

# Clinical Copilot OS


PRESENTED BY BITS & BYTES



# The Burden of Administration

## CONSEQUENCES OF OVERWORK

Clinicians are overwhelmed by administrative tasks, spending **35–55%** of their time on paperwork. This leads to burnout, **errors**, and delays in patient care, significantly reducing the quality of healthcare services offered to patients in need.





# 40%

## TIME WASTED

Clinicians lose approximately **40% of their work hours** due to administrative tasks. This staggering figure highlights the **inefficiency** of current workflows, emphasizing the need for innovative solutions like Clinical Copilot OS to reclaim valuable time for patient care and enhance overall healthcare quality.

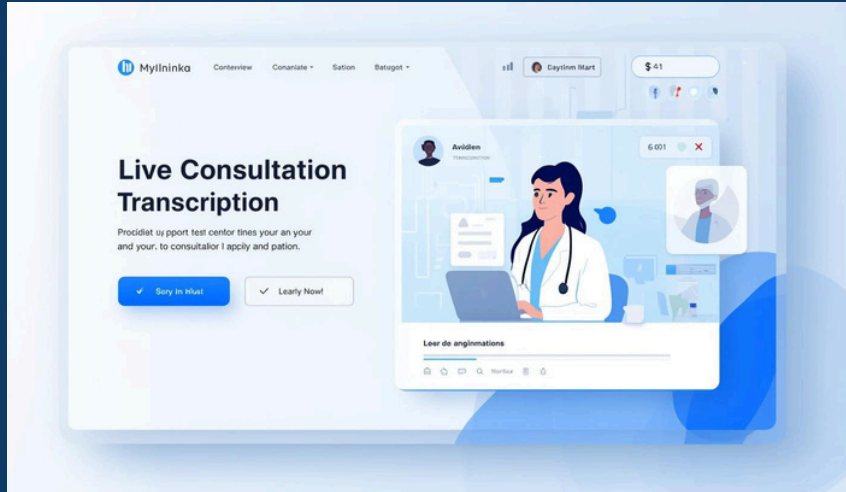


# Introducing Clinical Copilot OS for Clinicians

## AI-POWERED DOCUMENTATION SUPPORT

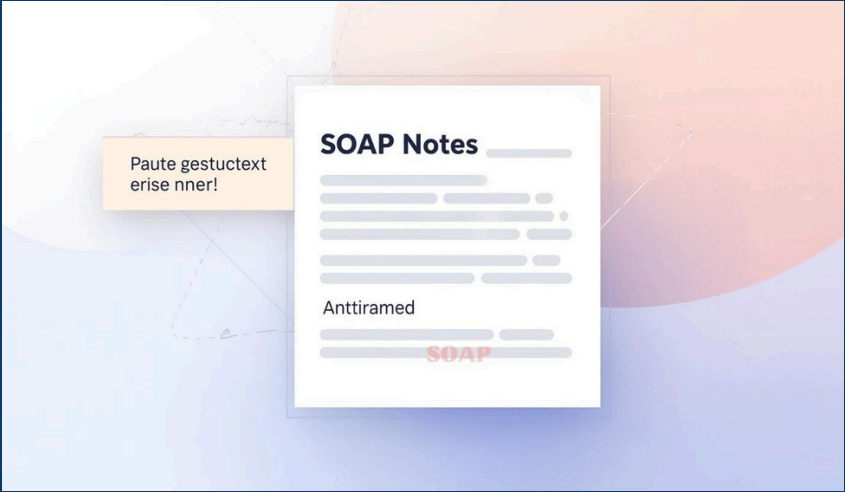
Clinical Copilot OS offers **real-time AI assistance** for documentation and care coordination, streamlining workflows and reducing clinician administrative burden effectively.





