

### **INDIA OFFICE**

C 203, World Tech Tower, Phase 8B, SAS Nagar, Punjab (140308)

+91 172 5099507

#### **CANADA OFFICE**

274 Pierre-Mercury, J7V 0X3, Quebec, CANADA

**L** +1 5149095838

### **AUSTRALIA**

L2, 696 Bourke Street, Melbourne, Australia

+61 448806897



WEB-BASED HEALTHCARE APPLICATION FOR PATIENT DATA MANAGEMENT AND AUTOMATED CLINICAL REPORTING DESIGNED TO HELP FACILITIES MANAGE PATIENTS, UPLOAD PDF REPORTS, AND AUTO-GENERATE CLINICAL LISTS (NTA COMPONENTS, MEDICATIONS, NURSING COMPONENTS)

# FROM CLIENT

Client were facing growing operational and clinical bottlenecks that made PDPM essential for our facility. Manual chart review of scattered PDF reports consumed clinician and admin time, causing delays in care and missed billing opportunities. Our patient data lived in fragmented silos, making coordination and reporting difficult. We struggled with;



MANUAL PDF REVIEWS WASTED CLINICIAN AND ADMIN TIME



DELAYS IN CARE DUE TO THE SLOW EXTRACTION OF CLINICAL INFORMATION.



DOCUMENTATION GAPS TRIGGERED BILLING ERRORS AND REVENUE LEAKAGE



INACCURATE EXTRACTION OF NTAS, MEDS, AND NURSING NEEDS



HIGH RISK OF AUDIT FAILURES AND COMPLIANCE GAPS.



FRAGMENTED PATIENT DATA BLOCKED COORDINATION AND REPORTING



# MANUAL ENTRY LED TO FREQUENT TRANSCRIPTION ERRORS



SLOW TURNAROUND FOR STANDARDIZED CLINICAL SUMMARIES



ADMIN COSTS ROSE WHILE CLINICIAN PRODUCTIVITY FELL



LACK OF AN AUDITABLE, REPEATABLE PROCESS FOR CLINICAL REPORTS



At Techbit Solutions, our mission is to empower healthcare providers with secure, AI-driven automation that transforms unstructured clinical documents into accurate, auditable, and actionable insights—so clinicians spend less time on paperwork and more time on patients.

# **OUR COMMITMENTS FOR THE PROJECT WERE**









**CONTINUOUS IMPROVEMENT** 



Our objective was to develop a secure, AI-powered application that automates the extraction of clinical information from PDF reports and generates standardised, auditable outputs. We intended to reduce manual effort, improve billing accuracy, and centralise patient data while ensuring compliance.

The solution was designed to enhance clinician productivity, lower administrative costs, streamline workflows, and provide healthcare facilities with faster, more reliable insights for better patient care and operations.

# **OBJECTIVE DEFINED TO ELIMINATE**

- Automate extraction of NTAs, medications, and nursing needs.
- Standardize and centralize patient data for easy access.
- Reduce manual chart review time and errors.
- Improve billing accuracy and minimize revenue leakage.
- Strengthen compliance through auditable, repeatable reporting processes.
- To enhance clinician productivity by cutting administrative overhead.



### **FRONTEND**











### **BACKEND**













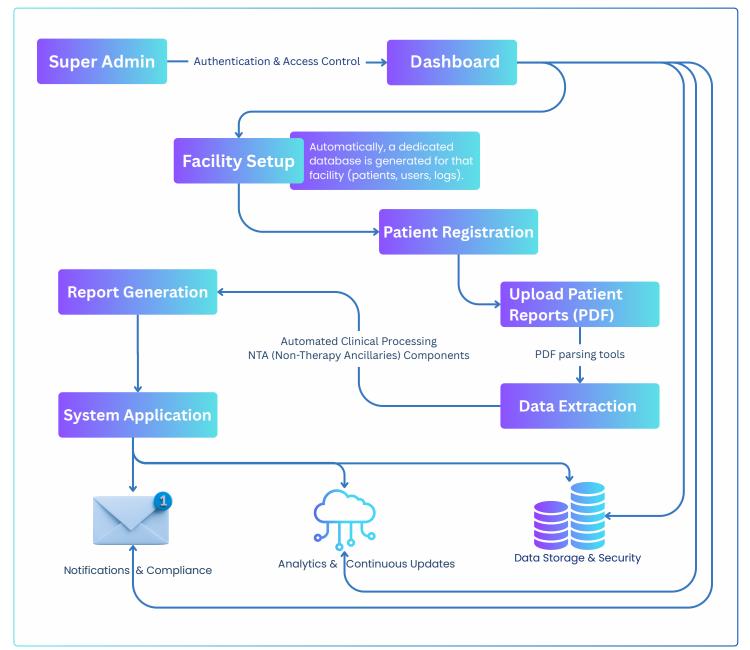


SOFTWARE DEVELOPMENT IS A DYNAMIC AND COMPLICATED PROCESS SINCE THERE ARE SEVERAL INTERRELATED FACTORS THROUGHOUT THE SOFTWARE DEVELOPMENT PROCESS. IT IS OBSERVED THAT QUALITY SUFFERS WHEN APPROPRIATE AND INDIVIDUAL FOCUS IS NOT GIVEN TO EACH DEVELOPMENT PHASE.

