**Waterfall Project1 – Part -1/2**

**Document 1**

**1. Why is this Project Initiated?**

The Electronic Claims Library (ECL) project is initiated to address the inefficiencies in managing Medicaid-related documents. Currently, these documents are stored across multiple locations, leading to difficulties in retrieval, inconsistent updates, and challenges in performing real-time data comparisons. The lack of a centralized system results in increased manual effort, potential errors, and delays in decision-making.

By implementing the ECL, the project aims to streamline document management, enhance accessibility, and provide a single source of truth for Medicaid-related information. This will ultimately improve operational efficiency, reduce errors, and support data-driven decision-making for the content team and other stakeholders.

**2. What are the current problems?**

**Current Problem**

Currently, Medicaid policy management, document comparison, and real-time updates are handled through multiple disparate applications across various platforms.

This decentralized approach results in several inefficiencies:

* **Delayed Access to Critical Information**: With documents stored across multiple systems, users often struggle to find the necessary Medicaid policies and guidelines promptly. This can lead to delays in processing claims and making informed decisions.
* **Data Inconsistencies**: Due to the lack of a unified platform, the same document might exist in different versions across various applications. This increases the risk of errors, misinterpretations, and compliance issues.
* **Increased Manual Effort**: Employees must manually retrieve, compare, and validate documents from multiple sources, leading to wasted time and decreased productivity.
* **Limited Real-Time Updates**: Changes in Medicaid policies must be reflected across all platforms, but the current system does not support synchronized real-time updates. This creates discrepancies in available information and poses risks for outdated references.
* **Compliance and Audit Challenges**: The scattered nature of documentation makes it difficult to track changes, verify updates, and ensure regulatory compliance. This can result in potential legal and operational risks.

**3**. **With this project how many problems could be solved?**

With the implementation of the Electronic Claims Library (ECL), several key problems will be resolved:

1. **Centralized Access to Medicaid Documents**: All Medicaid-related documents will be stored in a single repository, reducing time spent searching for information and ensuring quick access to the latest policies.
2. **Enhanced Data Consistency**: A single source of truth will eliminate the risk of multiple document versions, ensuring uniformity in Medicaid policies and minimizing errors.
3. **Improved Search and Retrieval Efficiency**: Advanced search functionalities will enable users to quickly find relevant documents, reducing inefficiencies caused by manual searching.
4. **Automated Document Comparison**: The system will allow seamless data comparison, helping users analyze policy updates and changes more effectively.
5. **Real-Time Updates and Synchronization**: Policy changes will be reflected instantly across the platform, ensuring that all stakeholders access the most current information.
6. **Reduced Manual Effort and Increased Productivity**: By automating document management, employees will spend less time retrieving and validating information, leading to higher productivity.
7. **Strengthened Compliance and Audit Readiness**: A structured and trackable document management system will simplify audits and ensure compliance with regulatory requirements.
8. **Minimized Operational Risks**: With accurate and timely access to Medicaid policies, the risk of errors in claims processing and decision-making will be significantly reduced.

**4.** **What are the resources required?**

* **People :-**

Business Analysts – Gather and document requirements.

QA/Testers – Ensure the application meets functional and performance criteria.

Project Manager – Oversees progress and ensures alignment with business goals.

Subject Matter Experts (SMEs) – Provide insights on Medicaid policies and payer guidelines.

End Users (Content Team & Claims Auditors) – Validate usability through testing and feedback

* **Time** – implementation within 12 months.
* **Budget** – hardware, software, training and services not to exceed Rs. 2 lakhs.