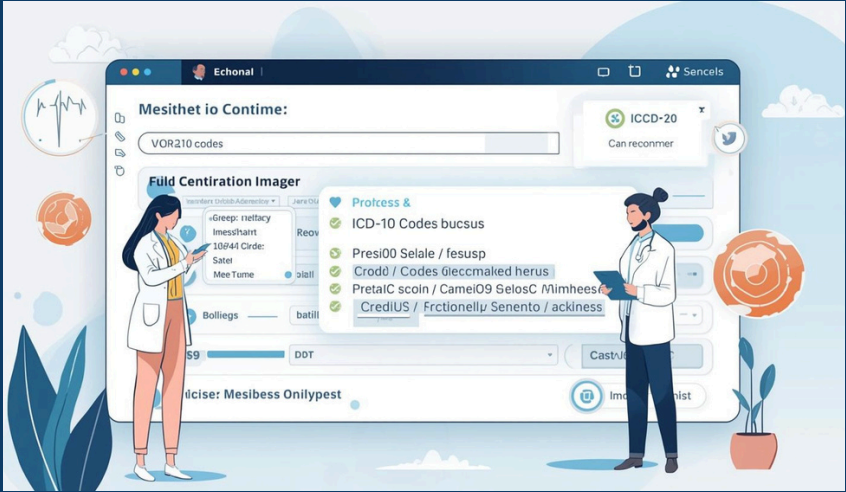
## CONSULTATION TRANSCRIPTION

Automatic transcription of clinician-patient conversations.



## SOAP NOTES

Effortlessly generated clinical documentation for better accuracy.



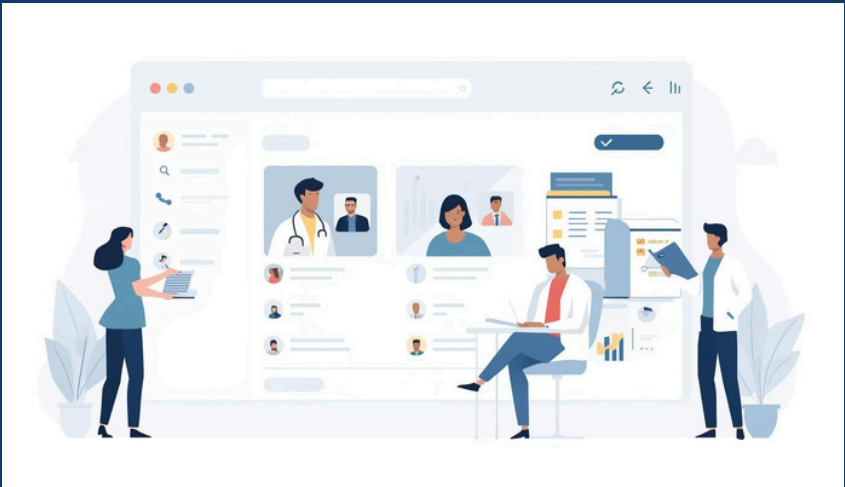
## CODING SUGGESTIONS

Smart recommendations for accurate coding and billing.



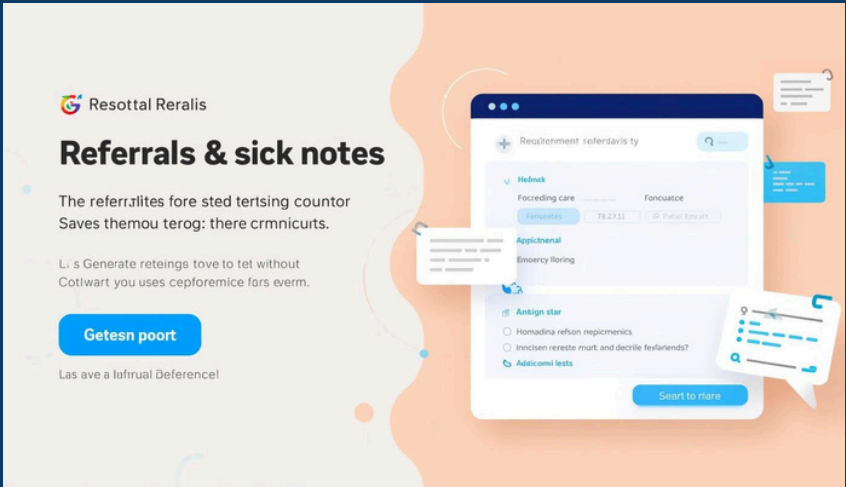
## SAFETY ALERTS

Real-time notifications for patient safety measures.



