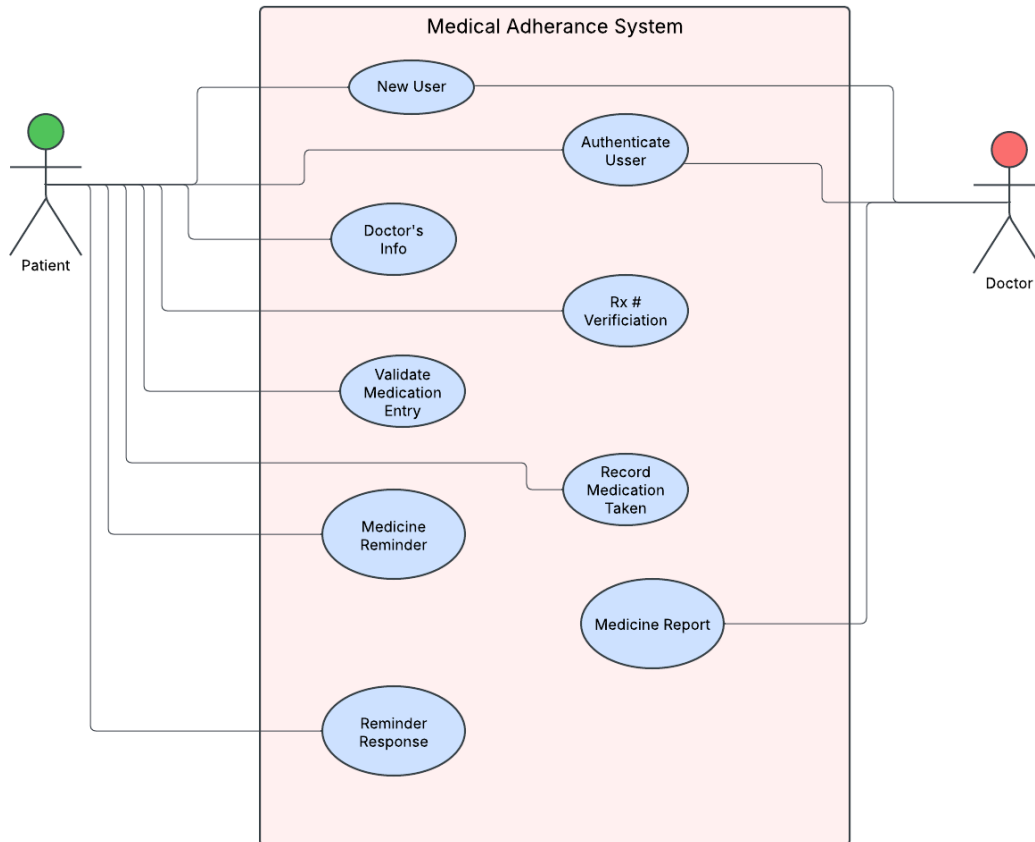


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## Medical Adherence System Requirements and Use Cases

### Use Case Diagram



## 1.1 New User

**Process:**

New  
User

**Initial Assumptions:** This is the User's first time logging in

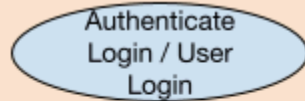
**Normal Process:**

1. User selects the New User option
2. User creates and enters a username and password
3. Process 1.2 will check if username and password already exist.
  - a. If it does not already exist in the system, the username and password are stored
  - b. If it exists, the user will be notified of its existence and asked to log in
4. Confirmation of username and password storage is sent back to the user
5. User provides first and last name and date of birth
6. First and last name and date of birth is stored
7. Confirmation of storage is sent to user

**What Can Go Wrong:**

Login already exists, in which case the system will notify the user of the existence of a previous account

## 1.2 Authenticate User / User Log In

**Process:**

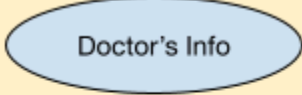
**Initial Assumptions:** User is returning and has login information

**Normal Process:**

1. User selects login option
2. User enters username and password
3. Username and password are used to check if they have a match in the User data store
  - a. If username and password match, then confirmation is sent to user
  - b. If username and password do not match, then user is notified that username or password is not a match, and asked to try again

