, access to the patient's care team, and the tools to bring it all together to improve healthcare outcomes. You create a strong, collaborative relationship with the patient and caregivers to assist the patient on his or her journey to better health.

Excellent care requires a complete picture of the data coming from electronic health record (EHR) systems to guide smart and efficient decisions regarding the patient. With Salesforce Health Cloud, you have all the tools to manage your patients with greater efficiency. The Health Cloud console includes:

- Comprehensive snapshot of vital patient data from EHRs
- Working view of your prioritized tasks related to all your patients
- Care timeline that lets you see a representation of patient history events, like appointments, prescriptions, conditions, and other care-related encounters
- Customized care plans that set measurable goals with tasks that can be assigned to the patient

When you configure Salesforce Communities, you also have a private patient community that unites professional and personal caregivers in a collaborative network that drives care plan compliance. You can assign ownership of health tasks to members of the care team, including other health professionals, patients, and family members. You can exchange secure, private messaging between you, the patient, and members of the community—and they can access those messages on any device.

EDITIONS

Health Cloud is available in Salesforce Classic

Available in: **Enterprise**, **Performance**, and **Unlimited** Editions

Get to Know the Health Cloud Data Model

Health Cloud supports the standard Salesforce data model. You can map clinical data from a source EHR system to Health Cloud objects and fields that hold patient and engagement data.

Patient and Individual Data Model

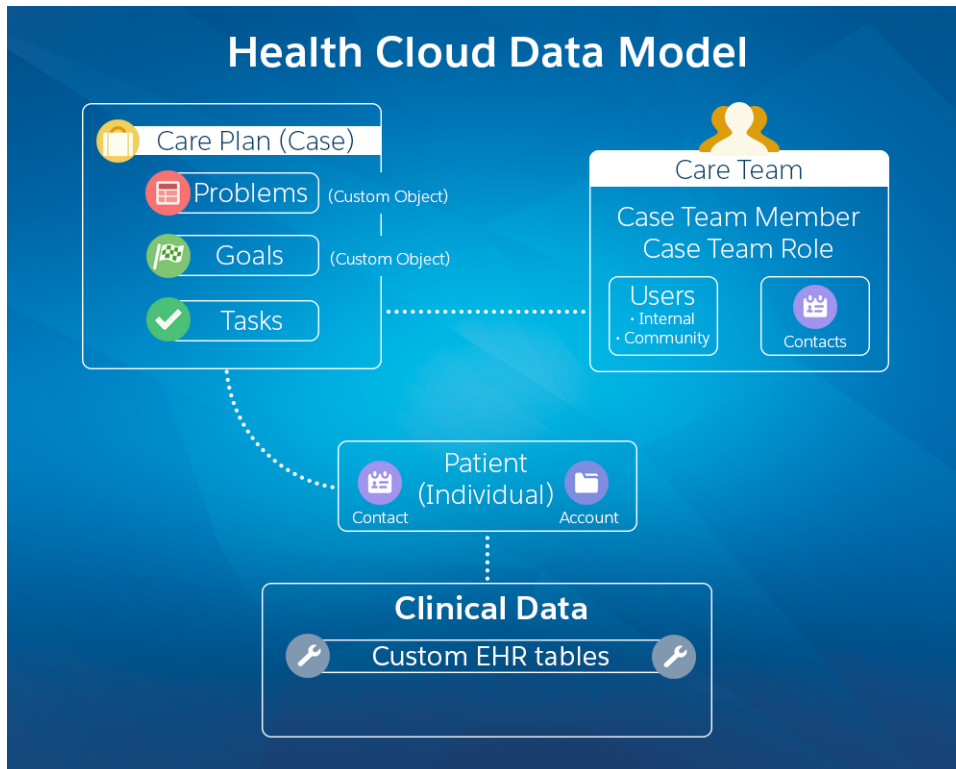
Health Cloud uses the individual model to address the different roles a person can have in relation to an organization. In one context, an individual is a patient; in another, a caregiver; and in another, an employee. The Health Cloud patient and individual data model is based on a unified object view consisting of fields and attributes from two standard Salesforce business objects: Account and Contact. Both objects are a part of the standard Salesforce data model, and within Health Cloud they are connected through a common field: *Individual ID*. When a patient is created in the system, both an account and a contact record are created and linked through the Individual ID field.

The Account object supports the transactions through the Case object to manage the care plan, its tasks, and the care team that supports the patient. The Contact object supports the communication between the patient, the coordinator, and the care team when Communities is enabled.

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All patient-specific information, including patient medical records, is tied to the account record. Because the contact record doesn't contain clinical information, a patient can collaborate with the external care team without them seeing the patient's medical records. Together, the account and contact records comprise the information that supports the patient, and are connected to the care plan, EHR data, and the members of the entire care team.

Health Cloud uses the following standard and custom objects to manage patient data.

- **Account**—In Health Cloud, the account record represents people instead of a business or an organization. Through the individual record type, it is also linked to the contact records. Accounts supports the transactions that occur related to the patient. So not only is the patient contact record connected through the Individual ID, but the contacts and users that represent caregivers or external healthcare providers are associated with the account through the patient care plan (case record).
- **Contact**—In the Salesforce data model, contacts are the people associated with the patient, such as family members and specialists who are outside of your organization. A contact must be related to an account. When you set up and use Salesforce Communities, the Contact object supports communication within the private patient community. Care team members are added as either external contacts without community access or as community users *and* contacts, which gives them community access.
- **User**—Health Cloud includes internal Salesforce users and community users. Each user type has different access to records and functions. Internal users have access to patient data, when granted. Community users don't have access to patient data.
- **Case Team Member**—The Case Team Membership object represents a patient care team member who is part of the team that works on tasks in the patient's care plan. In Health Cloud, care team members can be family members and healthcare providers from outside of your organization. They can also be internal Salesforce users, like the primary care physician. When Salesforce Communities is enabled, care team members with access to the community use Case Feed to collaborate around the patient and the care plan. Care team members who are only contacts can't log in to Salesforce, so they don't have access to Chatter in the case feed or to the patient care plan.
- **Case Team Role**—The Case Team Role object represents a role for a member of the patient care team, such as Caregiver or Physiotherapist. Care coordinators assign roles when they add a member to the private patient community. The case team role also controls access to the case and the care plan, and controls visibility of the user in the community.

- **Case**— In Health Cloud, the care plan is associated with the case record. The case permission controls access to the elements of the care plan, to the care team (Case Team), and to the communication within the patient's community. All care team members are associated with the patient's contact record through the Case object.
- **Problems**—Each care plan has a list of clinical or non-clinical health issues that must be addressed. The conditions, problems, concerns, and diagnoses that are managed and mitigated by this plan are represented in the Care Plan Problem custom object.
- **Goals**—Represents the intended objectives of carrying out a care plan.
- **Task**—Represents an activity, such as making a phone call, completing a survey, attending a medical appointment, or other to-do items. Tasks can be directly related to a goal on the care plan, or they can be unrelated to a specific problem or goal.
- **EHR Clinical Data Objects**—The custom objects that hold patient data that comes from the EHR system of record. For example, `EhrCondition__c` represents detailed information about conditions, problems, and diagnoses recognized by a clinician.

Clinical Data Model

Clinical data that comes from EHR or other clinical systems is critical to the planning, execution, and management of coordinated care plans for patients. Clinical data can be integrated with Salesforce using several standard APIs, to map messages from EHR systems into Health Cloud objects and fields. These objects and fields closely resemble the HL7® FHIR® standard.

Because the Health Cloud clinical data model is similar to FHIR® standard, it enables easier and more straightforward clinical data integration from other source systems. When devising an implementation strategy, you or your integration partner map messages from the EHR system to the correct Health Cloud object. Data is replicated into the clinical data model with read-only access. Data that originates in the EHR or other clinical systems, Health Cloud is view-only, so the source system remains the system of record.

You can take a deep dive into the Health Cloud data model by using Schema Builder. Schema Builder provides details, such as the field values, required fields, and how objects are related, by displaying lookup and master-detail relationships. You can view the fields and relationships for both standard and custom objects. Schema Builder is enabled by default and lets you add the following to your schema:

- Custom objects
- Lookup relationships
- Master-detail relationships
- All custom fields, except geolocation

To access Schema Builder, from Setup, enter `schema` in the `Quick Find` box.

LET'S GET STARTED

The Big Picture for Setting Up Health Cloud

It's time to get rolling! This guide shows you how to quickly set up the Health Cloud console that lets care coordinators manage their patients and provide excellent care.

Health Cloud is a managed package, installed on top of Salesforce Enterprise Edition, Performance, or Unlimited editions.



Note: Salesforce Communities provides the collaboration support for Health Cloud. Some of the collaborative features aren't available until you enable Salesforce Communities and create a private patient community.

1. [Verify that the Shared Contacts feature is enabled.](#)
2. [Install the Health Cloud managed package](#) from the AppExchange.
3. [Define a domain name.](#)
4. Optionally, [set up your patient community.](#)
5. [Configure the System Administrator profile](#) on page 8.
6. [Create profiles and assign permission sets for internal users and for care team members.](#)
7. [Control user access with profiles.](#)
8. [Assign record types to profiles.](#)
9. [Set field access with permission sets.](#)
10. [Control access to patient lists.](#)
11. [Create roles for care team members.](#)
12. [Set up Salesforce Knowledge](#) so that you can use it to create protocols for care coordinators and educational articles for patients and community users.
To set up Salesforce Knowledge, you need to:
 - a. Enable Knowledge users in your organization.
 - b. Create the article types that are used for protocols and educational articles.
 - c. Enable Salesforce Knowledge.
 - d. Enable the Knowledge articles widget so that articles can be accessed from the console.
 - e. Create the different content types that care coordinators and community members will use.
13. [Customize the Health Cloud Apps.](#)



Note: Make sure to assign the Health Cloud - Admin app to the user profile of the Health Cloud admin.

EDITIONS

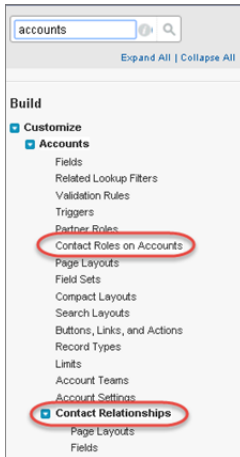
Health Cloud is available in Salesforce Classic

Available in: **Enterprise**, **Performance**, and **Unlimited** Editions

Verify That Shared Contacts is Enabled

The Shared Contacts feature must be enabled to support the Health Cloud data model.

1. From Setup, enter *Accounts* in the **Quick Find** box.
2. Verify that the Setup menu under Accounts includes **Contact Roles on Accounts** and **Contact Relationships**.



If you see the options, then Shared Contacts is enabled in your org.

3. If you don't see these items, enter *Account Settings* in the **Quick Find** box, then select **Account Settings**.
4. If **Enable Sharing Contacts with Multiple Accounts** is not selected, enable it.
If the checkbox is selected, try disabling it, and then reselect it.
5. Then check the Setup menu again for **Contact Roles on Account** and **Contact Relationships**.

Install the Health Cloud Package in Your Org

Install the Health Cloud managed package in your org so that you can begin implementing Health Cloud for your care coordinators.

1. Log into your org as a system administrator.
2. Paste the URL for the Health Cloud package into the browser navigation bar and press **Enter**.
3. Enter the password you received from Salesforce.
4. Click **Install**. You'll see a message that describes the progress and a confirmation message after the installation is complete.

Define Your Health Cloud Domain Name

Sign up for your organization's custom domain name.

Start setting up your custom domain name by finding a domain name unique to your organization and signing up for it.

1. From Setup, enter *My Domain* in the **Quick Find** box, then select **My Domain**.

EDITIONS

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Available in: **Enterprise**, **Performance**, and **Unlimited** Editions

USER PERMISSIONS

To install packages:

- "Download AppExchange Packages"

2. Enter the subdomain name you want to use within the sample URL. For example, a company called Universal Containers wants to use the subdomain `universalcontainers`. The company's login URL would be `https://universalcontainers.my.salesforce.com/`. You can use up to 40 characters.

You can't use these reserved words for subdomains:

- `www`
- `salesforce`
- `heroku`

And, you can't start the domain name with:

- `root`
- `status`

3. Click **Check Availability**. If your name is already taken, choose a different one.
4. Click **Terms and Conditions** to review your agreement, then select the checkbox.
5. Click **Register Domain**.
6. You receive an email when your domain name is ready for testing. (It can take from 30 seconds to 24 hours.)

Your domain isn't rolled out until you've tested and deployed it.

SEE ALSO:

[Salesforce Help: Test and Deploy Your New Domain Name](#)

Switch On Salesforce Communities (Optional)

If you're extending the Health Cloud console with Communities, the first step in setting up a private community is to flip the switch to enable Salesforce Communities.