## CARE COORDINATION

Streamlined tasks to enhance patient care efficiency.



## REFERRAL GENERATOR

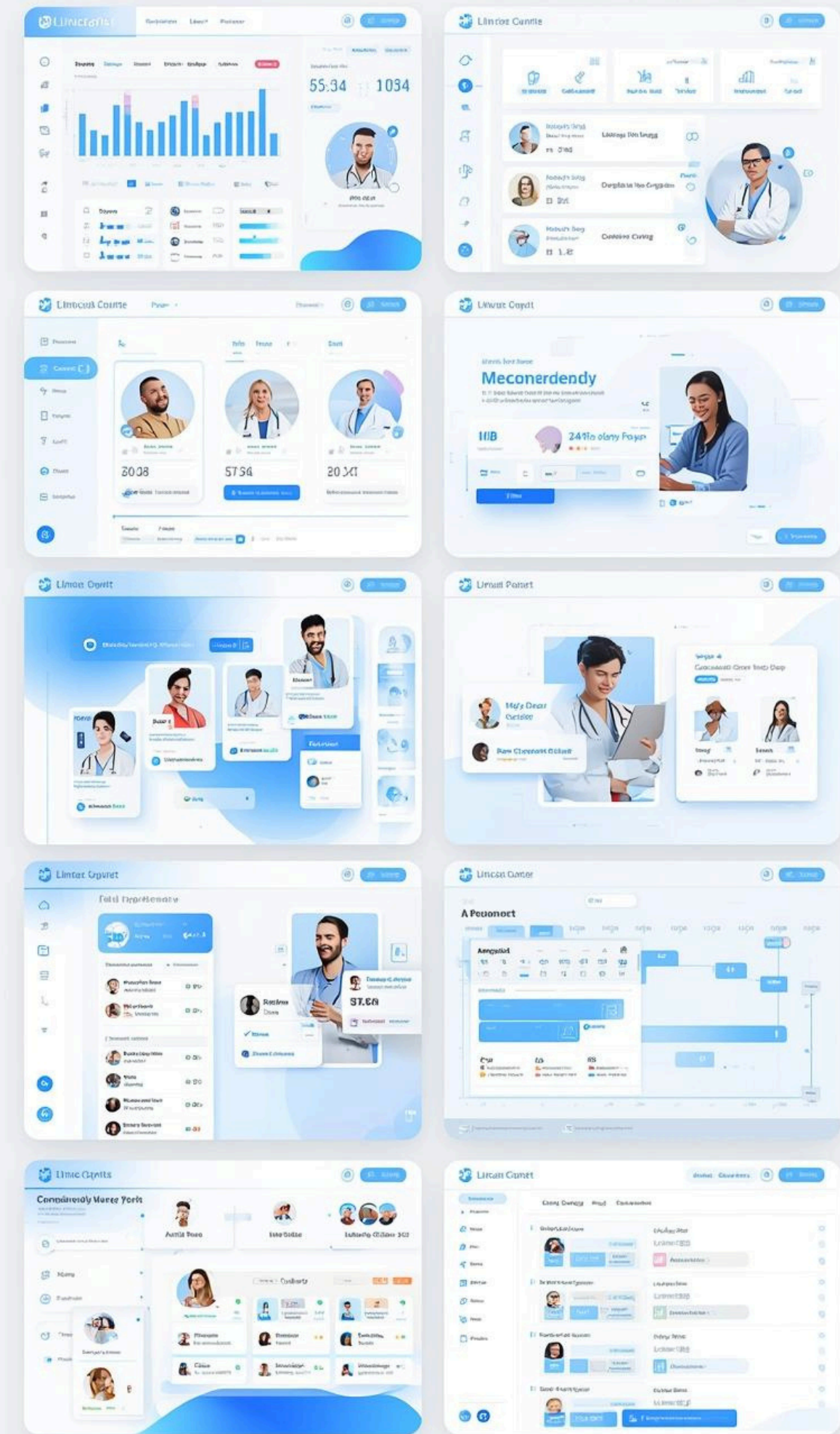
Quick generation of essential patient documentation.



