

# Software Requirement Specification

## 1. PROJECT NAME:

Health Information Network (HIN)

## 2. PROJECT IDEA:

The Health Information Network (HIN) is a web-based application designed to manage health records nationwide. It serves patients, healthcare providers, and government regulators by enabling efficient access to health records while ensuring compliance with HIPAA standards. The system provides personalized views for each stakeholder and features robust authentication and privacy measures.

## 3. PROJECT DRIVERS:

### a. The Goal of the Project:

- Create a secure, nationwide platform for managing health records.
- Improve patient care by providing real-time access to medical records and appointment scheduling.
- Enhance regulatory oversight and compliance with HIPAA standards.

### b. Client, Stakeholders:

- **Clients:** National health authorities, healthcare organizations.
- **Stakeholders:** Patients, healthcare providers, insurance companies, system administrators, government regulators, and caregivers.

### c. Users of the Project:

- **Primary Users:** Patients, healthcare providers, government regulators.
- **Secondary Users:** Insurance companies and caregivers.

## 4. PROJECT CONSTRAINTS:

### a. Mandated Constraints:

- The system must follow HIPAA standards to ensure data privacy.
- Implement a scalable infrastructure to accommodate nationwide usage.

### b. Naming Conventions and Definitions:

- **Patient:** A user receiving healthcare services.
- **Health Provider:** A doctor or a nurse.
- **HIPAA Compliance:** Ensures patient health data confidentiality.
- **Caregivers:** Designated individuals notified during emergencies.

### c. Relevant Facts and Assumptions:

- All users will have internet access.
- Patients may belong to either insured or uninsured categories.
- The system assumes data provided by patients is accurate.

## 5. FUNCTIONAL REQUIREMENTS:

### a. The Scope of the Work:

- **Current Situation:** The exchange of health records is fragmented, leading to inefficiencies.
- **Context of the Work:** HIN will centralize record management, reducing delays and errors.
- **Work Partitioning:** Separate modules for patient account management, appointment scheduling, medical record handling, and insurance processing.

### b. The Scope of the Product:

The system boundary includes features such as user registration, record management, appointment scheduling, billing, and report generation. Actors include patients, health providers, insurance companies, government regulators, system administrators, and caregivers.

### c. Atomic Functional Requirements Shell (Volere Snow Cards):

## Generate Patient Account

Requirement #: **01** Requirement Type: **Functional** Event/BUC/PUC #: **48**

Description: **Allow a patient to create a new account with secure login and profile information.**

Rationale: **Enables access to the health information system for new users.**

Originator: **Patient Feedback**

Fit Criterion: **Account creation should be completed in under 3 minutes.**

Customer Satisfaction: **5** Customer Dissatisfaction: **1**

Dependencies: **Authentication system** Conflicts: **None**

Supporting Materials: **Patient information**

Priority: **10**

History: **Created November 29, 2024 —Added after system requirements review**

## Update Patient Profile

Requirement #: **02** Requirement Type: **Functional** Event/BUC/PUC #: **13, 44, 45, 46**

Description: **Allow a patient to update their personal and medical information.**

Rationale: **Ensures patient details are kept up to date.**

Originator: **Patient Feedback**

Fit Criterion: **Profile update should be completed within 2 minutes.**

Customer Satisfaction: **5** Customer Dissatisfaction: **2**

Dependencies: **None** Conflicts: **None**

Supporting Materials: **Patient details**

Priority: **10**

History: **Created November 29, 2024 —Updated after feedback**

## Delete Patient Profile

Requirement #: **03** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Allow a patient to delete their account with the option for data removal or deactivation.**

