e_Treatment Clinical System

Software QA Test Plan

Version: 1.0

Date:12/12/2022

Prepared By: Group 5

1 Document Acceptance and Sign-Off

By signing below, I acknowledge that I have read the entire contents of this document and accept the document in this form as reasonably fulfilling the goals described in the section titled Document Purpose. I further agree that this will constitute the document of record and cannot be changed without review and acknowledgement of the groups shown below:

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2 Revision History

Document/Department Editor:			
Date	**Revision #**	**Editor**	**Description of Change**
12/08/2022	eTreatment_v1	Rashmi & Lokesh	Incorporated Test Condition Matrix for the e_Treatment Clinical System V5.0.
12/09/2022	eTreatment_v2	Divya & Sarvesh	Incorporated Test Scenarios/Cases
12/10/2022	eTreatment_v3	Rajiv Ranjan Sahu	Incorporated Traceability Matrix
12/11/2022	eTreatment_v4	Rajiv Ranjan Sahu	Incorporated Introduction & Testing objectives
12/11/2022	eTreatment_v5	Rashmi Singh	Incorporated Test Strategy & Environments details
12/12/2022	eTreatment_v6	Lokesh Balaji	Added details for section 8, 9 & 10

12/12/2022	eTreatment_v7	Divya Patil	Test Schedule, Testing Tool Requirements, Defect Life Cycle management
12/12/2022	eTreatment_v7	Sarvesh Sathishkumar	Added details for section 11,12 & 16

3 Glossary

Term	Definition
Application	A computer software program that performs a special task
Medicare	A federal health insurance program for senior citizen and permanently disabled people
Medicaid	A joint and state program that helps low-income families and individuals pay for the cost associated with medical care
Medco	Offers comprehensive and affordable insurance plans that minimize coverage gaps to keep your financial foundation strong.
United Care Insurance	Health plans are offered by United Healthcare Insurance Company and affiliates. They work with federal and state agencies to provide government-sponsored health insurance.
Claim	A request to your health insurance company to pay a bill for health care service
Spectra Labs	A lab that delivers testing, analysis and reporting with the reliability and personal service you require to ensure the accurate results possible for your patients
Mot-Ran, Xer-Ran, Per-Gan	Drugs used to treat patients.
Hemo Dialysis	Procedure where a dialysis and a special filter is used to purify the blood.
Peritoneal Dialysis	Procedure to remove unwanted and vestigial products from blood.

4 Introduction

A new e_Treatment Clinicals system is replacing the legacy TSS application. In the e_Treatment Clinicals System, patients will get admitted and treated based on their Financial and Clinical Clearance flags (Admit Flag and Treatment Flag), and the Insurance types. Once admitted, the patients are treated based on the Treatment Flag (Yes). During treatments, all the patients' Lab Orders will be sent to the Spectra System Lab and the Lab Results are sent to the e_Treatment Clinical System. After the end of the treatments, all treatments are collected in the e_Treatment Clinical System. The e_Treatment Clinical System will send all Treatment and Lab Charges to the e_Finance system nightly. The e_Finance system will create claims and sends them to the insurance companies for getting paid accordingly. The insurance companies then send the payments to the Archival_Trust Company. The Archival_Trust Company does a weekly reconciliation with the e_Finance System for auditing purposes.

5 Testing Objectives

The initial phase will include all ‘must have’ requirements aligning with business requirements and functional specifications. This System traverses through patient admission, treatments, financial charges, financial billing, and clinical reports.

Major new or modified capabilities included in this test

A. Patient Admission

- ✧ New and Existing patients can be admitted into the e_Treatment Systems.
- ✧ The patients are either Financially Cleared or Not Cleared. If the Admit_Flag is Yes, the patients will be admitted otherwise the patients will be rejected.
- ✧ Once the patients get admitted, their demographic information will be sent to the e_Finance System, the e_Filing System, and the Spectra System Lab
- ✧ For all New patients, new admission folders will be created in the e_Finance System, the e_Filing System, and the Spectra System Lab.
- ✧ For all Existing patients, the existing folders get updated in the e_Finance System, the e_Filing System, and the Spectra System Lab.
- ✧ For all New and Existing patients, the e_Filing system sends their insurance information to the proper insurance company for verification purposes (e.g., if Medicare, to Medicare/Medicaid, etc.)
- ✧ If the insurance type is anything different than Medicare/Medicaid, Medco, or United Care, the admission will fail, and the patients will get rejected. In this case, no demographic info will be sent to any system.