Note: Salesforce Communities provides the collaboration support for Health Cloud. Some of the collaborative features aren't available until you enable Salesforce Communities and create a private patient community.

Salesforce Communities lets care coordinators, patients, and care team members collaborate in the private community. Although all Health Cloud users share the same Community, access to information is restricted through the security that surrounds each individual care plan. So a patient can only see information or communication related to his or her specific care plan.



Note: Once you enable Communities, you can't turn it off.

1. From Setup, enter *Communities Settings* in the **Quick Find** box, then select **Communities Settings**.
2. Select **Enable Communities**.
3. Enter a unique value to use as your domain name. Click **Check Availability** to make sure it's not being used by someone else.
It's a good idea to use something recognizable to your users, such as your company name. Although the domain name is the same for all communities, you create a unique URL for each community during the creation process.



Note: Keep in mind that you can't change the domain name after you save it. You'll have to call Salesforce to change it.

4. Click **Save**, and make sure you click **OK** on the confirmation message page to enable the community.

For more information on setting up communities, see [Getting Started with Salesforce Communities](#).

Community Setup Overview

The private patient community is the heart of collaborative patient care. Communities provide care coordinators, physicians, patients, and caregivers an easy way to interact with each other whenever and wherever they are. You can set up private patient community using Salesforce Community Builder with the Napili template.

This topic provides a high-level outline of the steps needed to get your community up and running. Refer to the following guides for the detailed steps to get your community launched in no time at all.

- [Using Templates to Build Communities](#)
- [Getting Started with Communities](#)

 **Note:** Remember that external care team members require at least a Customer Community Plus license to become community members and collaborate around the patient care plan.

Health Cloud Setup

Perform the following steps when setting up Health Cloud in the Salesforce Setup menu:

- Create a Health Cloud Community user profile.
To update the profile from Setup, enter *Profile* in the **Quick Find** box, then select **Profiles**. Clone the existing Customer Community Plus user profile and modify it, as needed. Add Read access to Accounts, Contacts, Solutions, Cases, Documents, Problems, and Goals. Update field level security to make all fields visible for Problems and Goals. Verify that the Chatter tab is enabled.
- Create a Health Cloud Admin profile.
Add the Patient Card Configuration tab to the profile.
- Create users.
When you create community users manually, assign your Health Cloud Community profile to them and clear the **Salesforce 1** checkbox.
- Configure sharing settings for cases.
To update the setting from Setup, enter *Sharing* in the **Quick Find** box, then select **Sharing Settings**. Make sure that you select **Enable External Sharing Model** and set external case sharing to **Private**. That way, users can collaborate only with the care teams they are members of. Care plan access is restricted by membership in the community, as well.
- Update the CommunityProfileName custom setting with the value *Health Cloud - Community*.
From Setup, enter *Custom* in the **Quick Find** box, then select **Custom Settings**. Click **Manage** next to CommunityProfileName, and then click **New** to add the name and the value for the community.

Community Setup

Perform the following setup tasks from the Community node in Setup:

- Select the Napili template.
In the Community Creation wizard, select the Napili template to start building your community. Napili is powerful, responsive template that gives users the same visual and functional experience whether they use a tablet, a mobile device, or their desktop.
- Enable the global header.
The global header lets users switch between their communities and the internal organization. Users must be assigned the “View Global Header” permission either by selecting it on standard profiles, creating custom profiles, or by creating a permission set.
- Customize community properties.
From the Community Management page, select **Administration > Members** to customize the properties of the community.

- Enable private messages.

From the Community Management page, select **Administration** > **Preferences** to customize the properties of the community.

Community Builder

Perform the following setup tasks using Community Builder. From Setup, enter *All Communities* in the **Quick Find** box, then select **All Communities**. Then click **Manage** next to the community name.

- Brand your community.

Add your logo and use Community Builder's enhanced Branding Editor to efficiently apply color and style to your community.

- Edit community pages and components.

Remove unwanted default pages from the Napili template and create more pages, as needed. Make sure to update the navigation menu to access the new pages you create.

- Update component properties.

Review and update the properties for the User Profile Header, the Search Publisher, and any other components that you use.

- Configure page layouts.

Configure page layouts in the Page Editor for objects using the Record Information component.

- Preview, test, and publish your community.


Take a look at your community in a desktop browser window and on mobile devices. When you're happy with your changes, click **Publish** in the toolbar to publish your changes.

Configure the Health Cloud Admin Profile

To be able to set up the Health Cloud, the System Administrator must make a few additions to the Health Cloud Admin profile.

 **Note:** If the System Administrator needs access to features in the Health Cloud console, these items must be included in that profile, as well.

1. From Setup, enter *Profiles* in the **Quick Find** box, then select **Profiles**.
2. Select the **Health Cloud Admin** profile.
3. Add or enable the following items for the profile.

Profile Page Section	Name
Page Layouts	Account, Case, Contact, and Task
Record Types	Account: Business, Household, Individual (Default) Cases: CarePlan Contacts: Business, Individual (Default) Tasks: Care Plan Task
Administrative Permissions	"Customize Application" and "Manage Translation"  Note: Manage Translation only appears in the profile after you enable the translation workbench.

4. Click **Save**.

SEE ALSO:

[Salesforce Help: Assign Record Types to Profiles in the Original Profile User Interface](#)

[Salesforce Help: Enable and Disable the Translation Workbench](#)

Configure the Health Cloud Profile

Assign the required record types to the Health Cloud profile.

1. From Setup, enter *Profiles* in the *Quick Find* box, then select **Profiles**.
2. Select the *Health Cloud* profile.
3. Click **Edit**.
4. Scroll to the Record Type Settings section and add the following record types to the profile.

Record	Record Type
Accounts	Business, Household, Individual (Default)
Cases	CarePlan (Default)
Contacts	Individual (Default)
Task	Care Plan Task (Default)

5. Click **Save**.

SEE ALSO:

[Salesforce Help: Assign Record Types to Profiles in the Original Profile User Interface](#)

Add New Internal Users

You can add internal Salesforce users one at a time or in batches of up to 10 users.

1. From Setup, enter *Users* in the *Quick Find* box, then select **Users**.
2. Click **New User** to add a single user or click **Multiple Users** to add up to 10 users at a time.
3. If multiple user license types are available in your organization, select the user license to associate with the users you plan to create. The user license determines the available profiles.
4. Specify the information for each user, including *Role* and *Profile*.

Users who need access to the Health Cloud must have *Service Cloud User* enabled. If you're using Salesforce Knowledge articles to manage protocols, enable *Knowledge User* for every user needing access to articles.

User Edit

Mellinda Smith

Help for this Page

User Edit

SaveSave & NewCancel

General Information

Required Information

First Name

Mellinda

Last Name

Smith

Alias

msmit

Email

healthcaretest@example.c

Username

mellinda.smith@example.c

Nickname

mellinda

Title

Company

Department

Division

Role

Care Coordinator

User License

Salesforce

Profile

Health Cloud

Active

☒

Marketing User

☐

Offline User

☐

Sales Anywhere User

☐

Knowledge User

☒

Force.com Flow User

☐

Service Cloud User

☒

Accessibility Mode

☐

Color-Blind Palette on Charts

☐

Salesforce1 User

☐

Make Setup My Default Landing Page

☐

Allow Forecasting

☐

5

1

1

1

1

1

1

1

1

1


5. To email a login name and temporary password to each new user, select **Generate new password and notify user immediately**.
6. To specify more details for the users that you've created, edit individual users as needed.

Control User Access with Permission Sets

A permission set is a collection of settings and permissions that provide access to various records and functions in Health Cloud. Many users need a combination of these permissions depending on their roles and their interactions with patients and their records.

To find the list of delivered permission sets, enter *Permission Sets* in the **Quick Find** box, then select **Permission Sets**.

The following table shows the permission sets delivered with Health Cloud. Remember that permission sets don't override your defined record sharing settings. So, for example, if a record is set to Private, even users with the permission to view those objects don't have access.

 **Note:** You can't edit the delivered permission sets. To make customizations to the permissions sets, clone and update the permission sets as necessary to add or remove permissions. It's a best practice to clone the permission sets, even if you're not planning to customize them.

EDITIONS

Health Cloud is available in Salesforce Classic

Available in: **Enterprise**, **Performance**, and **Unlimited** Editions

Permission	Details
Health Cloud Standard	The standard user is someone who uses the console—most often the care coordinator.
Health Cloud Limited	Generally, an internal user who doesn't use the Health Cloud console. Examples would be a primary care physician or other care team member who needs access to the Health Cloud objects and records using a mobile device.
Health Cloud Admin	The Health Cloud Admin user is someone who configures and customizes the Health Cloud console. This user can be a system admin, but isn't required to be.
Health Cloud API	Gives full access to the integration system's API user to view, modify, and delete all data integrated from the EHR.

 **Example:** The following samples show permission set assignments a typical organization might use:

User	Permission	Function
Care Coordinator	Health Cloud Standard	Because they are responsible for creating and managing care plans, care coordinators can view and update the care plan and associated records, including problems and goals.
Primary Care Physician	Health Cloud Limited	Generally, the primary care physician uses the source EHR to create and modify patient records, read-only access to the records in the console is sufficient. In this organization, the physician isn't making updates to the care plan but requests changes through the care coordinator.
Nurse	Health Cloud Standard or Health Cloud Limited	<p>Nurses play various roles in different organizations. In some organizations, nurses establish relationships with patients and caregivers to increase the likelihood that the patient stay on the care plan established by the doctor. If nurses work with the care coordinators to create problems and goals in the care plan, they can also update records, which would require Health Cloud Standard permissions.</p> <p>In other organizations, nurses use the source electronic health system to create and modify patient records, and don't create items in the care plan. So read-only access to the console is sufficient, which only requires Health Cloud Limited permissions.</p>
System Administrator or Care Coordinator Supervisor	Health Cloud Admin	The person who sets up and customizes Health Cloud, needs access to almost everything. Whether the person in this role is a system administrator or someone who manages care coordinators, they need to modify the application to make it useful for the way your organization works.
Integration System	EHR Integration API	The integration system needs full access to the API user to view, modify, and delete all data.

Set Field Access Using Permission Sets

Field permissions specify the access level for each field in an object. Health Cloud comes with four preconfigured permission sets that you can clone and customize to meet your needs.

1. Enter *Permission Sets* in the **Quick Find** box, then select **Permission Sets**.
2. Find the permission set you want to customize, and click **Clone**.



Note: The default Health Cloud permission sets can't be edited. To make changes, clone the permission set and then make your changes.

3. Enter a new label and description for the cloned permission set.
4. Select the permission set that you're working on.
5. In the **Apps** section, click **Object Settings**.

6. In the Find Settings... box, enter the name of the object you want and select it from the list. Click **Edit**, then scroll to the Field Permissions section
7. Make sure that the following fields have Edit permission:

Object	Field Label
Accounts	<ul style="list-style-type: none"> Account Name Care Plan Source System ID Individual ID Source System Id Primary Contact Record Type Account Owner
Contacts	<ul style="list-style-type: none"> Name Birthdate Mailing Address Source System Id Phone
Tasks	<ul style="list-style-type: none"> Name Public Related To Due Date Goal Problem Priority Recurrence Interval Repeate This Task Status Task Type Task Subtype Task Record Type
Cases	<ul style="list-style-type: none"> Status Priority Contact Name Account Name Status Priority

Object	Field Label
	<ul style="list-style-type: none"> Case Origin Type Subject Description

8. Click **Save**.

Control Access to Patient Lists

Use sharing settings to control access to patient lists.

By default, any patient list created in your org is available to all users with access to the Health Cloud console. To restrict access to patient lists, you can use standard Salesforce sharing settings on the list. For example, you can grant access to all care coordinators in a certain department or who share a specific role.



Note: If field-level security settings are in place that restrict a user's access to a field in the patient list, the user can't see the list.

1. To apply sharing settings to a patient list, select the Filter Criteria tab from the Health Cloud - Admin app.
2. On the Filter Criteria Home page, select the name of the filter criterion for the patient list you're working with.
3. In the Filter Criterion Detail area of the page, select **Sharing**.
4. Grant access to other users, groups, or roles.

Access Level	Org-Wide Result
Full Access	The user can view, edit, and delete the patient list.
Read/Write	Anyone with access to the Health Cloud console can use and edit the list.
Private	Only the user who created the list view can view, edit, or delete the patient list.
Public Read Only	Anyone with access to the Health Cloud console can use the list.

Filter Criteria

Cross Object Relationships

Patient Card Configurations

+

▼

Sharing Detail

Patients Taking Insulin

Help for this Page

Patients Taking Insulin

This page lists the users, groups, roles, and territories that have sharing access to **Patients Taking Insulin**. Click **Expand List** to view all users who have access to it.

