

PATIENT SIMULATOR

*AI-tool to practice communication for medical
professionals*



PROBLEM

**Imagine telling someone they have cancer.
Healthcare professionals have to talk to people through the toughest times
in their lives but lack options on how to practice communication.**



HARD CONVERSATION

Physicians have to regularly deliver bad news, explain complex concepts, and communicate clearly to patients or their relatives.



LACK OF PRACTICE

You can't learn this from a book. Medical schools have to find physicians/actors to help with the training, and trainees sometimes ask their friends to act as patients.

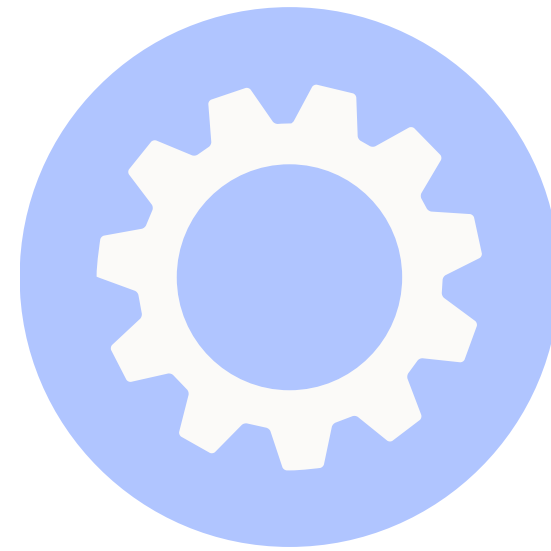
FOCUS AREA - OSCE EXAM

We focus on the Objective Structured Clinical Examination (OSCE) exam.



TIMED STATIONS

Timed 'stations' where students demonstrate history-taking, physical examination, clinical reasoning, medical knowledge, and communication skills.



RESOURCE INTENSIVE

Practicing and administering OSCEs is time and resource intensive.



ALL CLINICAL

94% of medical schools require final comprehensive OSCEs. Clinical training programs have similar exams including pharmacy, counseling, nursing, allied health, and residency programs.

Unlike written exams - there is no online self-study method to prepare for OSCEs.

