

Medical Language Models Deployment Options

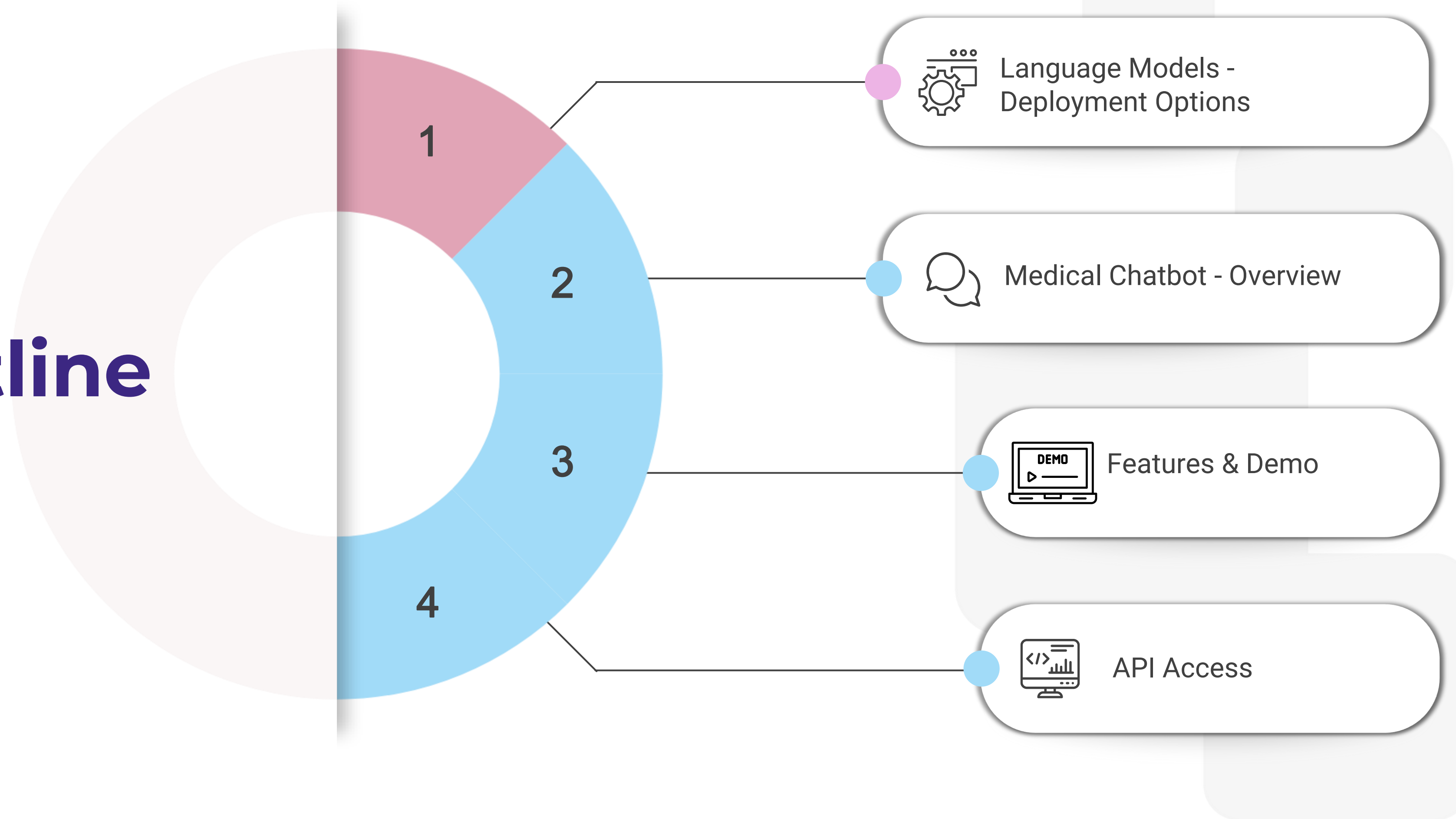
Use Case: Medical Chatbot



Dia Trambitas

Head of Product
John Snow Labs

Outline



Deployment Options – AMI/VM Products

aws marketplace

Microsoft Azure
MARKETPLACE



John Snow Labs - Healthcare NLP

By [John Snow Labs](#) | Ver 5.4.0

★★★★★ 1 AWS review | [2 external reviews](#)

📌 Free Trial

Starting from \$11.88 to \$570.24/hr for software + AWS usage fees

John Snow Labs - Healthcare NLP Libraries are designed to help organizations extract insights from unstructured documents and enable faster, more accurate data analysis. Healthcare NLP is a cutting-edge natural language processing solution designed specifically for the healthcare domain, leveraging...