**What Can Go Wrong:** User can forget their password, in which case user is asked to enter their first, last name, and date of birth

## 2.1 Doctor's Info

**Process:**

Doctor's Info

**Initial Assumptions:** User can provide Doctor's Name

**Normal Process:**

1. User inputs doctor's information
2. Doctor's information is stored in the system

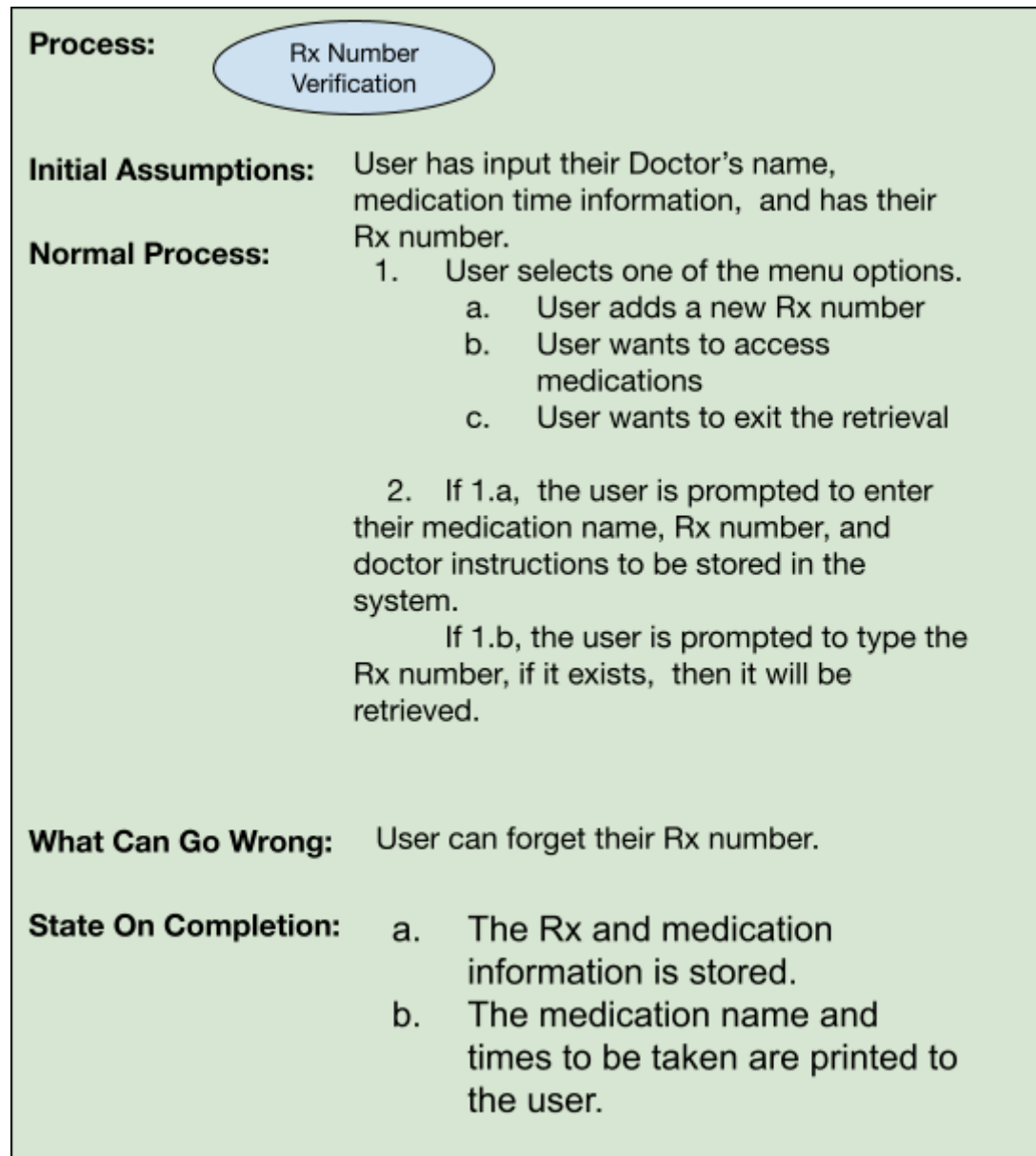
**What Can Go Wrong:**

User can forget or misspell the name they originally entered as their doctor. There could be duplicate doctors with the same first and last name.

