

Shumka  Program

Design for Startups



Fall 2025

Designing Better Healthcare Experiences with AI

Autochart.ai × Emily Qiang (BDes, 2026)

Autochart.ai develops AI-powered tools that help healthcare providers document appointments, generate clinical notes, referrals, and patient resources more efficiently. Emily worked directly with physicians and clinic staff to improve the user experience of Autochart.ai's clinical documentation platform through user research, workflow analysis, prototyping, and usability testing, helping simplify complex healthcare workflows and improve the usability of AI-assisted tools.

Design Activities: User research, workflow mapping, interface design, prototyping, usability testing

Design for Startups Fall 2025 Showcase

Autochart.ai

Website Redesign

Presented by Emily Qiang



Hello! I'm *Emily Qiang*.

Bachelor of Interaction Design @ Emily Carr University



Autochart.ai

AI Medical Scribe

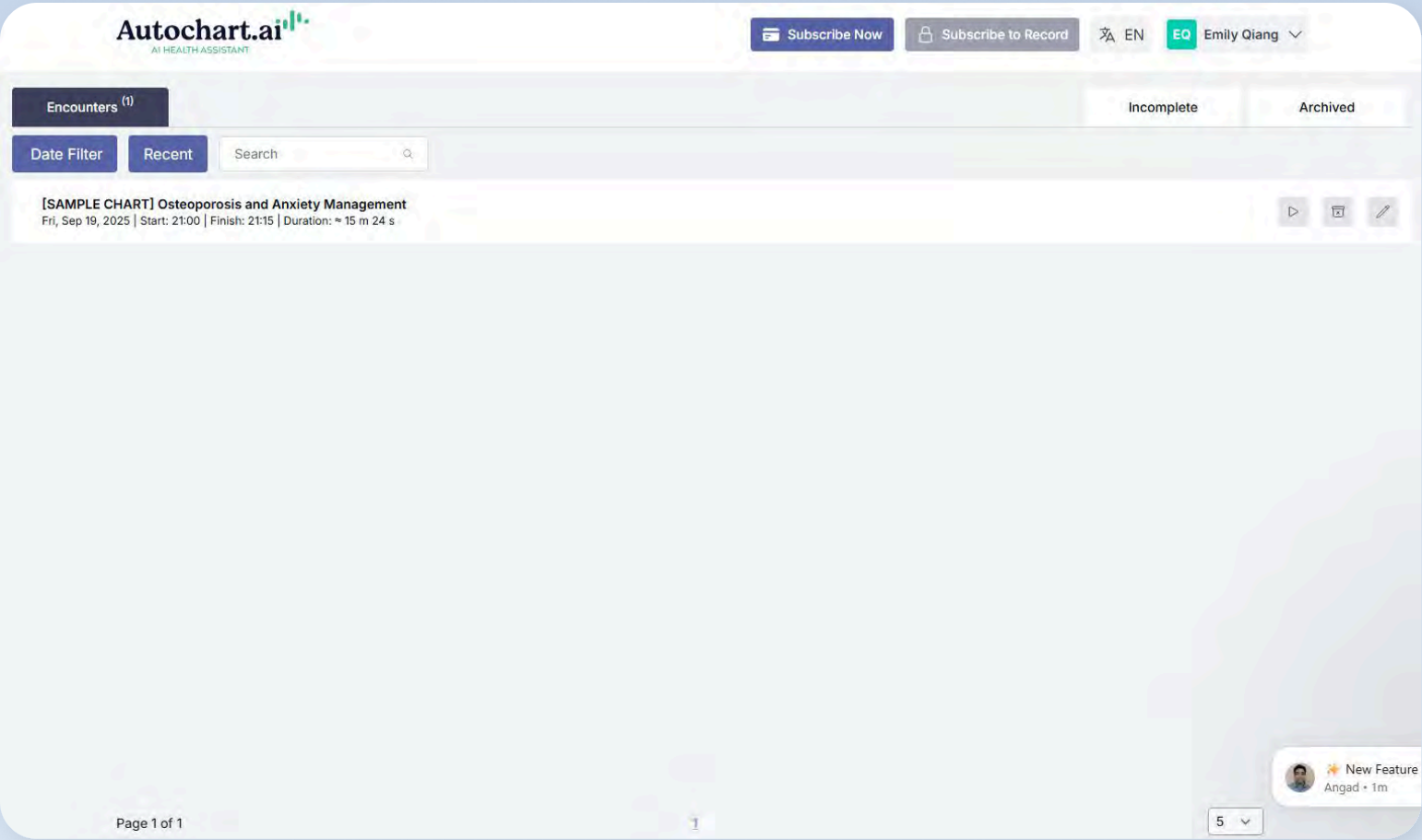
Features

Transcribes appointments.