Rationale: **Ensures privacy and compliance with data protection laws.**

Originator: **Patient Feedback**

Fit Criterion: **Account deletion should be processed within 5 minutes.**

Customer Satisfaction: **5** Customer Dissatisfaction: **3**

Dependencies: **Authentication system** Conflicts: **None**

Supporting Materials: **Patient data**

Priority: **8**

History: **Created November 29, 2024 —Initial feature based on user feedback**

## Schedule Appointment

Requirement #: **04** Requirement Type: **Functional** Event/BUC/PUC #: **34**

Description: **Allow patients to schedule appointments with healthcare providers.**

Rationale: **Ensures appointments are made efficiently, considering availability.**

Originator: **Patient Feedback**

Fit Criterion: **Appointment should be scheduled within 2 minutes with availability check.**

Customer Satisfaction: **5** Customer Dissatisfaction: **2**

Dependencies: **Check provider availability** Conflicts: **None**

Supporting Materials: **Patient and provider schedules**

Priority: **10**

History: **Created November 29, 2024 —Feature updated based on user feedback**

## View Appointments

Requirement #: **05** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Allow patients to view scheduled appointments.**

Rationale: **Enables easy access to appointment information.**

Originator: **Patient Feedback**

Fit Criterion: **Appointment data should be available within 1 second of request.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **1**

Dependencies: **Appointment system**

Conflicts: **None**

Supporting Materials: **Appointment data**

Priority: **9**

History: **Created November 29, 2024 —Updated with new user interface**

## Cancel Appointment

Requirement #: **06** Requirement Type: **Functional** Event/BUC/PUC #: **35**

Description: **Allow patients to cancel appointments and notify healthcare providers.**

Rationale: **Improves appointment management and ensures proper notification.**

Originator: **Patient Feedback**

Fit Criterion: **Cancellation should be processed within 2 minutes and notify the provider immediately.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **2**

Dependencies: **Notify Provider**

Conflicts: **None**

Supporting Materials: **Patient and provider data**

Priority: **9**

History: **Created November 29, 2024 —Enhanced after system testing**

## Reschedule Appointment

Requirement #: **07** Requirement Type: **Functional** Event/BUC/PUC #: **34**

Description: **Allow patients to reschedule appointments while checking provider availability.**

Rationale: **Ensures flexibility and efficient use of available slots.**

Originator: **Patient Feedback**

Fit Criterion: **Rescheduling should be completed within 2 minutes.**

Customer Satisfaction: **5** Customer Dissatisfaction: **3**

Dependencies: **Check provider availability** Conflicts: **None**

Supporting Materials: **Patient and provider data**

Priority: **9**

History: **Created November 29, 2024 —New feature after stakeholder discussion**

## Add Medical Record

Requirement #: **08** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Allow healthcare providers to add medical records for patients.**

Rationale: **Ensures up-to-date medical records for each patient.**

Originator: **Healthcare Providers**

Fit Criterion: **Record should be added successfully in under 2 minutes.**

Customer Satisfaction: **5** Customer Dissatisfaction: **1**

Dependencies: **None** Conflicts: **None**

Supporting Materials: **Patient medical records**

Priority: **10**

History: **Created November 29, 2024 —Initial requirement after system testing**

## View Medical History

Requirement #: **09**

Requirement Type: **Functional** Event/BUC/PUC #: **36**

Description: **Allow patients and providers to view patient medical history, with filter options.**

Rationale: **Important for providing a comprehensive understanding of patient history.**

Originator: **Healthcare Providers, Patients**

Fit Criterion: **History should be filtered and presented within 3 seconds.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **2**

Dependencies: **Filter by date, Filter by type** Conflicts: **None**

Supporting Materials: **Medical history records**

Priority: **10**

History: **Created November 29, 2024 —New feature added based on user feedback**

## Update Medical Record

Requirement #: **10**

Requirement Type: **Functional** Event/BUC/PUC #: **37**

Description: **Allow healthcare providers to update medical records, ensuring data accuracy.**

Rationale: **Essential for maintaining accurate and current medical records.**

Originator: **Healthcare Providers**

Fit Criterion: **Record update should be completed successfully within 3 minutes.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **2**