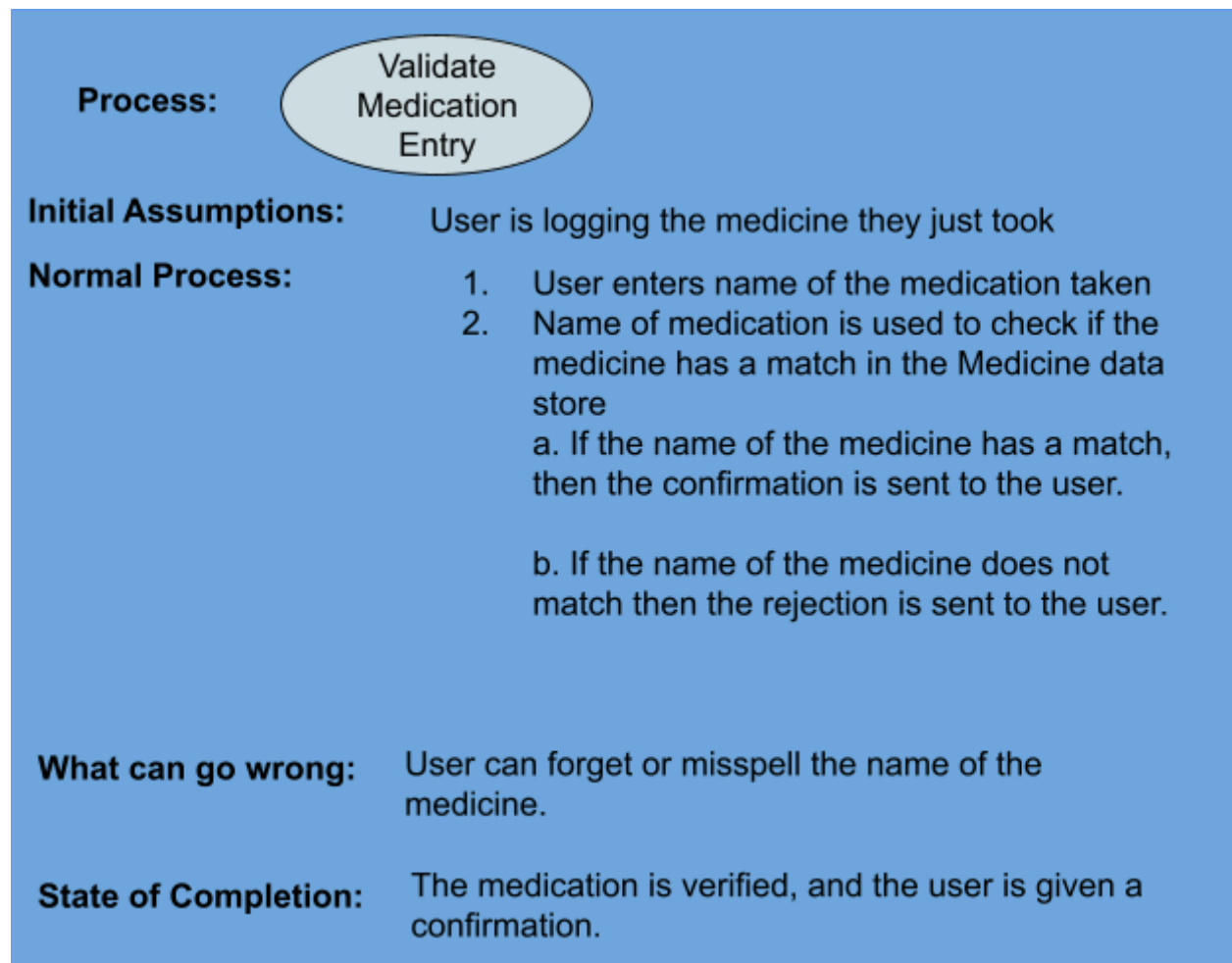
**State on Completion:**

If valid response, user is able to input their doctor's first and last name. User is also able to find medication based on the doctor they input.

