⊁luma™

How Luma's Navigator Uses AI Safely

A guide to empowering your patients with a secure, EHR-integrated AI concierge

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Introduction

Given extremely high security, privacy, and performance requirements, healthcare organizations are justifiably sensitive to the constantly evolving landscape of AI. This document is designed to support healthcare organizations in approving Luma's Navigator product by addressing key concerns around compliance, transparency, business value, and interoperability. This resource aims to simplify the decision-making process for AI governance committees at healthcare organizations. Roles who might use this resource include clinical leaders, executives, data experts, ethics officers, patient advocates, and operational specialists.



What is Navigator?

Navigator is Luma Health's AI-enabled patient concierge. Navigator empowers patients to self-serve with the guided experience of a customer service agent. It combines the best of text, voice, and selfservice, with deeper awareness than self-service, call routing, or a chatbot. Navigator reduces inbound calls, gets patients to their next steps, and creates a delightful experience - for both patients and staff. Learn more <u>here</u>.

"Hi, this is Hayes Valley Health's assistant. How can I h	elp you?"
९₄ +‡ Navigator 4:44 PM	
"Hi, I'd like to reschedule my appointment? my son's appointment."	Oh, actually sorry,
	📞 Chris, 4:45 PM
"Sure! What is your son's first and last name and date of birth?"	



Commitment to Compliance

Navigator is built with privacy and security at its core, adhering to full HIPAA compliance and meeting ISO 42001:2023 (AI Management) standards to align with ISO-level best practices in information security. Navigator builds upon Luma's existing security programs and certifications in this area, including HITRUST CSF r2, ISO 27001:2022, US-EU Privacy Framework and TX-RAMP Level 2. Additionally, our annual SOC 2 Type II process reinforces our dedication to security and compliance. We're committed to the gold standard in healthcare information security. We believe so strongly in our security programs that our policies are available publicly, without NDA at https://policy.lumahealth.io.

Data Protection Measures

Luma employs robust data protection measures to safeguard sensitive information. All data is encrypted both in transit (using a minimum of TLS 1.2) and at rest (AES-256). Access to data is stringently controlled through least-privilege principles, multi-factor authentication, VPNs, and context-aware access. Importantly, Luma's Navigator, powered by our Spark AI, operates under a zero-retention policy, ensuring that no customer or patient data is stored or retained by Luma or its third-party partners. Furthermore, our models are never trained on patient data; all datasets are deidentified or anonymized to maintain compliance with privacy standards. Details of our security and trust programs can be found at <u>https://www.lumahealth.io/security-and-trust/</u>.

Model Updates and Use

Navigator harnesses cutting-edge AI models from trusted partners such as Vapi, Deepgram, OpenAI, Claude, and Elevenlabs. These models are regularly updated, with new versions released periodically typically when they offer significant improvements in capabilities and performance. While there is no fixed schedule, the frequency of updates varies based on the model and ongoing development progress. Luma uses named major versions of models to allow us to track more carefully model changes as they occur and be mindful to track model deprecations.

It's important to note that no customer or patient data is ever used to train any models, and we operate on a zero-retention model, so no data is retained by Luma or any third parties.



Error Rates and Reliability

Navigator is designed to deliver high reliability and accuracy. We are committed to transparency, providing error rate data and performance metrics upon request, supported by real-world use cases that demonstrate its effectiveness.

As an example, Navigator handled 7,121 calls with measurable reliability metrics for one customer, the University of Arkansas for Medical Sciences (UAMS) over a five-month period. For patients who completed the verification process, Navigator achieved an 84.02% success rate. The system successfully processed 5,566 appointment cancellations, significantly reducing the volume of voicemails requiring human intervention for cancellation requests.

Risk Mitigation and Governance

Navigator is designed with robust risk mitigation and governance measures to ensure transparency, reliability, and performance.