View:

All

 | [Edit](#) | [Create New View](#)

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Other | **All**

User and Group Sharing

Add

Expand List

User and Group Sharing Help

Action	Type	Name	Access Level	Reason
Edit Del	Role	Care Coordinator	Read/Write	Manual Sharing
	User	Kathy Ellis	Full Access	Owner
Edit Del	User	Mellinda Smith	Read/Write	Manual Sharing

Explanation of Access Levels

- Full Access - User can view, edit, delete, and transfer the record. User can also extend sharing access to other users.
- Read/Write - User can view and edit the record, and add associated records, notes, and attachments to it.
- Read Only - User can view the record, and add associated records to it. They cannot edit the record or add notes or attachments.
- Private - User cannot access the record in any way.


SEE ALSO:

[Salesforce Help: Sharing Settings](#)

Control User Access with Profiles

The delivered Health Cloud profiles define how users access objects and data, and what they can do within the application.

The delivered Health Cloud profiles can't be modified, but can be cloned and edited to meet your organization's needs. You can find the list of profiles by entering *Profile* in the **Quick Find** box, then select **Profiles**.

 **Note:** If you create a custom Health Cloud profile for your org, make sure that the `Account Name` field in the `Account` object is set to `Visible` and that the `Read Only` checkbox isn't selected.


Permission	Details
Health Cloud	This profile is for someone who uses the console—most often the care coordinator.
Health Cloud Community	This profile is for users who don't have access to the console and are members of the care community.
Health Cloud Admin	The Health Cloud Admin user is someone who configures and customizes the Health Cloud console. This user can be a system admin, but isn't required to be.

SEE ALSO:


[Salesforce Help: Clone Profiles](#)

Create Roles for Care Team Members

Care team member roles define the access that members have to information in the care plan.


 **Note:** Salesforce Communities provides the collaboration support for Health Cloud. Some of the collaborative features aren't available until you enable Salesforce Communities and create a private patient community.

Every member has a unique role to play in caring for the patient, such as primary care physician, caregiver, or case manager. Roles determine access to patient information, like read only or read/write access.

 **Note:** Salesforce offers a user role hierarchy that you can use together with sharing settings to determine the levels of access users have to your organization's data. Roles within the hierarchy affect access on key components like records and reports. Unlike standard Salesforce roles, the access you provide with care team roles applies only to Case records. When an internal user who is a member of the care team already has a standard Salesforce role, they retain access that comes with their standard role.

When you set up roles for care team membership, you can include internal users who are already in your organization, and external contacts. (Contacts are the people associated with the patient such as family members or specialists outside of your organization.) For each contact, you can store various kinds of information, such as phone numbers, addresses, titles, and roles. In addition, if you've set up Communities, you can make the contact a community user and add them to the patient community. That way, they can see the care plan and collaborate in the feed, if given access.

1. From Setup, enter *Case Team Roles* in the **Quick Find** box, then select **Case Team Roles**.
2. Click **New**.
3. Enter a name for the role.

 **Note:** At a minimum, create one role entitled *Care Coordinator* and one role entitled *Patient*.

4. From the *Case Access* picklist, select the role's level of access to cases. The possible access levels are:

Access Level	Description
Read/Write	User can view and edit the record and add associated records, notes, and attachments to it.
Read Only	User can view the record and add associated records to it. The user can't edit the record or add notes or attachments.
Private	User can't access the record.

5. Click **Save**. Alternatively, click **Save & New** to save the role and begin creating another role.
6. Select **Visible in Customer Portal** to make care team members with this role visible to community members.

SEE ALSO:

[Salesforce Help: Create Case Team Roles](#)

EDITIONS

Health Cloud is available in Salesforce Classic

Available in: **Enterprise**, **Performance**, and **Unlimited** Editions

USER PERMISSIONS

To set up case teams for care teams:

- "Customize Application"
- AND
- "Manage Users"

To add team members:

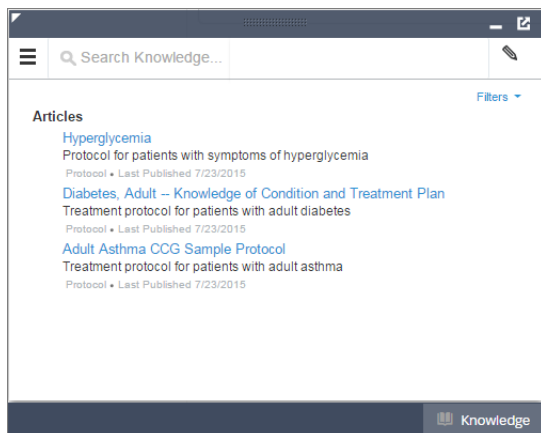
- "Edit" on cases

Provide Easy Access to Protocols and Articles

Salesforce Knowledge lets you easily create and manage content and make it available to other healthcare professionals and to the patient and care team members.

An article can contain the protocols you use to manage conditions or can hold educational materials you send to patients. When you set up Salesforce Knowledge, you give your care coordinators access to your organization's library of articles and protocols. After you set up Salesforce Knowledge in your organization, users with Knowledge licenses can write, edit, publish, and archive articles using the Articles Management tab or find and view published articles using the Articles tab.

By setting up the Knowledge One widget, you give care coordinators the ability to search, send, and create articles, all without leaving the Health Cloud console. Make sure that you've added Knowledge One to all the profiles that have access to the console.



Using the Knowledge One widget, articles can be accessed from the console footer, care coordinators can:

- Search for and find relevant articles or protocols
- Attach a published article to a care plan in one click
- Email an article as a PDF, if shared on a public channel
- Create and manage articles, when the user has permission and the correct license.

Enable Knowledge Users

Before you can set up all the great features of Salesforce Knowledge, make sure that you're a Salesforce Knowledge user.

1. From **My Settings**, select **Personal Settings**, enter *Advanced User Details* in the **Quick Find** box, then select **Advanced User Details**.
2. Click **Edit**.
3. Select **Knowledge User**.
4. Click **Save**.

EDITIONS

Health Cloud is available in Salesforce Classic

Available in: **Enterprise**, **Performance**, and **Unlimited** Editions

USER PERMISSIONS

To set up Salesforce Knowledge, and create article types:

- "Customize Application" AND "Manage Salesforce Knowledge"

Create Article Types

Articles types are the first step in creating the articles used to display protocols. An article type defines the structure and the types of content an author can add to an article or a protocol.

Health Cloud uses the power of Salesforce Knowledge to let you author and manage the article types that you use for protocols or educational articles.



Note: You can't enable Salesforce Knowledge until at least one article type is created.

When creating the article that contains a protocol, the author begins by selecting an article type. Article types, such as protocols, FAQs, and tutorials, provide the format and structure to control how an article displays for each audience, known as a channel. For each article type you can create custom fields, customize the layout by adding or removing sections and fields, and choose a template for each channel. You can also create workflow rules and approval processes to help your organization track and manage article creation and publication.

1. From Setup, enter *Article Types* in the **Quick Find** box, then select **Knowledge Article Types**.
2. Click **New Article Type** or edit an existing article type.
3. Enter the information for the following fields:

Field	Description
Label	A name used to refer to the article type in any user interface pages.
Plural Label	The plural name of the object. If you create a tab for this object, this name is used for the tab.

EDITIONS

Health Cloud is available in Salesforce Classic

Available in: **Enterprise**, **Performance**, and **Unlimited** Editions

USER PERMISSIONS

To create, edit, or delete article types:

- "Customize Application" AND "Manage Salesforce Knowledge"

Field	Description
Gender	If it is appropriate for your organization's default language, specify the gender of the label. This field appears if the organization-wide default language expects gender. Your personal language preference setting does not affect whether the field appears. For example, if the organization's default language is English and your personal language is French, you are not prompted for gender when creating an article type.
Starts with a vowel sound	If it is appropriate for your organization's default language, check if your label must be preceded by "an" instead of "a".
Object Name	(Read only) A unique name used to refer to the article type when using the API. The Object Name field can contain only underscores and alphanumeric characters. It must be unique, begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores.
Description	An optional description of the article type. A meaningful description helps you remember the differences between your article types when you are viewing them in a list.
Track Field History	(Optional) Select this option to track the full history of an article and its versions. The system records and displays field updates, publishing workflow events, and language versions for the master article and any translations.
Deployment Status	Indicates whether the article type is visible outside Setup. In Development means that article managers can't choose this article type when creating articles. Only select Deployed after you are done creating the article type.

4. Click **Save**.
5. In the Fields section of the Article Type definition, click **New**.
6. On the New Custom Field page, select `Text Area (Rich)`.
The Rich Text Area field lets authors enter formatted text, add images, videos, and links. The fields hold up to 131,072 characters on separate lines.
7. Click **Next**.
8. Enter a field label. The field name is populated based on the field label you enter. Ensure that the custom field name is not identical to any standard field name for that object.
9. Enter any field attributes, such as `Description`, and click **Next** to continue.
10. Set the field-level security to determine whether the field is visible and editable or read only for specific profiles, and click **Next**.
Field-level security allows you to control which fields are visible in different channels.
11. Ensure that the field `Yes, add this custom field to the layout` is selected so that the rich text field is included in the page layout.
12. Click **Save** to finish or **Save & New** to create more custom fields.

13. Optionally, rearrange your custom fields on the article-type layout.



Note: Don't forget to grant article type permissions for each user profile needing access to protocols and articles.

Enable Salesforce Knowledge

Before you can set up Knowledge, you must enable it in the organization.

1. From Setup, enter *Knowledge* in the *Quick Find* box, then select **Knowledge Settings**.
2. Confirm that you understand the impact of enabling Salesforce Knowledge and click **Enable Salesforce Knowledge** and click **OK** in the dialog box.
3. Click **Edit** to select your general settings.
 - a. Select *Allow users to create and edit articles from the Articles tab* to enable care coordinators and internal users to edit articles without going to the Article Management tab.
 - b. Select *Activate Validation Status field* to add a Validation Status field to all articles.
This way, users can attach approved articles to questions instead of ones that haven't gone through an approval process.
 - c. Select *Allow users to add external multimedia content to HTML in the standard editor* to allow `<iframe>` elements in the standard editor to embed multimedia content from Dailymotion, Vimeo, and YouTube.
4. Select *Internal App* and *Customer* to show article summaries to customers and internal community members in the article list view.
5. Accept the default settings for Knowledge One options.
6. Choose the **Default Knowledge Base Language**. This is the language your authors will use to write most of the articles. We recommend that your default knowledge base language and your organization's language be the same.

Note: Current multi-language users can still use Communities. The Salesforce Help provides more details on multi-language organizations.
7. Select **Single Language**.
8. Optionally, select *Allow users to create an article from a case* to let users create a draft article that is attached to the case.
9. Select the option to let users with correct privileges use the standard editor when they create articles. This lets them add links, formatting, and videos to articles.
10. Select a default article type.
11. Optionally, select the options to use profiles to create PDF files on cases and for users to share articles with public URLs.
12. Optionally, select the option to *Allow agents to create an article from a reply*.
This lets users turn a particularly helpful answer into an article.
 - a. Select the default article type.
 - b. Select an internal user to assign the article to so that it can be evaluated for accuracy.
13. Skip the steps to set up Chatter Questions and Knowledge Statistics.

EDITIONS

Health Cloud is available in Salesforce Classic

Available in: **Enterprise**, **Performance**, and **Unlimited** Editions

USER PERMISSIONS

To enable Salesforce Knowledge:

- "Customize Application"


14. Click **Save.**

For more information on setting up Salesforce Knowledge, see the *Salesforce Knowledge Implementation Guide* or search the Salesforce Help.


Create Protocols and Articles

Salesforce Knowledge lets you easily create and manage content and make it available to other healthcare professionals and to the patient and care team members. An article can contain the protocols you use to manage conditions or can hold educational materials you send to patients. You can write, edit, publish, and archive articles using the Articles Management tab or find and view published articles using the Articles tab.

Authors create articles by selecting an article type, writing content, and selecting where it should be published. You create both articles and protocols from the Article Management tab, but you select a different article type depending on the content you want to create.

 **Note:** It's possible that not everyone in your organization will have the license type or permissions to create articles and protocols for your patients and care coordinators. Contact your Salesforce administrator for access to the Article Management tab.

1. On the Article Management tab, click **New**.
2. If your organization supports multiple languages, choose the language for the article.
3. Choose an article type, enter the article title, and click **OK**.
4. Edit the article's fields, and select a validation status. If your article contains a rich text area field, you can add some formatting such as bulleted lists, links, and images.
5. Optionally, if your organization uses data categories, select the categories to associate with your article:
 - Click **Edit** next to a category group to open the category selection dialog box.
 - In the **Available Categories** list, expand the category hierarchy to select a category.
 - Click **Add** to move a selected category to the **Selected Categories** list.