Dependencies: **Check for data accuracy** Conflicts: **None**

Supporting Materials: **Medical record data**

Priority: **10**

History: **Created November 29, 2024 —Enhanced after compliance review**

## Delete Medical Record

Requirement #: **11** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Allow authorized personnel to delete medical records if required.**

Rationale: **Ensures compliance with data protection and privacy laws.**

Originator: **Compliance Team**

Fit Criterion: **Deletion should be processed within 3 minutes.**

Customer Satisfaction: **5 3**

Dependencies: **Authorization system** Conflicts: **None**

Supporting Materials: **Medical record data**

Priority: **8**

History: **Created November 29, 2024 —New feature after compliance review**

## Verify Insurance

Requirement #: **12** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Verify patient insurance details for eligibility and coverage.**

Rationale: **Ensures accurate billing and coverage determination.**

Originator: **Systems Administrator**

Fit Criterion: **Insurance verification should be completed in under 3 minutes.**

Customer Satisfaction: **5** Customer Dissatisfaction: **2**

Dependencies: **Insurance database** Conflicts: **None**

Supporting Materials: **Insurance data**

Priority: **10**

History: **Created November 29, 2024 —Added based on feedback from billing team**



## Update Insurance Information

Requirement #: **13** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Allow patients or administrators to update insurance details.**

Rationale: **Ensures accurate and current insurance information.**

Originator: **Patient Feedback**

Fit Criterion: **Insurance updates should be completed within 2 minutes.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **2**

Dependencies: **Insurance verification process** Conflicts: **None**

Supporting Materials: **Insurance information**

Priority: **9**

History: **Created November 29, 2024 —Enhanced after user feedback**

## Process Insurance Claims

Requirement #: **14** Requirement Type: **Functional** Event/BUC/PUC #: **38**

Description: **Process insurance claims, including checking patient insurance eligibility.**

Rationale: **Ensures streamlined claims processing and minimizes errors.**

Originator: **Insurance Specialist**

Fit Criterion: **Claims should be processed within 5 minutes with eligibility checks.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **3**

Dependencies: **Insurance eligibility check** Conflicts: **None**

Supporting Materials: **Insurance claims data**

Priority: **10**

History: **Created November 29, 2024 —Added during system enhancement phase**

## View Insurance Details

Requirement #: **15** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Allow patients and administrators to view detailed insurance information.**

Rationale: **Provides transparency and aids in decision-making.**

Originator: **Patient Feedback**

Fit Criterion: **Insurance details should be displayed within 2 seconds of request.**

Customer Satisfaction: **5** Customer Dissatisfaction: **1**

Dependencies: **None** Conflicts: **None**

Supporting Materials: **Insurance data**

Priority: **9**

History: **Created November 29, 2024 —Enhanced after stakeholder review**

## Add Emergency Contact

Requirement #: **16** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Allow patients to add emergency contact information.**

Rationale: **Ensures emergency preparedness and proper notifications.**

Originator: **Patient Feedback**

Fit Criterion: **Emergency contact should be added within 1 minute.**

Customer Satisfaction: **5** Customer Dissatisfaction: **1**

Dependencies: **None** Conflicts: **None**

Supporting Materials: **Contact information**

Priority: **8**

History: **Created November 29, 2024 —Basic feature implemented in early phase**

## Notify Emergency Contact

Requirement #: **17**

Requirement Type: **Functional** Event/BUC/PUC #: **39**

Description: **Notify emergency contact in case of an emergency event.**

Rationale: **Ensures timely communication during emergencies.**

Originator: **System Administrators**

Fit Criterion: **Notifications should be triggered within 5 seconds of the emergency event.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **2**

Dependencies: **Trigger on emergency event** Conflicts: **None**

Supporting Materials: **Contact and event data**

Priority: **9**

History: **Created November 29, 2024 —New feature for emergency management**

## View Notifications

Requirement #: **19**

Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Allow users to view all notifications regarding appointments, billing, and emergencies.**