**5.** **How much organizational change is required to adopt this technology?**

The adoption of the Electronic Claims Library (ECL) will require a structured organizational change process to ensure a smooth transition. The key areas of change include:

* **Technology Adoption**: Employees will need to transition from multiple existing systems to the new centralized platform. This will involve software installation, integration with existing workflows, and system customization based on user needs.
* **Training and Skill Development**: Users across different departments will require training on how to use the new system efficiently. Training sessions, user guides, and hands-on workshops will be necessary to ensure familiarity and ease of use.
* **Process Standardization**: The ECL will introduce standardized processes for document management, version control, and data comparison. Employees will need to adapt to these new workflows to maintain consistency and efficiency.
* **Change Management and User Adoption**: Resistance to change is a common challenge in technological transitions. A strong change management strategy, including leadership support, user feedback mechanisms, and phased rollouts, will be essential to encourage adoption and minimize disruption.
* **Policy and Compliance Adjustments**: With a new system in place, organizations may need to revise existing policies related to Medicaid documentation, data sharing, and regulatory compliance to align with the capabilities of the ECL.
* **IT Support and Maintenance**: A dedicated IT support team will be required to ensure smooth system functionality, troubleshoot issues, and handle software updates or enhancements.

**6**. **Time frame to recover ROI?**

The return on investment (ROI) for the Electronic Claims Library (ECL) is expected to be realized within a period of **12 to 24 months** post-implementation. The recovery timeline is based on several key factors:

* **Reduction in Manual Effort**: Automating document retrieval, comparison, and updates will lead to significant labor cost savings within the first 6 to 12 months.
* **Increased Productivity**: As employees spend less time managing Medicaid-related documents manually, operational efficiency will improve, leading to better resource utilization and faster decision-making.
* **Error Reduction and Compliance Improvements**: The system will help mitigate risks associated with data inconsistencies and outdated policies, reducing potential compliance penalties and legal issues.
* **Operational Cost Savings**: The elimination of multiple disparate applications will reduce maintenance and licensing costs, contributing to financial savings over time.
* **Faster Claims Processing and Decision Making**: With real-time access to Medicaid policies and streamlined workflows, the organization can expect a reduction in turnaround times, leading to improved service delivery and stakeholder satisfaction.
* By the end of two years, the cost benefits of the system will outweigh the initial implementation investment, ensuring a sustainable and profitable transition for the organization

**7. How to identify Stakeholders?**

Identifying stakeholders for the ECL project involves recognizing all individuals and groups affected by or involved in the system’s development and implementation. Key stakeholders include:

* **Internal Stakeholders:**
	+ Content Team (Users who manage Medicaid policies)
	+ Business Analysts (Gather requirements and ensure alignment with business needs)
	+ IT Department (Developers, system administrators, and support staff)
	+ Compliance and Legal Teams (Ensure adherence to Medicaid regulations)
	+ Executive Leadership (Decision-makers and budget approvers)
* **External Stakeholders:**
	+ Medicaid Agencies and Regulators (Ensure compliance with industry regulations)
	+ Healthcare Providers (Users who rely on Medicaid policy updates)
	+ Auditors (Verify data accuracy and compliance)
	+ Vendors and Technology Partners (Third-party integrations and support)

A stakeholder engagement strategy will be developed to ensure all parties are informed, involved, and aligned with the project's goals.

**Document 2: BA Strategy**

As the Business Analyst for the Electronic Claims Library (ECL) project, I played a crucial role in ensuring the successful completion of the project. My responsibilities included requirement gathering, stakeholder management, documentation, approvals, communication, change management, and final acceptance. This document outlines the key steps and strategies I followed throughout the project lifecycle.

**1. Elicitation Techniques** To gather requirements effectively, I applied various elicitation techniques, including:

* **Interviews** – Conducted discussions with key stakeholders, including the content team and IT department, to understand their needs.
* **Workshops** – Facilitated interactive sessions to align on project goals and functionalities.
* **Surveys/Questionnaires** – Collected feedback from end users on existing challenges.
* **Observation** – Analysed how users interacted with current Medicaid document management systems.
* **Prototyping** – Created wireframes to provide a visual representation of the application.
* **Document Analysis** – Reviewed existing Medicaid policy documents and internal reports.

**2. Stakeholder Analysis (RACI/ILS)**

* **Identified Stakeholders** – Engaged with internal teams (content team, IT, management) and external stakeholders (Medicaid regulatory bodies).
* **Stakeholder Classification** – Used the RACI (Responsible, Accountable, Consulted, Informed) matrix to define roles and responsibilities.
* **Stakeholder Engagement Plan** – Ensured continuous collaboration through meetings, regular updates, and feedback sessions.