Healthcare NLP - John Snow Labs [Save to my list](#)

John Snow Labs Inc

★ 5.0 (1 ratings)

Free trial

Overview

[Plans + Pricing](#)

[Ratings + reviews](#)

NLP & OCR libraries, models and notebooks for text and image annotation and model training & tuning

Overview

Get It Now

Pricing information
Starting at \$4.455/hour
+ Azure infrastructure costs



John Snow Labs - Finance and Legal NLP

By [John Snow Labs](#) | Ver 5.4.0

[2 external reviews](#)

📌 Free Trial

Starting from \$11.88 to \$570.24/hr for software + AWS usage fees

John Snow Labs - Finance and Legal NLP Libraries are designed to help organizations extract insights from unstructured documents and enable faster, more accurate data analysis. Finance and Legal NLP is a cutting-edge natural language processing solution designed specifically for the Financial and...



John Snow Labs - Finance and Legal NLP

John Snow Labs Inc

Free trial

Overview

[Plans + Pricing](#)

[Ratings + reviews](#)

NLP & OCR libraries, models and notebooks for text and image annotation and model training & tuning

John Snow Labs Finance and Legal NLP Libraries are designed to help organizations extract insights from unstructured documents and enable faster, more accurate data analysis.

Get It Now

Pricing information
Starting at \$4.455/hour

Medical Language Models – API Endpoints



Privacy

Sensitive data is kept secure within your controlled environment, ensuring compliance with data protection regulations.



Effortless Integration

Seamless API integration with existing workflows on cloud platforms, reducing complexity and accelerating time-to-value.



Speed

Quick subscription and instant deployment means faster development cycles, enabling teams to focus on products and/or solutions building.



Maintenance

Regular updates and model improvements are managed behind the scenes, ensuring your deployments stay up-to-date with minimal operational overhead.



Scalability





Designed to scale dynamically, adapting to varying workloads without compromising on performance or reliability.

Deployment Options – Private API Endpoints



- 29 Endpoints available & counting
 - Medical LLMs
 - Medical Text Summarization & QA LLM
 - Medical Speech to Text
 - Medical Translation
 - De-identification – (8 Languages)
 - Entity, Relation & Assertion Detection
 - Clinical, Oncology, Radiology, ADE, VOTP, etc.
 - Accuracy & throughput metrics
- [Deployment & Usage Instructions](#)

John Snow Labs (29 results) showing 1 - 20 Sort By: Relevance


	Medical LLM By John Snow Labs Ver 5.4.1 Free Trial Trained on diverse medical texts, this model excels in summarizing, answering complex clinical questions, and transforming detailed clinical notes, patient encounters, and various medical reports into concise, digestible summaries. Its question-answering capability ensures accurate,...
	Medical Text Summarization and QA By John Snow Labs Ver 1.0.0 Free Trial Trained on a diverse range of medical texts, this model excels in summarizing complex clinical notes, patient encounters, critical care annotations, discharge summaries, and various medical reports into concise and easily digestible summaries. For medical professionals, this tool provides a rapid underst...
	Clinical Text Analysis By John Snow Labs Ver 5.4.0 Free Trial Clinical entity detection, assertion status assignment, and relation extraction are essential in medical text analysis. These techniques enable healthcare professionals, researchers, and medical NLP practitioners to derive valuable insights from clinical literature, electronic health records, and...
	Extract clinical risk factors By John Snow Labs Ver 5.2.8 Free Trial This model specializes in identifying key risk factors such as Coronary Artery Disease, Diabetes, Family History, Hyperlipidemia, Hypertension, Medications, Obesity, and Smoking Habits in clinical documentation. Designed for precision, it assists health...


