C3.ai

Enhancing Member Experience and Service Quality with Generative AI

Providing exceptional customer service is a core tenet of many industries, but in the healthcare and life sciences industry, the stakes are higher because delays and incomplete resolutions directly impact patient health outcomes. When patients can't access their medications or resolve coverage issues, the consequences can be immediate and severe. Organizations must balance compliance and operational efficiency while ensuring every step of the patient journey is supported with timely, accurate, and empathetic assistance.

For pharmacy benefits management (PBM) companies, where every interaction can mean the difference between a patient receiving critical medication or going without, an enterprise-grade solution with security, scalability, and governance capabilities is a requirement. Service representatives must navigate complex benefit structures, formularies, and claims systems — resolving urgent medication needs and rejected claims while managing protected health information (PHI). This high-stakes environment demands not just speed and accuracy, but the ability to provide compassionate support when members are at their most vulnerable.

With C3 Generative AI, PBMs can reduce time to resolution and improve first-call resolution rates by providing representatives with real-time member information and accurate answers. C3 AI Data Fusion creates a 360-degree view across multiple systems, enabling faster, more informed decision making. Built-in compliance controls, including HIPAA safeguards, ensure secure access to sensitive data while maintaining accuracy and response times that exceed industry benchmarks — delivering enterprise-grade performance beyond what generic AI solutions can provide.

Results

99.3%
Accuracy achieved for data retrieval

>15%
Reduction in total call handle time

100%
First call resolution achieved during a seven-day evaluation period

Challenges

Call center representatives at pharmacy benefit managers (PBMs) play a crucial role in navigating the complexities of the U.S. healthcare system. These representatives serve as the critical link between patients, pharmacies, insurers, and healthcare providers, handling everything from medication coverage inquiries to prior authorizations. However, the complexity of their role — stringent regulations (e.g. HIPAA), highly sensitive patient healthcare data, strict internal processes and protocols, steep training and experience requirement — created significant operational challenges.

Before implementing C3 Generative AI, representatives had to interact with four separate applications, each with different interfaces and connecting to different data sources. This fragmented system made it difficult and time-consuming to ensure accurate information across all applications. Representatives often struggled to maintain accuracy while navigating multiple systems during member calls, which increased the risk of misinformation and extended call durations. Additionally, the quality and speed of service varied based on the representative's training, experience, and expertise. This inconsistency created a system-wide challenge in standardizing service quality.

Solution

To address these challenges, the company deployed C3 Generative AI configured specifically for their highly regulated healthcare environment. C3 Generative AI is built for enterprise applications, ensuring:

HIPAA-compliant architecture
Designed with strict data security and access controls to protect PHI and meet regulatory requirements.

Seamless integration with enterprise databases
Directly connects with secure internal systems, claims databases, and compliance platforms, enabling real-time, context-aware responses.

Deterministic responses
Unlike ChatGPT, which generates probabilistic text, C3 Generative AI provides fact-based, auditable answers, ensuring consistency and accuracy.

Enterprise governance and security
Unlike consumer-grade AI models, C3 AI operates within corporate IT environments, offering custom policies, role-based access controls, and data traceability.

C3 Generative AI provides the company with a unified interface that consolidates member details, case histories, and claims information in one place — eliminating the need for representatives to toggle between multiple systems. This significantly reduces time spent searching for information while ensuring accuracy, compliance, and efficiency.

About the Company

- Serves 1M+ members across 3.5K+ employers
- Saves clients $200M+ in annual drug costs
- 12M+ annual prescriptions processed through the platform
- 98% client retention rate (vs. industry average of 82%)
- 68K+ pharmacy network partnerships

Key Capabilities

- Natural Language Drug Query Chat: Enables medication coverage checks with flexible search queries
- Member Summary: Consolidates caller history and context for immediate access
- Case Summary: Transforms lengthy notes into concise, actionable case overviews
- Smart Knowledge Base: Makes company documentation searchable and instantly accessible

Key AI-Powered Capabilities:

1 Context-Aware Responses:
C3 Generative AI pulls structured data from verified enterprise sources, ensuring responses are accurate and aligned with company policies.

2 Real-Time Claims & Benefit Navigation:
Secure integration with claims and benefits databases allows representatives to quickly verify coverage, process authorizations, and resolve inquiries without delay.

3 Automated Compliance & PHI Handling:
Built-in data masking, audit logs, and access controls ensure compliance with HIPAA and internal security mandates at all times.

4 Agent Assist & Standardization:
AI-generated call summaries, suggested next steps, and knowledge recommendations help standardize responses across representatives, improving service quality and efficiency across the organization.

By leveraging C3 Generative AI's enterprise-grade security, deterministic responses, and deep integration with healthcare systems, PBMs can enhance customer service, maintain compliance, and optimize operational efficiency — capabilities that consumer-grade AI models simply cannot provide.

Project Outcome

C3 Generative AI transformed customer support operations, ensuring that every member inquiry—especially those involving urgent medication needs—was resolved quickly, accurately, and completely.

The solution cut total call duration by 15.6%, accelerating resolutions while reducing friction for both members and agents. The drug eligibility query system delivered precise answers in just seconds with 99.3% accuracy, allowing representatives to provide immediate, reliable guidance on coverage and formulary issues without manual searches or delays.

Beyond efficiency, C3 Generative AI ensured that every case reached full resolution, not just a partial answer. By dynamically surfacing the next best action—whether submitting a prior authorization, escalating a claim, or identifying alternative covered medications—agents could proactively guide members through the entire process, eliminating back-and-forth follow-ups.