Rationale: **Centralizes communication and ensures important messages are not missed.**

Originator: **Patients, Caregivers**

Fit Criterion: **Notifications should be displayed within 1 second of request.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **1**

Dependencies: **Notification system** Conflicts: **None**

Supporting Materials: **Notification data**

Priority: **7**

History: **Created November 29, 2024 —Enhanced after user interface testing**

## Generate Prescription

Requirement #: **20** Requirement Type: **Functional** Event/BUC/PUC #: **40**

Description: **Allow healthcare providers to generate prescriptions, including authorization for certain medications.**

Rationale: **Ensures efficient prescription generation and compliance.**

Originator: **Healthcare Providers**

Fit Criterion: **Prescription should be generated within 2 minutes, including authorization.**

Customer Satisfaction: **5** Customer Dissatisfaction: **2**

Dependencies: **Prescription authorization** Conflicts: **None**

Supporting Materials: **Prescription data**

Priority: **10**

History: **Created November 29, 2024 —Feature added during requirement analysis phase**

## View Prescription History

Requirement #: **21** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Allow patients to view their prescription history.**

Rationale: **Provides transparency and helps in managing medications.**

Originator: **Health Providers, Patients**

Fit Criterion: **Prescription history should be available within 2 seconds of request.**

Customer Satisfaction: **5** Customer Dissatisfaction: **1**

Dependencies: **None** Conflicts: **None**

Supporting Materials: **Prescription records**

Priority: **9**

History: **Created November 29, 2024 —Added during user requirement gathering**

## Renew Prescription

Requirement #: **22** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Allow patients to renew existing prescriptions.**

Rationale: **Simplifies the process of obtaining ongoing medications.**

Originator: **Patient Feedback**

Fit Criterion: **Prescription renewal should be processed within 2 minutes.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **2**

Dependencies: **Prescription records**

Conflicts: **None**

Supporting Materials: **Prescription data**

Priority: **9**

History: **Created November 29, 2024 —Added during feature enhancement phase**

## Update Prescription

Requirement #: **23** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Allow healthcare providers to update existing prescriptions.**

Rationale: **Ensures accurate and up-to-date medication information.**

Originator: **Healthcare Providers**

Fit Criterion: **Prescription updates should take less than 2 minutes.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **2**

Dependencies: **Prescription records**

Conflicts: **None**

Supporting Materials: **Prescription data**

Priority: **8**

History: **Created November 29, 2024 —Added based on provider feedback**

## Generate Health Reports

Requirement #: **24** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Generate detailed health reports for patients.**

Rationale: **Provides insights into the patient's health status over time.**

Originator: **Health Providers**

Fit Criterion: **Reports should be generated within 5 seconds of request.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **1**

Dependencies: **Medical records**

Conflicts: **None**

Supporting Materials: **Medical and health data**

Priority: **9**

History: **Created November 29, 2024 —Added during requirements phase**

## Generate Compliance Reports

Requirement #: **25** Requirement Type: **Functional** Event/BUC/PUC #: **41**

Description: **Generate reports to ensure compliance with patient privacy and legal requirements.**

Rationale: **Ensures the system adheres to legal and ethical standards.**

Originator: **Government Regulator**

Fit Criterion: **Compliance reports should be generated within 10 seconds.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **3**

Dependencies: **Privacy data management system**

Conflicts: **None**

Supporting Materials: **Privacy and audit data**

Priority: **10**

History: **Created November 29, 2024 —Added after legal review**

## View Usage Analytics

Requirement #: **26** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Allow administrators to view system usage analytics.**

Rationale: **Helps identify trends and optimize the system's performance.**

Originator: **Government Regulator**

Fit Criterion: **Analytics data should be displayed within 5 seconds of request.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **2**