B. Patient Treatments

- ✧ For all the new and existing patients, the patient will get treated only if the Treatment_Flags is set to Yes otherwise the patient will not get treated (Treatment_Flags = Yes or No).
- ✧ There are 2 treatment locations - At_Home and In_Center.

- ✧ At_Home Treatment Location has 2 Modalities - The patients are treated either using Hemo Dialysis under the insurer Medicare/Medicaid with the drug being Mot-Ran or Peritoneal Dialysis and the insurer is a Medco with the drug being Xer-Ran.
- ✧ Under In_Center Treatment the patients are treated using Palliative Dialysis and the insurer is United Care with the drug being Per-Gan.

C. Treatment and the Lab Charges:

- ✧ For all the new and existing patients, patient Treatments will get stored in the e_Treatment System's database after each treatment.
- ✧ The patients' Lab Orders are sent to the Spectra System Lab. The Spectra System lab processes the Lab Orders and sends the Lab Results to the e_Treatment Clinical System
- ✧ All the Treatment and Lab Result Charges are gathered daily in the e_Treatment Clinical System's database which sends the Treatment and the Lab Result Charges for all patients to the e_Finance system for billing purposes.

D. Financial Billing

- ✧ For all the patients the e_Finance System sends all claims for the Treatment and Lab Charges to the respective Insurance companies, Medicare/Medicaid, Medco, or United Care for all the treated patients.
- ✧ The 3 Insurance companies, Medicare/Medicaid, Medco, and United Care, send their payments to the Archival_Trust Company based on the claims they received.

E. Reconciliation

- ✧ The Archival_Trust Company does a weekly reconciliation with the e_Finance System for auditing purposes.

Differences between current release and the previous phase

Features/Functionalities	e_Treatment Clinical System	TSS Clinical System
Patient Information System (e_Finance System, the e_Filing System, and the Spectra System Lab)	☑	☒
Lab Order & Results (Spectra System Lab → e_Treatment Clinical)	☑	☒
Treatment & Lab Result Charges (e_Treatment Clinical → e_Finance system)	☑	☒

Insurance – Medicare/Medicaid, Medco, and United Care	☑	☒
Reconciliation → Archival_Trust Company	☑	☒

Details of the release undergoing testing :

a. Interfaces

✧ **Patient Admission**:

- The admission of the patient is dependent on the financial clearance and their insurance company.
- Patient admission interfaces with the e_Finance System, the e_Filing System, and the Spectra System Lab if Admit_Flag = Yes

✧ **Patient Treatment**:

- The treatment of the patient is dependent on the Treatment_Flags (Yes/No)
- Patient treatment interfaces with treatment location which in turn are interfaced with treatment Modalities along with Insurance and the drug.

✧ **Treatment and the Lab Charges**:

- Lab Orders are interfaced with Spectra System Lab and the lab results are interfaced with the e_Treatment Clinical System.

✧ **Financial Billing & Reconciliation:**

- Treatment and Lab Charges interface with the e_Finance system. e_Finance system is interfaced to the 3 Insurance companies which is turn are interfaced to the Archival_Trust Company for reconciliation.

b. Roles & Responsibility:

✧ **Patient Admission:** Gets admitted based on the Admit_Flag and insurance company.

