

# Prioritization

## Version 1.1

December 25, 2024

## 1 Priority Criteria

**Value** – This approach focuses on the business benefit of any given requirement; the requirements that will return the greatest business or economic value are given the highest priority. This focus on value helps to ensure “quick wins” for the organization.

**Cost** – With an eye toward funding, this approach may be implemented in a number of ways—implementing the least expensive requirements first or first implementing requirements with the greatest ROI (return on investment) (profit/investment).

**Risk** – This approach prioritizes the riskiest requirements first, with the logic that should they fail, the project can be abandoned with a minimum of investment. This approach often makes sense when a controversial or untested initiative is planned.

**Regulatory Compliance** – With this approach, the requirements that are needed to meet legal and/or regulatory requirements are given the highest priority.

**Relationship to Other Requirements / Dependency** – Requirements often intermingle in complex relationships of interdependence. With this approach, requirements that support other high-priority requirements are also given high priority.

## 2 Priority of our Functional Requirements

Function Requirement (FR)	Value	Cost	Risk	Compliance	Dependency	Justification	Total Priority
Add Patient Health Data	5	3	2	5	5	This is the base of the entire application. It must be implemented first to enable other features. Since it handles private and sensitive data, strict compliance with data protection laws is essential. The technical risk is moderate-low since data handling practices are well known.	20
Request Tests/Imaging	2	3	3	3	4	This feature supports diagnosis and treatment. It needs to be operational soon after basic patient data is established as other functionality rely on it. However, it is not completely valuable to our customer as they have systems in place for this which make it less of a priority to complete. Compliance with medical standards is not too high as it is a custom system, while technical complexity is moderate.	15
Generate Patient Reports	3	2	2	3	3	This feature summarizes patient data for easy access. It is less critical operationally but supports audits and legal documentation. Low risk and dependency make it easier to implement.	13
View Patient Records	5	3	4	5	4	Provides essential access to patient data for healthcare providers such as doctors or insurance workers. Compliance with data access policies is mandatory. Higher technical complexity due to secure data retrieval and high risk of mistakes.	21
Prescribe Medication	4	3	4	5	4	Enables accurate treatment plans and medication safety and an easier way to track the patients medicine than relying on them remembering it, making it an essential feature. Compliance with drug prescription regulations is essential. Moderate technical risk due to potential system integration challenges.	20
Give Patient Access	5	2	2	3	2	Increases transparency and engagement by allowing patients to access their records. It is beneficial but less critical according to the stakeholders.	14
Update Patient Records with Limitation	5	3	3	5	3	Allows for updates while minimizing risks through access control for nurses or technicians. Ensures the system stays up-to-date without compromising security. Needs to comply with data privacy laws.	19
Register New Patient	5	3	3	5	5	Establishes the foundation for creating patient records. Compliance and moderate technical dependencies make this a high priority as well as it being a fundamental part of our program.	21
View Medication Requests	3	3	3	4	4	Enables clinicians and pharmacists to review and validate medication plans, improving patient care, however not as important to the customer. Requires adherence to privacy regulations and builds on patient/prescription data.	17

Function Requirement (FR)	Value	Cost	Risk	Compliance	Dependency	Justification	Total Priority
Verify and Dispense Medication	4	3	4	4	2	Ensures correct medication distribution and adherence to regulatory standards, reducing risk of errors. Moderate complexity with strong dependency on core medication request features however with nothing depending on it itself.	17
View Test Requests from Doctors	3	3	3	4	4	Requires secure handling of test orders and depends on patient/test data integration and following of data privacy regulations.	17
Show Patient Data Related to Tests	3	2	3	5	3	Links patient details with test results, aiding diagnosis accuracy. Low cost and moderate risk, leveraging existing patient and test data infrastructures however high compliance to data privacy laws since what technicians see is very limited compared to doctors so should be handled with care.	16
Perform and Upload Test Results	5	3	4	5	3	Ensures availability of accurate test results and reduces risk of test result loss due to paper so very important to customer. High compliance and security needs, with moderate complexity and strong dependency on patient data but nothing relies on it itself.	20
View Imaging Requests from Doctors	4	3	4	4	3	Ensures timely communication of imaging requests. Requires secure integration and depends on foundational patient/imaging workflows but with few dependencies of its own.	18
Upload Imaging Results	4	3	4	4	2	Provides prompt access to imaging outcomes, enhancing patient care decisions. Strict compliance, moderate complexity, dependent on imaging requests and patient records.	17
Upload Radiology Report	5	3	4	4	2	Completes the patient's diagnostic picture with radiological findings. High compliance standards, moderate complexity, and depends on core imaging infrastructures. No dependencies but fundamental feature to our program	18
Share Patient Records	5	3	5	5	3	Sharing records easily between hospitals is one of the main features required and requested for implementing this system. It has no dependencies and is an independent feature but it is very difficult to implement as it needs to be very safe and secure and ensure no data leakage.	21
Manage User Roles and Permissions	4	3	4	4	4	Protects sensitive data through controlled access. Mandatory for regulatory compliance and data security, relies on established user/patient data systems.	19
Show Patient Reports	3	2	2	3	3	Offers summarized patient information for new doctors of for patients who would like to learn more about their conditions. Low cost and risk, depends on underlying patient data and reporting structures.	13
Patient Health Data Logging	4	3	3	5	4	Enables continuous monitoring for audits and compliance. Moderate complexity and risk, depends on patient data management frameworks. Data needs to be well secure and encrypted.	19

Function Requirement (FR)	Value	Cost	Risk	Compliance	Dependency	Justification	Total Priority
Generate Financial Reports	4	3	3	4	4	Provides detailed financial insights combining MIS and financial system data. Moderate complexity; depends on integration quality and data synchronization.	18
Notify Departments of Outstanding Payments	3	2	2	3	3	Ensures timely notification of unpaid amounts to relevant departments. Low complexity and risk; automated and periodic operation.	13
Automate Medical Insurance Claims Processing	5	4	4	4	5	Streamlines claims submissions and tracking with insurers. High impact and complexity; depends on accurate data validation and insurer API compatibility.	22
Order Inventory for Pharmacy	3	3	3	4	3	Supports inventory management to avoid shortages. Moderate complexity; depends on supplier integration and inventory tracking accuracy.	16