MediPal

Use-Case Specification

Version 2.0

Revision History

| **Date** | **Version** | **Description** | **Author** |
| --- | --- | --- | --- |
| 15/06/2025 | 1.0 | Initial draft of Use-Case Specification for MediPal, including full set of 18 use cases for both **Primary User** and **Caregiver**, based on updated Vision Document. | Toan, Luong |
| 02/07/2025 | 2.0 | Added alternative flows for UC01 (**Register as Primary User**), UC02 (**Log in as Primary User**), UC04 (**Manage Profile as Primary User**). Designed use-case model. | Toan |
| 02/07/2025 | 2.0 | Added alternative flows for UC07 (**Create Healthcare Reminder as Primary User**), UC08 (**Record Medication Dose as Primary User**), UC13 (**Add Health Profile Information as Primary User**). Designed use-case model. | Luong |
| 03/07/2025 | 2.0 | Added alternative flows for UC14 (**Register as Caregiver**), UC15 (**Log In as Caregiver**), UC17 (**Accept/Decline Invitation as Caregiver**). Added new use-case UC13 (**Add Health Profile Information as Primary User)** | Khoa |
| 05/07/2025 | 2.0 | Added alternative flows for UC18 (**View Shared Schedule as Caregiver**), UC19 (**Receive Missed Dose Alert as Caregiver)**.Finalized document version 2.0. | Hao |

Table of Contents

[**1. Use-case Model 4**](#_phqyibhwxijy)

[**2. Use-case Specifications 4**](#_abnyzkr8x3yy)

[2.1 Use-case: Register as Primary User 4](#_6dwb7z3r06i3)

[2.2 Use-case: Log in as Primary User 5](#_mg3j26say6xi)

[2.3 Use-case: Log out as Primary User 6](#_jnn27omcc8rv)

[2.4 Use-case: Manage Profile as Primary User 6](#_kpq8pwxxrqv7)

[2.5 Update Profile (UC04.1) 6](#_4gt8lo54czyn)

[2.6 Switch Profile (UC04.2) 7](#_c9eqvv7q8pvj)

[2.7 Use-case: Create Medication Schedule as Primary User 8](#_6yt9bhbao3aq)

[2.8 Use-case: Create Appointment Schedule as Primary User 8](#_jtz60bwhdsmj)

[2.9 Use-case: Create Healthcare Reminder as Primary User 9](#_jc1ui8wkdxku)

[2.10 Use-case: Record Medication Dose as Primary User 9](#_kug6ylhovwbe)

[2.11 Use-case: View History Log as Primary User 10](#_5s9b50d4x85x)

[2.12 Use-case: Customize Reminders as Primary User 10](#_xlurecjz0do2)

[2.13 Use-case: Use AI Chatbot as Primary User 11](#_8e1tcatvljxq)

[2.14 Use-case: Manage Caregiver Access as Primary User 11](#_kyfarxo8crhv)

[2.15 Use case :Add Health Profile Information as Primary User 12](#_govsa2dcu09j)

[2.16 Use-case: Register as Caregiver 13](#_nivj7xpc6uo7)

[2.17 Use-case: Log In as Caregiver 13](#_f9n3urv88eq1)

[2.18 Use-case: Log Out as Caregiver 14](#_y4pxyz4ux93v)

[2.19 Use-case: Accept/Decline Invitation as Caregiver 14](#_ic3hkt31ju64)

[2.20 Use-case: View Shared Schedule as Caregiver 15](#_81n5t2cn2njc)

[2.21 Use-case: Receive Missed Dose Alert as Caregiver 16](#_6t3wjbr9aejb)