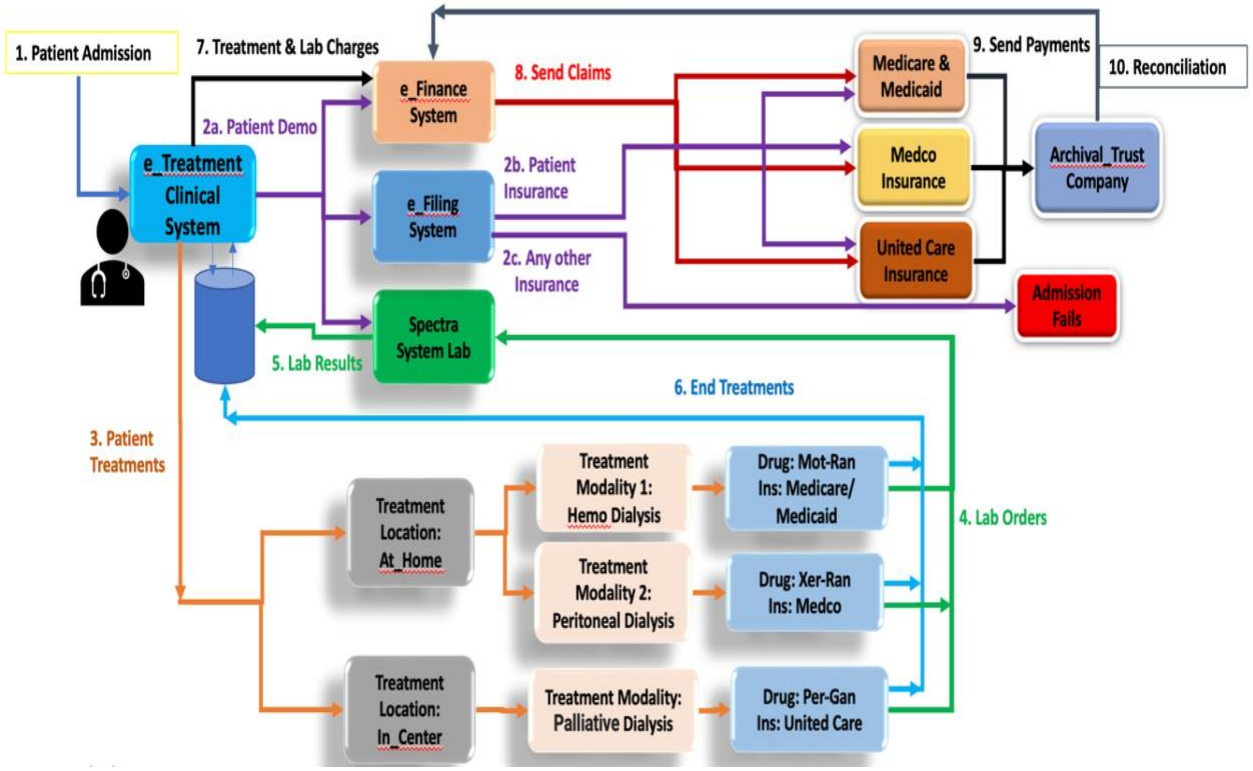
✧ **Patient Treatment:** Patients are treated, and lab orders are sent to Spectra System Lab.

✧ **Spectra System Lab:** It is responsible for processing the Lab Orders and sending the Lab Results to the e_Treatment Clinical System

✧ **e_Treatment Clinical System:** It is responsible for sending the Treatment and the Lab Result charges for all patients to the e_Finance system for billing purposes

- ✧ **e_Finance system:** e_Finance System sends all claims for the Treatment and Lab Charges to the respective Insurance companies, Medicare/Medicaid, Medco, or United Care for all the treated patients.
- ✧ **Insurance companies:** The 3 Insurance companies, Medicare/Medicaid, Medco, and United Care, send their payments to the Archival_Trust Company based on the claims they received.
- ✧ **Patient Demographics:** The patient's information is stored in various systems like OnBase System, eProcessing system and Avalon Systems Lab
- ✧ **The Archival_Trust Company:** It is responsible for weekly reconciliation with the e_Finance System for auditing purposes.

Context diagram of product within its environment showing interfaces



Hardware (Physical/VM/Cloud):

- ✧ CPU: Intel i7
- ✧ RAM: 16 GB
- ✧ Storage: 1TB
- ✧ Internet: LAN/Wi-Fi/VPN

Software

- ✧ OS: Windows 7,10,11, Mac OSX
- ✧ Browsers: Google Chrome, Firefox, Safari, Edge
- ✧ Security: Norton 360, McAfee Total Protection
- ✧ Software: Selenium, UFT, JMeter, LoadRunner, ALM

Risks

- ✧ **Data security:** The e_Treatment Clinicals system has various information regarding patient's demographics, Lab results and End Treatments which needs to be secured.
- ✧ The applications need to be running 24/7 as it is a health care system.

Environment requirement

- ✧ Environment that will be used for testing should be stable and should have configurations like that of the production environment.

6 Test Strategy

This section gives the overall details of the test effort and the approach on how the testing will be accomplished. This helps in communicating to the project team and the customers/users the scope of testing.

6.1 Unit and SIT Testing

Unit Testing: Individual units or components of the software are tested. The purpose is to validate that each unit of the software code performs as expected.

Unit Testing is done during the development (coding phase) of an application by the developers.

SIT Testing: System Integration Testing (SIT) is performed to verify the interactions between the modules of a software system. It deals with the verification of the high and low-level software requirements specified in the Software Requirements Specification/Data and the Software Design Document.

It is conducted after unit testing and will be done each time a new module is added to the system. This is performed by testers and developers.

6.2 System Testing and Integration Testing

System Testing involves testing the complete system. All the modules/components are integrated to verify if the system works as expected or not.