# Visual Preview of User Interface Components

## USER-FRIENDLY DASHBOARD ELEMENTS

The Clinical Copilot OS interface is designed for **intuitive usability**, featuring streamlined navigation and easy access to key functionalities for clinicians.



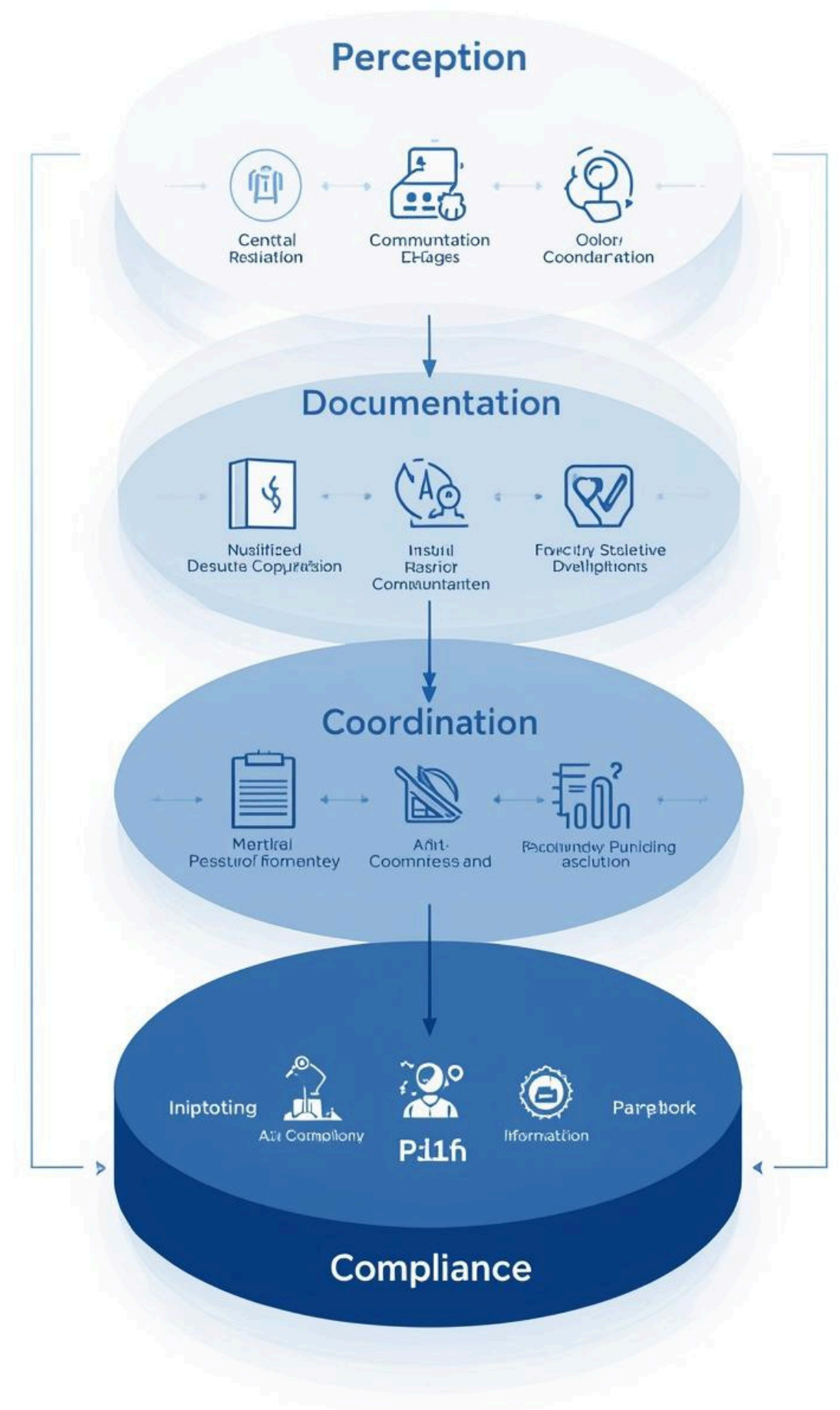
# Multi-Agent AI System Enhancing Clinical Workflows

## FOUR AUTONOMOUS AGENTS

The Multi-Agent AI System consists of four specialized agents that autonomously manage distinct clinical workflows, ensuring efficiency and improving care delivery.