Dependencies: **Usage data**

Conflicts: **None**

Supporting Materials: **Analytics data**

Priority: **7**

History: **Created November 29, 2024 —Added during system optimization phase**

## Generate Bill

Requirement #: **27** Requirement Type: **Functional** Event/BUC/PUC #: **42**

Description: **Generate patient bills, including service fees and insurance deductions.**

Rationale: **Simplifies the billing process for patients and administrators.**

Originator: **Billing Specialist**

Fit Criterion: **Bills should be generated within 3 seconds.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **2**

Dependencies: **Billing and insurance data**

Conflicts: **None**

Supporting Materials: **Billing data**

Priority: **10**

History: **Created November 29, 2024 —Enhanced during feature refinement phase**

## Process Payment

Requirement #: **28**

Requirement Type: **Functional** Event/BUC/PUC #: **43**

Description: **Process payments and verify payment methods.**

Rationale: **Ensures smooth and secure transactions.**

Originator: **Billing Team**

Fit Criterion: **Payments should be processed within 2 seconds.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **3**

Dependencies: **Payment gateway**

Conflicts: **None**

Supporting Materials: **Payment data**

Priority: **10**

History: **Created November 29, 2024 —Added during billing integration phase**

## View Billing History

Requirement #: **29**

Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Allow patients to view their billing history.**

Rationale: **Provides transparency in financial transactions.**

Originator: **Patient Feedback**

Fit Criterion: **Billing history should be displayed within 3 seconds.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **1**

Dependencies: **Billing database**

Conflicts: **None**

Supporting Materials: **Billing records**

Priority: **9**

History: **Created November 29, 2024 —Added during requirement gathering phase**



## Update Billing Information

Requirement #: **030** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Allow patients to update their billing information.**

Rationale: **Ensures accurate and up-to-date billing data.**

Originator: **Patient Feedback**

Fit Criterion: **Billing updates should be completed within 2 minutes.**

Customer Satisfaction: **5** Customer Dissatisfaction: **1**

Dependencies: **None** Conflicts: **None**

Supporting Materials: **Billing data**

Priority: **8**

History: **Created November 29, 2024 —Added during feature enhancement phase**

## Register New User

Requirement #: **031** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Allow new users to register for system access.**

Rationale: **Ensures the system is accessible to new users.**

Originator: **System Administrator**

Fit Criterion: **Registration process should be completed within 2 minutes.**

Customer Satisfaction: **5** Customer Dissatisfaction: **1**

Dependencies: **User management system** Conflicts: **None**

Supporting Materials: **User data**

Priority: **9**

History: **Created November 29, 2024 —Basic feature implemented in early phase**

## Change Password

Requirement #: **032** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Allow users to change their passwords.**

Rationale: **Ensures account security and compliance.**

Originator: **Patient**

Fit Criterion: **Password change should be completed within 1 minute.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **1**

Dependencies: **Authentication system**

Conflicts: **None**

Supporting Materials: **Password data**

Priority: **8**

History: **Created November 29, 2024 —Enhanced after security review**

## Assign Roles and Permissions

Requirement #: **033** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Allow administrators to assign roles and permissions to users.**

Rationale: **Ensures proper access control and security.**

Originator: **System Administrator**

Fit Criterion: **Roles and permissions should be assigned within 1 minute.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **1**

Dependencies: **Access control system**

Conflicts: **None**

Supporting Materials: **Role and permission data**

Priority: **9**

History: **Created November 29, 2024 —Added during security enhancement phase**

## Check provider availability

Requirement #: **34** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Check the availability of healthcare providers based on date, time, and type of illness.**

Rationale: **Ensures patients are assigned providers with availability matching their requirements.**

Originator: **System Administrator**

Fit Criterion: **Availability information must be accurate and up-to-date.**

Customer Satisfaction: **5** Customer Dissatisfaction: **2**

Dependencies: **Provider database** Conflicts: **None**

Supporting Materials: **Provider schedules**

Priority: **10**

History: **Created November 29, 2024 —Initial version created in November 2024**

## Notify Provider

Requirement #: **35** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Notify the assigned provider of new or updated patient appointments via email or SMS.**