System Testing is done **after Integration Testing.** This plays a vital role in delivering a high-quality product. System testing is done by the developers and testers.

Integration Testing: In this testing, software modules are integrated logically and tested as a group. This testing exposes defects in the interaction between these software modules when they are integrated.

After Unit testing and before System testing, Integration testing is performed. QA is responsible for integration testing.

6.3 Performance and Stress Testing

Performance Testing: Performance Testing is used for testing the speed, response time, stability, reliability, scalability, and resource usage of a software application under a particular workload. The main purpose of this testing is to identify and eliminate the performance bottlenecks in the software application.

Yes, performance testing is included as e_Treatment Clinical System is a healthcare system, and performance testing will help us to ensure the quality, reliability, performance, safety, and efficiency of the application.

Monitoring of the application performance is crucial when various patients are trying to register for the treatment at the same time. During the admission procedure, the patient admission module should always be available (stable). By loading many patient records, the system is put to the load test.

The healthcare providers (Doctors/Hospitals) provide care 24/7, so the patient check-in software needs to be always available. Also, it needs to communicate with insurance companies to validate policy information and send claims.

Stress Testing: The goal of Stress testing is to measure software on its robustness and error handling capabilities under extremely heavy load conditions and ensuring that software doesn’t crash under crunch situations. It even tests beyond normal operating points and evaluates how software works under extreme conditions.

Stress testing is required for the e_Treatment Clinical System to ensure that the system does not crash if there is sudden increase in number of patients. It will help us interpret the system's performance during its failures and get to know the behavior of the software.

6.4 User Acceptance Testing

User Acceptance Testing (UAT), also known as beta or end-user testing, is carried out by the user or client to determine whether it can be accepted or not.

The main purpose of this testing is to validate the software against business requirements.

This is typically the last step before the product goes live or before the delivery of the product is accepted. This is performed after the product itself is thoroughly tested i.e., after System Testing.

The UAT team is responsible for User Acceptance testing. The team can be comprised of beta testers, or the customer should select UAT members internally from every group of the organization so that every user role can be tested accordingly.

- The UAT process is extensively focused on developing quality products and seeking feedback regularly from customers. QA teams here must ensure that each method and strategy is executed to improve the quality and usability of the product while making it user-friendly.
- QA teams must streamline the testing processes that define the outcome of UAT and leverage the UAT execution with far better efficiency.
- Testers need to work on iterating the product functions based on improving the quality of a product. Through various inspections and process checklists, QA teams can improvise their processes and contribute to developing a top-quality product.

6.5 Automated Regression Testing

Automated regression testing is a technique for ensuring that new software upgrades do not break the functioning of an existing software application. It includes re-running functional and non-functional tests to ensure that a software application works as intended after any code changes, updates, revisions, improvements, or optimizations.

Yes, automation regression testing is required in this process. This would help us to:

- An effective regression strategy saves organizations both time and money.
- The greatest benefit of automated regression testing is that it frees up resources.
- With an automation tool that creates visual recording and logs, we can easily go in and detect why tests fail. These speeds up feedback loops, and bug fixes.
- Automated regression tests can run 24/7, 365 days a week.
- With the ability to test faster comes the ability to test more.
- As new features are added to a product, new tests must follow, causing the regression suite to grow over time. Eventually, it'll reach a point where it's no longer feasible to manage the regression test cases manually. Automated regression testing will make it easy for us to keep a clear overview of our testing suite and allow us to adjust and maintain it without requiring us to rewrite or change code.

7 Test Environments

Testing environment is an arrangement of all the required software and hardware settings essential for testing. The setting of the test environment depends upon the requirement or the build of the applications that needs to be tested.

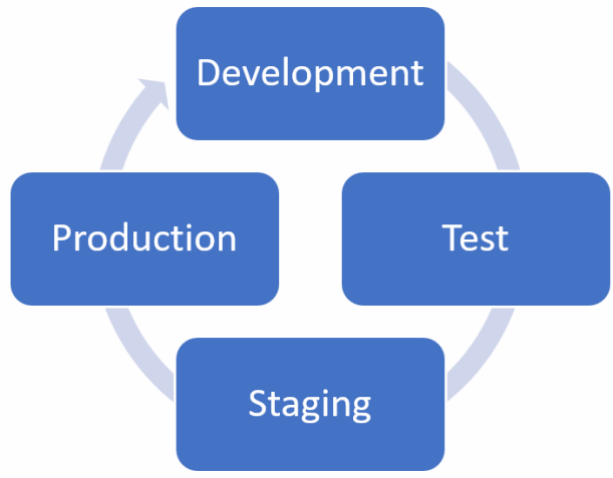
The test environment requires setting up of various number of distinct areas like: -

- **Setup of Test Server** – Each test may or may not be executed on the local machine itself. Hence, we need to establish a test server.
- **Setting up a network** – Setting up of Internet, LAN/WiFi
- **Test PC setup**
- **Creating Test Data for the Test Environment**
- **Check the Bug Reporting** Tools

Test Type	Environment
SIT Testing	SIT
System Testing	ST
Performance Testing	Pre- Prod (Env similar to Production)
User Acceptance Testing	Staging

All production deployments follow a path from the Development to Production and beyond from the environment's perspective.