-  **Note:** You can't add both a category and its child categories to the **Selected Categories** list. When you add a category to an article:
- Child categories in the **Available Categories** list are unavailable unless you remove the parent from the **Selected Categories** list.
 - Child categories in the **Selected Categories** list disappear from that list.

Users searching for articles can find them by selecting an exact category or by selecting a parent or child category.

- Click **OK**.
6. Select the audience you want to publish the article to:
 - Internal App: Salesforce communities users can access articles in the Articles tab depending on their role visibility.
 - Customer: Customers can access articles if the Articles tab is available in a community.. Customer users inherit the role visibility of the manager on the account. In a community, the article is available only to users with Customer Community licenses or Customer Community Plus licenses.

EDITIONS

Health Cloud is available in Salesforce Classic

Available in: **Enterprise**, **Performance**, and **Unlimited** Editions

USER PERMISSIONS

To create articles:

- "Manage Articles"

AND

"Create" and "Read" on the article type

To edit draft articles:

- "Manage Articles"

AND

"Read" and "Edit" on the article type

To edit published or archived articles:

- "Manage Articles"

AND

"Create," "Read," and "Edit" on the article type


- **Partner:** Partners can access articles if the Articles tab is available in a community. Partner users inherit the role visibility of the manager on the account. In a community, the article is available only to users with Partner Community licenses.
 - **Public Knowledge Base:** Articles can be made available to anonymous users by creating a public knowledge base using the *Sample Public Knowledge Base for Salesforce Knowledge* app from the AppExchange.
 - **Your own website.** Articles can be made available to users through your company website.
7. Click **Quick Save** to save your changes and remain on this page. Alternatively, click **Save** to save your changes, close the article, and go to the Article Management tab.
 8. Click **Publish...** when the content is ready to be published.
 9. Select `Publish article(s) now` or `Schedule publication on` to choose the date to publish the article.
 10. If the article has previously been published, select the `Flag as new version` checkbox to make the new article icon (✳) display next to your article in the selected channels. Users from these channels can see that this article has been modified since the last time they've read it. This checkbox is not available when you publish an article for the first time, as the icon displays by default for new articles.
 11. Click **OK**.
Articles you scheduled for publication at a later date continue to appear in the Draft Articles filter, now with the pending icon (🕒) next to the article title. Hover over the icon to see the publication date.

SEE ALSO:

[Salesforce Help: Publish Articles and Translations](#)

Customize the Health Cloud Apps


You can change some of the properties of the Health Cloud Apps in your organization. For example, you can add the Knowledge widget so that care coordinators can see articles and protocols from the console footer. You can also do things like add your company's logo, change the color of page elements, and enable keyboard shortcuts in the Health Cloud console.

 **Note:** Make sure to assign the Health Cloud - Admin app to the user profile of the Health Cloud admin.

1. From Setup, enter `Apps` in the `Quick Find` box, then select **Apps**.

2. Click **Edit** next to the app you want to modify.

Select `Health Cloud - Admin`, `Health Cloud - Worklist`, or `Health Cloud - Console`.

 **Note:** The only modification that the Health Cloud - Admin app requires is to select the tabs you want to display as an admin.

The Today page is designed to be used in the Health Cloud - Console app only. Adding it to the Health Cloud - Worklist app will cause the Today page to display incorrectly.

3. Specify a label for the app. The label can have a maximum of 40 characters, including spaces. This label is the app's name in the app menu.
4. Optionally, specify a custom logo for the app. Click **Insert an image** and choose an image file from the document library. Consider these requirements when choosing a custom app logo from the document library:

EDITIONS

Health Cloud is available in Salesforce Classic

Available in: **Enterprise**, **Performance**, and **Unlimited** Editions

USER PERMISSIONS

To view apps:

- "View Setup and Configuration"

To manage apps:

- "Customize Application"

- The image must be in GIF or JPEG format and less than 20 KB.
 - If the image is larger than 300 pixels wide by 55 pixels high, then it is scaled to fit.
 - For the best on-screen display, we recommend that you use an image with a transparent background.
 - The `Externally Available` checkbox must be selected on the document's properties so that users can view the image.
5. Optionally, to change the color of the app's page elements, enter the hex code beginning with #.
 6. Ensure that `Patients`, `Candidate Patients`, and `Today` are selected as navigation tabs and that they're configured to display as a primary tabs in the `Choose How Records Display` selection.
If you create your own custom apps, such as a `Dashboards` tab, select it to display in the Health Cloud app and configure how it displays in the console.
 7. Optionally, select how the list is placed in the console.
 8. In `Choose Console Components`, add `Knowledge One` to `Selected Items`.
When the `Knowledge One` widget is enabled, care coordinators can access articles and protocols from the console footer.
 9. In `Align Custom Console Component`, choose whether the component appears in the footer's right or left side.
 10. To let care coordinators perform actions using key combinations instead of the mouse, click the `Customize Keyboard Shortcuts`.
 11. Make sure that `Save User Sessions`, `Enable Multi-Monitor Components`, `Pin Tabs`, and `Responsive Lists` are all selected.
 12. Select the `Visible` option for every profile that needs access to the app.
 13. Select the `Default` box to set the app as that profile's default app.
 14. Click **Save**.

CUSTOMIZE THE CARE CONSOLE

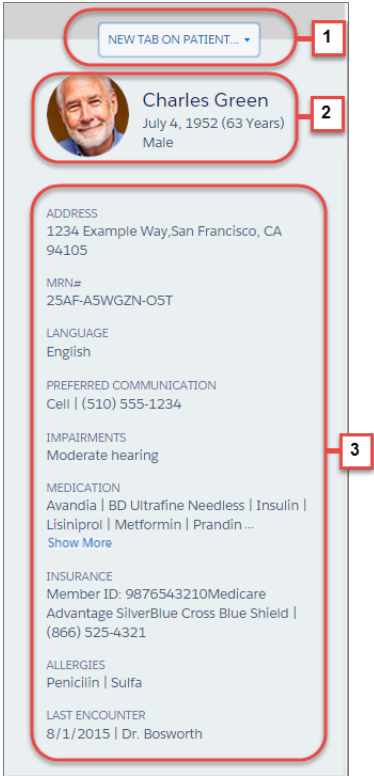
Health Cloud Custom Tabs

We've delivered a set of custom tabs to help you customize the Health Cloud Console to align with how your company works with patients.

Tab Name	Description
Cross Object Relationships	Cross-object relationships control which objects and fields appear in the filter selection options when creating patient lists.
EHR Custom Objects (EHR Patients, EHR Encounters, and so on)	These tables contain data from the source record system related to things like prescriptions, conditions, patients, and immunizations.
Patient Card Configurations	Edit the patient card view to add or remove information from EHR or other records.
Timeline View Configurations	Add or remove healthcare events from the timeline to provide care coordinators with the information they need to be more effective in managing patients.

Customize the Patient Card

You can add fields to the patient card and provide care coordinators with the information they need about a patient's contact information, conditions, prescriptions, appointments, and other information from their medical records.



The patient card is made up of three different components:

- The patient card navigation menu **(1)** that lets care coordinators navigate to the pages they need without leaving the patient card. You can [customize the items that appear in the tab navigation list](#) on the patient card using custom settings. So you can add a new navigation item to one of the default menu categories, or you can add a category with new child navigation options to what you already have.
- The patient card header **(2)** that provides basic information on the patient as well as a thumbnail photo, if available.

The patient card header shows identification information for the patient. The following table shows the source of the information that is displayed for each patient. Fields from the patient card header aren’t available for editing or other customizations.

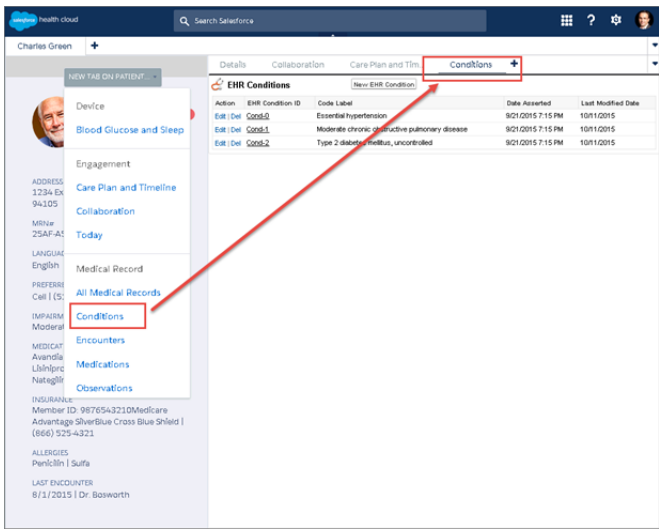
Field	Source
Thumbnail photo	Chatter profile photo
Patient name	Contact record
Date of birth and age	Formula field based on fields from the contact record
Gender	Gender Label field on EHR Patient record

- Patient contact and medical record fields **(3)** that you can add to the patient card. You can customize the patient card and [add fields from the source record system](#) so that care coordinators have the information they need to manage patients. Each field displays up to 200 characters, after which users can click **Show More** to expand the section and view the remaining text. There is no upper limit to the number of fields you can add to the patient card, but we recommend no more than 15-20 fields to ensure optimal performance.

Add Items to the Patient Card Navigation Menu

You can make it quick and easy for care coordinators to navigate to the pages they need without leaving the patient card.

Care coordinators need quick access to the different tabs and pages that give a complete picture of a patient’s records. You can configure the tab navigation menu on the patient card to open standard and custom pages or URLs as either primary or subtab. Clicking an item in the menu opens a new tab or subtab related to that patient’s records.



EDITIONS

Health Cloud is available in Salesforce Classic


Available in: **Enterprise**, **Performance**, and **Unlimited** Editions

USER PERMISSIONS

To customize the patient card navigation menu:


- “Manage Profiles and Permission Sets” AND “Customize Application”

You can customize the items that appear in the tab navigation list on the patient card using custom settings. So you can add a new navigation item to one of the default menu categories, or you can add a category with new child navigation options to what you already have. For example, you can create your own Visualforce page and add it to the navigation list or you can add a URL to another frequently used page.

 **Note:** All navigation menu elements appear in alphabetical order. Categories are listed in alphabetical order, as are the subcategories beneath them.

1. From Setup, enter *Custom Settings* in the Quick Find box, then select **Custom Settings**.
2. In the list of custom settings, click **Manage** next to the *CardView Dropdown* custom settings.
3. Click **New** and complete the following fields:


Field	Details
Menu Option Name	Description of the menu navigation item for internal purposes. This text doesn’t appear on the menu or the page.
Category Name	Name of the parent category that contains child menu navigation items. The category name is just a heading and isn’t a clickable navigation link.
URL Parameter	(Optional) Add more URL parameters to the existing Visualforce page or URL to open the new tab.
Tab Type	Specify the type of tab to use for this page: <i>Primary</i> or <i>Subtab</i> . A primary tab is the main item to work on. A subtab is related to an item on a primary tab.

Field	Details
Subcategory Name	Name of the child category in the menu list. This text is the clickable link that opens the page or tab.
Page Type	Content type of the new page. Specify <i>VFpage</i> or <i>URL</i> .  Note: Make sure to add external URLs to the console's whitelist so that console users can access that domain.
URL	URL to access the page.

4. Click **Save**.



Example: The following example shows how to add a subtab entitled `All Medical Records` to a category named `Medical Records`:

Field	Details
Menu Option Name	All Medical Data.
Category Name	Medical Record
URL Parameter	Not necessary
Tab Type	<i>Subtab</i>
Subcategory Name	All Medical Records
Page Type	<i>VFpage</i>  Note: Make sure to add external URLs to the console's whitelist so that console users can access that domain.
URL	<code>/apex/<VF page name></code>

Whitelist Domains for Health Cloud Console

Administrators can let console users access domains outside of Salesforce. For example, you can add `www.example.com` to a console's whitelist so that console users can access that domain.

1. From Setup, enter *Apps* in the *Quick Find* box, then select **Apps**.
2. Select a console app.
3. Click **Edit**.
4. In *Whitelist Domains*, type the domains you want users to access, and separate multiple domains by commas. You don't need to add `http://` or `https://` because those are part of a URL, not a domain.
5. Click **Save**.

Add Fields to the Patient Card

You can edit the patient card view to add or remove information from EHR or other records.

Health Cloud delivers the patient card with the basic fields that care coordinators commonly use. But you can customize the patient card and add fields from the source record system so that care coordinators have the information necessary to make informed decisions and provide excellent patient care.

Each field displays up to 200 characters, after which users can click **More** to expand the section and view the remaining text. There is no upper limit to the number of fields you can add to the patient card, but we recommend no more than 15-20 fields to ensure optimal performance. You can add fields from objects that come from the custom EHR tables and other objects, as well. Be sure that the fields that you're adding to the patient card are related to the Account object.



