

TRANSFORMATIONAL GROWTH LEADERSHIP

Reimagining Patient Engagement: How Puppeteer.ai is Redefining the Digital Front Door with Agentic AI

Federico Ruiz

CEO of Puppeteer.ai

in conversation with

Alejandra Parra

Research Analyst, Frost & Sullivan





As healthcare systems worldwide grapple with rising patient expectations, workforce constraints, and fragmented digital experiences, Puppeteer.ai is pushing boundaries with agentic AI designed to truly engage patients, autonomously and safely. In this exclusive Transformational Growth Leadership (TGL) conversation, **Federico Ruiz**, CEO of **Puppeteer.ai**, shares the company's vision of intelligent agents that don't just talk but act, remember, and adapt. Frost & Sullivan's **Alejandra Parra** spoke with Ruiz at HIMSS Chile 2025 to explore how Puppeteer is turning everyday clinical tasks into smart, scalable interactions.

Building Agentic Intelligence for Healthcare

Alejandra Parra: *Federico, Puppeteer talks about “agentic AI” instead of chatbots. How do you define this, and what makes your agents fundamentally different?*

Federico Ruiz: To us, agentic AI means autonomy with purpose. Our agents don't just respond—they handle complete workflows like intake, triage, and

appointment scheduling from start to finish. They remember past conversations, adapt behavior based on patient inputs, and act on clinical data in real time. For example, if a patient mentions dizziness after starting a medication, the agent won't just acknowledge it, it will track that symptom, follow up later, and escalate if it persists. This is real healthcare intelligence—not just scripted conversation.

Fastest Path to ROI: Intake & Scheduling

Alejandra Parra: You automate multiple touchpoints across the care journey. Which use cases have delivered the fastest ROI for your clients?

Federico Ruiz: Intake and appointment scheduling lead the way. These tasks take up a lot of staff time and are prone to errors or drop-offs. By automating them, clinics reduce friction, increase show rates, and unlock staff time. In one clinic, automating appointment reminders and rebooking led to a 70% patient response rate and over half of those converted into bookings.

Seamless EHR Integration with Conversational Memory

Alejandra Parra: How do your agents integrate with backend systems like EHRs [Electronic Health Records] and CRMs [Customer Relationship Management]? And how do you maintain consistent memory across channels?

Federico Ruiz: Our agents connect securely to EHRs, CRMs, and even wearables via APIs. They read and write structured data in real time. As for memory, we use structured, minimal context tied to patient IDs, not raw transcripts. So, when a patient moves from SMS to voice or a web widget, the agent remembers their prior symptoms,

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appointments, or interactions. This allows for fluid, human-like continuity.

Personalization, Privacy, & Practicality

Alejandra Parra: Longitudinal memory adds value but how do you ensure it aligns with privacy and data minimization principles?

Federico Ruiz: We only store what's clinically relevant. Memory is purpose-driven and structured, we don't log full transcripts unless required. All data is HIPAA ([Health Insurance Portability and Accountability Act](#))-compliant and encrypted end-to-end. Patients don't want to repeat themselves, but they also want to feel secure. We make that possible by storing only what's essential.

“We are not just automating conversations—we are transforming clinical access through intelligent action. That’s the power of agentic AI in healthcare.”

— Federico Ruiz, CEO, Puppeteer.ai

Clinical Impact of Contextual Intelligence

Alejandra Parra: Can you share a real-world example where memory-based personalization improved care?

Federico Ruiz: Sure. A patient being treated for depression mentioned nausea after starting a new medication. The agent remembered this, followed up proactively, and eventually escalated to the clinician when symptoms persisted. This led to a medication switch and better adherence. Without contextual memory, this would've been lost in the cracks.

Conversational Quality Across Channels

Alejandra Parra: Puppeteer agents work across SMS, voice, web, and apps. What were the biggest challenges in ensuring consistent quality across these modalities?

Federico Ruiz: Each channel has different constraints. Voice requires brevity and natural turn-taking. SMS demands clarity in short bursts. We designed channel-aware behaviors so the same agent adjusts tone, timing, and structure depending on the platform. Memory and state are centralized, so conversations can transition smoothly between channels without losing context.