DEVEVELOPMENT -> QA -> STAGING -> PRODUCTION



7.1 Test Data

Like test environment, test data will depend upon the application that is tested by the QA. After carefully reviewing the requirements of the application, the testing team can create appropriate test cases and data based upon the test scenarios which are to be tested.

Test Data can be generated –

- ✧ Manually
- ✧ Mass copy of data from production to testing environment
- ✧ Mass copy of test data from legacy client systems
- ✧ Automated Test Data Generation Tools

Test data that would be required are:

- ✧ URL of the application/ Desktop application installed on the system if it a desktop application
- ✧ Username & Password to login to the system

8 Roles and Responsibilities

Tester

- ✧ The tester gathers the information related to the testing and tests the software at various levels and records the result.
- ✧ Working with software developers and project support teams.
- ✧ meet with system users to understand the scope of projects.
- ✧ The tester is also responsible for tracking the defects and reporting them.

QA Lead

- ✧ Supervises the entire team and software testing processes - developing testing strategy, planning the use of technical resources, and performing quality control.
- ✧ Sometimes they can act as a negotiator with the client, in order to bring all his wishes to the project team.

Test Manager

- ✧ In addition to preparing test strategies, test budgets and test cycles, the test manager is also responsible for evaluating the test outcome.
- ✧ It is also the responsibility of the Testing Manager to guide the testing teams in designing testing approaches and techniques.

Test Leaders

- ✧ Responsibilities of Test leaders tend to include involvement in the planning, monitoring, and control of the testing activities and tasks.

- ✧ The test Leaders are also responsible for assigning tasks to the testers and reviewing the test documents and preparing test plans at each level according to the objective.

Test Architect

- ✧ This specialist conducts project analysis and develops a global product validation system.
- ✧ He/she must have experience performing automated testing and must understand software architecture and system design.

QA Analyst

- ✧ This position is kind of a combination of software testing skills with the skills to build long-term web product validation strategies.
- ✧ The QA Analyst position includes work with business logic and matches the target audience.

Test Automation Engineer.

- ✧ They are responsible for creating test scripts, which can be used to test the operation of the system and implement an automation environment.

Manual Test Engineer

- ✧ Manual Test Engineer gets to know the product manually.
- ✧ He/She mostly works with the client part of the software. Web software is tested from the point of view of the end user group, to find the maximum number of bugs that should not get into the release version and to users.

UI/UX Test Engineer

- ✧ Some companies make a UI/UX department in order to find the best user experience.

9 Monitoring Testing

Test Monitoring is the process of evaluating and providing feedback on the test proceedings that are currently in progress.

The most used **Test monitoring metrics include**:

- ✧ Test Coverage Metrics
- ✧ Test Execution Metrics (Number of test cases pass, fail, blocked, on hold)
- ✧ Requirement Traceability Metrics
- ✧ Percentage of scheduled test cases prepared – Percentage of test environment preparation finished (including tests executed or not executed, failed, or passed)
- ✧ Defect information (discovered, resolved or unresolved, failure rate, retest outcomes)

- ✧ Test Deadlines
- ✧ Test project cost, based on a cost-benefit analysis of detecting the next problem or running the next test.
- ✧ Requirement Tracking
- ✧ Consumption of Resources in the Project.

Test Monitoring includes:

- ✧ Track and report defect status as per the defect management process.
- ✧ Establish, document, and publish test status reports as defined by implemented TS test methodology.
- ✧ Testing schedule slippage recovery plans (including code rework) for testing should be considered and documented accordingly.
- ✧ Ensure that any approved changes can be incorporated into the testing, referencing the change control process as appropriate.
- ✧ Schedule test meetings for monitoring progress as appropriate.

10 Entry and Exit Criteria

Entry Criteria gives the prerequisite items that must be completed before testing can begin.