### AI AGENTS

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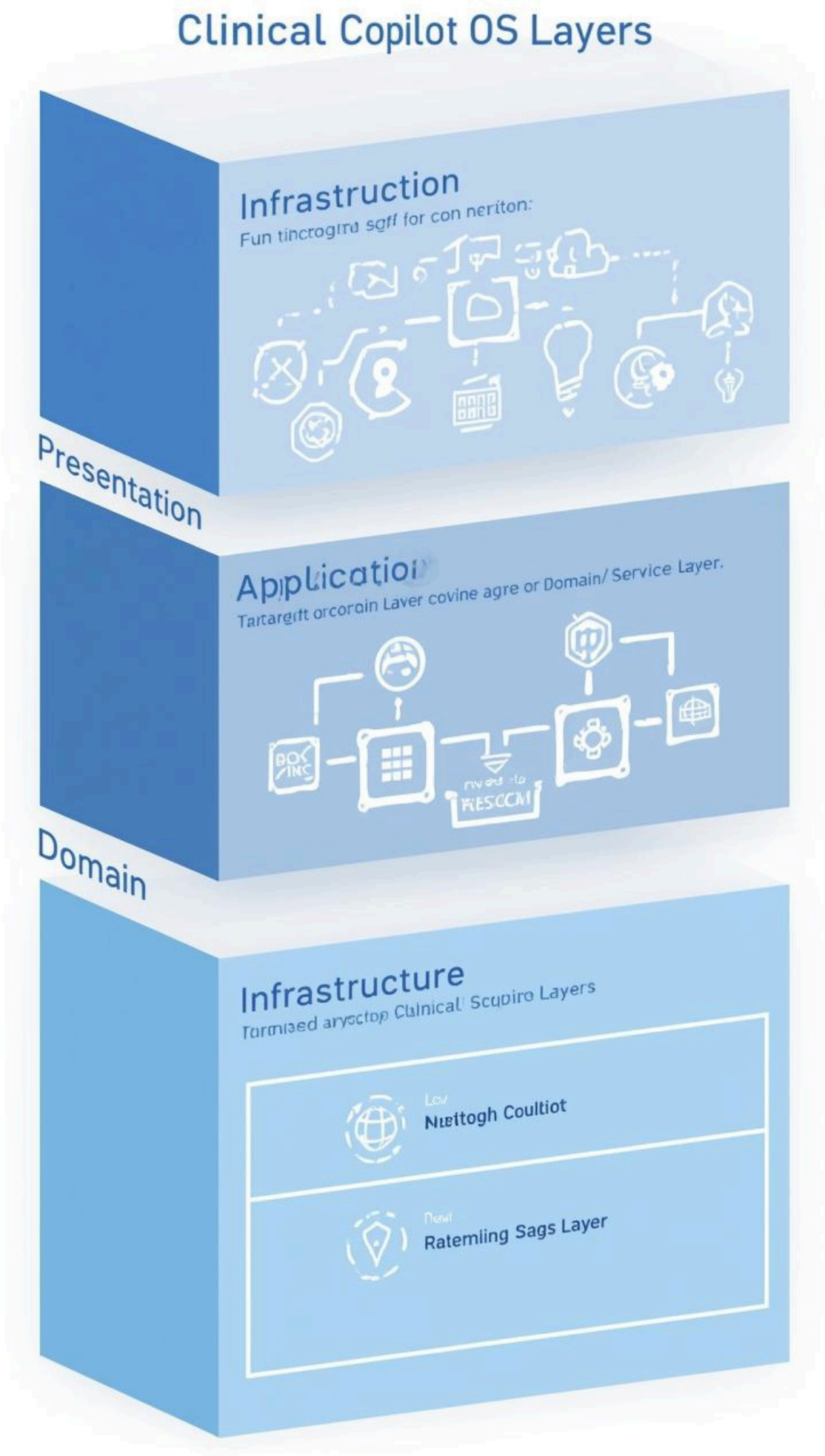




# Technical Architecture of Clinical Copilot OS

## LAYERED SYSTEM OVERVIEW

The CC-OS employs a robust layered architecture designed for efficiency, scalability, and integrated AI capabilities essential for clinical documentation.