- **Real-time visibility and auditability:** All conversations between Navigator and your patients are accessible in real time through your Luma account, with options to intervene when possible. Additionally, completed calls are logged in the monitoring dashboard for review and audit purposes. Luma uses tools such as self-hosted LangFuse among others to provide internal observability to model actions and performance and makes the results of the models and any function calling and tool use available in our Luma application for end users to view and audit.
- **Performance monitoring:** Key metrics such as model accuracy and response latency are continuously tracked through an automated real-time dashboard. Predefined thresholds trigger alerts when limits are exceeded, enabling prompt investigation and resolution.
- **Error management:** Error-handling mechanisms are embedded throughout Navigator's technical design, ensuring that workflow issues are logged and flagged for timely intervention.
- **Drift detection and mitigation:** AI drift is actively monitored through statistical sampling of Navigator logs. Automated alerts and interventions help maintain consistent performance and reliability over time.
- **LLM guardrails:** Real-time content filtering and boundary enforcement systems monitor model outputs and prevent unauthorized actions such as making medical diagnoses or prescribing medication. Input validation protects against prompt injection and adversarial attacks, while output filtering blocks non-compliant responses. These controls operate within latency requirements through optimized filtering mechanisms integrated into the response pipeline. All guardrail interventions are logged and monitored through the same dashboard infrastructure used for general performance tracking.



Performance Monitoring

Luma has a robust governance framework to ensure AI performance, manage errors, and mitigate AI drift effectively. Transparency is a core principle, allowing customers to validate Navigator's actions through a comprehensive monitoring dashboard. This dashboard provides access to conversation logs, actions taken, and detailed reports. We also actively engage customer stakeholders in the development and updates of Navigator, fostering a collaborative approach that minimizes risks and aligns with organizational goals.

All conversations between Navigator and patients are visible in real time through your Luma account. Once a conversation ends, users can review the full conversation history in the monitoring dashboard, which includes detailed logs of interactions and any actions taken on behalf of the patient—such as API calls within Luma or to the EHR for retrieving or updating information. Additionally, reports provide key insights into Navigator's impact and effectiveness, tracking metrics such as patient verification rates, time saved, and overall success rates over time.

Insights Center			Overview M	Patient Journeys Repor	ts Provider Utilizat	ion Recommend	lations Executive	Summary
Monitoring	× Navigator Activity					Q. Search for pa	tient Fi	Iters
Messaging Activity								
Navigator Activity	Event Created	Patient	Channel	Stage ①	Outcome 🛈	Accuracy ①	Status 🛈	
	1 5 new events have been	n created. Please refresh to update t	he table.				Ref	resh
	Aug 12, 2024, 2:15 PM	Simon Sais	Voice	Patient identification	Needs met	• High	Completed	1
	Aug 12, 2024, 2:15 PM	Dianne Russell	SMS	Appointment listing	Needs met	• High	Completed	ı
	Aug 12, 2024, 2:15 PM	Albert Flores	SMS	Appointment cancellation	Needs met	• High	Completed	ı
	Aug 12, 2024, 2:15 PM	Darlene Robertson	Voice	Conversation transfer	Needs met	• Low	• Failed	ı
	Aug 12, 2024, 2:15 PM	Eleanor Pena	Voice	-	Needs met	• Fair	• Idle	:
	Aug 12, 2024, 2:15 PM		Internal	Welcome	Needs met	• Fair	Completed	:
	Aug 12, 2024, 2:15 PM	Kaci Cole	SMS	Welcome	Needs met	• High	Completed	ı
	Aug 12, 2024, 2:15 PM	-	SMS	Conversation transfer	Needs met	• High	• Idle	ı
	Aug 12, 2024, 2:15 PM	-	Internal	Appointment listing	Needs met	• High	• In Progress	1
	Aug 12, 2024, 2:15 PM	Dianne Russell	Voice	Patient identification	Needs met	• Fair	• In Progress	1
	Aug 12, 2024, 2:15 PM	Albert Flores	Voice	Appointment listing	Needs met	• Low	• Completed	1
	Rows per page: 25 👻			25 Results			< Page 1 of 1	,



Customer Testimonials and Endorsements

Luma actively engages with customer stakeholders throughout Navigator's development, to foster transparent collaboration that address core business challenges and drive measurable organization value.