- ✧ Test plan should be appropriately defined and approved.
- ✧ QA has a thorough understanding of the functional requirements.
- ✧ Readiness of test cases for testing each step of the process must be there.
- ✧ Appropriately requirements regarding Patient Admission, Patient Treatments, Treatment and Lab Charges and Financial Billing should be defined and approved.
- ✧ Partial or Complete code for each requirement must be available for testing.
- ✧ Patients admitted, Patient's treatment type, charges for each patient, types of treatment, and financial information about each patient's data must be available and accessible for testing.
- ✧ Test Environment should be set up with necessary resources like tools and devices.
- ✧ Tester should have sound knowledge of the test environment and the testing tools.

Exit Criteria defines the items that must be completed before testing can be concluded.

- ✧ Achieving complete coverage of each functional requirement.
- ✧ Spotting and fixing the high priority defects and errors. For example, errors in charges, billings and transferring the lab charges should be fixed.

- ✧ Fixing all the “Show Stopper Defects” or “Blockers” which are blocking the final functioning of the application and making sure that no critical defects and errors are in open status.
- ✧ Retesting and closing all the high priority defects and errors to execute the regression scenarios successfully.
- ✧ All the critical test cases for admission of patient, treatment of patients, charges and billing are passed.

11 In Scope and Out of Scope

The **In-Scope** functions that will be tested:

- ✧ Check Patient Admission & Treatment based on admit flags
- ✧ Check the Treatment location for each patient
- ✧ Check Test Modalities based on Location
- ✧ Check Insurance for different Modalities
- ✧ Check Drug type based on location, insurance & modalities
- ✧ Check if Spectra System lab sends the Lab Results to the e_Treatment Clinical System
- ✧ Check if Lab Result Charges for all patients are sent to the e_Finance system
- ✧ Check if e_Finance system sends all claims to the respective Insurance companies
- ✧ Check if Archival_Trust does reconciliation with the e_Finance System

The **Out-of-Scope** functions of the application:

- ✧ Maximizing Patients Benefits
- ✧ Improvisations on machines for Home and In-Clinic treatment
- ✧ Checking Annual Agreements with Insurance Companies
- ✧ Payment terms and condition with Insurance Companies
- ✧ Validation of the total claims received by the Holding Trust Company

12 Risk/Assumptions and Dependencies

12.1 Risks/Assumptions

Risk	Mitigation
The test environment should be stable	All major codes fixes should have been delivered before the start of the testing.
All the home treatment equipment's gives unaltered output	Verifying with the factual data of other in clinic patients
Transfer of the bills from e-treatment to financial system will be done flawlessly	Verification of before and after numbers of the bills
Lack of resources	By outsourcing resources, the costs can be reduced, and the requirements can be met
Testing schedules are met	There will be a dedicated product manager who will keep track of the progress and manage the schedules
Corruption of files	Backup of all the files should be taken
Teamwork and communication	To track the progress of the team, stand-ups should be conducted everyday

Assumptions	Mitigation
Production data will be available for seeding the test database before testing.	Ensure production data is backed up and restored in the Test DB.
Patient details should be proper	Accurate patient records

12.2 Dependencies

Dependencies	Comments
Test Data Availability	Test data & database should also be made available to the testers for use during testing.
Software Availability	Selenium, E-treatment system, JIRA, Load Runner
Resource Availability	Testing must be conducted with an adequate number of resources
Budget Constraint	Testing should be funded adequately

13 Test Schedule

Deliverable	Start Date	End Date
Design and Functional Requirements Review	May 1, 2022	June. 2, 2022
User Story Reviews	September 12, 2022	September 19, 2022
Sprint 1 to Sprint 5	October 10, 2022	February 28, 2023
Test Plan Review	October 10, 2022	-
Test Cases Review, Before each Sprint	October 10, 2022	October 30, 2022
Performance & Load Testing,	January 15, 2023	February 28, 2023
Pilot Release	April 1, 2023	-
Full Deployment	May 1, 2023	-
Project Retrospective	June 1, 2023	-

14 Testing Tools Requirements

Tool	Objective
Load runner & Performance Centre	Performance testing
Selenium, UFT	Automation tool
ALM, JIRA	Defect Management tool
Junit, NUnit	Unit testing tool
Citrus, Tessy	Integration testing tools
Test Management Tools	TestRail, Test pad