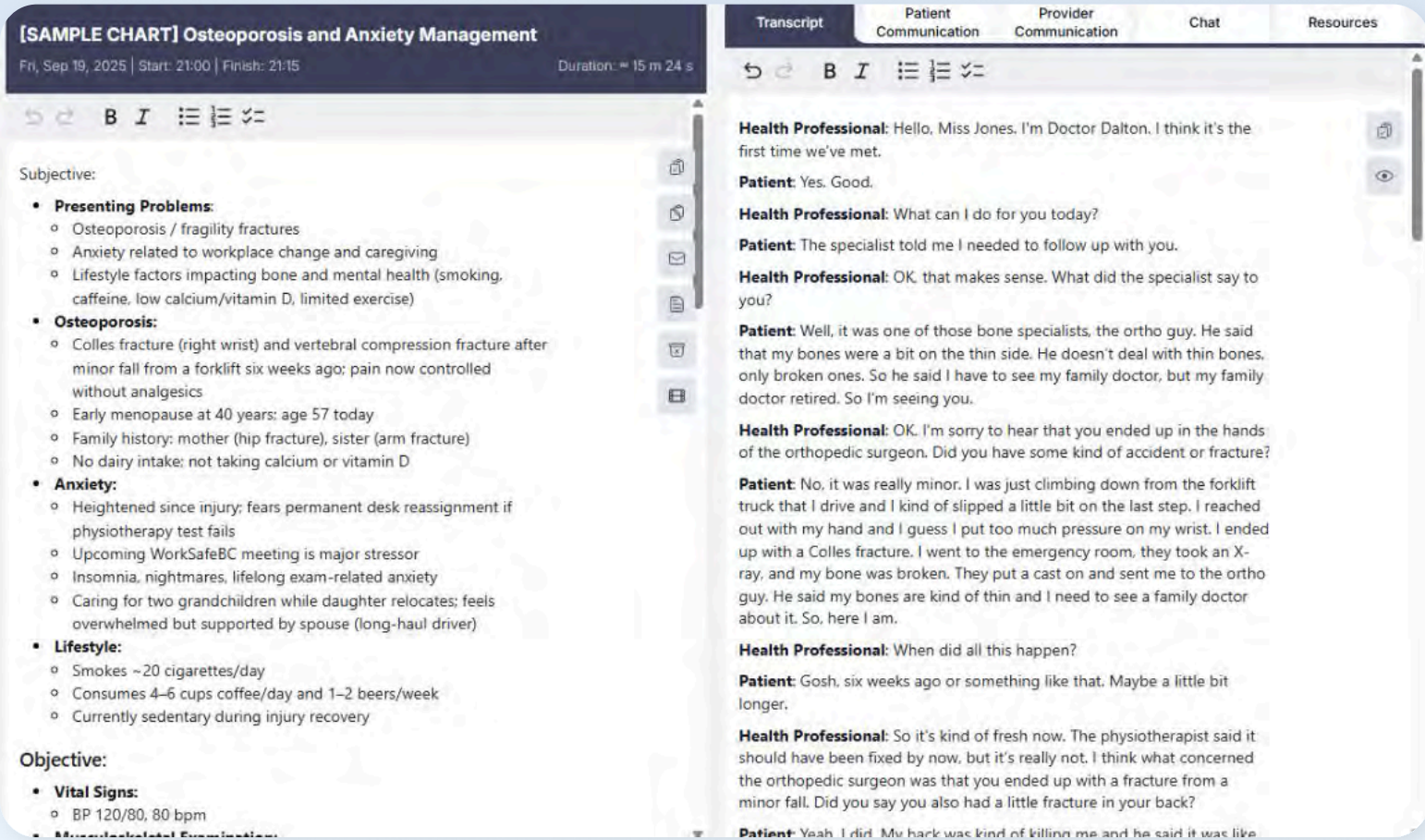
Generates medical charts and documentation.

Real-time AI Health Assistant

Supports clinical decisions.



Encounters Dashboard



Document View

The Problem

Clinicians must juggle listening, documenting, handling admin tasks all within tight time constraints

Project Objective

Optimize user experience of web-based application through understanding workflows + pain points.

Design Process

Secondary Research

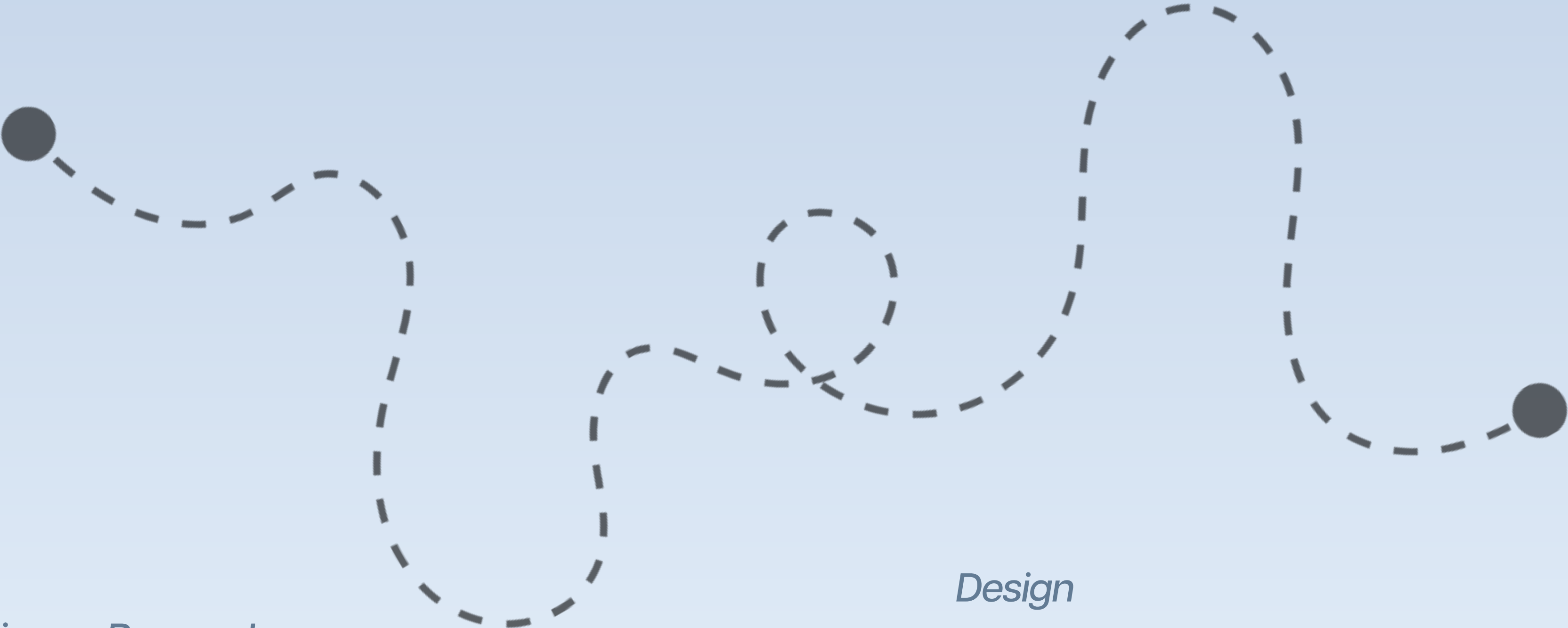
- Empathy Mapping
- Competitive Analysis
- SWOT Analysis
- Edge Case Research