Navigator's success is underscored by endorsements from leading healthcare institutions.

- Michelle Winfield-Hanrahan, Chief Clinical Access Officer at University of Arkansas for Medical Sciences, said: "I love Navigator. It's fantastic. It sounds and acts like a human, and it's so helpful. Our outcomes have been very positive, and really exceeded what I expected."
- Emily Smythe from DENT Neurologic Institute, shared this quote about working with Luma to co-create AI capabilities: "Luma is very transparent about how they develop products, how they use AI, and doing it in a very responsible manner. At DENT, we take privacy and PHI extremely seriously, and a big part of that is how our data is being used. A lot of vendors may not be forthcoming with how they're using data, so it's incredibly important that we work with a vendor that wants to protect our data as much as we do. We know that Luma isn't monetizing or selling our data off."

"

We were looking for efficiency — and we found it with Navigator. The team was spending three hours daily just listening to patient voicemails and then going in and canceling appointments. Navigator completely took that manual work off our plates."

Michelle Winfield-Hanrahan, RN, BSN, MHA, MSN Clinical Chief Access Officer & Associate Vice Chancellor of Access



4 Business Value

Proven ROI

Navigator has a proven track record of delivering measurable value. Real-world case studies highlight its ability to reduce administrative burdens, enhance patient engagement, and generate significant cost savings for organizations. The University of Arkansas for Medical Sciences used Navigator to solve a key contact center bottleneck: answering after-hours calls that would otherwise land in a voicemail box for staff to filter through the following business day. Their outcomes include:

- **1000+ staff hours saved annually**. Agents no longer spend hours each day manually canceling appointments.
- Nearly 15,000 calls are handled annually. Patients who call UAMS' main cancellation line can now cancel right away instead of leaving a voicemail. Changes are written back directly into Epic to ensure staff efficiency and data integrity.
- **84% of after-hours calls** are successfully handled by Navigator without staff intervention. UAMS' team no longer starts each day by listening to a laundry list of patient voicemails and manually processing after-hours cancellations.

Low-Risk Implementation

Navigator is designed for seamless integration with existing systems, ensuring minimal disruption during onboarding. With a rapid implementation process that is guaranteed to deliver value in four weeks or less, organizations can quickly experience the benefits of the platform, accelerating their return on investment.

Support and Training

To ensure successful adoption and sustained success, Luma provides ongoing support and tailored training programs. Comprehensive outcome tracking and reporting offer full transparency into the platform's impact, showcasing key metrics such as time saved and improvements in patient satisfaction.





5 Interoperability and Scalability

Integration with Existing Systems

Navigator integrates seamlessly with your EHR, allowing patient-Navigator interactions to be directly viewed within EHRs like Epic for streamlined workflows and with no additional sign-in. Luma also supports SSO/SAML to further comply with enterprise healthcare identity services. Additionally, Navigator leverages any existing telephony systems for call routing, ensuring continuity with established processes and minimizing disruptions.

Scalability and Risk Minimization

Navigator is built to scale alongside organizational needs while safeguarding core systems of record. All actions performed by Navigator remain within predefined parameters, with human oversight in place to manage any exceptions, ensuring reliability and reducing risks.

About Luma

Luma's Patient Success Platform[™] delivers full-cycle schedule automation to increase appointment utilization and revenue, and cut out busy work for staff. Luma delivers true self-service opportunities to your healthcare organization's new and returning patients.

Navigator is designed to address the critical concerns of AI governance committees in healthcare organizations. Its comprehensive compliance framework, transparent operations, measurable business value, and seamless interoperability ensure it delivers transformative benefits without compromising safety, privacy, or existing workflows.

Luma has a proven track record of performance, serving more than 650 healthcare organizations ranging from specialty networks and primary care practices to integrated delivery networks and academic medical centers across the United States.

Learn more at https://www.lumahealth.io