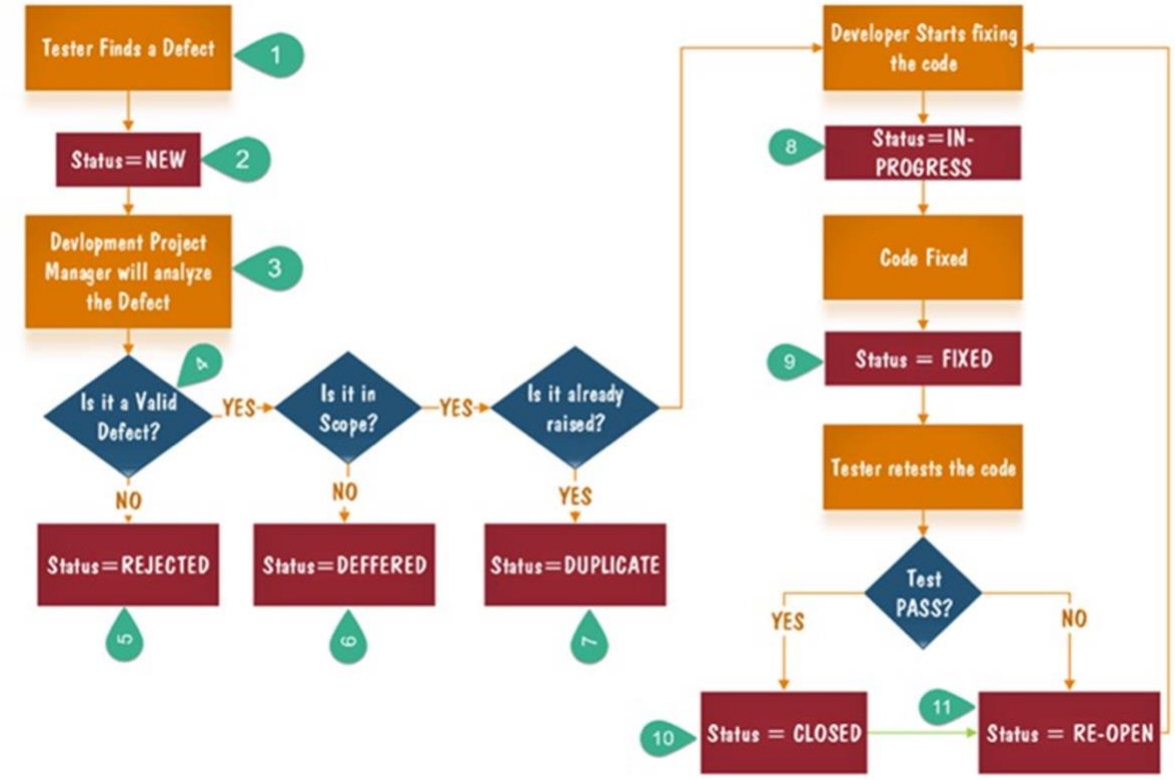
15 Defect Life Cycle Management

A defect is an error in coding or logic that causes a program to malfunction or to produce incorrect/unexpected results.

a. Defect Fields

Defect Fields	Defect Fields Description
Defect ID	It's a unique identification number
Reported Date	This is the date when a defect/bug is reported.
Reported By	It contains information about the individual who reported the defect, such as their name and ID number.
Status	Defect statuses include New, Assigned, Open, Retest, Verification, Closed, Failed, and Deferred, etc
Version Found In	It's an Application's Product version where the defect is found
Defect Description	It includes a detailed step-by-step description of the defect
Fixed by	It contains info about the developer who fixed the defect.
Date Closed	The date on which the defect was resolved.
Severity	Shows the impact of the defect or bug in the software application.
Priority	The order in which defects are fixed - High, Medium, and Low.

b. Defect Life Cycle



c. Defect Severity:

Defect Severity	Defect Description
Critical	This defect indicates complete shut-down of the process, nothing can proceed further
Major	It is a highly severe defect and collapses the system. However, certain parts of the system remain functional
Medium	It causes some undesirable behaviour, but the system is still functional
Low	It won't cause any major break-down of the system

d. Defect Priority:

Defect Priority	Defect Description
Low	The Defect is an irritant, but repair can be done once the more serious Defect has been fixed
Medium	During the normal course of the development activities defect should be resolved. It can wait until a new version is created
High	The defect must be resolved as soon as possible as it affects the system severely and cannot be used until it is fixed

16 Test Deliverables

Test Scenarios/Test Cases: The Test Scenarios/Cases can be found in Appendix.

Test Coverage Report and the Traceability Matrix: Listing the mapping of the requirements to the test cases to ensure full coverage. Test Coverage Report and the Traceability Matrix can be found in Appendix.