Tip: Check the Schema Builder in your org if you're unsure if an object is related to the Account object.

1. From the Health Cloud - Admin Home page, select the Patient Card Configuration tab, and click **New**.
2. Enter the following:

Field	Description
Patient Card Configuration Name	Name of the patient card item you're creating. This name appears only on setup pages.
Object Name	Name of the object that contains the field to show on the patient card. Use the exact spelling of the object name to ensure correct results.
Field Name	Name of the field that contains the information to display on the patient card.
Friendly Name	Name that appears as a title on the patient card.
Sort Order	Indicates the vertical order in which this field appears on the patient card.
Sort By	Enter the name of the field used to define the order in which the results appear. For example, if you have several medication names

Field	Description
	returned, you can sort them by the date prescribed to have the most recent prescriptions appear first in the field.
Override Filter Field	If you're creating your own filter field to replace the delivered one or to add a new field to the patient card, enter the name of your filter field.
Ascending	Select to display results in ascending order. This field works in conjunction with the Sort By field.
Active	Select to activate this field and have it appear on the patient card.
Limit	Enter the maximum number of results to display in the field.

Create a Custom Formula Field for the Patient Card

You can customize the information that appears on the patient card by adding a custom filter field to a specified object.

By default, the patient card shows fields that provide basic medical and contact information for the patient. To add other items to the patient card or to change the information that displays from the delivered fields, create a custom formula field on the object you want to display. For example, to display medical device information, create a custom field on the EHR_Devices object with a formula that returns the information you want to display on the patient card.

1. From Setup, enter *Object* in the **Quick Find** box, then select **Objects**.
2. Select the name of the custom object that holds the information you want to display on the patient card.
3. In the Custom Fields & Relationships section of the page, click **New**.
4. Select **Formula** as the data type and click **Next**.
5. Enter a field label that identifies the custom field.
6. Select **Checkbox** for the return type and click **Next**.
7. Create a formula that returns the results that you want to display on the patient card.

For instructions on using the Advanced Formula tab, search for Building Formulas in the Salesforce Help & Training.



Example: The following table shows the objects and fields used to display the default information on the patient card. When there are multiple entries returned for an item, each value is separated by a vertical bar.

Display Name	Description	Object	Field
Address	Primary address	Contact	Mailing Address
Patient ID/MRN	Patient identifier	Account	Source System ID
Agent/Guardian/Guarantor	Name of person responsible for the patient.	EHR Related Person	IsVisibleOnPatientCard
Language	Preferred language	EHR Patient	IsVisibleOnPatientCard
Medications	Name of current medications.	EHR Medication Prescription	IsVisibleOnPatientCard

Display Name	Description	Object	Field
Immunization	Current or valid immunizations.	EHR Immunization	IsVisibleOnPatientCard
Medical Conditions	Currently diagnosed conditions	EHR Condition	IsVisibleOnPatientCard
Allergies	Known allergies or intolerances.	EHR AllergyIntolerance	IsVisibleOnPatientCard
Last Encounter	Description and date of last medical interaction.	EHR Encounter	IsVisibleOnPatientCard

SEE ALSO:

[Salesforce Help: Building Formulas](#)

Configure Health Cloud Custom Metadata Settings

You can add or replace fields in many of the components of Health Cloud using custom metadata.

Health Cloud Settings contains a variety of key/value pairs of configuration settings for the Health Cloud application. Health Cloud Settings includes the default settings that control the following in Health Cloud:

- Add external care team member
- Care plan goals
- Care plan problems
- Patient creation job flow
- Patient creation data mappings

To change the settings, deactivate the setting in Health Cloud Settings, clone the setting record keeping the Setting Name, make your changes, and then make that record active.

1. From Setup, enter *Custom metadata* in the **Quick Find** box, then select **Custom Metadata Types**.
2. Click **Manage Records** next to **Health Cloud Settings**.
3. Click **Edit** in the row for the setting you want to override or change.
4. Deselect the **Active** checkbox, and then click **Save**.
5. Click the name of the setting you want to override.
6. Click **Clone**, create a settings record using the exact text found in the Setting Name field of the cloned record, and make the record active.

Override Custom Labels

The custom labels that are delivered with Health Cloud package can't be edited, but you can override them by creating a translated version of the label.

To override custom labels, you must enable the Translation Workbench and add English as a supported language.

1. From Setup, enter *Custom Labels* in the **Quick Find** box, then select **Custom Labels**.
2. Select the name of the custom label to open.
3. In the Translations related list, click **New** to override the existing label by creating a new translation.
4. Select the language you are translating into. Since Health Cloud is currently not localized, select English.
5. Enter the **Translation Text**. This text overrides the value specified in the label's **Value** field.

SEE ALSO:

[Salesforce Help: Enable and Disable the Translation Workbench](#)

Customize Problems and Goals

With fields sets, you can add custom fields or change the order of existing fields on the pages used to create problems and goals.



Note: The delivered problem and goal pages make use of a packaged field set, which lets you choose the fields and the order in which fields appear on these pages. The delivered pages aren't available for edit through the page layout editor.

Customize the fields that show up on the pages care coordinators use to create problems and goals for the care plan. Problems and Goals are both custom objects, and you can add custom groupings of fields by leveraging Salesforce field sets. A field set is a grouping of fields you create and then add to an object.

After you create the field sets, you add them to the default field set for that object in the Custom Labels page. For example, to add fields to the Problems page, you modify the defaultFieldSet for Problems.

1. From Setup, enter *Object* in the **Quick Find** box, then select **Objects**, and select either the Problem custom object or the Goal custom object.
2. From the management settings for the appropriate object, go to Field Sets, and then click **New**.
3. Enter a **Field Set Label**. This is the name presented to subscribers who install the field through a managed package.
4. Optionally, enter a name for your field set.
5. In the **Where is this used?** area, provide a brief description of which pages use the field set, and for what purpose. This information helps a subscriber understand where and how an installed field set is being used, so that they can populate it with their own fields.
6. Save your changes.
7. To add fields to the field set, drag the fields from the object palette and drop them into the **Available for the Field Set** or the **In the Field Set** container. The fields in the **In the Field Set** container are visible by default.



Note: In the field set, you can span to fields that reference multiple objects. When you span a field into a field set that references multiple objects, the only field you can span to is the **Name** object.

You can drag and drop a field from one container to the other. The vertical order of the **In the Field Set** list indicates the order of how the fields render on pages.

8. To remove a field from the field set, drag the element back to the object palette, or click the icon next to the element.
9. To make a field required, double-click the element or click the wrench icon () next to it and select the **Required** checkbox.



Note: Indicates the field is required and must have a value to save the record.

EDITIONS

Health Cloud is available in Salesforce Classic

Available in: **Enterprise**, **Performance**, and **Unlimited** Editions

Enable Custom Fields Sets

After you create custom field sets, make sure to add them to the related default custom label component.

You can edit existing custom labels for goals and problems to add custom field sets or you can create entirely new default labels for problems and goals.

1. From Setup, enter *Custom Label* in the Quick Find box and select *Custom Labels*.
2. Click **New Custom Label** to create a label, or click *Edit* next to the custom label that you want to edit.
 - To add custom field sets to goals, select the `goalDefaultFieldSet` custom label.
 - To add custom field sets to problems, select the `problemDefaultFieldSet` custom label.
3. In the *Value* field, enter the name of the custom field set you want to use in the component.
4. Click **Save**.

Customize Tasks

Customize the fields on the New Task page so that the field values reflect the kinds of tasks care coordinators most often assign, and use rating terminology specific to your organization.

You can add to or change the values for the following picklists on the New Task page:

- Status
- Priority
- Task Type

Add Custom Task Types

Custom task types help your care coordinators create tasks that are specific to the type of patient care that they deliver. For example, for an outpatient orthopedic surgery center, task types could include *Pre-Op Lab Work* or *Weekly PT*.

Plan carefully when you create task types so that there aren't a large number of choices in the picklist.

The screenshot shows the 'Edit Task' form. The 'Type' picklist is highlighted with a red box. The picklist options are: Other, Uncategorized, Administrative, Clinical, and Other. The 'Subject' field contains 'Test blood sugar 3 times a day'. The 'Assigned To' field contains 'Melinda Smith'. The 'Description' field contains 'Test blood sugar'. The 'Performed By' field contains 'Charles Green'. The 'Priority' field is set to 'Normal'. The 'Problem' field contains 'Blood Glucose control'. The 'Goal' field contains 'Lifestyle changes'. The 'Due Date' field is set to '12-28-2015'. The 'Cancel' and 'Save' buttons are at the bottom right.

EDITIONS

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USER PERMISSIONS

To create or change custom fields:

- "Customize Application"

1. From Setup, enter *Activity Custom Fields* in the Quick Find box.
2. Click **Task Type**.
3. In the Picklist Values section, click **New**.
4. Add one or more picklist values in the text box. Put each value on its own line
5. Select *Care Plan Task* so that the new values are associated with the Task Type picklist.
6. Click **Save**.
7. To change the order in which the values display in the picklist, click **Reorder**.
8. To specify a default value for the picklist, select the *Default* checkbox for that task type.

Add or Edit Task Priority Values

You can change the values that appear in the Status field that shows the progress or measures the completion of a task.

1. From Setup, enter *Task* in the Quick Find box and select *Task Fields*.
2. In the Task Standard Fields list, click **Priority**.
3. To add a value to the list, click **New**.
4. Add one or more picklist values in the text box. Put each value on its own line
5. Select *Care Plan Task* so that the new values are associated with the care plan.
6. Click **Save**.
7. To change the order in which the values display in the picklist, click **Reorder**.
8. To specify a default value for the picklist, select the *Default* checkbox for that priority.
9. Select the value that represents the highest priority for the task.

Add or Edit Task Status Values

You can change the values that appear in the Status field that shows the progress or measures the completion of a task.

1. From Setup, enter *Task* in the Quick Find box and select *Task Fields*.
2. In the Task Standard Fields list, click *Status*.
3. To add a value to the list, click **New**.
4. Add one or more picklist values in the text box. Put each value on its own line
5. Select *Care Plan Task* so that the new values are associated with the care plan.
6. Click **Save**.
7. To change the order in which the values display in the picklist, click **Reorder**.
8. To specify a default value for the picklist, select the *Default* checkbox for that status.
9. To select a value that closes the task, select the *Closed* checkbox for that status.

Customize the Create External Member Fields

You can customize the fields that appear on the modal that care coordinators use to create an external care team member.

Use field sets to add new fields or change the order of existing fields used to create external care team members.

1. From Setup, enter *Accounts* in the **Quick Find** box, then select **Field Sets**.
2. Select **Edit** next to the New External Member field set.
3. Drag and drop the fields you want to display on the New External member modal.



Note: You can only add fields from Account and the related primary contact. Fields from other related objects will be ignored.

4. Click **Save**.

Customize the Candidate Patient List View

You can customize the fields that appear on the list view that care coordinators use to convert candidate patients to patients in Health Cloud.

Use field sets to add new fields or change the order of existing fields used in the candidate patient list view.

1. From Setup, enter *Objects* in the **Quick Find** box, then select **Objects**.
2. On the Custom Object page, select the Candidate Patient custom object.
3. Scroll to the Field Sets section and click **Edit** next to the Candidate Patient List View.
4. Drag and drop the fields you want to display on the Candidate Patients list view.



Note: The following fields must be included in the field set and should not be deleted:

- Record ID (Id)
- Name (Name__c)
- Patient Account (AccountId__c)
- Patient Account Name (AccountId__r.Name)
- Patient Account Primary Contact (AccountId__r.PrimaryContact__c)

5. Click **Save**.

Configure the Timeline View

You can add or remove healthcare events from the timeline view to provide your care coordinators with precisely the information they need to be more effective in managing their patients.

On the Timeline View Configurations tab, add different events to the timeline by exposing fields on custom or standard object, and then selecting icons to represent the data on the timeline.


1. From the Health Cloud - Admin Home page, select the Timeline View Configurations tab, and click **New**.
2. Enter the following:

Field	Description
Timeline View Configuration Name	Name of the timeline event. This name appears only on setup pages.
Object Category	Name of the category of objects that this event is related to. Use this field to create a

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Field	Description
	group of events. This name appears in the Select All Events menu in the timeline. By default, all pre-configured objects are either Engagement Data or Medical Record Data.
Friendly Name	Name that appears in the timeline for the event.
Object Name	Name of the object that contains the field that is shown in the timeline. Use the exact spelling of the object to ensure correct results—for example, EhrMedicationPrescription__c.
Detail Field	Name of the field to display as an event in the timeline.
Position Field	Date field that the system uses to position the event horizontally on the correct date on the timeline.
Graphical Icon	Name of the image file that represents the event on the timeline. Upload the image file to the Health Cloud Assets folder in the Documents tab.  Note: For images to display with the best results in the timeline, they must be within the recommended file and frame size. The recommended file size is up to 1 MB. Salesforce scales the image to roughly 48 x 48 pixels, so smaller images, and images with an aspect ratio of 1:1 (square) provide the best results.
Sort Order	Indicates the vertical order that the events appear if the timeline has more than one event on the same date.