C3 AI's real-time, secure data integrations empowered agents to resolve complex cases in a single interaction, ensuring that members received clear, actionable solutions without delays or uncertainty.

The application is a one stop shop with data integrated from multiple data sources

Member Summary
Gives agent member context & engagement interactions
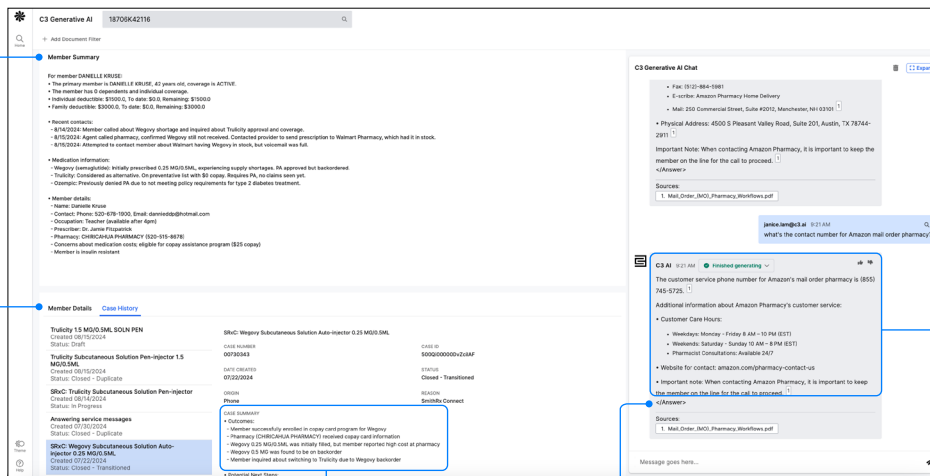
Member Details
Provide key member information immediately

Case Summary
Surfacing summary and suggested next steps on each case

DCC Integrated Chat
Agents can ask drug eligibility and alternative medication questions directly on chat with precision

C3 Generative AI Chat
Provide interactive help to surface accurate next step and guidance directly from training materials

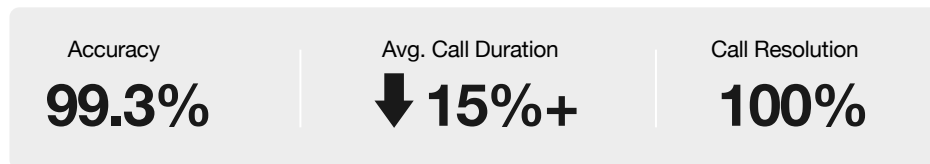| Accuracy	Avg. Call Duration	Call Resolution
99.3%	⬇ **15%+**	**100%**

Figure 1. A unified interface that brings together member details, case histories, and claims information in one place. This integration alone significantly reduced the time representatives spent switching between systems.
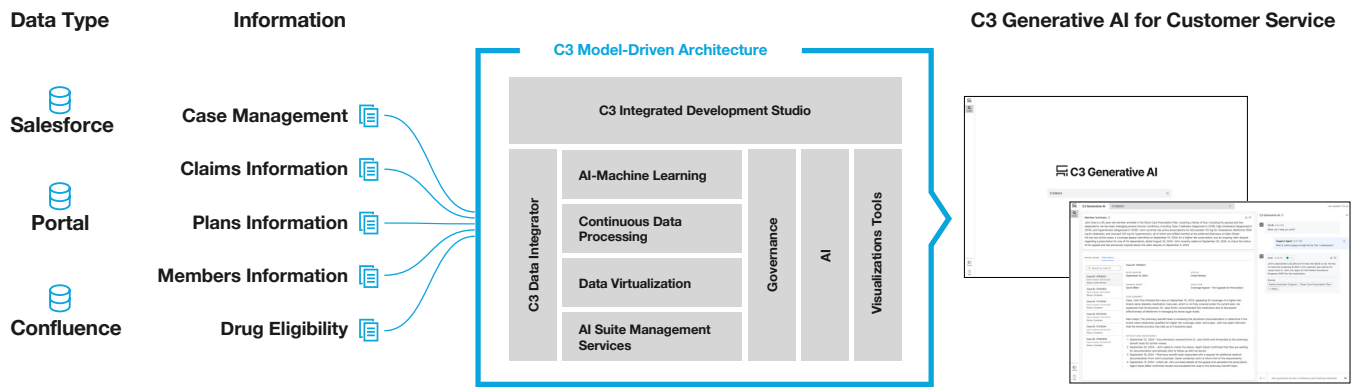
Figure 2. C3 AI deployed a comprehensive AI-powered solution that transformed how representatives' access and utilize information during calls. The solution unified data retrieval across different systems while adding intelligent features to streamline common tasks.

Conclusion

This implementation demonstrates how enterprise-grade AI — designed for security, compliance, and real-time enterprise data integration — can transform healthcare member service operations while maintaining the high accuracy standards essential in healthcare. Unlike consumer AI models, C3 Generative AI ensures HIPAA compliance, deterministic responses, and seamless connectivity with secure databases, empowering representatives with instant, accurate, and regulatory-compliant insights.

By combining intelligent automation with enterprise governance and user-friendly design, the solution enabled representatives to focus on empathetic, high-value service rather than struggling with fragmented systems. The success of this implementation highlights the potential for AI to address similar challenges across highly regulated industries — where customer service teams must balance efficiency, compliance, quality, and accuracy.

As organizations continue to prioritize customer experience, C3 Generative AI proves that Enterprise AI doesn't just automate workflows — it enhances human interaction, ensuring faster resolution times, improved service quality, and uncompromising security.