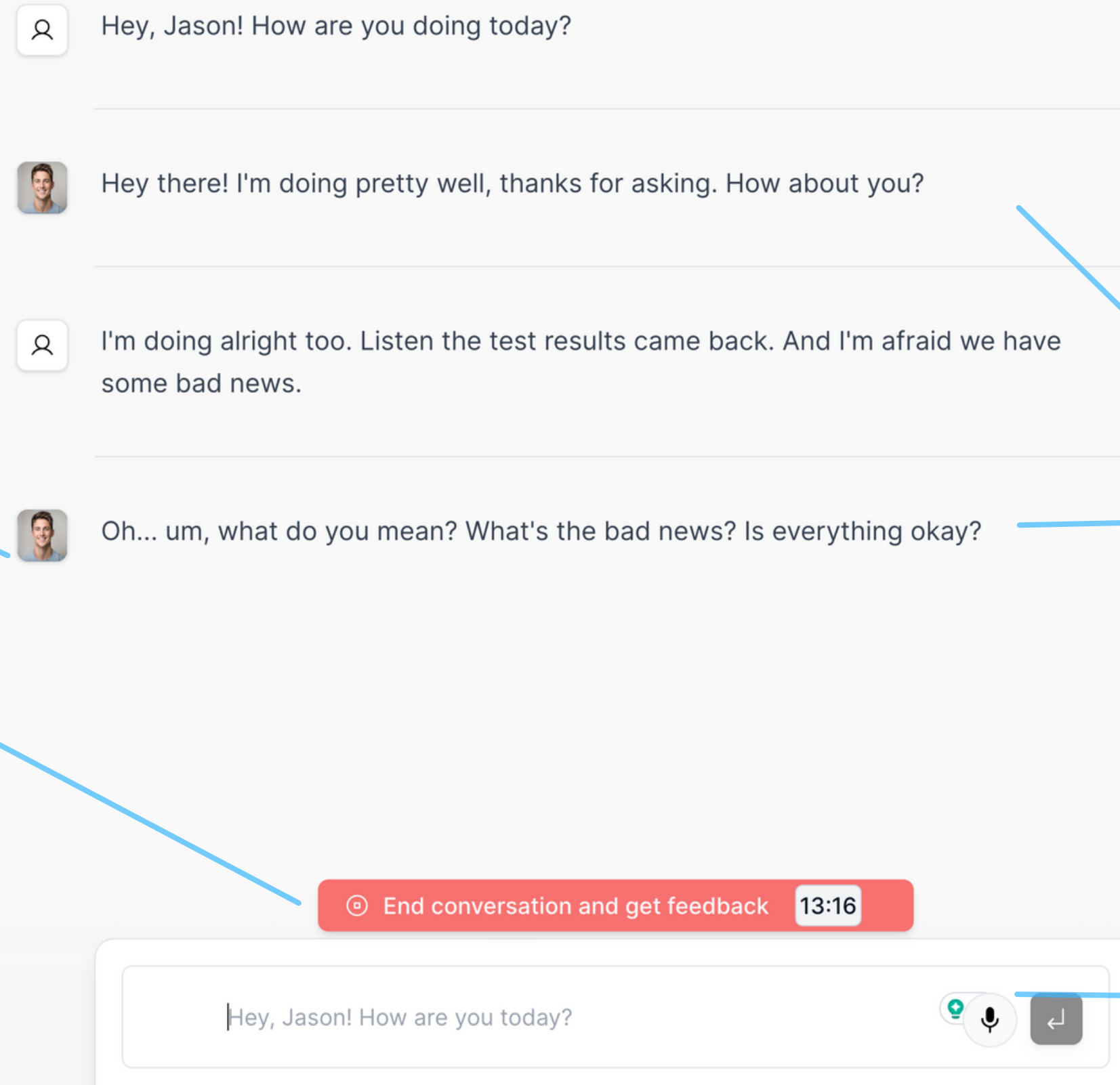
SOLUTION

Prepare for OSCE by chatting with an AI patient

We use **ChatGPT** to simulate a conversation with a patient. Instructions on how to behave are taken from medical exam case studies.

(bonus) Generated avatar with **Stable Diffusion**

ChatGPT will also provide feedback following the exam criteria.



ElevenLabs API voices responses with a suitable voice for the current persona, making the experience more engaging.

Use **Whisper API**, for voice input instead of typing.

DEMO

Try to walk the patient through their positive HIV result

Welcome to patient simulator!



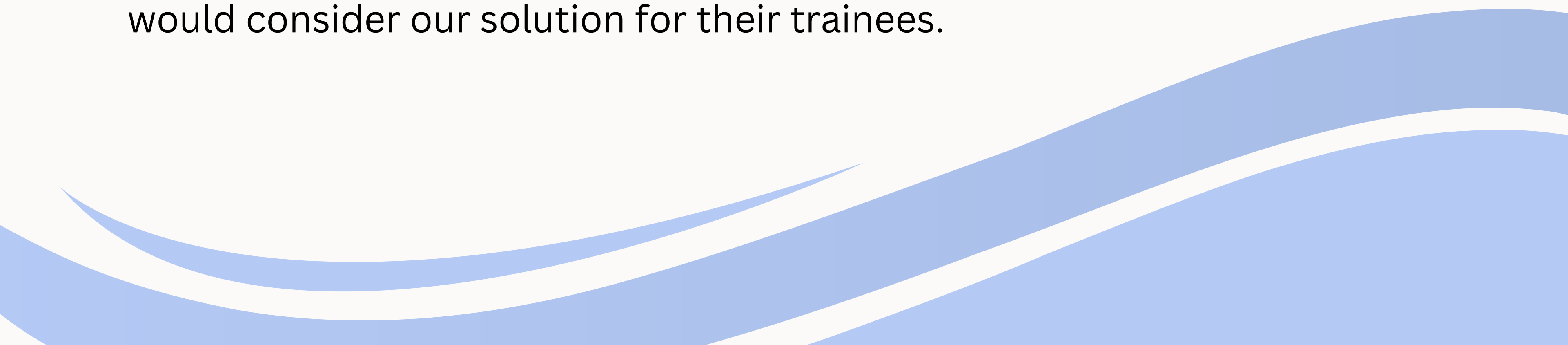
For this case you will be seeing Jason Brody, a 26 year-old patient of yours for the past 3 years in overall good health. Jason is coming in today for your periodic health visit. As is his custom, he came in last week to have lab work drawn in preparation for his visit.

