



Charter Global

CASE STUDY – Powering Proactive Healthcare: Automating EMR System Readiness

Client Overview

The client is a renowned U.S.-based healthcare provider focused on advanced eye care and surgical services. With a network of clinics across the region, the organization depends on a proprietary electronic medical record (EMR) system—NexGen—to manage patient information, streamline clinical workflows, and support daily operations across its facilities.

Business Challenges

To ensure system readiness, the client's IT team conducted a manual validation process each morning to confirm that the NexGen platform was operating as expected. However, this approach came with several drawbacks:

- **Time-Consuming Process:** Daily manual testing required early intervention from IT personnel, reducing their availability for strategic tasks.
- **High Dependency on Individuals:** The process was reliant on the presence and consistency of a specific IT team member, increasing risk during vacations or absences.
- **Inconsistent Test Execution:** Manual execution led to variability in test coverage, increasing the chance of missed or incomplete validations.
- **No Real-Time Alerts:** Errors discovered during manual checks lacked automated notifications, delaying issue detection and response.

- **Limited Scalability:** As the organization expanded, the manual process became increasingly unsustainable and difficult to scale.

The client required an automated, scalable, and reliable solution to maintain system readiness and reduce the operational burden on their IT staff.

Charter Global's Solution

Charter Global partnered with the client to automate the daily system testing and integrate real-time alerting using Microsoft technologies. The solution provided a consistent, scalable, and proactive approach to system validation.

1. Process Automation with Microsoft Power Automate Desktop

- Automated login through Citrix to access the NexGen application.
- Verified accessibility of sample patient records and documentation.
- Ensured all relevant forms loaded and functioned as expected.
- Designed workflows initially in the development environment and recreated them in production due to export limitations of Power Automate Desktop.

2. Real-Time Alerts via Azure Communication Services

- Implemented SMS alerts to notify the IT team of any system errors or inconsistencies detected during automation.
- Designed workflows initially in the development environment and recreated them in production due to export limitations of Power Automate Desktop.
- Guided client through procurement and verification of Microsoft-approved phone numbers to activate alert services.

3. Collaborative Implementation

- Conducted discovery sessions to document existing manual steps and align on automation goals.
- Built an architecture that integrated seamlessly with Citrix, NexGen, and Azure services.
- Provided client-side support and knowledge transfer for Azure credential management and configuration.
- Maintained weekly progress reviews to monitor milestones, track feedback, and resolve challenges collaboratively.
- Deployed and validated the final solution in production after rigorous testing in the development environment.

4. Technical Problem-Solving

- Resolved initial Citrix access delays through joint troubleshooting efforts.
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- Aligned local Power Automate Desktop environments with standardized configurations.
- Provided step-by-step support for Azure setup due to restricted access.
- Minimized delays in phone number verification by parallelizing efforts in the dev environment.

Business Impact

The automation solution delivered significant operational benefits:

- **Consistent System Readiness:** Daily checks were automated, ensuring reliable performance validation of the NexGen platform.
- **Improved Efficiency:** IT staff were relieved from repetitive manual tasks and could focus on high-value initiatives.
- **Reduced Downtime Risk:** Real-time alerts enabled immediate issue resolution, minimizing disruptions to clinical operations.
- **Scalable Framework:** The solution was designed for future growth, allowing integration of additional test scenarios as needed.
- **Enhanced Patient Care:** Ensuring timely access to patient data each morning supported seamless clinical operations and high-quality patient service.

Why Charter Global?

- **Industry Knowledge:** Experienced in healthcare IT systems, workflow automation, and cloud platforms.
- **Tailored Solutions:** Customized implementation aligned with the client's unique workflows and regulatory environment.
- **Collaborative Execution:** Maintained transparency, frequent communication, and cross-functional alignment throughout the project lifecycle.
- **Proven Technical Expertise:** Skilled in leveraging Microsoft Power Automate, Azure Communication Services, and Citrix integration.
- **Trusted Partnership:** Provided ongoing support and value-added guidance beyond implementation, reinforcing long-term client confidence.