

Unified Healthcare Data and Care Management Platform.

February 2024 - Ongoing (Active development and support).



I. SUMMARY

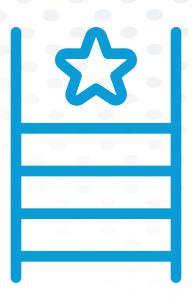
Delivered for a healthcare client aiming to consolidate fragmented healthcare data and automate core services around Utilization and Care Management.

II. PROBLEM STATEMENT

The client struggled with fragmented healthcare data across multiple medical record systems, leading to inefficient manual workflows, difficulty in proactive care coordination, and increased IT overhead. The goal was to unify data in a secure, compliant platform, automate workflows, embed analytics for proactive care, and reduce reliance on additional IT resources.

III. TECHNOLOGIES USED

- Frontend: HTML5, CSS, JavaScript, Bootstrap, jQuery
- Backend: C#, ASP.NET MVC, Entity Framework 6
- Database: SQL Server, Azure SQL
- Testing: xUnit
- DevOps / Cloud: Azure DevOps, Azure Functions, Azure Storage, Azure Service Bus
- Task Mgmt: Azure Repos, Microsoft Teams, Jira



IV. OUR APPROACH

- Data Integration: Built secure APIs to ingest and normalize healthcare data.
- Compliance & Security: Implemented encryption, granular access control, and audit logging.
- Automation: Enabled configurable workflows and rule-based engines to streamline core processes.
- Scalability: Designed metadata-driven architecture for rapid deployment and dynamic UI updates without coding.

V. KEY FEATURES

- Modular architecture (Management Portal & Next Generation).
- Auto-save with DB-first EF6 design and robust role-based access.
- Multi-case management (Appeals, UM, CM, Assessments).
- Dual login tailored for clients and providers.
- Mobile offline support with sync and smart dashboards.



VI. CHALLENGES FACED

- Complex dynamic UI requiring rigorous testing.
- Ensuring stable, seamless auto-save.
- Overhead of managing schema changes in DB-first EF6.
- Maintaining data integrity across multiple case types.
- Designing secure, scalable dual login access models.

VII. OUTCOME/RESULT

- The project delivered a scalable, secure, and feature-rich healthcare platform that streamlined operations and empowered both providers and clients.
- Faster workflows and reduced manual effort improved overall efficiency.
- Real-time analytics and dashboards enabled proactive care coordination.
- Configuration-driven deployment minimized IT overhead and ensured scalability."