# Use-case Model



# Use-case Specifications

## Use-case: Register as Primary User

| Use case Name | Register (UC01) |
| --- | --- |
| Brief description | Allows a new user to create a Primary User account in the MediPal system. |
| Actors | Primary User (prospective) |
| Basic Flow | 1. User selects the "Register" or "Sign Up" option.  2.The system presents options to register as a "Primary User" or "Caregiver". The user selects "Primary User".  3. System displays the registration form.  4. User enters required information (e.g., email, password, name).  5. User accepts the Terms of Service.  6. User clicks the "Register" button.  7. System validates the input data (e.g., checks if email is unique, password meets complexity rules).  8. System creates a new user account.  9. System automatically logs the user in and navigates them to the main dashboard. |
| Alternative Flows | **Alternative Flow 1: Email already exists**  1. At step 7 of the basic flow, the system detects the email is already registered.  2. System displays an error message: "This email address is already in use. Please log in or use a different email."  3. The flow resumes at step 4.  **Alternative Flow 2: Passwords do not match**  1.At step 7, the system detects the password and confirmation password are not identical.  2.The system displays an error message: "Passwords do not match."  3.The flow resumes at step 4, clearing the password fields. |
| Pre-conditions | The user does not have an existing account and is on the application's welcome/login screen. |
| Post-conditions | A new Primary User account is created and stored in the system. The user is logged in. |

## Use-case: Log in as Primary User

| Use case Name | Log In (UC02) |
| --- | --- |
| Brief description | Allows a registered Primary User to access their account. |
| Actors | Primary User (prospective) |
| Basic Flow | 1. User enters their registered email and password.  2. User clicks the "Log In" button.  3. System validates the credentials.  4. System establishes a secure session.  5. System displays the user's main dashboard. |
| Alternative Flows | **Alternative Flow 1: Invalid credentials**  1. At step 3 of the basic flow, the system determines the email/password combination is incorrect.  2. System displays an error message: "Invalid email or password."  3. The flow resumes at step 1.  **Alternative Flow 2: Account is locked**  1.At step 3, the system determines the account is temporarily locked due to too many failed login attempts.  2.The system displays a message: "Your account is temporarily locked. Please try again in 15 minutes or use the 'Forgot Password' link."  3.The use-case ends. |
| Pre-conditions | The user has an existing account and is not currently logged in. |
| Post-conditions | The user is successfully authenticated and has access to their application data. |

## 

## Use-case: Log out as Primary User

| Use case Name | Log Out (UC03) |
| --- | --- |
| Brief description | Allows a logged-in Primary User to securely end their session. |
| Actors | Primary User (prospective) |
| Basic Flow | 1. User selects the "Log Out" option from the menu or profile page.  2. System terminates the user's session.  3. System clears any sensitive session data.  4. System navigates the user back to the login screen. |
| Alternative Flows | **Alternative Flow 1: Network connection lost during logout**  1. At step 2 of the basic flow, the system attempts to notify the server of the logout but fails due to a network error.  2. System proceeds to terminate the local session and clear sensitive data on the device (as per steps 3 and 4).  3. The server-side session will eventually time out. |
| Pre-conditions | The user is currently logged in. |
| Post-conditions | | The user's session is ended, and they can no longer access protected content without logging in again. | | --- | |

## Use-case: Manage Profile as Primary User

| Use case Name | Manage Profile (UC04) |
| --- | --- |
| Brief description | Allows a Primary User to view their profile and access options to update it or switch between profiles they manage. |
| Actors | Primary User (prospective) |
| Basic Flow | 1.The user navigates to the "Profile" section.  2. The system displays the user's current profile information (name, avatar, etc.).  3. The system presents options such as "Update Profile" and "Switch Profile". |
| Extension Points | **EP1: Update Profile:**  -If the user selects the "Update Profile" option, the **UC04.1 [Update Profile]** use-case is executed.  **EP2: Switch Profile:** If the user manages multiple profiles and selects "Switch Profile", the **UC04.2 [Switch Profile]** use-case is executed. |
| Pre-conditions | The user must be logged in as a Primary User. |
| Post-conditions | The user has viewed their profile or initiated an update/switch action. |