Rationale: **Keeps providers informed about their upcoming schedules.**

Originator: **System Administrator**

Fit Criterion: **Notifications must be sent within 5 minutes of changes.**

Customer Satisfaction: **4** Customer Dissatisfaction: **1**

Dependencies: **Messaging system** Conflicts: **None**

Supporting Materials: **Contact details of providers**

Priority: **9**

History: **Created November 29, 2024 —Initial version created in November 2024**

## Filter by date, Filter by type

Requirement #: **36** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Allow users to filter medical history by date or type of incident for better navigation.**

Rationale: **Simplifies retrieval of specific medical history records.**

Originator: **Patient Feedback**

Fit Criterion: **Filters must return results within 2 seconds for queries under 1,000 records.**

Customer Satisfaction: **4** Customer Dissatisfaction: **2**

Dependencies: **Database of records** Conflicts: **None**

Supporting Materials: **Medical history database**

Priority: **7**

History: **Created November 29, 2024 —Initial version created in November 2024**

## Check for data accuracy

Requirement #: **37** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Ensure all medical record updates are validated for completeness and accuracy.**

Rationale: **Prevents incorrect or incomplete records from being stored in the system.**

Originator: **Health Providers**

Fit Criterion: **All records must pass predefined validation checks before saving.**

Customer Satisfaction: **5** Customer Dissatisfaction: **1**

Dependencies: **Data validation rules** Conflicts: **None**

Supporting Materials: **Validation criteria documentation**

Priority: **10**

History: **Created November 29, 2024 —Initial version created in November 2024**

## Check patient insurance eligibility

Requirement #: **38** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Verify if a patient is eligible for insurance coverage before processing claims.**

Rationale: **Avoids errors in claim processing and reduces disputes.**

Originator: **Insurance Specialist**

Fit Criterion: **Eligibility must be verified within 3 seconds of submission.**

Customer Satisfaction: **5** Customer Dissatisfaction: **2**

Dependencies: **Insurance company API** Conflicts: **None**

Supporting Materials: **Patient insurance details**

Priority: **10**

History: **Created November 29, 2024 —Initial version created in November 2024**

## Trigger on emergency event

Requirement #: **39** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Notify emergency contacts immediately when an emergency condition is detected.**

Rationale: **Ensures caregivers are informed promptly during critical events.**

Originator: **Systems Administrator**

Fit Criterion: **Notifications must be sent within 1 minute of the event detection.**

Customer Satisfaction: **5** Customer Dissatisfaction: **1**

Dependencies: **Emergency detection system** Conflicts: **None**

Supporting Materials: **Emergency contact list**

Priority: **10**

History: **Created November 29, 2024 —Initial version created in November 2024**

## Prescription authorization (for certain meds)

Requirement #: **40** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Require additional authorization for prescriptions of restricted medications.**

Rationale: **Ensures compliance with regulatory requirements for controlled substances.**

Originator: **Systems Administrator**

Fit Criterion: **Authorization must be granted or denied within 2 minutes.**

Customer Satisfaction: **5** Customer Dissatisfaction: **3**

Dependencies: **Authorization database** Conflicts: **None**

Supporting Materials: **Regulatory guidelines**

Priority: **9**

History: **Created November 29, 2024 —Initial version created in November 2024**

## Compile patient privacy data

Requirement #: **41** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Compile patient privacy compliance data for regulators to review.**

Rationale: **Ensures system compliance with HIPAA and other regulations.**

Originator: **Government Regulator**

Fit Criterion: **Reports must be generated within 10 minutes for up to 10,000 records.**