# Clinical Documentation Process

## CONSULTATION

During the consultation, the clinician engages with the patient while the AI listens attentively, capturing all relevant dialogue for documentation.

## TRANSCRIPTION

The AI automatically transcribes the conversation, converting speech into structured clinical notes that are ready for review and editing by the clinician.

## CODING

After transcription, the system suggests appropriate ICD-10 codes based on the generated notes, streamlining the documentation process for accuracy and efficiency.

# User Types Benefiting from CC-OS

## CLINICIANS

Clinicians utilize CC-OS to streamline documentation and focus more on patient care, reducing administrative burden and enhancing workflow efficiency.

## ADMINISTRATIVE STAFF

Administrative staff leverage CC-OS for efficient management of billing codes and data synchronization, ensuring seamless operations within the healthcare system.

## MANAGERS

Managers benefit from CC-OS by accessing comprehensive analytics and compliance insights, empowering them to make informed decisions for operational improvements.



# Target Customer Segments

## PATIENTS

Youth and underserved communities will benefit from accessible healthcare solutions, ensuring timely diagnosis and treatment through AI-driven triage and support.

## CLINICIANS

Clinic staff can streamline workflow and reduce administrative burdens, allowing them to focus more on patient care and enhancing overall service delivery.

## NGOS

Public health programs will leverage CC-OS to improve health outcomes, promote awareness, and facilitate efficient care coordination across diverse communities.



# 80%

## PATIENT VOLUME INCREASE

With the implementation of Clinical Copilot OS, **clinicians experience an 80% increase** in patient volume. This remarkable improvement is attributed to the significant reduction in documentation burden, allowing healthcare professionals to focus more on patient interactions, leading to improved care delivery and better overall patient outcomes.



- **\*MODEL SELECTION PARADE\***
- **\*\*LLAMA 3.2\*\* GALLOPED TO THE FRONT FOR:**
  - **BRAINPOWER EXTRAORDINAIRE**
  - **FLUENT IN MORE LANGUAGES THAN A POLYGLOT PARROT**
  - **ZOOMING AT THE SPEED OF LIGHT**
- **\*ARCHITECTURE EXTRAVAGANZA\***
- **\*\*JAVA CLEAN ARCHITECTURE\*\***
  - **\*\*PRESENTATION\*\*:** APP, USSD, VOICE – LIKE A TECH BUFFET
  - **\*\*SERVICE LAYER\*\*:** WHERE TRIAGE MAGIC HAPPENS
  - **\*\*DOMAIN\*\*:** COMMAND CENTRAL FOR PATIENT AND SYMPTOM WRANGLING
  - **\*\*INFRASTRUCTURE\*\*:** THE LLAMA API AND DATABASE DANCE PARTY
- **\*PLEDGE TO PLAY NICE WITH AI\***
- **KEEPING IN LINE WITH \*\*POPIA\*\***
- **MENTAL HEALTH SAFETY NETS FIRMLY IN PLACE**
- **GUARDING SECRETS LIKE A DRAGON WITH ITS HOARD**
- **\*DAY-BY-DAY SHENANIGANS\***
- **\*\*DAY 1\*\*:** SET UP AND GIVE LLAMA A TEST RUN
- **\*\*DAY 2\*\*:** COOK UP THE TRIAGE ENGINE AND SPRINKLE IN SAFETY ALERTS
- **\*DAY 3\*\*:** STITCH IT ALL TOGETHER AND WRAP IT UP WITH A BOW OF DOCUMENTATION