## Update Profile (UC04.1)

| Relationship | **<<Extends>>** **Manage Profile (UC04)** |
| --- | --- |
| Brief description | Allows a Primary User to modify their personal details. |
| Actors | Primary User (prospective) |
| Basic Flow | 1.From the "Manage Profile" screen, the user selects "Update Profile".  2. The system displays the profile editing form.  3. The user selects an item to edit. This action invokes one of the following **included** use-cases:   * + **Update Avatar:** The user selects a new image from their device.   + **Edit Name:** The user enters a new name in a text field.   + **Update Health Information:** The user updates fields like date of birth, allergies, or chronic conditions.   4. The user clicks "Save Changes".  5. The system validates and saves the updated information to the database.  6. The system displays a confirmation message: "Profile updated successfully." |
| Alternative Flows | **Alternative Flow 1: User cancels editing**  1. At any point before step 5, the user selects the "Cancel" or "Back" button.  2. System discards any unsaved changes.  3. System returns the user to the profile view screen.  **Alternative Flow 2: Invalid data input**  1. At step 6 of the basic flow, the system validation fails (e.g., user enters text in a date-of-birth field).  2. System displays an error message next to the invalid field.  3. The flow resumes at step 4, allowing the user to correct the data. |
| Pre-conditions | The user is currently in the **Manage Profile (UC04)** use-case. |
| Post-conditions | The user's profile information is updated in the system. |

## 

## Switch Profile (UC04.2)

| Relationship | **<<Extends>>** **Manage Profile (UC04)** |
| --- | --- |
| Brief description | Allows a Primary User to switch between different profiles they manage (e.g., their own and an elderly parent's). |
| Actors | Primary User (prospective) |
| Basic Flow | 1.From the "Manage Profile" screen, the user selects "Switch Profile".  2. The system displays a list of all profiles managed by the user.  3. The user selects a target profile from the list.  4. The system loads all data (schedules, history, etc.) for the selected profile and refreshes the application's main views. |
| Alternative Flows | **Alternative Flow 1: No other profiles to switch to**  1.At step 1, the user selects "Switch Profile", but they only manage one profile.  2.The system may disable the button or show a message: "You do not manage any other profiles."  3.The use-case ends. |
| Pre-conditions | The user is in the **Manage Profile (UC04)** use-case and has been granted access to manage more than one profile. |
| Post-conditions | The application interface is now displaying the data of the newly selected profile. |

## 

## Use-case: Create Medication Schedule as Primary User

| Use case Name | Create Medication Schedule (UC05) |
| --- | --- |
| Brief description | Allows the Primary User to set up a new medication schedule. |
| Actors | Primary User (prospective) |
| Basic Flow | 1. User navigates to the 'Schedules' screen and selects 'Add Medication'  2. System displays the 'New Medication Schedule' form.  3. User enters medication details (name, dosage, form).  4. User sets the schedule frequency and specific times.  5. User sets start and end dates.  6. User clicks 'Save'.  7. System validates the data.  8. System saves the new schedule.  9. System displays a success confirmation. |
| Alternative Flows | **Alternative Flow 1: Invalid data**  1. At step 7, if data is invalid, the system highlights the incorrect fields and shows an error message.  2. The flow resumes at step 3.  **Alternative Flow 2: User cancels creation**  1. At any point before step 6, the user selects "Cancel".  2. The system discards the form data and returns to the previous screen. |
| Pre-conditions | The user must be logged in. |
| Post-conditions | A new medication schedule is created. Reminders for this schedule are activated. |

## Use-case: Create Appointment Schedule as Primary User

| Use case Name | Create Appointment Schedule (UC06) |
| --- | --- |
| Brief description | Allows the Primary User to add a new doctor's appointment to their calendar. |
| Actors | Primary User (prospective) |
| Basic Flow | 1. User navigates to the 'Appointments' screen and selects 'Add Appointment'.  2. System displays the new appointment form.  3. User enters appointment details (doctor's name, location, date, time, reason for visit).  4. User clicks 'Save'.  5. System validates and saves the appointment.  6. System creates a reminder for the appointment.  7. System displays a success confirmation. |
| Alternative Flows | **Alternative Flow 1: User cancels creation**  1. At any point before step 4, the user selects "Cancel".  2. System discards the new appointment data and returns to the previous screen.  **Alternative Flow 2: Invalid or missing data**  1. At step 5 of the basic flow, the system detects missing required fields (e.g., date or time).  2. System displays an error message highlighting the required fields.  3. The flow resumes at step 3. |
| Pre-conditions | The user must be logged in. |
| Post-conditions | A new appointment is saved and a reminder is set. |