Primary Research

- Interviews w/ Clinicians
- Observational Analysis
- Mapping Userflows
- Identifying Key Tasks
- Site Mapping

Design

- Wireframing
- Low-Fidelity Prototype
- Continual User-Testing & Iterations
- Style Guide
- High-Fidelity Prototype

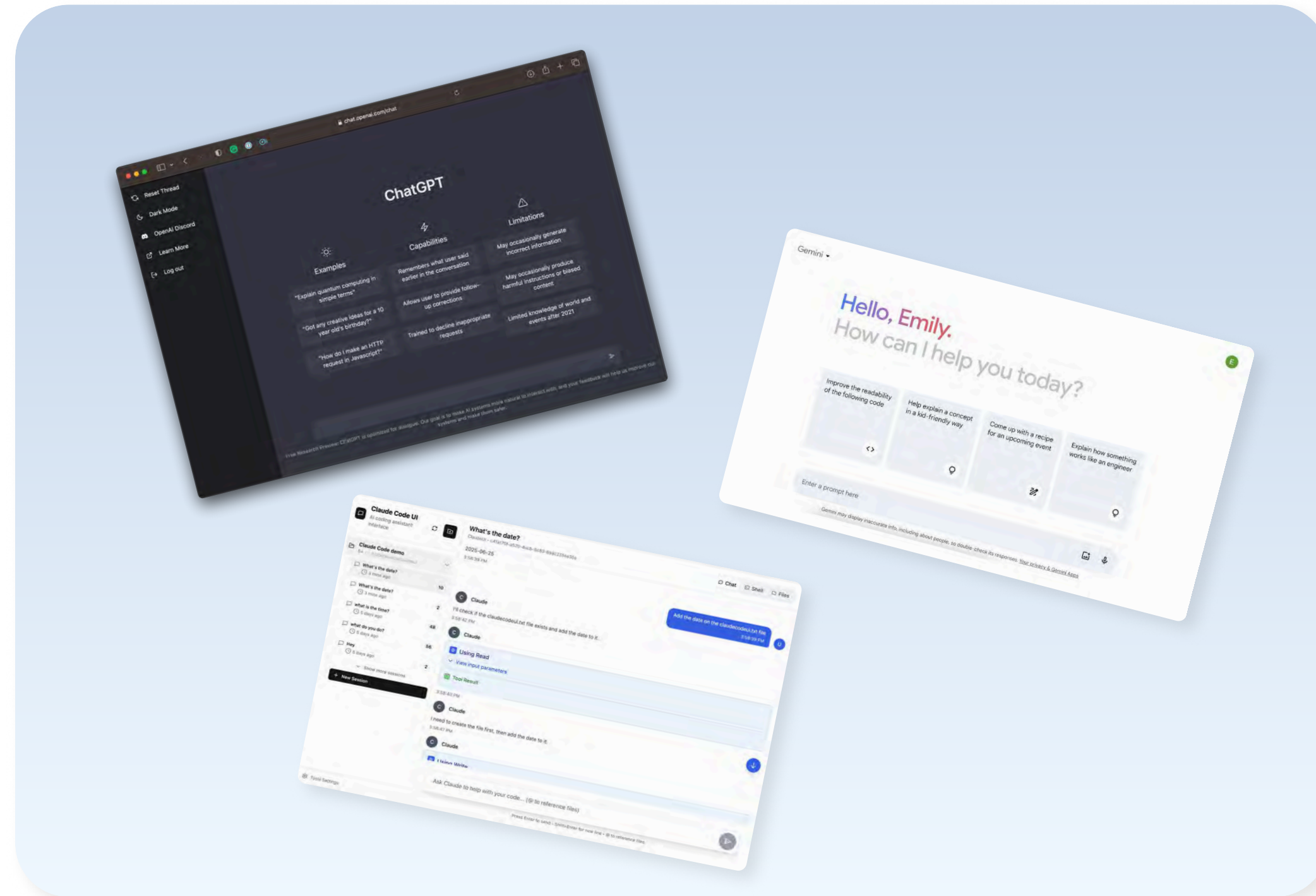