Customer Satisfaction: **5** Customer Dissatisfaction: **1**

Dependencies: **Privacy tracking logs** Conflicts: **None**

Supporting Materials: **Privacy regulations**

Priority: **10**

History: **Created November 29, 2024 —Initial version created in November 2024**

## Calculate service fees, insurance deductions

Requirement #: **42** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Automatically calculate service fees and deduct applicable insurance coverage.**

Rationale: **Ensures accurate billing for patients and providers.**

Originator: **Finance Team**

Fit Criterion: **Calculations must be accurate to 2 decimal places.**

Customer Satisfaction: **4** Customer Dissatisfaction: **2**

Dependencies: **Insurance database** Conflicts: **None**

Supporting Materials: **Billing rules**

Priority: **9**

History: **Created November 29, 2024 —Initial version created in November 2024**

## Verify payment method

Requirement #: **43** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Ensure the validity of payment methods (e.g., credit card, bank transfer).**

Rationale: **Reduces payment errors and ensures financial compliance.**

Originator: **Payment Team**

Fit Criterion: **Verification must be completed within 2 seconds.**

Customer Satisfaction: **5** Customer Dissatisfaction: **1**

Dependencies: **Payment gateway API** Conflicts: **None**

Supporting Materials: **Payment processor**

Priority: **8**

History: **Created November 29, 2024 —Initial version created in November 2024**

## Update Caregiver Contact Information

Requirement #: **44** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Allow caregivers to update their contact details in the system.**

Rationale: **Ensures accurate and up-to-date caregiver contact information.**

Originator: **System Improvement Feedback**

Fit Criterion: **Changes should be reflected immediately after submission.**

Customer Satisfaction: **4**

Customer Dissatisfaction: **2**

Dependencies: **Caregiver database**

Conflicts: **None**

Supporting Materials: **Contact database**

Priority: **7**

History: **Created November 29, 2024 —Added support for email updates.**

## Delete Insurance Information

Requirement #: **45** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Enable the deletion of outdated or invalid insurance records.**

Rationale: **Prevents confusion and errors due to outdated insurance information.**

Originator: **Patient Request**

Fit Criterion: **Data deletion should be processed within 2 seconds.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **1**

Dependencies: **Insurance database**

Conflicts: **High, requires validation**

Supporting Materials: **Insurance database records**

Priority: **7**

History: **Created November 29, 2024 —Recently added audit trail for deleted records.**



## Update Payment Information

Requirement #: **46** Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Allow patients to update their stored payment methods.**

Rationale: **Reduces failed payment incidents.**

Originator: **Payment Gateway Feedback**

Fit Criterion: **Updates should be processed securely within 3 seconds.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **1**

Dependencies: **Payment processor**

Conflicts: **High, requires encryption**

Supporting Materials: **Payment records**

Priority: **8**

History: **Created November 29, 2024 —Integrated with new security measures.**

## View Patient Profile

Requirement #: **47** Requirement Type: **Functional** Event/BUC/PUC #: **15**

Description: **Allow authorized personnel to view detailed patient profiles.**

Rationale: **Facilitates efficient decision-making and personalized care.**

Originator: **Medical Staff Feedback**

Fit Criterion: **Profile information should load within 1 second.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **1**

Dependencies: **Patient database**

Conflicts: **Medium, requires authentication**

Supporting Materials: **Patient records**

Priority: **9**

History: **Created November 29, 2024 —Enhanced with recent UI updates and additional fields for medical history.**

## Register Insurance Information

Requirement #: **48**

Requirement Type: **Functional** Event/BUC/PUC #: **None**

Description: **Allow patients to add new insurance information to their profiles.**

Rationale: **Ensures all necessary insurance details are available for services.**

Originator: **Registration Process Feedback**

Fit Criterion: **New entries should be validated and saved within 3 seconds.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **1**

Dependencies: **Insurance database**

Conflicts: **Medium, validation required**

Supporting Materials: **Insurance forms**

Priority: **9**

History: **Created November 29, 2024 —Recently added support for additional insurance types.**