

medical record



SumData

An AI driven solution to medical documentation workflow problems

Problems

Healthcare providers spend a significant portion of patient visits on clinical documentation rather than direct patient care. Doctors are required to manually write detailed medical reports after each consultation, a process that is time-consuming, repetitive, and a major contributor to physician burnout. This administrative burden reduces the number of patients doctors can see per day, increasing wait times and limiting access to care.

At the same time, patients often leave appointments confused or overwhelmed. Medical terminology, rushed explanations, and information overload because many patients forget or misunderstand diagnoses, treatment plans, medications, and follow-up instructions. This communication gap can lead to poor adherence, unnecessary follow-up visits, and worse health outcomes.



Impact

- As Canada adopts EHRs (electronic health records) physicians spend up to 50% of their time with documentation.
- Though creating EHRs is helpful, wasting physician time and talent on documentation tasks is unresourceful
- Only 12-27% of time is spent engaging in direct bedside patient care

50%



Sources:

<https://www.cansurg.ca/content/64/4/E457>

<https://www.cmpa-acpm.ca/en/education-events/good-practices/physician-patient/patient-centred->

Call to action

Current documentation workflows are:

- inefficient
- largely designed for providers rather than patients

this creates a system that strains clinicians while failing to support patient understanding.

There is a clear need for a human-centered solution that:

- reduces documentation time for doctors

while simultaneously improving patient's:

- clarity
- accessibility
- understanding

without compromising:

- accuracy
- privacy
- clinical control.



Solutions



01.

SumData is a privacy-first, AI-powered clinical documentation assistant designed for Canadian healthcare environments. It reduces physician documentation time by generating structured medical reports directly from doctor–patient conversations, allowing clinicians to focus more on patient care.

02.

SumData processes all data locally or on-premise and does not require internet access for AI functionality. Using the ClariNote Engine, the system generates two outputs from each approved visit: a clinician-focused report using medical terminology and a patient-friendly summary written in clear, accessible language.

03.

All reports require physician review and approval before being saved or shared. By combining offline AI processing, centering the doctor, adding encrypted cybersecurity protection, and patient-centered communication, SumData improves efficiency, reduces burnout, shortens wait times, and enhances patient understanding while maintaining strong privacy protections aligned with Canadian healthcare standards

Safe

Canadian Focused

Saves time

generates medical reports

processed data locally

no data stored

generates accessible reports

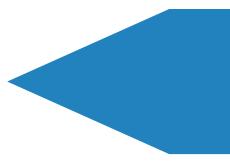
human based solution

all reports physician reviewed

AI trained on approved accurate medical data (no access to the internet)

enforces physician responsibility

Solutions



04.

ClariNote Engine is SumData's internal, offline AI documentation engine that converts doctor-patient conversations into structured medical reports. This AI is not a third-party application and does not access the internet. All data recorded by the AI is discarded and forgotten after the app/website is closed. No patient records are stored in the system. Convenience is sacrificed for safety.

05.

The engine operates using a preloaded medical knowledge base shipped with the system, including medical terminology, clinical documentation standards, research summaries, clinical theories, and structured report templates. During use, ClariNote processes only the locally captured, consented clinical conversation and the embedded offline resources.

06.

ClariNote Engine functions strictly as a clinical documentation support tool, not a diagnostic or decision-making system. All generated reports are drafts and require mandatory physician review and approval before finalization, ensuring accuracy, accountability, and clinician control.

Offline AI

no Patient records stored

safety > convenience

AI model receives controlled information

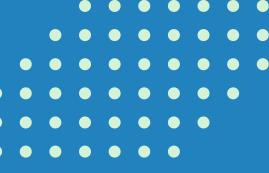
Physician chosen templates

conversation consented by both physician and patient

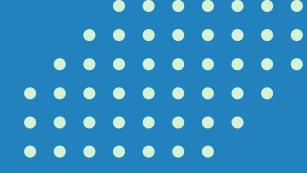
all reports physician reviewed

Physician's are given complete control

AI is not given diagnostic control



Worries



1. Why will healthcare providers get on board?

This tool solves a huge problem in the health care industry, maximizes physician resourcefulness while simultaneously creating a safe, low effort tool to help doctors with documentation, and patients with memory and understanding.

2. Where will data be stored?

Patient data will never be stored unless downloaded to the physicians computer or emailed to the patient. The app will not store any information related to the patient. The doctors data is stored on local hospital servers. once a doctor signs into their work computer in the healthcare facility and connects to their wifi, they are given access to sign in and all information is locally stored.

3. What if the AI makes mistakes?

The clariNotes engine is trained on extensive medical records and is not likely to make big mistakes. If the AI tool does make mistakes physicians are responsible for correcting them as SumData is only meant to be a tool.

4. How will security be enforced?

Since all doctors sign in information is locally stored on hospital servers and is not accessible directly to the app creators or regulators, the health care providers' IT department is responsible for managing security against malicious threat actors.

Compliance with Guidelines

- Asks for consent
- Does not store patients data
- Users reserve the right to change data
- Website uses encrypted HTTPS
- AI output is a draft - physician review required
- AI does not diagnose, treat, or administer support

Use Cases

- Typical use cases: hospitals or other healthcare providers
- In an emergency wing of the hospital where time is crucial
- Large hospitals that have an obligation to contribute to EHRs (electronic health records)
- Small clinics that do not have enough staffing and need all the extra time they can get



Technical architecture

Technical Architecture — SumData (Offline-First)



Privacy by design: No Internet Access • No Data Sharing • Doctor-in-the-Loop • Canada-Ready



Step By Step

1. physicians sign in onto hospital computers and then will be allowed to sign in and access their dashboard on the app
2. the medical practitioner will provide consent to record and obtain patient consent to record
3. An editable transcript of the conversation will be created
4. The AI will create both a doctor's report and a patient report that the doctor will review and download based off of the recorded transcript
5. The physician will review all information to ensure accuracy and completeness
6. Both files will be downloaded onto the hospitals computer and the patient file will be distributed to the patient as the doctor sees fit (email, mail, printout)
7. once the app/website is closed all recorded data, transcript, and downloadable files will be erased



Future Roadmap

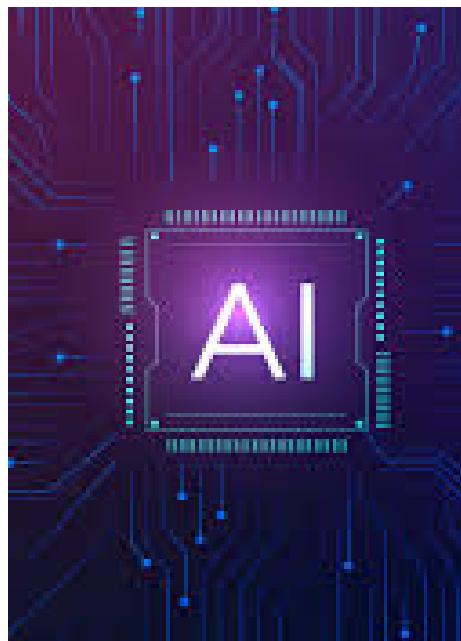
Integrate SumData into hospitals

Since SumData is a safe, and opensource it would make sense as to why many hospitals and physicians would incorporate it in their work



Create a fully offline AI

We didn't have access to offline AI's or AIs that aren't run by external companies for the prototype. In the future we'd like to create an AI that is fully offline and internal to SumData



Insurance

Future SumData plans include taking up other paper work issued by health care providers such as Insurance - making paperwork easier with AI