**3. Documentation Requirements**. Below are the steps and strategies which we are implementing to make the the process smooth and efficient

# Documentation & Sign-off Process

In this stage we are writing key document and getting them signed-off on them

* BRD (Business Requirement Document) – Captures high-level business needs.
* SRS (Software Requirement Specification) – Details functional & non-functional requirements.
* Process Flows & UML Diagrams – Use Case, Activity, Sequence Diagrams.
* FS (Functional Specification Document) – Defines system functionalities.

As a signed-off process we are

* Presenting documents to stakeholders for review.
* Address feedback and finalize changes.
* Obtain formal sign-off via email or approval tool

# **4. Client Approvals and Communication Channels**

In this stage we are establishing the bridge between client and vendor by:

1. Conduct weekly/monthly meetings with clients for updates.
2. Establish communication channels:
* Emails for official approvals
* MS Teams/Zoom for virtual meetings
* Confluence/JIRA for document tracking

# **5. Change Request (CR) Management**

In this stage we are managing CR where we are planning how to incorporate those CR to the system.

* Any change request is formally documented in a Change Request Form (CRF).
* Perform impact analysis (cost, timeline, feasibility).
* Get approvals from Project Sponsor & Change Control Board (CCB).
* Update the Requirements Traceability Matrix (RTM).

Once the above step are followed we are sharing Change Request Log and Impact Assessment Report.

# **6. Project Progress Updates & Status Reports**

In this stage we are keeping all the stakeholder in sync by providing the periodically update as below:

* Track progress using JIRA, MS Project, or Excel Dashboards.
* Prepare Weekly Status Reports (WSR) for stakeholders.
* Conduct Steering Committee Meetings for high-level updates.

As an put come we are sharing Project status report and MoM.

# **7. UAT & Client Sign-off on Project Acceptance.**

In this stage are planning for the go-live activity by implementing below plan:

1. Define UAT criteria & prepare UAT Test Plan.
2. Execute test cases with client/end users & track defects.
3. Collect User Acceptance Test (UAT) Sign-Off from the client.
4. Finalize Client Project Acceptance Form for closure.

If all above step fall into pass result we will be sharing UAT Test Plan & Sign-Off Document and Client Project Acceptance Form.

**Document 3- Functional Specifications**

| **Project Name** | **Electronic Claims Library** |
| --- | --- |
| **Customer Name** | Medicaid Team |
| **Project Version** | 1.0 |
| **Project Sponsor** | Rudolph Dmello |
| **Project Manager** | Ajith Krishnan |
| **Project Initiation Date** | Jan 1, 2025 |

| **Req ID** | **Req Name** | **Req Description** | **Priority** |
| --- | --- | --- | --- |
| FR0001 | Login | Users should be able to log in securely using their credentials. | 10 |
| FR0002 | Document Upload | Users should be able to upload Medicaid policy documents. | 9 |
| FR0003 | Search | Users should be able to search documents using keywords and filters. | 10 |
| FR0004 | Real-time Updates | Changes in documents should be updated in real time for all users. | 9 |
| FR0005 | Document Comparison | Users should be able to compare two or more policy documents side by side. | 8 |
| FR0006 | Access Control | Role-based access should be implemented to restrict unauthorized users. | 10 |
| FR0007 | Notifications | Users should receive notifications for document updates or approvals. | 7 |
| FR0008 | Reports & Analytics | The system should generate reports on document usage and modifications. | 6 |
| FR0009 | Version Control | The system should maintain a version history for all documents. | 9 |
| FR0010 | Audit Trail | All user actions should be logged for security and compliance purposes. | 8 |