Key Insights

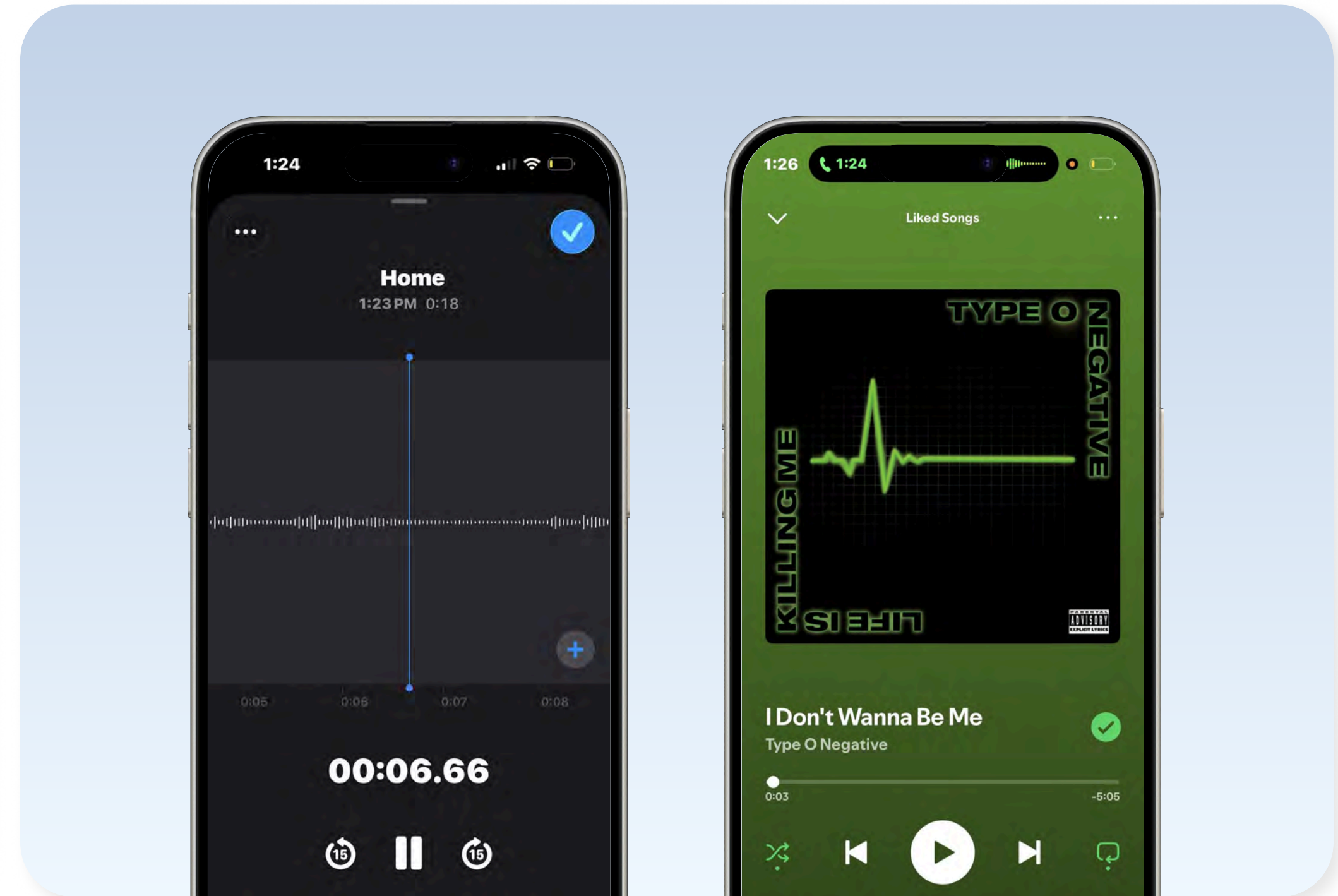
- 1 Automation must integrate seamlessly into routines.
- 2 Trust depends on transparent and accurate capture of information.
- 3 Poor user flows lead to friction and user-error.
- 4 Need for clarity, reliability and reduced cognitive load.

