

Case Study

Healthcare Organization Streamlines Clinical Operations and Patient Management with a Purpose- built EHR on Dynamics 365



Customer Overview



Customer

A leading nonprofit dedicated to serving blind and low-vision individuals across North America.



Profile

Headquartered in San Francisco, the nonprofit provides education, training, and advocacy with universal design principles.



Industry

Nonprofit



Services

Custom EHR Design, Development & Phased Rollout | Microsoft Dynamics 365 CRM |

Business Need

The nonprofit organization needed to replace siloed clinical processes with a unified, secure, and accessible digital health platform, built from the ground up for visually impaired end users. Challenges included:

- **Fragmented Operations:** Patient intake, scheduling, billing, and clinical documentation ran on disconnected systems.
- **No Unified Patient System:** No single platform to manage patient profiles, encounters, and clinical data.
- **Manual, Error-prone Processes:** Appointment scheduling, insurance tracking, and referral management were handled manually.
- **Data Governance Gaps:** Absence of role-based access controls led to compliance risks.
- **No Single Reporting Platform:** Inability to generate billing codes or compliance reports from one place.
- **No Digital Signatures:** Patient consents and prescriptions required physical document handling.

The nonprofit also had a non-negotiable accessibility requirement: Full keyboard navigation and screen reader support (JAWS/NVDA).



Solution and Approach

Synoptek partnered with the nonprofit to design and deliver a fully custom EHR application on Microsoft Dynamics 365 CRM. The project was structured as a phased Agile engagement across four major phases and 13+ sprints, ensuring continuous delivery with minimal disruption.



Purpose-Built EHR Platform

Custom D365 CRM forms and entities for vision rehabilitation workflows, covering patients, encounters, insurance, and clinical documentation.



Security & Document Management

Role-based security across all staff levels. SharePoint integration centralizes documents and automates address lookups and clinical templates.



Smart Automation & Integration

Payment and insurance tracking with automations: zip-code-driven address population, auto status updates, and encounter reminders.



Accessibility by Design

Full keyboard navigation and screen reader compatibility (JAWS/NVDA) were built as a core foundation.



DocuSign & Integrations

SharePoint document management was fully embedded in clinical workflows. DocuSign e-signatures eliminate physical document handling.



Reporting & Compliance

SSRS Individual Service Plans, clinical recap reports, and billing code management (CPT, ICD-10, HCPCS) were enabled from a single platform.

HIPAA Compliance & Security-First Architecture

Security and HIPAA compliance were treated as foundational requirements from day one. Every design decision, data model, and workflow was evaluated through a security lens to ensure protected health information (PHI) remained safeguarded at every touchpoint.



HIPAA at the Core

Every design decision, data model, and workflow was evaluated through a security lens to ensure PHI is safeguarded at every touchpoint.



Security Roles & Teams

Comprehensive security roles and teams were configured within D365 to enforce strict access control. Each staff role assigned granular permissions.



SharePoint Isolation

SharePoint was configured such that document access was strictly mediated through the EHR application, enforcing record-level security on all clinical documents.



Encounter-Level Security

Clinical encounters were secured through custom code; visit notes, assessments, and treatment plans were accessible only to authorized personnel.

Business Benefits

The custom EHR implementation delivered measurable improvements across clinical operations, compliance, and staff productivity, transforming the way the nonprofit serves its patients and programs.

Unified EHR Platform

Replaced fragmented processes with a single purpose-built EHR on D365, centralizing patient data, encounters, scheduling, and documentation, and improving user efficiency by **~20%**

Multi-Program Scalability

Supports Low Vision Clinic, ECM, Community Health, and STD Services with tailored forms and role-based access per program.

Automated Workflows

Streamlined enrollment, referrals, waitlists, and notifications, increasing operational efficiency by **~25%**

HIPAA-Grade Security

Role-based access, SharePoint document isolation, and custom encounter-level security ensuring PHI protection at every touchpoint.

Integrated Care Delivery

Connected SharePoint, DocuSign, and automated reporting to reduce administrative effort and improve collaboration.

Accessibility by Design

Full keyboard navigation and screen reader compatibility (JAWS/NVDA) ensuring staff with low or no vision can work without barriers.

Appointment Management

Automated scheduling, reminders, and Outlook integration improved appointment efficiency by **~15%**

About Synoptek

Synoptek is the first IT Managed Experience Provider (MxP™), delivering AI-enabled automation, strategic modernization, and experience-led outcomes. Its services span Cloud and Agile Infrastructure, Business Applications and Platform Development, Customer and Employee Experience, and Cybersecurity. With a business-first approach and a global delivery model, Synoptek helps organizations optimize operations, accelerate transformation, and achieve measurable results—guided by a culture rooted in growth, ownership, inclusiveness, and philanthropy.



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