**Document 4- Requirement Traceability Matrix**

| **Req ID** | **Req Name** | **Req Description** | **Design** | **D1** | **T1** | **D2** | **T2** | **UAT** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| FR0001 | Login | User must be able to log in to access the application. | Yes | Pending | No | Yes | Yes | YES |
| FR0002 | Document Upload | Users should be able to upload Medicaid policy documents. | Yes | Yes | No | Pending | Yes | YES |
| FR0003 | Search | Users should be able to search documents using keywords and filters. | Yes | Pending | No | Yes | Yes | YES |
| FR0004 | Real-time Updates | Changes in documents should be updated in real time for all users. | Yes | No | No | Yes | Pending | YES |
| FR0005 | Document Comparison | Users should be able to compare two or more policy documents side by side. | Yes | Pending | No | Yes | Yes | YES |
|  |  |  |  |  |  |  |  |  |
| ­ |  |  |  |  |  |  |  |  |
| FR0006 | Access Control | Role-based access should be implemented to restrict unauthorized users. | Yes | Yes | No | Yes | Yes | YES |
| FR0007 | Notifications | Users should receive notifications for document updates or approvals. | Yes | Pending | No | No | Yes | YES |
| FR0008 | Reports & Analytics | The system should generate reports on document usage and modifications. | Yes | No | No | Yes | Yes | YES |
| FR0009 | Version Control | The system should maintain a version history for all documents. | Yes | Pending | No | Yes | Yes | YES |
| FR0010 | Audit Trail | All user actions should be logged for security and compliance purposes. | Yes | Yes | No | Yes | Yes | YES |

**Legend:**

* **Yes** → Completed
* **Pending** → Work in progress
* **No** → Not started

**Document 5- BRD Template**



| **Field** | **Description** |
| --- | --- |

|  |  |
| --- | --- |
| **Project Name** | ECL |

|  |  |
| --- | --- |
| **Project ID** | PROJ-2025-001 |

|  |  |
| --- | --- |
| **Version ID** | 1.0 |

|  |  |
| --- | --- |
| **Author** | Kavya Garg |

|  |  |
| --- | --- |
| **Date** | 17-03-2025 |

**Contents**

1. Document Revisions .............................................................12
2. Approvals ........................................................................12
3. RASCI Chart for This Document ......................................12
	* Codes Used in RASCI Chart .............................................
	* RASCI Chart .................................................................
4. Introduction ..................................................................13
4.1. Business Goals ........................................................13
4.2. Business Objectives ..............................................14
4.3. Business Rules ......................................................14
4.4. Background .........................................................14
4.5. Project Objective .................................................14
4.6. Project Scope .....................................................14
4.6.1. In Scope Functionality ...............................14
4.6.2. Out Scope Functionality ...........................15
5. Assumptions ...............................................................15
6. Constraints .................................................................15
7. Risks .........................................................................15
	* Technological Risks .................................................15
	* Skills Risks ...............................................................15
	* Political Risks ..........................................................15
	* Business Risks .......................................................15
	* Requirements Risks .............................................15
	* Other Risks ............................................................16
8. Business Process Overview ......................................16
8.1. Legacy System (AS-IS) .................................16
8.2. Proposed Recommendations (TO-BE) ....16
9. Business Requirements ...........................................16
10. Appendices ...............................................................17
10.1. List of Acronyms ............................................17
10.2. Glossary of Terms ........................................17
10.3. Related Documents ....................................17

**1. Document Revisions**

|  |  |  |
| --- | --- | --- |
| **Date** | **Version Number** | **Document Changes** |
| 05/02/2024 | 0.1 | Initial Draft |
| 12/02/2024 | 0.1.2 | Minor formatting and grammatical corrections |
| 19/02/2024 | 0.1.3 | Added new claim validation logic |
| 26/02/2024 | 0.1.4 | Updated security measures (Role-Based Access Control) |
| 01/03/2024 | 0.1.5 | Revised workflow for claim approvals |
| 08/03/2024 | 0.1.6 | Integrated automated claim status notifications |
| 15/03/2024 | 0.1.7 | Added AI-based fraud detection module |
| 22/03/2024 | 0.1.8 | Updated document management system |
| 29/03/2024 | 0.1.9 | Improved analytics and reporting features |
| 06/04/2024 | 1.0.0 | Final version before UAT |