Design Influences



Learning Language Models

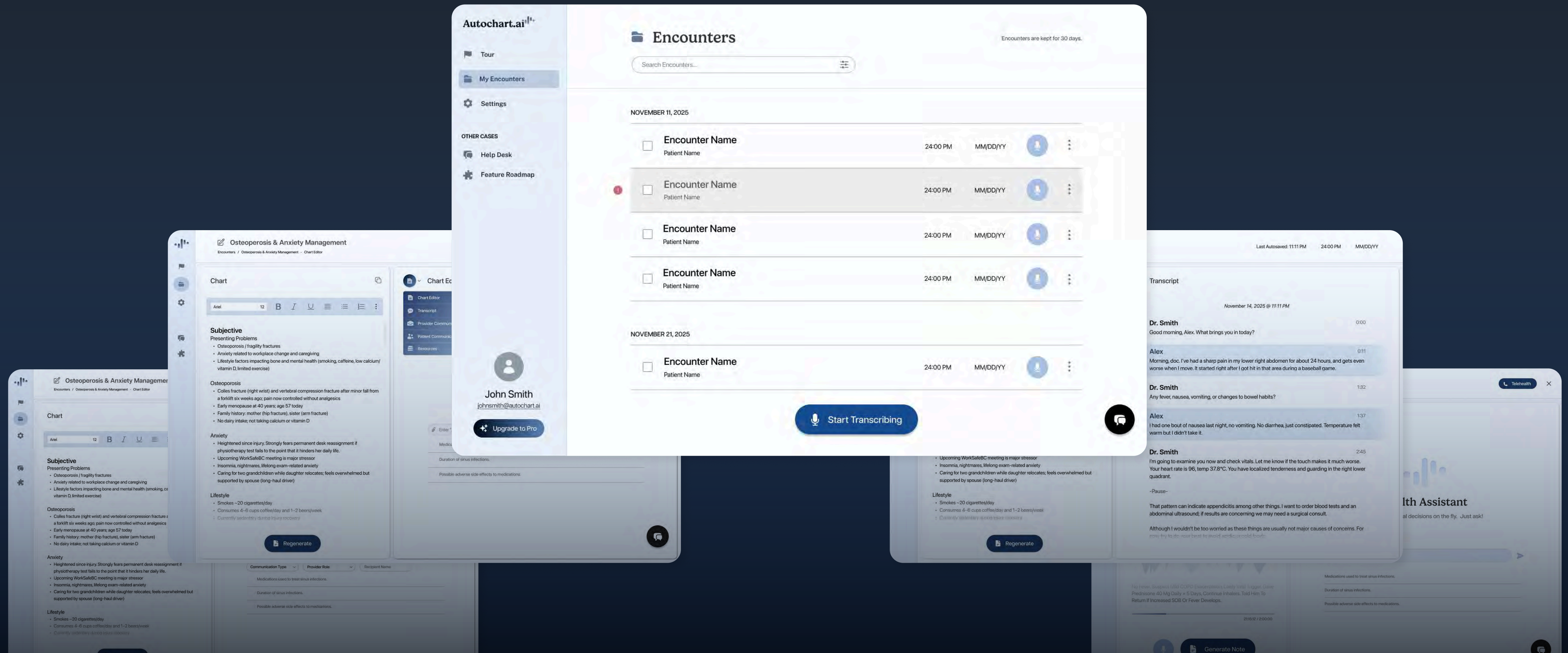
ChatGPT, Claude, Gemini



Audio Players & Recorders

Spotify, Apple Music, Voice Recorder

Final Prototype



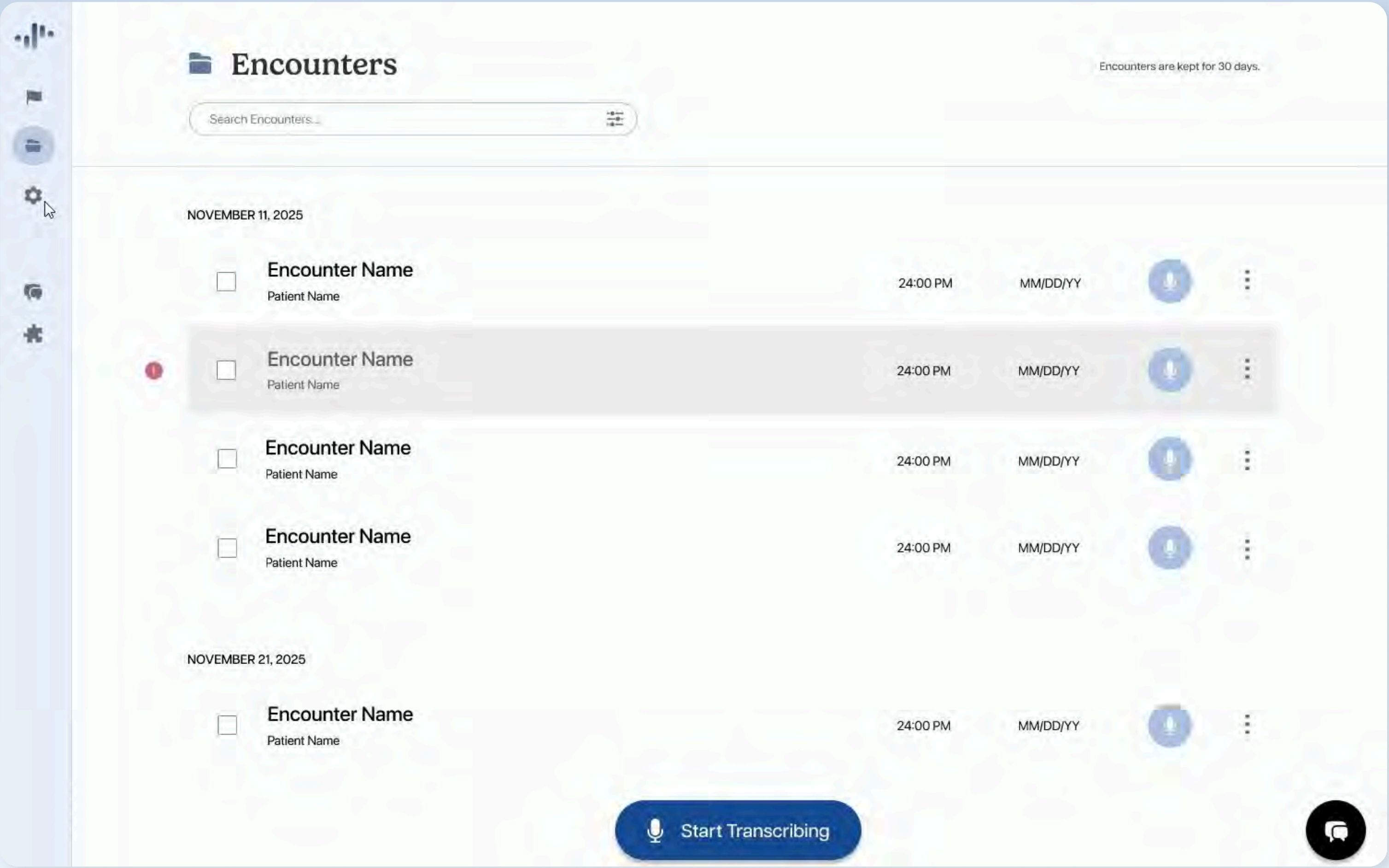
Encounters Dashboard

Goal

Help clinicians find desired encounters efficiently or quickly begin transcribing an appointment.

Changes

- New navigation bar.
- Redesigning information architecture.
- Batch edits & improved filters.
- Clear CTA for new transcription.



Recording Module

Goal

Allow physicians to easily start new transcriptions with minimal set-up and integrate real-time clinical guidance.

Changes

- Removal of pop-up modal.
- Better userflow with preset settings.
- Multiple visual feedback cues.

