Technical Report
Health Information System

Use Case Identification Table

User	Type	Use Case
Patient	External	Update Patient Information
Patient	External	Access and View Health Records
Patient	External	Schedule Appointment
Patient	External	Check Insurance Coverage
Healthcare Provider	External	Access Patient Records
Healthcare Provider	External	Generate Medical Reports
Patient	Temporal	Receive Appointment Reminders
Government Regulator	Temporal	Run Custom Reports
Government Regulator	External	Track System Usage
Insurance Company	External	Verify Patient Insurance Coverage

Brief Use Case Descriptions

Use Case	Description	Acceptance Criteria	Trigger
Update Patient Information	Patient or caregiver updates profile information in the system to ensure records are accurate.	User can update personal details like address, contact number, and emergency contacts. System validates input to prevent incorrect data. Only authorized users (patients or caregivers) can edit profiles.	N/A
Access and View Health Records	Patient views their health records, including medical history and prescriptions.	System displays a list of health records with search and filter options Records can be filtered by date, type, or provider. Only authorized users (patients, providers, or regulators) can access health records.	N/A

Schedule Appointment	Patient schedules an appointment with a healthcare provider.	System displays available appointment slots. User can reschedule or cancel appointments. Confirmation is sent to the patient and caregivers upon scheduling. Reminders are sent 24 hours before the appointment to both patient and caregiver.	N/A
Check Insurance Coverage	Patient checks their insurance coverage for specific treatments.	System displays insurance coverage for common treatments and medications. Insurance policy expiration date and renewal reminders are shown.	N/A

Access Patient Records	Provider accesses patient records to provide accurate treatment.	System displays a list of patients with search and filter options. Patient record updates made by providers are tracked in real-time for auditing.	N/A
Generate Medical Reports	Provider generates medical reports to share with patients and caregivers.	System allows creating various types of reports, such as diagnostic summaries and treatment plans. Notifications are sent to patients and caregivers when a new report is generated. Reports include provider's name, date, and contact information.	N/A
Receive Appointment Reminders	System sends reminders to patients and caregivers before an appointment.	Reminder notifications are sent to both patient and caregiver (if assigned).	24 hours before scheduled appointment time.

Run Custom Reports	Regulator generates reports to monitor trends in healthcare at the national level.	Regulators can generate system usage reports showing activity trends. Only authorized regulators can access these reports.	N/A
Track System Usage	Regulator tracks system usage to ensure privacy and security compliance.	Access to system usage data is restricted to authorized regulators. Regulators can access health providers' reports and patients' health records to ensure standards are met.	N/A
Verify Patient Insurance Coverage	Insurance company verifies patient insurance coverage for efficient claims processing.	System displays insurance coverage details, policy limits, and covered treatments. Access to patient insurance information is restricted to authorized representatives.	N/A

UML use case Diagram