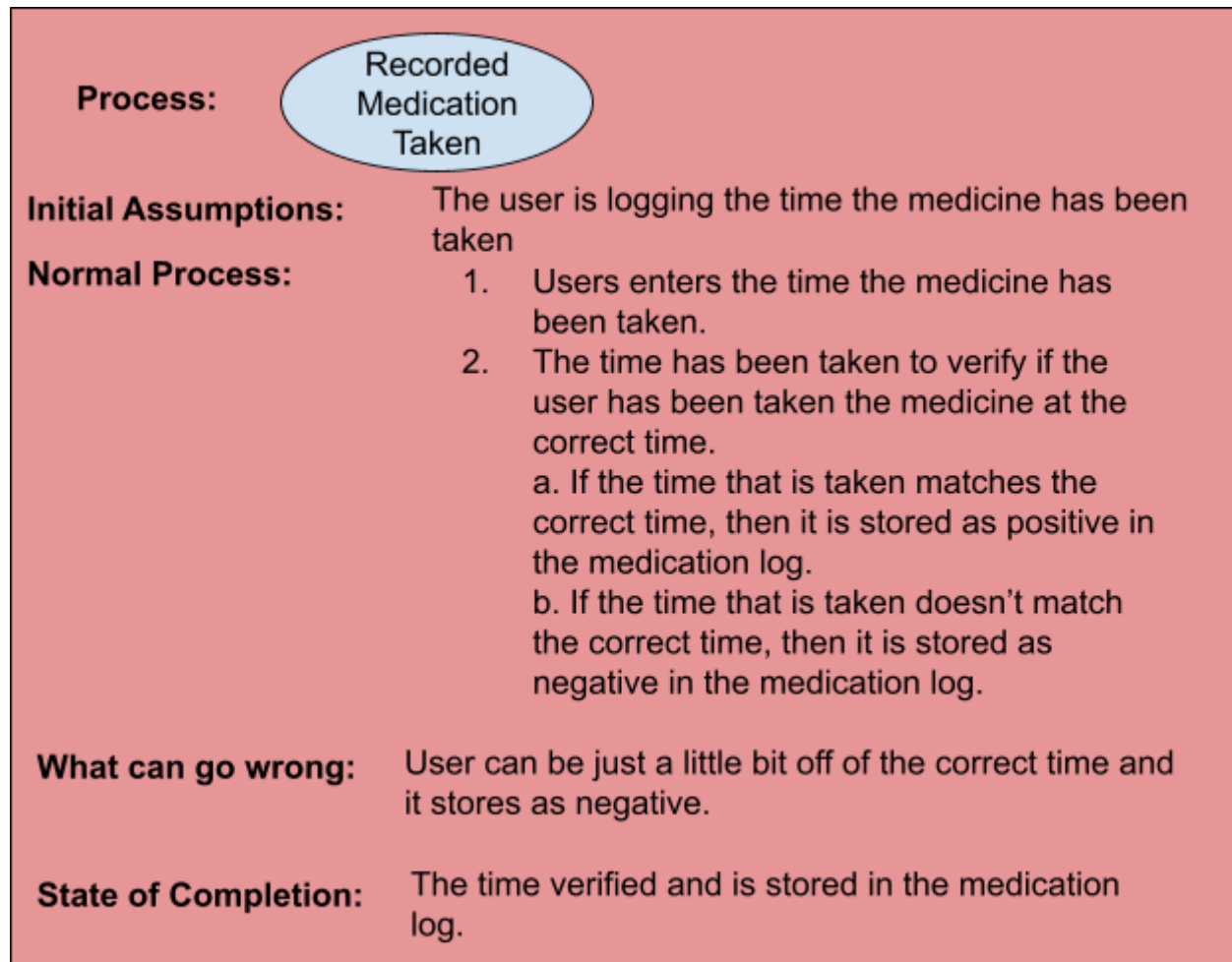
## 2.2 Rx Number Verification



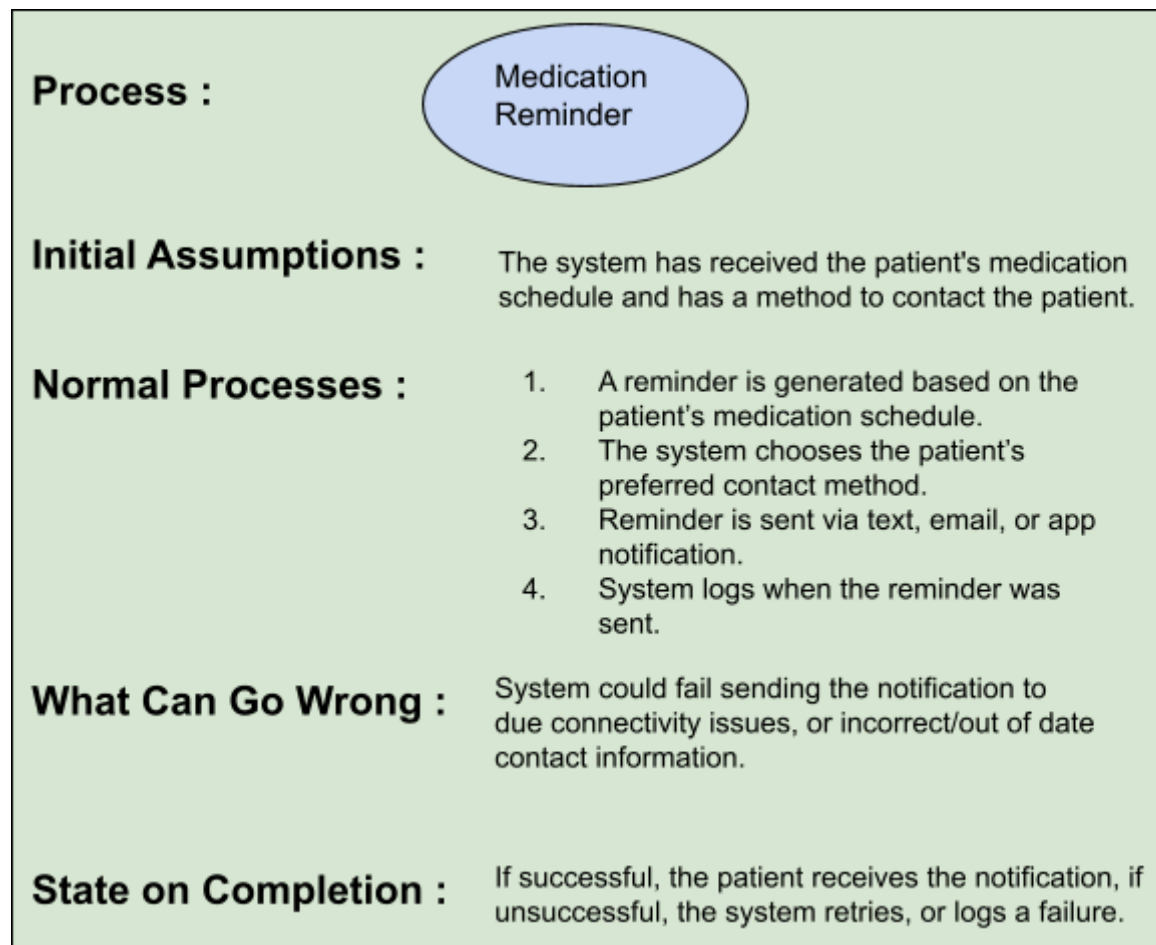
### 3.1 Validate Medication Entry



### 3.2 Record Medication Taken

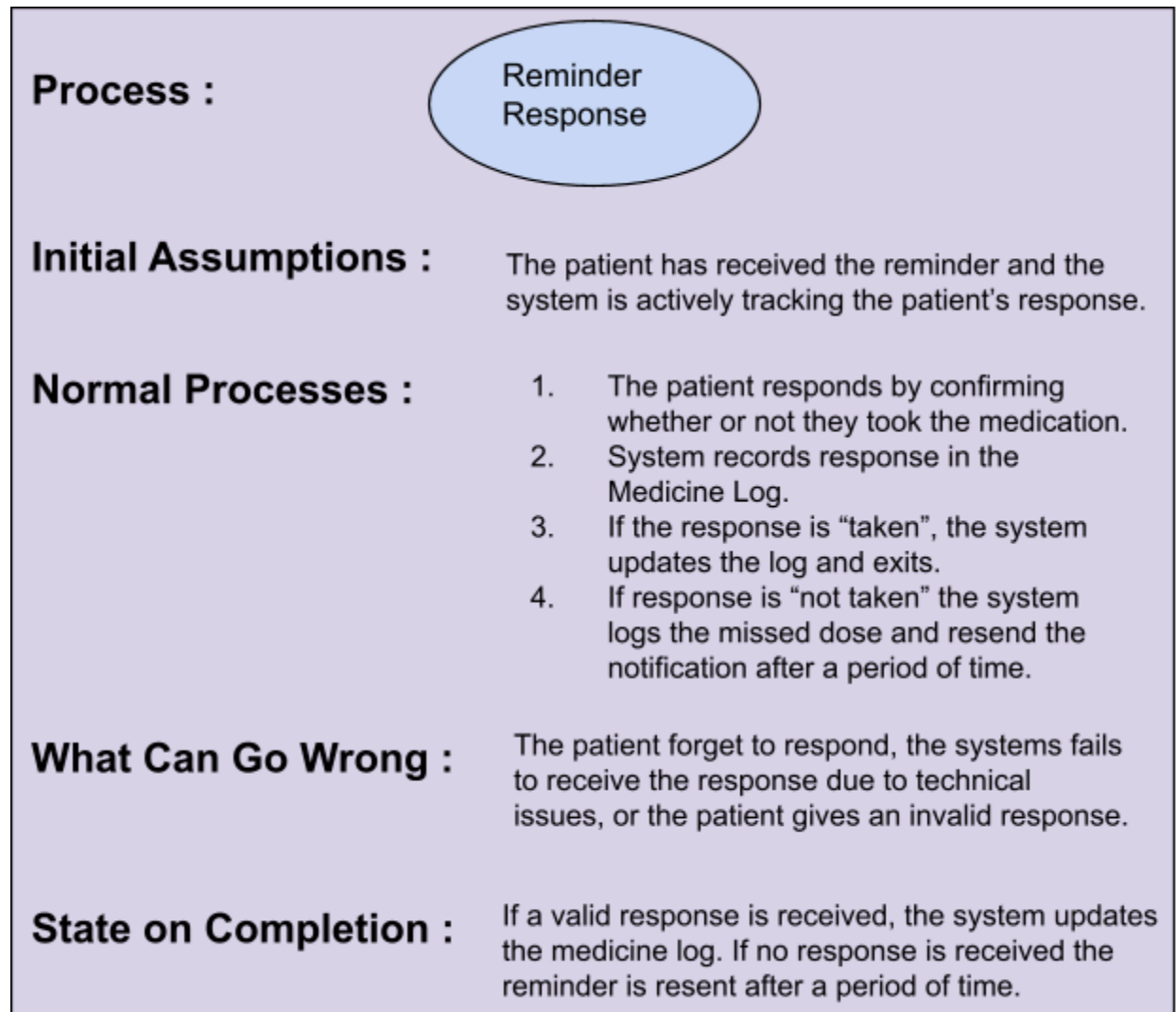


### 4.3 / 4.5 Medication Reminder





#### 4.4 Reminder Response



## 5.0 Medicine Report

### Process :

Medicine Report

### Initial Assumptions :

1. User (patient or doctor) has been authenticated and has access to the medical adherence system.
2. System has data recorded about patient's medication intake.
3. Patient's medication history and adherence record are properly stored in the system.

### Normal Processes :

1. User selects medical report option.
2. System retrieves patient's medication intake history.
3. System compiles relevant data:
  - a. Medication names, dosages, and schedule
  - b. Adherence records
  - c. Logged side effects and/or responses to medication
4. System generates a summary report detailing the medication adherence data.
5. User is notified when report is ready to review
6. User can view, download, or print report as needed
  - a. If user is a doctor, they may provide recommendations based on the report.

### What Can Go Wrong :

1. Authentication issues
2. System errors in compiling or retrieving data
3. Patient may not have access to certain reports
4. Data inconsistencies

### State on Completion :

Medical report is successfully generated for patient or doctor access to print, review, or download. Doctor is able to provide recommendations. Data is correct and consistent.