Guardrails for Safe, Compliant Conversations

Alejandra Parra: How do you prevent hallucinations or off-topic responses while staying flexible in conversation?

Federico Ruiz: We use **retrieval-augmented generation (RAG)** with strict SOPs (Standard Operating Procedures). Every response is grounded in client-approved documentation. We also have behavior-level guardrails: if a user asks an off-limits question, the agent triggers a fallback response or escalates. Before deployment, we run scripted QA, hallucination checks, and human review.

Real-Time Escalation & Human-in-the-Loop

Alejandra Parra: How do your agents handle red flags and route to human teams when needed?

Federico Ruiz: Clinical red flags, like suicidal ideation or chest pain, trigger condition checks. If matched, the agent stops the conversation, sends alerts, or routes to staff with a structured handoff. We integrate with EHRs, Slack, or email to pass summaries and ensure seamless clinician follow-up without starting from scratch.

Protocol-based Triage for Safe AI Routing

Alejandra Parra: You support symptom-driven triage. How do you balance intelligent conversation with clinical safety?

Federico Ruiz: Our triage flows are grounded in **clinical decision trees and validated SOPs**. No guessing—agents follow pre-approved scripts. Hard rules ensure safety, like escalating a fever over 39°C. We run QA on these flows regularly to test accuracy, safety, and consistency.



Measurable Impact: From Bookings to Better Adherence

Alejandra Parra: *What measurable outcomes have your clients seen with agent-driven scheduling and triage?*

Federico Ruiz: Clients report **higher booking conversions, faster intake completion, and reduced no-show rates.** Agents automate nudges via SMS or voice, improving adherence and freeing up front-desk staff. For one sleep clinic, reactivating dormant leads with voice and SMS outreach led to over 70% engagement and more than 50% booking follow-through.

Custom Agents by Specialty—At Scale

Alejandra Parra: *Puppeteer agents work across ophthalmology, orthopedics, mental health, and more. How do you balance specialty depth with scalability?*

Federico Ruiz: Our system is modular. The core logic—memory, scheduling, safety—is shared. What changes is specialty-specific language and logic. For instance, in mental health, the agent uses PHQ-9 and GAD-7; in orthopedics, it asks about mobility or surgery history. We also tailor integrations—like pulling sleep data from wearables.

Operational Speed: Fast Time-to-value

Alejandra Parra: *How quickly can you launch a new agent for a clinic or specialty?*

Federico Ruiz: Technically, a few days. Operationally, we spend 2–4 weeks customizing workflows, testing, and training. Clinics appreciate that they can go live quickly without sacrificing safety or personalization.

Real-time Insights That Drive Optimization

Alejandra Parra: *You offer a robust analytics dashboard. How do clients use it to improve operations?*

Federico Ruiz: Clients track metrics like intake completion, booking rates, and care progression. If they see drop-offs, they adjust flows, maybe rephrasing questions or shifting timing. A/B testing helps compare agent behaviors. The dashboard helps teams refine UX and clinical outcomes, not just track performance.

Feedback Loops and Continuous Improvement

Alejandra Parra: *Do you support ongoing optimization through retraining or feedback?*

Federico Ruiz: Yes. We don't retrain base models but continuously refine prompt logic, behaviors, and workflows based on feedback. Clients run A/B tests, submit QA flags, or share patient ratings. Every improvement loops back into better performance.

Trust, Transparency, and Compliance

Alejandra Parra: *With HIPAA and PIPEDA (Personal Information Protection and Electronic Documents Act) compliance, how do you maintain patient and provider trust?*

Federico Ruiz: We are transparent about what we store. All data is encrypted, audit-logged, and access-controlled. Clients can view logs, transcripts, and decision paths. Our systems are regularly audited to maintain compliance and build long-term trust.

Full Visibility and Explainability

Alejandra Parra: Can providers trace how an agent made a decision or escalated a case?

Federico Ruiz: Absolutely. Every interaction is documented whether text or voice. Providers can review full transcripts, escalation triggers, and structured summaries. The dashboard also shows what the agent did like confirming appointments or reporting symptoms. This visibility is key to trust and accountability.