Test Status Report: The list of tests that were executed and the status of the testing, including Defect report. Test status report can be found in Appendix.

Change Control and Change Management:

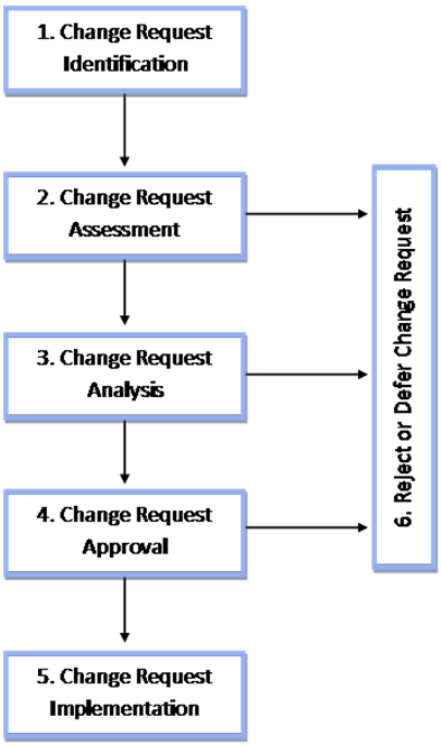
a. Change Control & its implementation during testing:

Change Control is the process that a company uses to **document, identify, and authorize changes** to an IT environment. It reduces the chances of unauthorized alterations, disruption, and errors in the system.

Whenever any **new or different changes are requested for the system**, especially by stakeholders, it is neither optional nor ignorable. It has to be implemented without affecting other components of the system. This is when the change control comes handy. It **helps** project teams to **modify the scope of the project using specified controls and policies**. Change Control is practiced whenever a project is not progressing as planned.

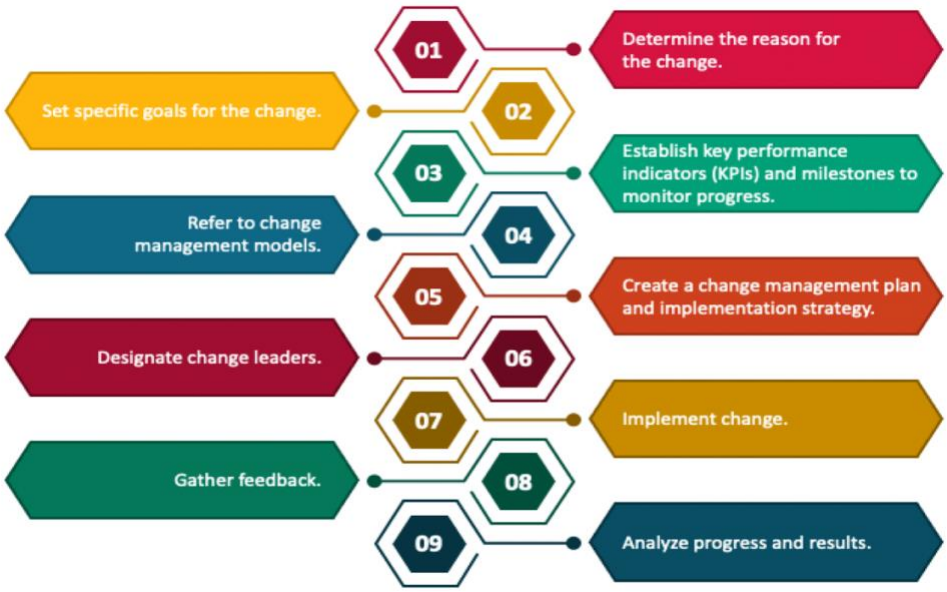
It is mandatory that a formal document for change request is completed and reviewed in order to keep control of change requests.

Process of Change Control



b. Change Management Process:

It is the quality control process that sets the stage ready by assessing, planning, and getting the right approvals for deployment of one or multiple changes to ensure minimal disruption to live environment.



17 Appendix

Document	Links
Test Scenarios/Cases	https://northeastern-my.sharepoint.com/:x:/g/personal/singh_ras_northeastern_edu/EQVnDnomAWlNl0S6ImsUntgBq2s5gXqq3v1fz3rVMDNR2w
Traceability Matrix	https://northeastern-my.sharepoint.com/:x:/g/personal/singh_ras_northeastern_edu/EQVnDnomAWlNl0S6ImsUntgBq2s5gXqq3v1fz3rVMDNR2w
Test status report	https://northeastern-my.sharepoint.com/personal/singh_ras_northeastern_edu/Documents/Test%20Status%20Report.xlsx?web=1

18 References

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