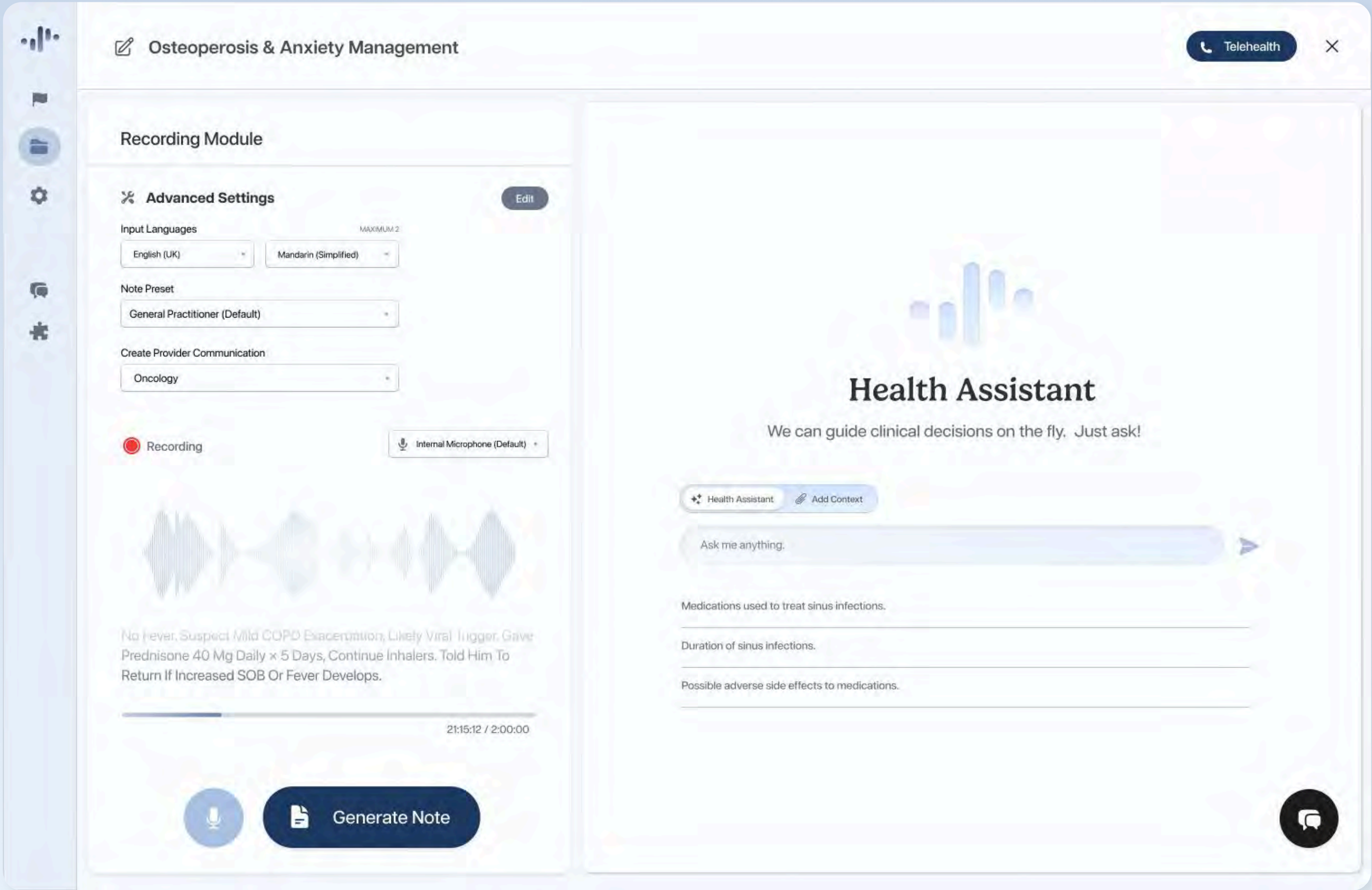
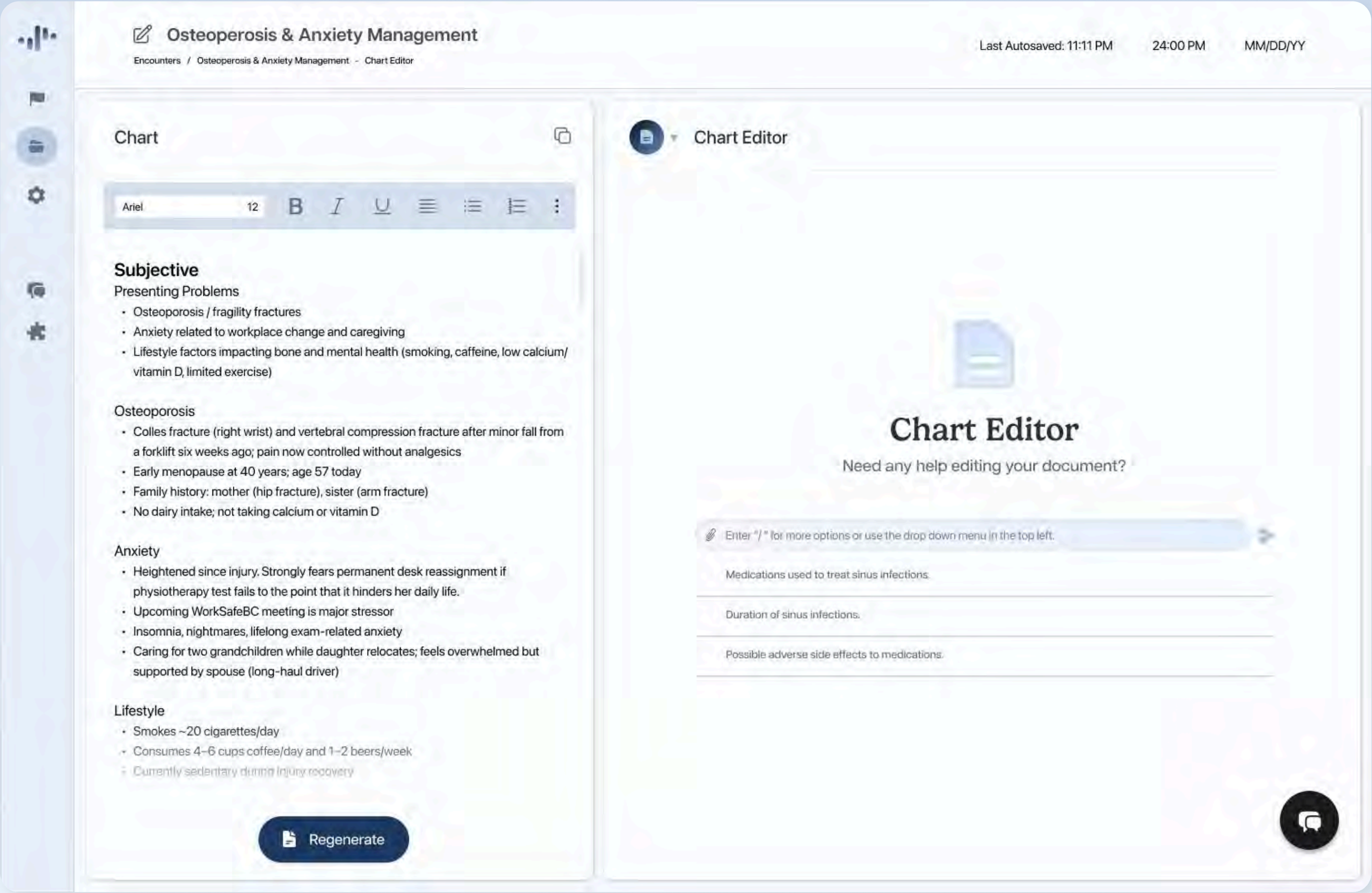