 **Example:** For example, to display prescriptions, use the EhrMedicationPrescription__c object.

Field	Description
Timeline View Configuration Name	Prescriptions
Object Category	Medical Data
Friendly Name	Prescriptions
Object Name	EhrMedicationPrescription__c
Detail Field	MedicationName__c
Position Field	DateWritten__c
Graphical Icon	timeline_icon_pill.png
Sort Order	2

Upload Timeline View Icons

When you add information from custom objects or fields to the timeline view, make sure to include an icon for the timeline that lets care coordinators understand the type of event that’s represented.

 **Note:** For images to display with the best results in the timeline, they must be within the recommended file and frame size. The recommended file size is up to 1 MB. Salesforce scales the image to roughly 48 x 48 pixels, so smaller images, and images with an aspect ratio of 1:1 (square) provide the best results.

1. On the Documents tab, click **New**.
2. On the Upload New Document page, specify a descriptive document name for the image file. To use the file name, leave this field blank. The file name appears automatically when you upload the file.
3. Enter a unique name to be used by the API.
4. To have the image appear in the timeline, select `Externally Available Image`.
5. Select the **Health Cloud Assets** folder for the file.
6. Enter a description and keywords to use later as search criteria.
7. Select the option to upload the image file. Click **Choose File**, choose the file, and click **Open**.
8. Click **Save**.

EDITIONS

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USER PERMISSIONS

To upload new documents:


- “Create” on documents

Add Cross-Object Relationships to Customize Patient List Filter Options

Cross-object relationships control which objects and fields appear in the filter selection options when creating patient lists.

Health Cloud delivers a basic set of filters that you can use when you define a patient list. To add other custom records to the patient list filter options, create relationships that link records with each other. When your users view records, they can also see related data. You can define different types of relationships by creating custom relationship fields between objects. For example, to add fields related to patient immunizations to the patient list filters, you create a relationship between Account and EhrImmunization__c.

Before creating relationships, determine which fields you want to expose in the filter and which object exposes those fields. Relationships between objects in Health Cloud determine sharing, required fields in page layouts, and which fields are available when you create a patient list.

 **Note:** The Account object must be one of the two objects in your cross-object relationship.

To see a list of Health Cloud objects and fields, see the *Health Cloud Object Reference Guide*.

1. To create the relationship that adds a custom object to the patient list filter criteria, select the **Cross Object Relationships** tab.
2. Specify the details of the relationship:

Field	Description
Cross Object Relationship Name	Name that describes the relationship
From Object	Name of the parent object
To Object	Name of the child object to include as an option in patient list filter criteria
Relationship	Name of the custom relationship

Field	Description
Reverse Relationship	The name of the object that is the originating or “from” object

The following table shows the cross object relationships that are pre-configured with Health Cloud. You can use this table as a reference to create other cross-object relationships and make more records and fields available when creating patient lists.

Cross Object Relationship Name	From Object	To Object	Relationship	Reverse Relationship
AccountToContact	Account	Contact	Contacts__r	Account
AccountToObservation	Account	EhrObservation__c	Observations__r	AccountParent
AccountToEncounter	Account	EhrEncounter__c	Encounters__r	Account
AccountToEhrMedicationPrescriptions	Account	EhrMedicationPrescription__c	MedicationPrescriptions__r	Account
AccountToCondition	Account	EhrCondition__c	Conditions__r	Account

Dashboards Give Your Users Access to the Big Picture

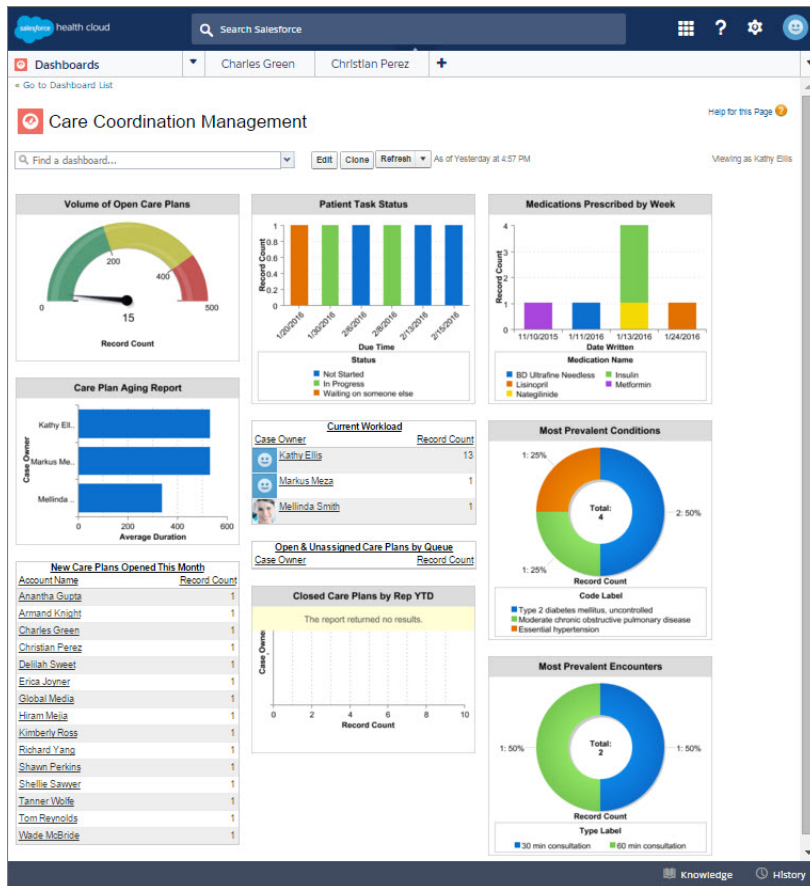
Set up your reporting environment, use the report builder to create a basic report, and organize your reports to make it easy to find information. You can also find great dashboard apps on the Salesforce AppExchange and add them to the console.

People love the summarized views they get with dashboards, and you can help care coordinators optimize their workload with dashboards. A dashboard shows data from source reports as visual components, which can be charts, gauges, tables, metrics, or Visualforce pages. The components provide a snapshot of key metrics and performance indicators for your organization. Each dashboard can have up to 20 components.

You can start with a standard report and customize it to your needs. Users can report on any data they have read or read/write access to.

For a fun and engaging learning experience, check out the *Reports & Dashboards* module in the [Trailhead Admin Beginner](#) trail.

To save you time, there are many apps available on the AppExchange that you can download and customize. The following sample dashboard was created using the Salesforce Labs Service & Support Dashboards. Search the AppExchange to find the best app for your needs.



Once you create your dashboard, remember to add it to the console so that care coordinators can use the tab switcher to access the dashboard. From Setup, enter **Apps** in the Quick Find box, then select **Apps**. Select the Health Cloud app you want to customize and then add it as a navigation tab item.

CREATE PATIENTS

A Behind-the-Scenes Look at Patient Creation

When you select a patient name from the EHR system, Salesforce creates all the records and objects you need to start managing that patient.

Each time you create a patient, Salesforce performs the following actions:

- Creates the patient as an individual, based on the fields you've mapped from the EHR system. An individual is an object view of both Account and Contact, linked by the Individual ID.
- Creates an account for the individual. The account is linked to the patient ID/MRN field.
- Creates a contact record for the individual. The contact record is linked to the account through the Individual ID.
- Creates a case with a CarePlan record type so that the page layout for the care plan appears automatically. If a care coordinator has been selected, the coordinator becomes the owner of the case.
- Adds the case that represents the care plan to the account record.
- Creates a case team with the individual as the patient, and adds the care coordinator, if one has been selected.
- When a care coordinator is selected, the system adds a task for the care coordinator to create a care plan for the patient.
- Adds the patient's account ID to the Candidate Patient record.

Create Patients from Imported Records

Create patients using the information you receive through the integration with an electronic medical records system.

Watch a Demo: [▶ Create Patients in the Health Cloud Console](#)

The frequency with which you create patients largely depends on how your organization chooses to integrate back-end systems like the EHR with Health Cloud.

The Candidate Patients pages show all the records that have been brought into Salesforce through integration with an EHR system. There are several options available for viewing these records:

- **All** shows all patients that have been brought over from the source records system, including those patients who haven't been converted to Health Cloud patients yet. For patients who have already been converted, you can click their Candidate Patient Record and view their patient data in the Health Cloud console. For those patients who haven't been converted, click their Patient Name to view the information waiting to be brought into a Health Cloud patient record.
- **Not Converted** contains records that have been brought over from the source records system, but have not been converted to a Health Cloud patient record.
- **Converted** shows the records that have been successfully converted into Health Cloud patient records. This list can be used as a pin list in the console when the console primary tabs are open.

When you select a record to convert to a patient, the system does all the behind-the-scenes setup for that individual, in addition to creating:

- A patient card that includes the MRN or other identifiers, basic contact information, and important medical information such as conditions and medications
- An empty care plan

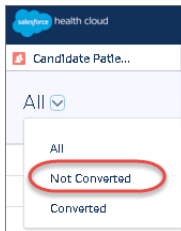
- A care team consisting of the patient and the care coordinator, when one has been selected

You can create patients from the Health Cloud - Console or the Health Cloud - Worklist app.

1. From the worklist or the console, select the **Candidate Patients** list.

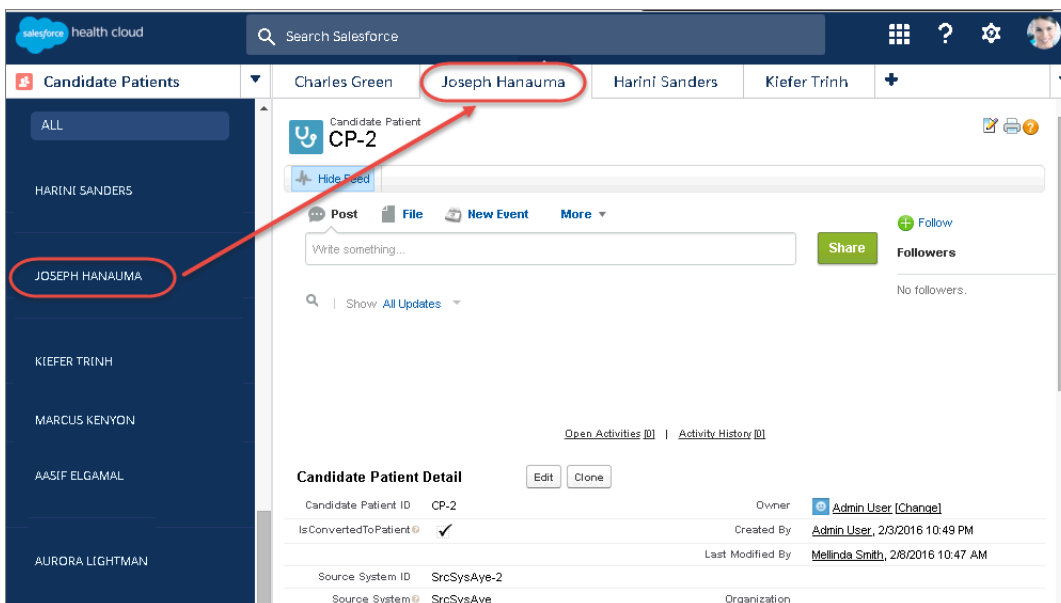


2. From the All page, select **Not Converted**.



The Not Converted page lets you select names of patients who don't have patient records in Health Cloud yet.

3. Optionally, view details about the patient that come from the source record system by clicking the patient's name in the Worklist view. The patient's information opens in a separate tab.



4. Select one or more incoming patient records to convert.

5. From the Actions menu, select **Convert to Patients**.

The system performs a check to make sure that there aren't any duplicate patient ID or MRN numbers. When you have names with duplicate MRNs, the duplicates are listed, unselected, and highlighted. You can't select names with duplicate MRNs. They must be resolved in the originating records system. After the duplicate identifiers are removed, you can re-import the record and convert it to a patient.

6. Review any duplicate patients. If there are no duplicates, click **Next**.

Duplicate records must be resolved in the source medical records system before they can be converted.

7. Optionally, search for and select the name of the care coordinator to assign to the patients.



Note: If you choose not to assign a care coordinator during this step, you can assign one later in the Case Team section of the Care Plan case record. You can also have your admin create automatic case assignment rules.