## Use-case: Create Healthcare Reminder as Primary User

| Use case Name | Create Healthcare Reminder (UC07) |
| --- | --- |
| Brief description | Allows the Primary User to set reminders for general health activities (e.g., exercise, check blood pressure). |
| Actors | Primary User (prospective) |
| Basic Flow | 1.User selects 'Add Healthcare Reminder'.  2. System displays a list of reminder types (Exercise, Vitals Check, etc.).  3. User selects a type.  4. User sets the frequency and time for the reminder.  5. User clicks 'Save'.  6. System saves the new reminder.  7. System displays a success confirmation. |
| Alternative Flows | **Alternative Flow 1: User cancels creation**  1. At any point before step 5, the user selects "Cancel".  2. System discards the new reminder data and returns to the previous screen. |
| Pre-conditions | The user must be logged in. |
| Post-conditions | A new recurring health reminder is created and activated. |

## Use-case: Record Medication Dose as Primary User

| Use case Name | Record Medication Dose (UC08) |
| --- | --- |
| Brief description | Allows the Primary User to respond to a medication reminder by recording their action. |
| Actors | Primary User (prospective) |
| Basic Flow | 1. System displays a medication reminder notification.  2. User interacts with the notification.  3. System displays options: "Take Now", "Skip", "Snooze".  4. User selects "Take Now".  5. System records the dose as "Taken" at the current time in the history log.  6. System displays a confirmation message. |
| Alternative Flows | **Alternative Flow 1: User skips the dose**  1. At step 4, the user selects "Skip".  2. System records the dose as "Skipped" in the history log.  **Alternative Flow 2: User snoozes the reminder**  1. At step 4, the user selects "Snooze".  2. System reschedules the notification to appear again after a predefined interval (e.g., 15 minutes). |
| Pre-conditions | A medication reminder notification has been triggered by the system. |
| Post-conditions | The medication history log is updated with the user's action (Taken or Skipped). |

## Use-case: View History Log as Primary User

| Use case Name | View History Log (UC09) |
| --- | --- |
| Brief description | Allows the Primary User to review their past medication adherence and appointment records. |
| Actors | Primary User (prospective) |
| Basic Flow | 1. User navigates to the "History" or "Report" section.  2. System retrieves and displays a chronological log of all recorded medication doses (taken, skipped) and completed appointments.  3. User can filter the log by date range or event type. |
| Alternative Flows | **Alternative Flow 1: No history found**  1. At step 2 of the basic flow, the system finds no recorded history for the selected user/profile.  2. System displays a message: "No history to display. Start by recording a medication dose."  **Alternative Flow 2: Filter returns no results**  1. At step 3 of the basic flow, the user applies a filter (e.g., a specific date range) that has no matching records.  2. System displays a message: "No records found for the selected filter." |
| Pre-conditions | The user must be logged in. |
| Post-conditions | The user has reviewed their health history. |

## Use-case: Customize Reminders as Primary User

| Use case Name | Customize Reminders (UC10) |
| --- | --- |
| Brief description | Allows the Primary User to change the settings for how reminders are delivered. |
| Actors | Primary User (prospective) |
| Basic Flow | 1. User navigates to 'Settings' and selects 'Notification Settings'.  2. System displays options for customizing reminders (e.g., reminder sound, vibration pattern, persistent notifications).  3. User changes the desired settings.  4. User clicks 'Save'.  5. System saves the new notification preferences.  6. System displays a confirmation. |
| Alternative Flows | **Alternative Flow : User cancels changes**  1. At any point before step 4, the user navigates away or selects "Cancel".  2. System discards any unsaved changes to the settings. |
| Pre-conditions | The user must be logged in. |
| Post-conditions | All future reminders will be delivered according to the new settings. |