**2. Approvals**

| **Role** | **Name** | **Title** | **Signature** | **Date** |
| --- | --- | --- | --- | --- |
| Project Sponsor | Mr.Nareesh Ropulu | CEO | ----- | 10-01-25 |
| Business Owner | Mr. Daniel Lee | CEO | ----- | 15-01-25 |
| Project Manager | Mr.Ajiith Krishna | VP | ----- | 20-01-25 |
| System Architect | Mr. Kevin Brown | AVP | ----- | 25-01-25 |
| Development Lead | Mr. Jason Clark | Director | ----- | 01-02-25 |
| User Experience Lead | Mrs. Emily Davis | UX Manager | ----- | 10-02-25 |
| Quality Lead | Mr. Robert King | QA Director | ----- | 25-02-25 |
| Content Lead | Mr. Michael Scott | Head of Content Director | ----- | 05-03-25 |

**3. RACI Chart for This Document**

The RACI chart identifies the persons who need to be contacted whenever changes are made to this document. RACI stands for responsible, accountable, consulted, and informed. These are the main codes that appear in a RACI chart, used here to describe the roles played

by team members and stakeholders in the production of the BRD. They are adapted from charts used to assign roles and responsibilities during a project.( RACI Can be made for IT side[Project stakeholder] as mentioned above, apart from that Can also Be made for Client side[Business Stakeholder]).

The following describes the full list of codes used in the table:

* Codes Used in RACI Chart

\* Authorize Has ultimate signing authority for any changes to the document.

**R** Responsible- Responsible for creating this document.

**A** Accountable -Accountable for accuracy of this document (for example, the project manager)

**S** Supports- Provides supporting services in the production of this document

**C** Consulted- Provides input (such as an interviewee).

**I** Informed- Must be informed of any changes.

| **R/A/C/I** | **Resource Name** | **Designation** | **Details** |
| --- | --- | --- | --- |
| **Responsible** | Mrs Kavya Garg | Business Analyst | Mail Id: rm@email.com Phone: 9876543210 |
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|  | Mr. Vikram Joshi | Frontend Developer | Mail Id: vj@email.com Phone: 9988776655 |
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| **Consulted** | Mr. Rajesh Nair | Customer Support | Mail Id: rn@email.com Phone: 9900112233 |

## **4.1 Business Goals**

**Need:**
Currently, Medicaid policy management, document comparison, and real-time updates are handled through multiple disparate applications across various platforms. This decentralized approach results in inefficiencies, delays in accessing critical information, and challenges in maintaining data accuracy.

As a Business Analyst, I propose the **Electronic Claims Library (ECL)** to centralize all Medicaid-related documents in a single application. This will enable real-time updates, seamless data comparison, and improved searchability. By consolidating these functionalities into one platform, the application will enhance efficiency, accuracy, and decision-making for the content team and other stakeholders.

## **4.2 Business Objectives**

To provide an IT solution for:

* Document comparison (Medicaid policy documents and Excel file comparisons)
* Real-time updates from a centralized repository
* Enhanced search and retrieval capabilities
* Centralized Medicaid document storage
* Process automation & efficiency
* Collaboration and knowledge sharing
* Compliance with HIPAA, CMS, and Medicaid regulations

## **4.3 Business Rules**

* The system must comply with HIPAA and CMS regulations.
* User authentication and role-based access control should be implemented.
* The repository should maintain a version history for all documents.
* Search functionality must include keyword-based and filtered searches.
* Real-time updates should be accessible only to authorized personnel.

## **4.4 Background**

As a Business Analyst, I identified inefficiencies in Medicaid document management, where multiple systems were used for policy tracking, leading to data discrepancies and workflow delays. The new system aims to provide a centralized solution to improve accessibility, compliance, and operational efficiency.

## **4.5 Project Objective**

This project will develop a centralized digital repository for Medicaid policies with document comparison, real-time updates, and advanced search features. The platform will help content teams and business analysts track policy changes efficiently and ensure compliance with industry regulations.