Flexible Pricing That Scales

Alejandra Parra: With pricing starting around \$1,500/month, how do you support growth across small clinics and larger systems?

Federico Ruiz: We offer **tiered pricing** based on usage and complexity. Smaller clinics can start simple, and health systems can scale up with integrations and advanced workflows. It's built to grow with the client.

Beyond Time Savings: Patient-centric Value

Alejandra Parra: What outcomes beyond operational efficiency do you hear most from clients?

Federico Ruiz: Clients see **higher patient reactivation, better medication adherence, and improved follow-through** on care plans. Patients feel supported and connected, even outside of clinic hours. That's the real value.

Standing Out in a Crowded Space

Alejandra Parra: How does Puppeteer differentiate itself from broader DFD platforms like Fabric or TQA?

Federico Ruiz: We go deep, not broad. We are purpose-built for healthcare from day one. Our agents handle real clinical logic, maintain memory, and integrate deeply with EHRs. Others are generalist platforms—we are vertical specialists.

The Road Ahead: Embedded, Predictive, and Multilingual

Alejandra Parra: What's next for Puppeteer.ai in terms of product roadmap?

Federico Ruiz: We are building **native plugins** for systems like Athenahealth and Healthie. That allows agents to create appointments, update records, and store clinical assessments right in the EHR. We are also expanding **multilingual support, mental health capabilities, and predictive triggers** based on patient behavior or wearable data.

Final Thoughts: Agentic AI as the New Front Door

Alejandra Parra: Where do you see the industry heading in the next 2–3 years?

Federico Ruiz: Agentic AI will be the first point of contact for most patients. It won't replace providers, but it will handle the routine so humans can focus on care. We are not building tools. We are building teammates - intelligent ones that show up 24/7, safely and empathetically.





Federico Ruiz | CEO of Puppeteer.ai

Federico Ruiz Cassarino is the Founder & CEO of Puppeteer, an AI company focused on developing conversational AI solutions specifically for the healthcare sector. With experience gained at Meta, he's dedicated to simplifying the development of Large Language Models (LLM)-based healthcare applications that are HIPAA-compliant. His company provides tools that empower clients to build exceptional conversational solutions like virtual health coaches, patient intake forms, and mental health companions, designed for seamless and engaging user experiences. In addition to his work with Puppeteer, Federico also co-founded LangAI, an AI-powered language learning app. He's a proponent of AI's potential in mental health and digital health in general. He actively shares his knowledge and experiences in the AI space, having participated in workshops and roundtables focused on AI agent design and digital health.



Alejandra Parra | Research Analyst, Frost & Sullivan

Alejandra María Parra is a dedicated Research Analyst at Frost & Sullivan, specializing in the intricate Healthcare and Life Sciences sector. Her work encompasses detailed market research and analysis, focusing on critical areas such as preventive care, mental health, women's health, AI in healthcare, cybersecurity, and interoperability solutions. Alejandra is actively involved in conducting primary research, including interviews and meetings with industry players to gather and validate crucial data. She also plays a key role in analyzing data, generating market forecasts for the Healthcare IT sector, and providing valuable consulting and advisory services to healthcare companies. Her contributions extend to public discourse, sharing insights on the digital transformation within healthcare.

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Appendix: Empowering the Digital Front Door with Agentic AI

For a deeper understanding of how intelligent automation, AI-powered patient engagement, and digital health platforms are transforming care delivery, explore these Frost & Sullivan thought leadership pieces aligned with Puppeteer.ai's mission:

- ▶ [Global Digital Health Outlook, 2025](#)
- ▶ [Growth Opportunities in Clinical Decision Support System](#)
- ▶ [Frost Radar™: Clinical Decision Support Systems in North America, 2025](#)
- ▶ [Generative AI in Payer and Provider IT Transformation, Global](#)
- ▶ [Frost Radar™: Enterprise Conversational AI in Healthcare](#)
- ▶ [Frost Radar™: Patient Monitoring](#)

Each resource offers actionable insight for digital health leaders, clinical innovators, and healthcare executives working to make care more accessible, personalized, and efficient through AI-driven transformation

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