

Case Study

Modernized Patient Engagement with a Scalable Dynamics 365 Communication Framework



Customer Overview



Customer

A global healthcare and life sciences technology organization



Profile

The customer provides advanced analytics, technology solutions, and clinical research services across the global healthcare and life sciences ecosystem.



Industry

Healthcare & Life Sciences



Services

Microsoft Dynamics 365 Customer Engagement | Microsoft Power Platform

Business Need

The organization sought a scalable communication framework to improve patient engagement through timely, automated SMS interactions. The solution also needed to meet stringent healthcare consent requirements while integrating seamlessly into its existing Dynamics 365-based patient relationship management platform. Challenges included:

- **Lack of Automated Communication** - Patient communications lacked event-driven SMS capabilities, creating dependence on manual outreach and inconsistent engagement.
- **Fragmented Messaging** - There was no centralized framework to trigger, manage, and standardize SMS workflows across patient programs.
- **Consent & Compliance** – The organization required stringent consent validation and reliable opt-in/opt-out management to support regulatory requirements.
- **Limited Visibility** - Teams lacked unified visibility into SMS delivery status, failures, and communication lifecycle events.

The organization needed a reusable solution that could be developed centrally and deployed rapidly across multiple client implementations without duplicating development effort.



Solution and Approach

Synoptek designed and implemented a Relay SMS Integration framework within Dynamics 365 PRM, creating a reusable core capability for automated and compliant patient communication. Developed using an Agile delivery model, the framework combined Power Automate, Relay APIs, consent management, scheduling, and lifecycle tracking to support multiple healthcare programs and client environments.

Event-Driven SMS Automation

- Developed Power Automate flows to automatically trigger SMS communications based on events such as patient enrollment, case updates, and consent changes.
- Enabled both automated and user-initiated SMS communications to support different patient engagement scenarios.
- Established cadence-based scheduling to deliver timely, program-specific communications.

Relay API Integration

- Developed custom connectors to integrate Dynamics 365 with Relay APIs.
- Enabled SMS delivery along with patient opt-in and opt-out processing.
- Established structured communication between Dynamics 365, Power Automate, and Relay services.



Solution and Approach

Consent & Compliance Framework

- Embedded consent validation at both patient and communication levels.
- Supported controlled opt-in and opt-out workflows before messages were generated.
- Established communication logging to support monitoring and compliance requirements.

Resilient Communication Management

- Implemented automated retry mechanisms and structured error handling for failed SMS deliveries.
- Captured message lifecycle events from Pending → Sent → Failed.
- Provided detailed logs to improve troubleshooting, monitoring, and operational visibility.

Communication Asset Management

- Created reusable SMS templates and communication assets.
- Standardized messaging across programs while allowing configuration for individual client requirements.
- Simplified ongoing management of communication content.



Core Product Model – Build Once, Scale Across Clients

Synoptek follows a centralized product development model in which new capabilities are developed within the customer's Dynamics 365 core product and subsequently distributed across client implementations. This approach maintains a unified product foundation while allowing targeted configuration for individual client requirements.

1

Build in the Core Product

New functionality is developed once within the Dynamics 365 PRM core product, creating a reusable foundation and a single source of truth.

2

Pilot with the Initiating Client

The capability is first deployed to the client that initiated the requirement, enabling real-world validation before broader rollout.

3

Demonstrate & Validate

Once validated, the functionality is demonstrated to other clients to review its applicability and obtain implementation sign-off.

4

Scale Across Clients

The proven capability is distributed across applicable client environments without duplicating core development.

5

Customize for Individual Needs

Light-touch customizations, including branding, workflows, data mappings, and client-specific business rules, are applied while preserving the core architecture.

One Core Product | Reusable Capabilities | Multiple Client Environments | Client-Specific Configuration

Business Benefits

The Relay SMS integration established a scalable patient communication foundation that improved engagement, reduced manual effort, strengthened compliance, and enabled the organization to rapidly extend proven functionality across multiple healthcare clients.

90% Reduction in Verification Delays

Automated benefits verification significantly accelerated eligibility checks and reduced delays in patient onboarding.

100% Trackable SMS Communication

Enabled complete visibility into the SMS lifecycle, including message status, delivery tracking, failures, and retry mechanisms.

Strengthened Regulatory Compliance

Embedded consent validation and opt-in/opt-out controls into messaging workflows ensured compliance with healthcare regulatory requirements.

Reduced Manual Effort

Automated SMS workflows and benefits verification reduced dependence on manual processes and improved operational efficiency.

Improved Patient Engagement

Enabled real-time, event-driven SMS communications and benefits checks, providing patients with more timely and consistent interactions.

Centralized Communication Management

Unified Dynamics 365 PRM, Core Services, and Relay APIs to provide a consistent framework for triggering, managing, and tracking patient communications.

Improved Platform Resilience

Automated retry and error-handling mechanisms improved communication reliability and supported scalable patient engagement.

Accelerated Client Rollouts

The reusable core-product framework can be deployed across multiple client environments with minimal configuration, reducing duplicate development effort.

Additional Solutions Delivered

Beyond the Relay SMS framework, Synoptek continues to provide Dynamics 365 development, enhancements, and production support while developing reusable capabilities within the core platform.

Automated Benefit Verification Integration

Integrated an AI-enabled medical benefit verification solution to automate decisioning based on insurance rules, reducing manual effort and improving processing accuracy across client workflows.

Data Archival & SQL Virtual Table Framework

Implemented a scalable data archival framework using automated pipelines and configuration-driven processes. The solution enabled access to historical Dataverse data while improving platform performance and supporting scalable data management.

Dataverse Virtual Table Integration

Built a reusable framework connecting Dynamics 365 with external SQL data sources, providing real-time access to external data while reducing duplication and supporting scalable integrations.

User Feedback Management

Developed a structured feedback management solution with controlled submission workflows, validation rules, role-based visibility, personalized views, and status-driven governance to improve user experience and operational oversight.

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.



Pacific Arts Plaza, 611 Anton Blvd., Suite #925,
Costa Mesa, CA 92626



303-728 3335



salesinquiries@synoptek.com



www.synoptek.com