8. Click **Next**.
9. Review the list of patients and the assigned coordinator, if one is assigned, and click **Save**.

HEALTH CLOUD LIMITATIONS

Learn about display, access, and customization limitations for Health Cloud.

Display Limitations

Health Cloud is only available in Microsoft® Internet Explorer® 10, or 11; Microsoft® Edge; the most recent stable version of Mozilla® Firefox®; and the most recent stable version of Google Chrome™.



Tip: For best performance, we recommend that console users adopt the Google Chrome™ browser and machines with 8 GB of RAM.

Platform Encryption

Event monitoring and field encryption are not supported as part of Salesforce Shield.

Behavior and Access Limitations

Health Cloud doesn't meet accessibility requirements.

Clicking **Edit** in any of the Object Detail pages from within the console refreshes all tabs in the console.

In the Timeline, the `Days to Show` field can mistakenly show a negative number of days. Edit the field to show the correct number of days.

The `After Occurrences` option in recurring tasks isn't supported.

When creating a recurring task, you must select a value in the `Repeats On` field or the task fails to be created.

When you add a task to the care plan, it doesn't appear on the Timeline until you refresh the Timeline. Refresh the Timeline by clicking its refresh button or by select the Timeline from the Patient Card tab switcher.

When you add a task to the care plan, it doesn't appear on the Today page until you refresh the Today page. You can refresh the Today page by refreshing your browser.

On the Today page, tasks with a status of `Deferred` appear as overdue tasks.

The patient thumbnail image in the care team and the patient card doesn't display properly in Microsoft® Internet Explorer® 10.

You can't create custom field sets for the Candidate Patient list view.

EDITIONS

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Available in: **Enterprise**, **Performance**, and **Unlimited** Editions

APPENDIX

Migrating More Data in the Patient Creation Job Flow

When patients are first imported into Health Cloud, the information required to identify and represent those patients is created. Historical medical information associated with patients is not imported into Health Cloud by default; however, you can choose to map more historical information, as needed. You can implement a custom integration to import historical medical records from the EHR system and append it to the default patient creation job flow.

Patient Creation Job Flow in Health Cloud

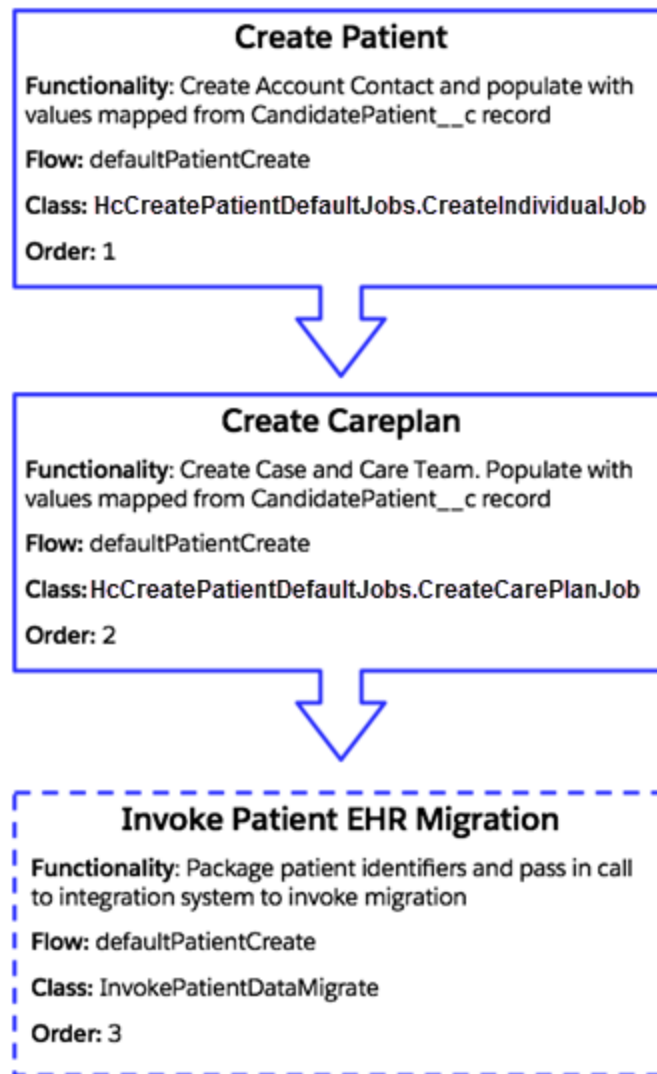
Each patient is initially represented in Health Cloud as a candidate for services that are managed in Health Cloud. As a result, each patient starts with a `CandidatePatient__c` record. When the candidate patient is converted, the patient creation process creates corresponding objects in Salesforce:

- An account and contact representing a patient
- A case representing a care plan
- A care team (case team) linked to the care plan coordinator user and the patient contact

The data copied to the Salesforce objects is based on mapping of fields between `CandidatePatient__c` and the appropriate Salesforce objects.

The candidate patient record (`CandidatePatient__c`) is a cross-reference between the representation of a patient in the EHR system and in Health Cloud. The records are linked through the medical record number, which is represented in Salesforce by the `SourceSystemId__c` external ID field.

The following diagram shows the patient creation job flow. This flow consists of two jobs that perform the steps that occur when a candidate patient record is converted. The third job (Invoke Patient EHR Migration) is a custom integration that you can implement to migrate more data for that patient into Health Cloud.




Extend or Override the Default Patient Creation Job Flow

Because Health Cloud populates objects with minimal information when a patient is converted, you can [add a custom integration](#) to import additional medical records. To migrate more data, append your custom integration as the last job in the patient creation job flow. You can also deactivate either of the delivered jobs and add your own customized job instead. Or, you can [override the entire delivered job flow](#) and instead use a custom job flow that you create.

Your custom integration consists of an Apex class that extends a base class and implements an interface from the Health Cloud package. The previous job passes your job relevant patient record information through a context parameter. By providing your own implementation for this custom job, you can choose which patient records you want to migrate to Health Cloud. These are some examples of useful data migrations after a candidate patient has been converted in Health Cloud.

- Import medical records for a patient from the EHR system, such as:
 - The full patient record
 - Encounters
 - Conditions
 - Observations

- Diagnosis
 - Treatments
 - Flag EHR patient data to be published to Health Cloud if it is changed or created.
 - Establish cross-references of patient records between Health Cloud and the EHR system. This cross-reference linkage enables posting data back to the EHR system through another integration. For example, when one of the following records is created in Health Cloud, it can be updated in the EHR system later.
 - Encounters: phone calls to the patient, emails, or Chatter messages
 - Observations: Performed remotely by patient or caregivers, or performed by devices
-  **Note:** EHR systems can update only the records they create. If records were created in an external system and were migrated, they are viewable, but not editable in the current system.

Create a Custom Apex Class for the Patient Creation Job Flow

Create a custom Apex class that extends a base class and implements an interface from the Health Cloud package. The custom class overrides the methods in the base class and the interface.

Your Apex class extends the `HealthCloudGA.MoiJobFlowFactory.MoiJobBase` base class and implements the `HealthCloudGA.MoiJobFlowFactory.MoiIJob` interface from the Health Cloud package. Your class signature looks as follows:

```
public with sharing class InvokePatientDataMigrate
    extends HealthCloudGA.MoiJobFlowFactory.MoiJobBase
    implements HealthCloudGA.MoiJobFlowFactory.MoiIJob { }
```

Your class overrides the following methods, which are in the base class.

boolean processJob(HealthCloudGA.MoiJobFlowFactory.MoiJobContext flowCtxts)

Override this method to implement the logic of your data migration job that is part of the patient creation flow. In this method, you call another method to make a callout to the external EHR system to get more medical records for the patient.

The patient creation job flow runs all the jobs as a single Apex transaction. Partial data changes aren't saved if an error occurs because all changes are rolled back in that transaction. Any callouts must be invoked from a future method so that the data from the first two jobs is saved even if the callout fails. Future methods are executed asynchronously, in the background. For example, this method signature represents the callout utility method in our sample.

```
@Future(callout=true)
private static void invokeIntegration(String jsonPatientIds)
```

The type of the parameter passed to the `processJob()` method is the `HealthCloudGA.MoiJobFlowFactory.MoiIJobContext` class, installed from the Health Cloud package. The patient creation job flow uses this context object to pass information about the created objects to the next job. The jobs for creating a patient populate this context object with the account and contact. Next, the job for creating the care plan accesses the objects in the context to link the case (care plan record type) to CaseTeam members. You can use the objects in the context parameter to find out which objects have been created in Health Cloud and link them to the EHR system. The objects you can access from the `flowCtxts` parameter are:

- Account
- Contact
- CandidatePatient__c
- Case (CarePlan record type)

You can obtain these objects by calling `getContextData()` on the `flowCtxts` parameter. The `getContextData()` method returns a list of maps. Each map corresponds to the context of one patient and contains the objects related to that patient. The map is keyed by the name of the object. For example, this snippet shows how to get the `CandidatePatient__c` object from a returned map object:

```
for (Map<String, Object> flowCtxt : flowCtxts.getContextData()) {
    HealthCloudGA__CandidatePatient__c candidatePatient =
        (HealthCloudGA__CandidatePatient__c)flowCtxt.get('CandidatePatient__c'); }
```

HealthCloudGA.MoiJobFlowFactory.MoiErrorHandler getErrorHandler()

Override this method to add error handling logic when an exception is thrown from `processJob()`. This method returns an instance of a class that performs error handling. The class performing the error handling must implement the `HealthCloudGA.MoiJobFlowFactory.MoiErrorHandler` interface and override its method:

```
public void handleError(HealthCloudGA.MoiJobFlowFactory.MoiIJobContext context, Exception
e)
```

We've provided a sample Apex class that you can copy and modify to suit your needs. The implementation of the callout in the `invokeIntegration` helper method is not provided and is left for you to provide. Details of how to communicate with the service endpoint and fetch data differs based on what you want to accomplish. For information about how to make callouts from Apex, see [Invoking Callouts Using Apex](#) in the *Force.com Apex Code Developer's Guide*.

You can create an Apex class by using various tools. This walkthrough uses the Developer Console.

1. From Setup, click *Your Name* and then click **Developer Console** to open the Developer Console.
2. Click **File > New > Apex Class**.
3. Enter *InvokePatientDataMigrate* for the class name, and then press **OK**.
4. Delete the auto-generated content and paste the following sample.

```
public with sharing class InvokePatientDataMigrate extends
HealthCloudGA.MoiJobFlowFactory.MoiJobBase
    implements HealthCloudGA.MoiJobFlowFactory.MoiIJob {

    private static final String CTXTVAR_ACCOUNT = 'Account';
    private static final String CTXTVAR_CONTACT = 'Contact';
    private static final String CTXTVAR_CAREPLAN = 'CarePlan';
    private static final String CTXTVAR_CANDIDATEPATIENT = 'CandidatePatient__c';

    public with sharing class IntegrationErrorHandler implements
        HealthCloudGA.MoiJobFlowFactory.MoiErrorHandler {
        public void handleError(HealthCloudGA.MoiJobFlowFactory.MoiIJobContext context,
            Exception e) {
            // Code can be placed here to address the failure
            System.debug('Exception: '+e+' thrown on Job with context '+context);
            //No Exception
        }
    }

    public override HealthCloudGA.MoiJobFlowFactory.MoiErrorHandler getErrorHandler()
    {
        return (HealthCloudGA.MoiJobFlowFactory.MoiErrorHandler)
            new IntegrationErrorHandler();
    }
}
```

```

}

// Invokes asynchronous migration of patient data for list of patient identifiers
@Future(callout=true)
private static void invokeIntegration(String jsonPatientIds){

    String SalesforceOrgId = System.UserInfo.getOrganizationId();

    ////////////////////////////////////////////////////////////////////
    // Make call to integration system passing patient Identifiers
    // and organization Id.
    // Integration System should respond asynchronously by push Patient
    // EHR records to the org.
    ////////////////////////////////////////////////////////////////////
}

private class PatientId{
    public PatientId(String SourceSysId, Id accountId, Id contactId,
                    Id carePlanId){
        this.SFDCSourceSysId = sourceSysId;
        this.SFDCAccountId = accountId;
        this.SFDCContactId = contactId;
        this.carePlanId = carePlanId;
        this.SFDCSourceSysIdType = 'MRN';
    }
    // Id of account created in CreateIndividual Job
    public Id SFDCAccountId;
    // Id of contact created in CreateIndividual Job
    public Id SFDCContactId;
    // Id of Careplan created in CreateCarePlan job
    public Id carePlanId;
    // Medical Record Number of patient in external Electronic
    // Health Record System
    public String SFDCSourceSysId;
    // EMR ID Type - MRN in most cases
    public String SFDCSourceSysIdType;
}

// Override processJob method to be called when this job is invoked
// by MoiJobFlowManager.
public override boolean processJob(HealthCloudGA.MoiJobFlowFactory.MoiIJobContext
                                   flowCtxts) {

    System.debug('Entered InvokeIntegration.processJob');
    // Compile List of strings with Patient Ids
    // {CandidatePatient__c.SourceSystemId_c, Account.Id and Contact.Id}
    // to pass to integration system to invoke asynchronous publish
    // of patient EHR records.
    List<PatientId> patientIds = new List<PatientId>();

    for (Map<String, Object> flowCtxt : flowCtxts.getContextData()) {
        HealthCloudGA__CandidatePatient__c candidatePatient =
            (HealthCloudGA__CandidatePatient__c)flowCtxt.get(