Chart Editor

Health Assistant/Context Manager

Goal
Decrease cognitive load.
Seamlessly integrate automation into workflow and allow user’s to customize outputs to their needs.

- Changes**
- Simplified layout; fewer buttons.
 - Smooth, flexible editing workflow.



User Control & Customization

Highlight, Prompt, Review, Apply.

Osteoporosis & Anxiety Management

Encounters / Osteoporosis & Anxiety Management - Chart Editor

Last Autosaved: 11:11 PM

24:00 PM

MM/DD/YY

Chart

Ariel

12

B

I

U

≡

≡

≡

⋮

Subjective

Presenting Problems

- Osteoporosis / fragility fractures
- Anxiety related to workplace change and caregiving
- Lifestyle factors impacting bone and mental health (smoking, caffeine, low calcium/ vitamin D, limited exercise)

Osteoporosis

- Colles fracture (right wrist) and vertebral compression fracture after minor fall from a forklift six weeks ago; pain now controlled without analgesics
- Early menopause at 40 years; age 57 today
- Family history: mother (hip fracture), sister (arm fracture)
- No dairy intake; not taking calcium or vitamin D

Anxiety

- Heightened since injury. Strongly fears permanent desk reassignment if physiotherapy test fails to the point that it hinders her daily life.
- Upcoming WorkSafeBC meeting is major stressor
- Insomnia, nightmares, lifelong exam-related anxiety
- Caring for two grandchildren while daughter relocates; feels overwhelmed but supported by spouse (long-haul driver)

Lifestyle

- Smokes ~20 cigarettes/day
- Consumes 4-6 cups coffee/day and 1-2 beers/week
- Currently sedentary during injury recovery

Regenerate

Provider Communication

Generate a referral to a dermatologist named Dr. Smith for Keloid Scarring.

Here's your referral letter:

Referral to Dermatologist

Patient Name: [Your Name]
Date of Birth: [MM/DD/YYYY]
Date: [Today's Date]

To: Dr. Smith, Dermatologist
Re: Consultation for Keloid Scarring

Dear Dr. Smith,

I am referring [Patient Name] for evaluation and management of keloid scarring. The patient presents with persistent raised scars on the upper chest for the past 8 months, associated with itching and cosmetic concern.