Deployment Options – Private API Endpoints





- 16 Endpoints available & counting
 - Medical Text Summarization & QA
 - De-identification – (8 Languages)
 - Entity, Relation & Assertion Detection
 - Clinical, Oncology, Radiology, ADE, VOTP, etc.
 - Accuracy & throughput metrics
- [Deployment & Usage Instructions](#)

16 data products ↑↓ Most recent

**Extract adverse drug events (ADE)** Free to Try Paid
John Snow Labs
Detects adverse reactions of drugs (ADE) from reviews, tweets, and medical text.
This model is engineered for the extraction of adverse drug events ADEs from unstructured clinical texts, leveraging several components finely tuned for this purpose: - Entity Recognition: Initially, the model...
⚡ Instantly accessible

**Extract entities from mental-health data** Free to Try Paid
John Snow Labs
Identify mental-health entities,assign assertion status and establish relations between the extracted entities
This model is specialized in analyzing and extracting mental-health entities such as opioid drugs, substance use, substance quantity,, symptom, drug information like dosage, duration, route, form, frequency,strength,...
⚡ Instantly accessible

**Extract entities from public health data** Free to Try Paid
John Snow Labs
Identify demographic entities, social factors , medical ,etc. from public healthcare data and online sources.
It is designed to identify and extract various entities such as access to care, employment and financial Status, various social factors, substance abuse, health status, etc., informally presented in public data.
⚡ Instantly accessible






















**Medical Text Summarization and QA** Free to Try Paid
John Snow Labs
Use for tasks like medical summarization or open-book question answering with context of up to 8K tokens.
Trained on a diverse range of medical texts, this model excels in summarizing complex clinical notes, patient encounters, critical care annotations, discharge summaries, and various medical reports into concise and...
⚡ Instantly accessible

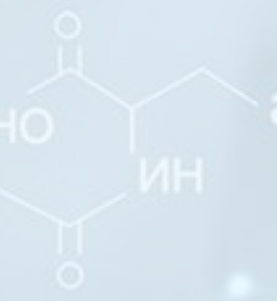
Deployment Options – Private API Endpoints



- 43 Endpoints available & counting
 - De-identification – (8 Languages)
 - Entity, Relation & Assertion Detection
 - Clinical, Oncology, Radiology, ADE, VOTP, etc.
 - Entity Resolution – SNOMED, HPO, UMLS, RxNorm, LOINC, ICD9, ICD10, etc.
- [Deployment & Usage Instructions](#)

43 filtered results

 John Snow Labs Clinical De-identification for Romanian This pipeline can be used to deidentify PHI information from Romanian medical texts. 	 John Snow Labs Clinical De-identification for Arabic This pipeline can be used to deidentify PHI information from Arabic medical texts. 	 John Snow Labs Clinical De-identification for Portuguese This pipeline can be used to deidentify PHI information from Portuguese medical texts. 
 John Snow Labs Clinical De-identification for Spanish This pipeline can be used to obfuscate PHI information from Spanish medical texts. 	 John Snow Labs Clinical De-identification for German This pipeline can be used to deidentify PHI information from German medical texts. 	 John Snow Labs Clinical De-identification This model specializes in masking Personal Health Information (PHI) in English clinical notes. Utilizing cutting-edge 
 John Snow Labs Detect Healthcare Professional Consult documents This model verifies if a provided text represents a consultation with a Healthcare Professional. 	 John Snow Labs SNOMED Codes to ICDO Codes Mapper Translates SNOMED clinical terminology into ICDO (International Classification of Diseases for Oncology) codes. 	 John Snow Labs SNOMED Clinical Health Information Coder This model is designed to map healthcare data to SNOMED codes accurately. 
 John Snow Labs Extract Clinical Findings and the ...	 John Snow Labs Extract Social Determinants of Health ...	 John Snow Labs Medication Coder ...



Medical Chatbot

Medical Chatbot

AI Medical Assistant that understands and responds to a wide range of health related queries, from simple questions to complex discussions and provides **informative and well-researched responses**, while also being able to **adapt to different tones, styles, and formats**.