Techbit team built comprehensive solution delivering proactive service, increasing profitability, optimizing operational efficiencies and driving higher customer retention. Integration of Sage, Quickbooks, MYOB and Xero were done for accounting module which store and manage sophisticated information with performing arithmetic / account operations at backend. Organisations after integration can efficiently managing data related to campaign management, contact management, quoting, selections, contracts and inventory.

Biggest challenge was to migration of the existing big database with automating all the paper (Documents, Forms & all) work to digital. The team anticipated the challenges prior to development and resolved the database migration with 'Server Log shipping' to send transaction log from a primary database on a primary server to a separate secondary datacenter containing two databases of about 1TB.



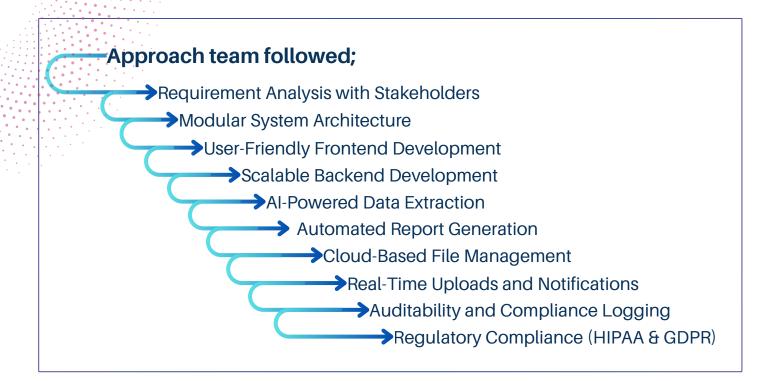


# **PDPM Environment**

# APPROACH>>>>>>>>

Our team approached the PDPM project with a clear vision to replace manual, error-prone processes with a secure, intelligent, and scalable solution. We started by deeply understanding the client's operational challenges, from fragmented patient data to delayed clinical reporting. With these insights, we designed a modular system architecture that empowered Super Admins and Facility-level users with distinct workflows.

By combining Al-driven document analysis, automated reporting, and cloudbased storage, our team ensured accuracy, compliance, and efficiency while preparing the platform for future growth.





The application Team built under the PDPM model delivers significant business impact by automating patient data management and clinical reporting. It enables healthcare facilities to reduce manual effort, improve billing accuracy, and centralise patient data. With built-in compliance, secure cloud storage, and scalable architecture, the platform addresses operational bottlenecks while preparing organisations for growth.

By streamlining reporting and ensuring audit readiness, the application allows clinicians to focus on patients and administrators to focus on performance, ultimately improving both care quality and efficiency.

### OPERATIONAL EFFICIENCY



# **Operational Efficiency**

The application automates complex workflows, reducing manual processing and saving staff hours.



### **Billing Accuracy**

Al-powered extraction improves coding and reporting accuracy, protecting revenue streams.



# **Compliance Assurance**

Integrated audit logs and secure data handling ensure HIPAA and GDPR compliance.



### **Scalability**

Facility-specific databases and AWS cloud support seamless growth across multiple sites.



### **Cost Savings**

Facility-specific databases and AWS cloud support seamless growth across multiple sites.



### **Centralized Data Access**

Patient information is consolidated into a single, reliable, and accessible platform.



### **Better Patient Outcomes**

Faster and more accurate clinical reporting enables timely decisions and coordinated care.



### **Increased Productivity**

An intuitive, user-friendly interface boosts staff efficiency and adoption.





techbit

Copyright Techbit Solutions Pvt Ltd. INDIA

Techbit Solutions Software Group C 203, Phase 8B, World Tech Tower, Industrial Area, Sahibzada Ajit Singh, Mohali (Punjab) INDIA

Document of Techbit and Generated in Mohali India.

This document is current as of the initial date of the publication and may be changed by Techbit at any time. Not all the offering will be provided very instant but will be allocated based on the in-dependability of team Actual performance results may very depending on specific configuration and operation condition. For more you can contact on: info@techbitsolution.com

THIS INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT.

Techbit Solutions are services according to the terms and conditions of the agreements under which they are provided.