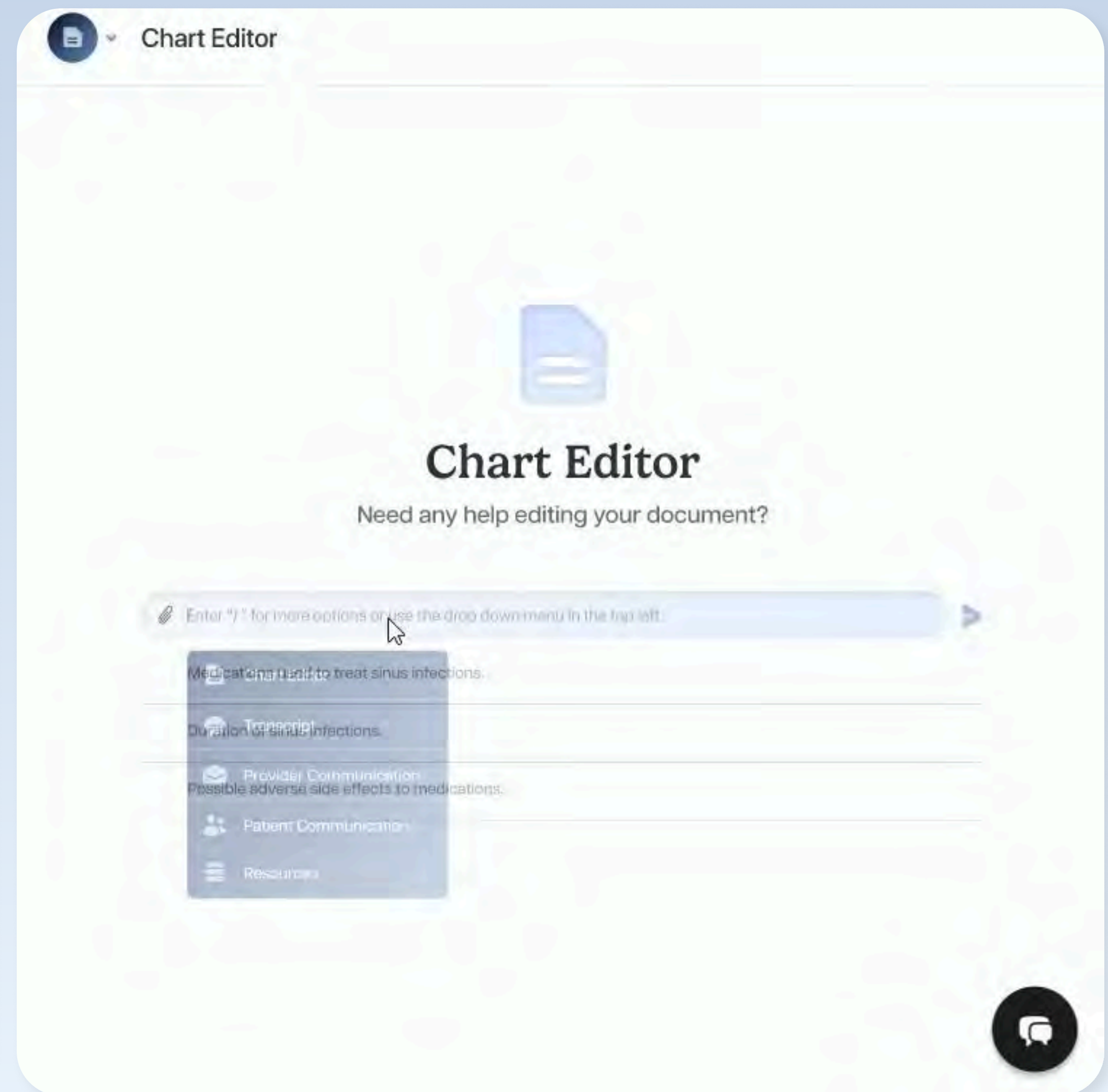
Thank you for your attention to this referral.

Sincerely,
[Referring Physician's Name]
[Clinic Name]

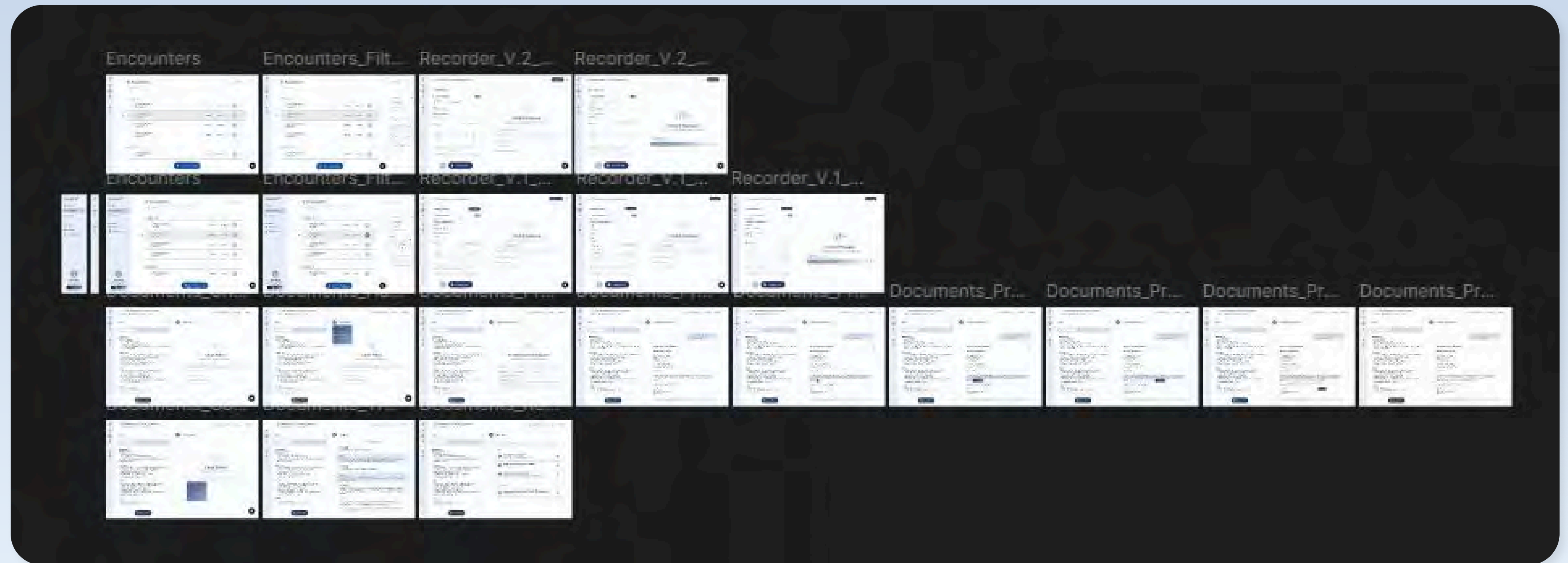
Generate a new communication or add some tweaks



Hamburger Menu



Command-Line



Thank You!