## **4.6 Project Scope**

### 4.6.1 In Scope Functionality

* Document comparison for Medicaid policies
* Excel file comparison for claims rules
* Real-time updates from a centralized repository
* Comprehensive search functionality
* Centralized Medicaid document storage
* Workflow automation for claims adjudication rules
* Compliance with regulatory standards

### 4.6.2 Out Scope Functionality

* Mobile application for Android and iOS
* E-learning management system
* HRMS module

## **5. Assumptions**

* All required Medicaid policies will be available for migration.
* Users will receive adequate training for system adoption.
* Stakeholders will provide timely feedback and requirements.
* Internet connectivity is available for real-time updates.

## **6. Constraints**

* Budget limited to Rs. 2 lakhs.
* Implementation timeline restricted to 12 months.
* Integration dependencies on external Medicaid policy sources.
* Compliance with HIPAA, CMS, and Medicaid regulations.

## **7. Risks**

### Technological Risks

* Challenges in integrating with external repositories or claims systems.
* Security vulnerabilities in data transmission and storage.

### Skills Risks

* Limited availability of skilled personnel in Medicaid policy and claims processing.
* Need for training content analysts and business users.

### Political Risks

* Changes in regulatory policies that may affect project scope.
* Resistance from stakeholders used to existing systems.

### Business Risks

* Delayed adoption by end-users, affecting operational efficiency.
* Budget overrun due to unforeseen technical challenges.

### Requirements Risks

* Incomplete or evolving business requirements leading to scope creep.
* Misinterpretation of Medicaid policies affecting rule implementation.

### Other Risks

* Potential downtime during system migration.
* Data loss risks if migration is not handled properly.

## **8. Business Process Overview**

### 8.1 Legacy System (AS-IS)

* Medicaid policy management is decentralized across multiple platforms.
* No centralized repository for document comparison and policy tracking.
* Content teams manually track updates, leading to inefficiencies.

### 8.2 Proposed Recommendations (TO-BE)

* Implement a centralized repository for Medicaid policies.
* Enable document comparison and real-time updates.
* Automate workflow for claims adjudication and compliance tracking.

## **9. Business Requirements**

* **Functional Requirements:**
	+ Document repository with version control.
	+ Advanced search and filtering capabilities.
	+ Real-time updates and notifications.
	+ Document comparison tool for policies and Excel files.
	+ Role-based access control.
	+ Integration with Medicaid and CMS policy sources.
* **Non-Functional Requirements:**
	+ System must support at least 100 concurrent users.
	+ Data must be encrypted in transit and at rest.
	+ System uptime must be at least 99.9%.
	+ Audit logging and compliance tracking should be enabled.

## **10. Appendices**

### 10.1 List of Acronyms

* **ECL** – Electronic Claims Library
* **CMS** – Centers for Medicare & Medicaid Services
* **HIPAA** – Health Insurance Portability and Accountability Act
* **SME** – Subject Matter Expert
* **BA** – Business Analyst
* **UAT** – User Acceptance Testing

### 10.2 Glossary of Terms

* **Electronic Claims Library (ECL):** A centralized digital repository for Medicaid policies with document comparison, real-time updates, and advanced search features.
* **Medicaid:** A government healthcare program providing assistance to low-income individuals and families.
* **Claims Adjudication:** The process of determining the validity and processing of insurance claims.
* **Version Control:** The management of changes to documents, ensuring the most recent updates are accessible.
* **Workflow Automation:** The use of technology to streamline repetitive tasks in the claims review process.

### 10.3 Related Documents

* **COEPD (Centre of Excellence for Professional Development):** www.coepd.com
* **HIPAA Compliance Guidelines** – Ensuring adherence to patient data protection regulations.
* **CMS Policy Updates** – Latest Medicaid and Medicare policy changes affecting claims processing.
* **Business Analyst Role in Healthcare IT** – Documentation related to BA responsibilities in healthcare software projects.

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