## Use-case: Use AI Chatbot as Primary User

| Use case Name | Use AI Chatbot (UC11) |
| --- | --- |
| Brief description | Allows the Primary User to ask **basic**, non-diagnostic health-related questions. |
| Actors | Primary User (prospective) |
| Basic Flow | 1. User opens the AI Chatbot interface.  2. User types a question and sends it.  3. System processes the query and provides a pre-programmed or AI-generated answer.  4. System includes a disclaimer that the information is not a substitute for professional medical advice.  5. The flow repeats from step 2. |
| Alternative Flows | **Alternative Flow 1: No internet connection**  1. At step 1 or 2 of the basic flow, the system detects that the device is offline.  2. System displays a message: "Internet connection is required to use the AI Chatbot."  3. The use-case ends.  **Alternative Flow 2: Chatbot cannot understand the query**  1. At step 3 of the basic flow, the AI cannot parse or find a relevant answer to the user's query.  2. System displays a message like: "I'm sorry, I don't understand that question. Could you please rephrase it?" or suggests related topics. |
| Pre-conditions | The user must be logged in and have an active internet connection. |
| Post-conditions | The user has received information from the chatbot. |

## Use-case: Manage Caregiver Access as Primary User

| Use case Name | Manage Caregiver Access (UC12) |
| --- | --- |
| Brief description | Allows the Primary User to invite, view, and remove Caregivers who can see their schedule. |
| Actors | Primary User (prospective) |
| Basic Flow | **(Inviting a Caregiver)**  1. User navigates to 'Settings' -> 'Caregiver Access'.  2. User selects 'Add New Caregiver'.  3. User enters the Caregiver's email and clicks 'Send Invitation'.  4. System validates the email and sends an invitation.  5. System displays the caregiver's email with a "Pending" status. |
| Alternative Flows | **(Removing a Caregiver)**  1. From the 'Caregiver Access' screen, the user selects a connected caregiver.  2. User selects the 'Remove Access' option.  3. System asks for confirmation.  4. User confirms.  5. System revokes the caregiver's access to the user's data. |
| Pre-conditions | The user must be logged in. |
| Post-conditions | The list of caregivers with access to the user's data is updated. |

## 

## Use case: Add Health Profile Information as Primary User

| Use case Name | **Add Health Profile Information** (UC13) |
| --- | --- |
| Brief description | Allows the Primary User to add essential health details to their profile, such as allergies, blood type, chronic conditions, or emergency contacts. This is often done during initial setup or when new health information becomes available. |
| Actors | Primary User (prospective) |
| Basic Flow | 1.The user navigates to their "Profile" or a dedicated "Health Information" section.  2.The system displays the user's current health profile, which may be empty initially.  3. The user selects an option to "Add Health Information" or clicks on a specific category to add an item (e.g., "Add New Allergy").  4.The system presents a form with fields for entering various health data points (e.g., Blood Type, Known Allergies, Chronic Conditions, Emergency Contact Name & Phone).  5.The user fills in the relevant information.  6.The user clicks "Save" or "Submit".  7.The system validates the input (e.g., ensures phone numbers are in a valid format).  8.The system saves the information to the user's profile in the database.  9.The system displays a success message ("Health profile saved successfully") and shows the updated information on the screen. |
| Alternative Flows | **Alternative Flow 1: User cancels the process**  1.At any point before step 6, the user selects a "Cancel" or "Back" button.  2.The system prompts for confirmation: "Are you sure you want to discard unsaved changes?"  3. The user confirms.  4.The system discards any information entered and returns the user to the previous screen.  **Alternative Flow 2: Incomplete or invalid data**  1.At step 7, the system detects that a required field is empty or contains invalid data.  2. The system highlights the problematic fields and displays an error message (e.g., "Please enter a valid phone number for your emergency contact.").  3.The flow resumes at step 5, allowing the user to correct the information.  **Alternative Flow 3: Adding information after initial setup**  1.The user has already added some health information in the past.  2. The user navigates to the "Health Information" screen (step 1).  3.The system displays the existing information and provides an "Edit" or "Add New" button for each category.  4.The user selects "Add New" for a specific category (e.g., Allergies).  5.The flow continues from step 4, but the form may be specific to just that category. |
| Pre-conditions | The user must be logged in as a Primary User. |
| Post-conditions | New health information is successfully added and stored as part of the Primary User's profile. |