**Explainable
Answers**



Cited references



**Daily Updated
Medical Knowledge**



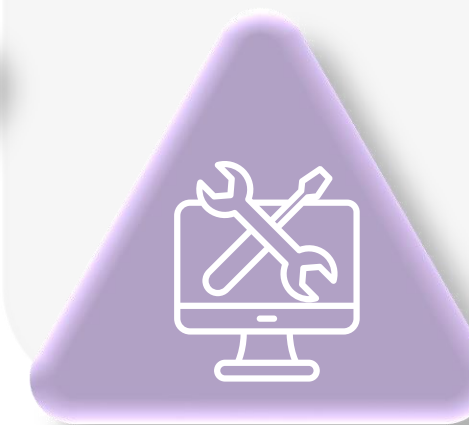
Custom KBs



**Document
Q&A**



Medical Agents



**Literature
Review**



Medical Chatbot

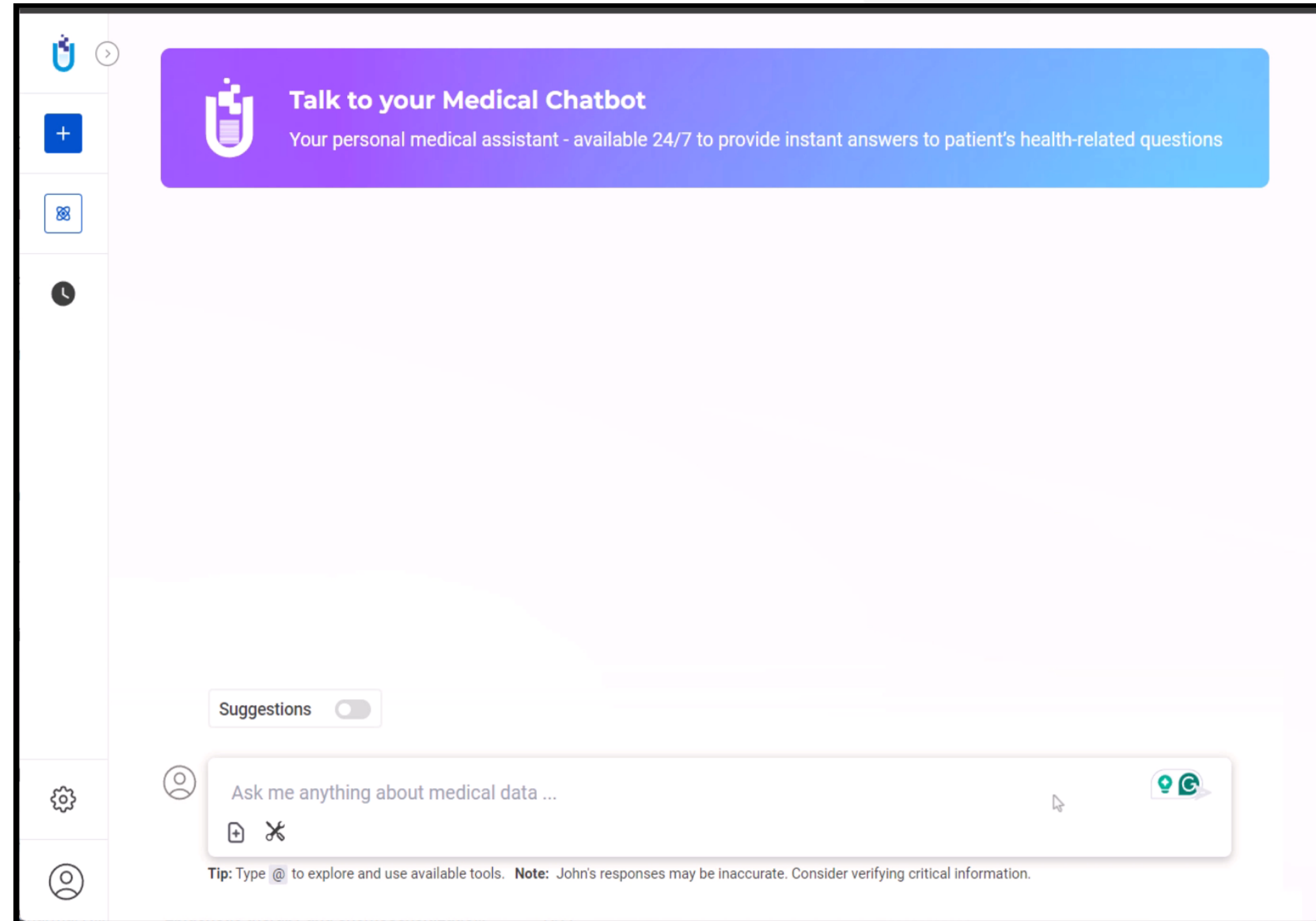
What it is:

- Information Retrieval + Text Generation
- [Proprietary Medical Large Language Models](#)
- Daily Updated Context Information
 - Medical Knowledge Bases
 - Custom Knowledge Bases

State-of-the-Art Accuracy

JSL-MedMX-8B	91.82
Med-PaLM2	84.09
GPT-4	82.97
Llama3-FT-Med	77.71

*on the Open Medical LLM Leaderboard Benchmark



DEMO

1. <https://login.chatbot.johnsnowlabs.com/>
2. [API Access example Notebook](#)

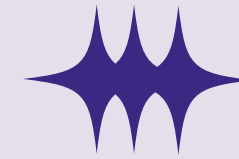
Offerings



Professional

Chat from your browser

- Proprietary Large Language Model tuned for Healthcare
- Medical Knowledge Updated Daily
- Medical Conversations
- Literature Review
- Document Q&A
- Smart Ranking of References
- Safeguards
- Prevent Hallucinations
- Customizable Tone of Voice
- Search Bookmarks and Responses



Enterprise

Private for your team & data

- Everything **Professional** +
- Private On Premise Deployment
- Unlimited Custom Knowledge Bases
- Connect Your Own Data Sources
- Custom Brand Voice and Safeguards
- Unlimited Users and Groups
- Role Based Access Management
- Single Sign-On
- API Access
- Designed to Scale

Get Started

<https://login.chatbot.johnsnowlabs.com/>



Sign Up

via LinkedIn or using your enterprise email



7 day Free Trial

get free access to all available features.



Subscribe

to continue using and get access to new features

The screenshot displays the Medical Chatbot web application. The browser tab is titled "Medical Chatbot" and the address bar shows the URL "chat.johnsnowlabs.com/conversations/6eb0f078-ce08-4062-93d0-bb42d27c0a29". The interface includes a sidebar with icons for a chatbot, a plus sign, a chat bubble, a gear, and a user profile. The main area features a "Target Documents" section with a green status bar indicating "5 docs ready to query". Below this, five document tabs are visible: "Chart1.txt", "neonatology.txt", "Nursing Progress Note.txt", "Nursing Progress Note2.txt", and "Physical Exam.txt". A user input field contains the question "What can you tell me about the patient's family?". The chatbot's response is displayed in a white box with a blue header icon. The response text is as follows:

Based on the information provided in the documents, I can infer some details about the patient's family. The patient has a twin sibling, which is mentioned in Chart1.txt. Their mother is 37 years old and this was her first pregnancy (G1). She underwent IVF treatment and gave birth via Cesarean section at 32 weeks and 3 days gestational age. Unfortunately, there is no direct mention of the father or other family members in these documents.

In Nursing Progress Note2.txt, it appears that the father visited the nursery and held the baby, indicating that he is actively involved in the baby's life. It is also stated that the mother would come later, but the exact time is not specified.

Please note that the documents primarily focus on the clinical aspects of the patient's health and do not provide extensive information about the family.

Relevant References: 1 2 3 4 5

Below the response, there is a user input field with the placeholder text "Ask me anything about medical data ...". At the bottom of the interface, a note states: "Note: John's responses may be inaccurate. Consider verifying critical information."



 dia@johnsnowlabs.com

 [/in/diamiron](https://www.linkedin.com/company/diamiron)

 [#medical-chatbot](https://twitter.com/medical-chatbot)

Break
Until 11:00 AM PST