```

```

        CTXTVAR_CANDIDATEPATIENT);
    if (candidatePatient == null ||
        candidatePatient.HealthCloudGA__SourceSystemId__c == '')
        throw new IntegrationException(
            'Failure: No CandidatePatient record set. ' + candidatePatient);

    patientIds.add(
        new PatientId(candidatePatient.HealthCloudGA__SourceSystemId__c,
            ((Account)flowCtxt.get(CTXTVAR_ACCOUNT)).Id,
            ((Contact)flowCtxt.get(CTXTVAR_CONTACT)).Id,
            ((Case)flowCtxt.get(CTXTVAR_CAREPLAN)).Id)
        );
    }/* for Flow Ctxts (on for each patient in creation flow */

    System.debug('Calling future method InvokeIntegration('+patientIds+')');
    invokeIntegration(JSON.serializePretty(patientIds));
    return true;
} // processJob()

class IntegrationException extends Exception{}
} //class InvokePatientDataMigrate

```

5. Click **File > Save**.

Register a Remote Site — Before the callout in this integration can be made, the service endpoint must be registered as a remote site in Salesforce. To register the remote site:

1. From Setup, enter *Remote Site Settings* in the Quick Find box, then select **Remote Site Settings**.
2. Click **New Remote Site**.
3. Enter a descriptive term for the Remote Site Name. For example, *ClinicalIntegrationEndPoint*.
4. Enter the URL for the remote site.
5. Optionally, enter a description of the site.
6. Click **Save**.

Customize the Patient Conversion Process

Patient creation includes two processes: a job flow that creates the patients and then a mapping group that maps data from the Candidate Patient object to other patient objects.

The settings that control these processes are available for customization so that you can control how patient creation and data mapping occur in your org. From Setup, enter *Custom metadata* in the Quick Find box, then select **Custom Metadata Types**.

All Custom Metadata Types [Help for this Page](#)

Custom metadata types enable you to create your own setup objects whose records are metadata rather than data. These are typically used to define application configurations that need to be migrated from one environment to another, or packaged and installed.

Rather than building apps from data records in custom objects or custom settings, you can create custom metadata types and add metadata records, with all the manageability that comes with metadata: package, deploy, and upgrade. Querying custom metadata records doesn't count against SOQL limits.

Action	Label	Namespace Prefix	Visibility	Api Name	Record Size	Description
Del Manage Records	Health Cloud Setting	1	Public	HealthCloudSetting__mdt	661	A generic dictionary for Health Cloud specific app configuration key value pairs.
Del Manage Records	Job Flow Data Mapping	2	Public	JobFlowDataMapping__mdt	375	Source to Target field mapping for objects created in Job Flow
Del Manage Records	Job Flow Setting	3	Public	JobFlowSetting__mdt	677	
Del Manage Records	Label Config		Public	LabelConfig__mdt	541	

- Health Cloud Setting (1) contains the configuration values for processes like the job flow that creates patients.
- Job Flow Data Mapping (2) holds the rules that determine which fields from the Candidate Patient object get mapped to patient objects like Account, Contact, and Case.
- Job Flow Setting (3) contains the actual job flows that execute in the patient creation process.

You can customize the delivered patient creation job flow by creating your own custom Apex class and adding your own job, changing the order in which the jobs run, or overriding the job entirely and using your own job flow. You can also change which fields are mapped during patient creation.

Health Cloud Settings

Health Cloud Settings contains a variety of key/value pairs of configuration settings for the Health Cloud application. This includes the two default settings that control which flow to use when creating patients. `PatientCreateFlow_default` controls which job flow to use when creating patients and `PatientCreateMappingGroup_default` controls which group of mappings is used. You can deactivate either of these records and create your own patient creation flow or mapping group.

When creating your own job flows, you must rename the `Setting Name` and `Setting Value` fields. For readability, it's helpful to make the object name and label of Health Cloud Setting record be a combination of the setting name and something about the new value. For example, you can rename `PatientCreateFlow_default` to `PatientCreateFlow_mynewflow`.

To learn more about overriding one of the Health Cloud job settings, see [Configure Health Cloud Custom Metadata Settings](#).

Patient Creation and Data Mapping Job Flows

You can also [add new steps](#) to the patient creation job flow or [add new mappings](#) to the data mapping process. To deactivate a step in the job flow, deselect the `Active` field for the record.

Override the Health Cloud Job Flows

You can override either of the delivered jobs in the default patient creation job flow and use your own custom job to create patients or to map patient data from the source record system.

You can deactivate the delivered jobs and use your own custom job when you create and activate a new record with the same job flow name. Since you're not deleting the delivered setting, you can reactivate it and use it in the future.

1. From Setup, enter *Custom Metadata* in the *Quick Find* box, then select **Custom Metadata Types**.
2. Click **Health Cloud Setting**, then click **Manage Health Cloud Settings**.

3. Click name of the setting you want to change and click **Edit**.
 - To override the delivered patient creation job, click **PatientCreateFlow_default**.
 - To override the delivered patient data mapping job, click **PatientCreateMappingGroup_default**.
4. Clear the `Active` checkbox and then click **Save**.
5. Navigate back to the Health Cloud Settings page, and click **New**, and fill out the information for your custom job and Apex class.

Make sure to use the same `Setting Name` as the default job flow that you are overriding. For example, *PatientCreateFlow*, if you are overriding the default patient creation job flow with your own entirely new job flow.
6. Select the `Active` checkbox to make the setting available.

Add Your Job to the Patient Creation Job Flow

Whether you have chosen to add a job to the existing patient creation job flow, or have defined an entirely new patient creation job flow, you must create a `JobFlowSetting__mdt` custom metadata record for every job that you want executed.

JobFlowSetting Custom Metadata

Job flows for Health Cloud consist of one or more jobs, each represented by a `JobFlowSetting__mdt` custom metadata record. Each record points to an Apex class that implements that job.

The settings for each job are defined as one row. You can insert custom metadata records the same way you'd create an instance of another sObject. You can also override any of the jobs within the Patient Create job flow by deselecting the `Active` field on the job. The jobs that make up the default patient creation job flow are represented by these custom metadata records.

Table 1: Default Patient Create Job Flow

Label	Job Flow Name	Job Name	Job Order	Active	Custom
Patient Create	defaultPatientCreate	HcCreatePatientDefaultJobs.CreateIndividualJob	1	true	false
Care Plan Create	defaultPatientCreate	HcCreatePatientDefaultJobs.CreateCarePlanJob	2	true	false

The default Patient Create flow defines the steps for creating a patient record. The jobs in this flow create one Account record and one Contact record, and a Case record for the patient's care plan. This flow uses the `JobFlowDataMapping__mdt` custom metadata object to define the field mapping from the source `CandidatePatient__c` to the Account, Contact, and Case records.

The following are descriptions of the fields in the `JobFlowSetting__mdt` custom metadata type.

Master Label

The friendly name for the job flow entry.

Object Name

The API name of the job flow entry.

Job Flow Name

The name of the job flow. All jobs in the same flow share the job flow name.

Job Name

The name of the Apex class that implements the job. This class extends the `HealthCloudGA.MoiJobFlowFactory.MoiJobBase` class and overrides its `processJob()` method.

Job Order

An integer number that specifies the order of the job in the job flow. Jobs in a job flow must have unique job order numbers, and their order must be linear.

Active

Indicates whether the job is used (true) or not (false).

Custom

False if provided by default in the Health Cloud package; otherwise true.

Protected Component

Specifies whether this Job Flow Setting component is hidden outside a managed package. This field is unchecked (false) in the Health Cloud package as the component is accessible outside the package.

To register your custom integration job, insert a record to the `JobFlowSetting__mdt` custom metadata. To do so in the user interface:

Register Your Custom Integration Job

1. From Setup, enter *Custom Metadata Types* in the **Quick Find** box, then select **Custom Metadata Types**.
2. Click **Job Flow Setting**, then click **Manage Job Flows Settings**.
3. Click **New**, and fill out the information for your custom job and Apex class, including the job flow name, job name, and order in which it runs.
4. Ensure that the **Active** and **Custom** checkboxes are checked.
5. Click **Save**.

For example, to register the sample class that's provided, enter the following information.

1. For Master Label, enter *Create Patient: Invoke Integration*.
2. For Object Name, enter *CreatePatientInvokeIntegration*.
3. For Job Flow Name, enter *defaultPatientCreate* to append your job to the existing job flow.
4. For Job Name, enter the class name *InvokePatientDataMigrate*.
5. For Job Order, enter *3* to ensure that Health Cloud invokes this job after the second default job for patient creation.
6. Ensure that the **Active** and **Custom** checkboxes are checked.
7. Click **Save**.

Data Mapping to Health Cloud Objects

When a patient is converted, Health Cloud copies patient data from `CandidatePatient__c` to the corresponding Account, Contact, and Case (CarePlan record type) objects. A mapping defines how patient data maps to the fields in the destination Salesforce objects. This mapping is specified in the `JobFlowDataMapping__mdt` custom metadata object.

The following table shows the default mappings that are provided for `CandidatePatient__c`. These mappings can't be changed or deleted. To change the mappings in your org, create another mapping group and specify in the Health Cloud Settings to use that mapping group instead of the default mappings.

Table 2: JobFlowDataMapping__mdt

MappingGroupName	SourceObject	SourceField	TargetObject	TargetField
defaultPatientCreate	CandidatePatient__c	SourceSystemId__c	Account	SourceSystemId__c

MappingGroupName	SourceObject	SourceField	TargetObject	TargetField
defaultPatientCreate	CandidatePatient__c	SourceSystemId__c	Account	Name
defaultPatientCreate	null	Health Cloud Care Plan ¹	Care Plan ²	Subject
defaultPatientCreate	CandidatePatient__c	SourceSystemId__c	Contact	SourceSystemId__c
defaultPatientCreate	CandidatePatient__c	Address1Line1__c	Contact	MailingStreet
defaultPatientCreate	CandidatePatient__c	GivenName1__c	Contact	FirstName
defaultPatientCreate	CandidatePatient__c	FamilyName1__c	Contact	LastName
defaultPatientCreate	CandidatePatient__c	BirthDate__c	Contact	Birthdate
defaultPatientCreate	CandidatePatient__c	Address1City__c	Contact	MailingCity
defaultPatientCreate	CandidatePatient__c	Address1Country__c	Contact	MailingCountry
defaultPatientCreate	CandidatePatient__c	Telecom1Value__c	Contact	Phone
defaultPatientCreate	CandidatePatient__c	Address1PostalCode__c	Contact	MailingPostalCode

¹ Because the source object for this record is null, `Health Cloud Care Plan` is a string literal and not a field name. This string value is applied to the target field, `Subject`.

² `Care Plan` is a string literal that corresponds to the object that represents a care plan, namely a `Case` whose record type is `CarePlan`. The following is a description of the fields in the `JobFlowDataMapping__mdt` custom metadata type that's used for mapping.

Mapping Group Name

The name of a mapping group, which represents a set of field mappings. The patient creation job flow uses only one mapping group named `defaultPatientCreate`.

Source Object

The API name of the sObject from which data is copied to the target object.

Source Field

The API name of the field that is copied to the target object.

Target Object

The API name of the sObject to copy the data to.

Target Field

The API name of the field to copy the data to.

Active

Indicates whether the job is used (true) or not (false).

Mapping Extra Fields

You can add new field mappings by inserting a record in the `JobFlowDataMapping__mdt` custom metadata object for each new mapping. Custom mappings can be changed and removed.

To add a mapping in the user interface:

1. From Setup, enter *Custom Metadata Types* in the Quick Find box, then select **Custom Metadata Types**.
2. Click **Job Flow Data Mapping**, then click **Manage Job Flow Data Mappings**.

3. Click **New**, and fill out the information for the new mapping.

4. Click **Save**.



Note: You can also deactivate the delivered JobFlowDataMapping__mdt and [use your own custom set of mappings](#) when you create and activate a new record with the same setting name and setting value.