## 

## Use-case: Register as Caregiver

| Use case Name | Register (as a Caregiver) (UC14) |
| --- | --- |
| Brief description | Allows a new user to create a Caregiver account in the MediPal system. This account is intended for monitoring purposes. |
| Actors | Caregiver (prospective) |
| Basic Flow | 1. User selects the "Register" or "Sign Up" option.  2. System presents options to register as a "Primary User" or "Caregiver". User selects "Caregiver".  3. System displays the Caregiver registration form.  4. User enters required information (e.g., email, password, name).  5.The user accepts the Terms of Service.  6. User clicks the "Register" button.  7. The system validates the input data (e.g., checks if the email format is valid, if the email is unique, and if the password meets complexity rules).  8.The system creates a new Primary User account.  9. System automatically logs the user in and displays the Caregiver's dashboard, which is initially empty. |
| Alternative Flows | **Alternative Flow 1: Email already exists**  1. At step 7 of the basic flow, the system detects the email is already registered.  2. System displays an error message: "This email address is already in use. Please log in or use a different email."  3. The flow resumes at step 4.  **Alternative Flow 2: Passwords do not match**  1.At step 7, the system detects the password and confirmation password are not identical.  2.The system displays an error message: "Passwords do not match."  3.The flow resumes at step 4, clearing the password fields. |
| Pre-conditions | The user does not have an existing account. |
| Post-conditions | A new Caregiver account is created and stored in the system. The Caregiver is logged in. |

## 

## Use-case: Log In as Caregiver

| Use case Name | Log In (as a Caregiver) (UC15) |
| --- | --- |
| Brief description | Allows a registered Caregiver to access their account. |
| Actors | Caregiver (prospective) |
| Basic Flow | 1. User enters their registered email and password.  2. User clicks the "Log In" button.  3. System validates the credentials for a Caregiver account.  4. System establishes a secure session.  5. System displays the Caregiver's dashboard, showing a list of Primary Users they are monitoring. |
| Alternative Flows | **Alternative Flow 1: Invalid credentials**  1. At step 3 of the basic flow, the system determines the email/password combination is incorrect.  2. System displays an error message: "Invalid email or password."  3. The flow resumes at step 1.  **Alternative Flow 2: Account is locked**  1. At step 3, the system determines the account is temporarily locked due to too many failed login attempts.  2. The system displays a message: "Your account is temporarily locked. Please try again in 15 minutes or use the 'Forgot Password' link."  3. The use-case ends. |
| Pre-conditions | The Caregiver has an existing account and is not currently logged in. |
| Post-conditions | The Caregiver is successfully authenticated and can view data from Primary Users who have granted them access. |

## 

## Use-case: Log Out as Caregiver

| Use case Name | Log Out (as a Caregiver) (UC16) |
| --- | --- |
| Brief description | Allows a logged-in Caregiver to securely end their session. |
| Actors | Caregiver (prospective) |
| Basic Flow | 1. Caregiver selects the "Log Out" option.  2. The system prompts for confirmation.  3. The Caregiver confirms the logout action.  4.The system terminates the user's session.  5.The system clears any sensitive session data from the device.  6.The system navigates the user back to the login screen. |
| Alternative Flows | **Alternative Flow 1: Caregiver cancels logout**  1. At step 3, the Caregiver selects "Cancel" or closes the confirmation dialog.  2. The system closes the dialog, and the user remains logged in.  3. The use-case ends. |
| Pre-conditions | The Caregiver is currently logged in. |
| Post-conditions | The Caregiver's session has ended. |

## 

## Use-case: Accept/Decline Invitation as Caregiver

| Use case Name | Accept/Decline InvitationLog Out (as a Caregiver) (UC17) |
| --- | --- |
| Brief description | Allows a Caregiver to respond to a sharing invitation sent by a Primary User |
| Actors | Caregiver (prospective) |
| Basic Flow | 1. System displays a notification or an "Invitations" section on the Caregiver's dashboard, showing the pending invitation from a Primary User.  2. Caregiver selects the pending invitation.  3. System displays options: "Accept" or "Decline".  4. Caregiver selects "Accept".  5. System updates the sharing relationship status from "Pending" to "Active".  6. System grants the Caregiver read-only access to the Primary User's schedules.  7. System displays the Primary User's name in the list of monitored profiles. |
| Alternative Flows | **Alternative Flow 1: Caregiver declines the invitation**  1. At step 4 of the basic flow, the Caregiver selects "Decline".  2. System asks for confirmation.  3. Caregiver confirms.  4. System deletes the invitation and the sharing relationship is not established.  5. System may optionally notify the Primary User that their invitation was declined.  **Alternative Flow 2: Invitation is expired or revoked**  1. At step 2, when the Caregiver selects the invitation, the system checks its validity  2. The system finds the invitation is no longer active.  3. The system displays a message: "This invitation has expired or was revoked by the user." and removes it from the list. |
| Pre-conditions | - The Caregiver must be logged in.  - A Primary User has sent a sharing invitation to the Caregiver's account. |
| Post-conditions | - If accepted, the Caregiver can now view the Primary User's schedules.  - If declined, the invitation is removed. |

## 

## Use-case: View Shared Schedule as Caregiver

| Use case Name | View Shared Schedule (UC18) |
| --- | --- |
| Brief description | Allows a Caregiver to view the medication and appointment schedules of a Primary User they are monitoring. |
| **Relationship** | **<<Includes>> Access Shared Schedule** (This represents the secure data retrieval process). |
| Actors | Caregiver (prospective) |
| Basic Flow | 1. From their dashboard, the Caregiver selects the profile of the Primary User they wish to view.  2. **<<include>> Access Shared Schedule:** The system securely authenticates the request and fetches the corresponding data from the server.  3. The system displays the Primary User's medication and appointment schedules in a read-only format.  4. The system also displays the history log, showing which doses were recorded as "Taken" or "Skipped".  5. The Caregiver can navigate through a calendar or list to view past and future events. |
| Alternative Flows | **Alternative Flow 1: Access has been revoked**  1. At step 1, the Caregiver selects a profile.  2. During the **<<include>>** step, the system determines the Caregiver's access has been revoked by the Primary User.  3. The system displays a message: "You no longer have permission to view this profile." and removes it from the Caregiver's list.  **Alternative Flow 2: Network error during data fetch**  1.During step 2, the system fails to retrieve data due to a network connection issue.  2. The system displays an error message: "Could not load data. Please check your internet connection and try again." |
| Pre-conditions | - The Caregiver must be logged in.  - The Caregiver has accepted a sharing invitation from a Primary User. |
| Post-conditions | The Caregiver has reviewed the Primary User's health schedule and adherence status. |

## 

## Use-case: Receive Missed Dose Alert as Caregiver

| Use case Name | Receive Missed Dose Alert (UC19) |
| --- | --- |
| Brief description | The system automatically sends an alert to the Caregiver when a Primary User they are monitoring misses a scheduled medication dose. |
| Actors | Caregiver (prospective) |
| Basic Flow | 1. The system detects that a scheduled medication time for a monitored Primary User has passed without the dose being recorded as "Taken" or "Snoozed".  2. The system generates a missed dose alert.  3. The system sends a push notification to the Caregiver's registered device.  4. The notification contains the Primary User's name, the medication name, and the time of the missed dose.  5.The Caregiver views the alert on their device. |
| Alternative Flows | **Alternative Flow 1: Caregiver has disabled notifications**  1. At step 3, the system determines the Caregiver has disabled notifications for the app in their device's settings.  2. The push notification is not delivered. However, the alert will be visible in the app's internal notification center upon the Caregiver's next login.  **Alternative Flow 2: Alert escalation is not configured:**  1. At step 1, the system determines that while the dose was missed, the Primary User has not enabled the setting to alert their Caregiver.  2. The system does not generate or send an alert to the Caregiver. The use-case ends. |
| Pre-conditions | The Caregiver has an active sharing connection. The Primary User has enabled caregiver alerts for missed doses. A medication dose was missed. |
| Post-conditions | The Caregiver is made aware of a missed medication dose, allowing them to follow up with the Primary User. |

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