In reviewing his lab results, you find that his HIV ELISA/Western Blot (which had been done by verbal consent) has returned positive. He is not yet aware of this result.

Perform an appropriate history, disclose the results, and manage. Try to finish in 14 minutes.

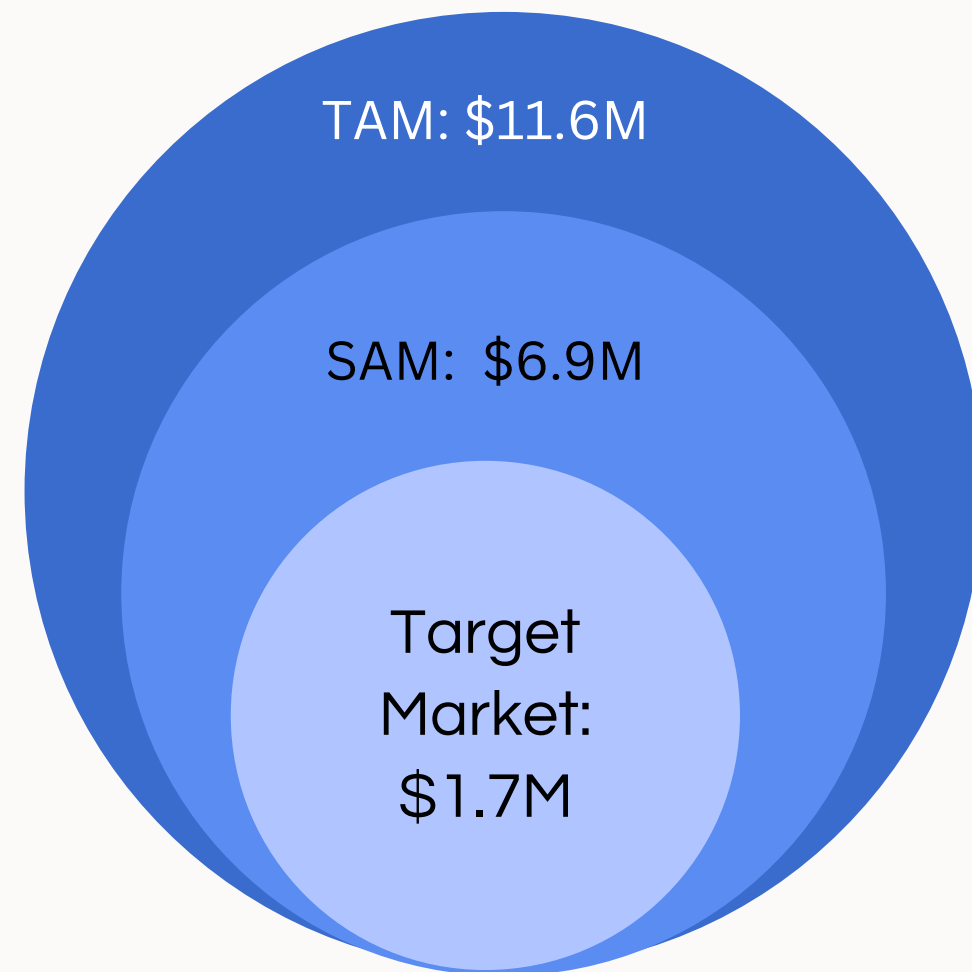
<https://patient-simulator.vercel.app/>

REVENUE STREAM

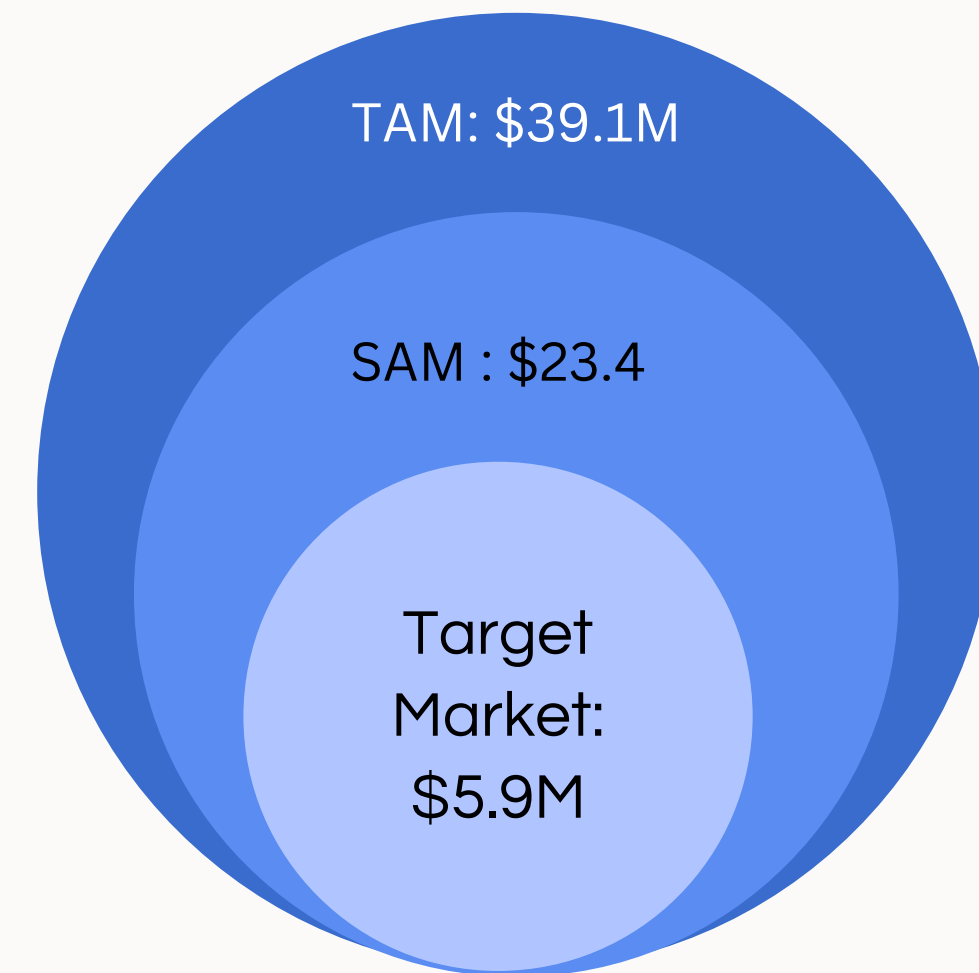
- We would have tier-based pricing, charging **20\$ a month** for the 'Pro' tier, which will include an extensive collection of cases and higher usage limits.
 - Users will likely use the service for a few months prior to the exam, so we expect cyclical patterns depending on the time of the year close to exams.
 - We would also support custom tiers for organisations, e.g. residencies, who would consider our solution for their trainees.
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MARKET SIZE (NORTH AMERICA)

Medical Students



All Clinical Trainees



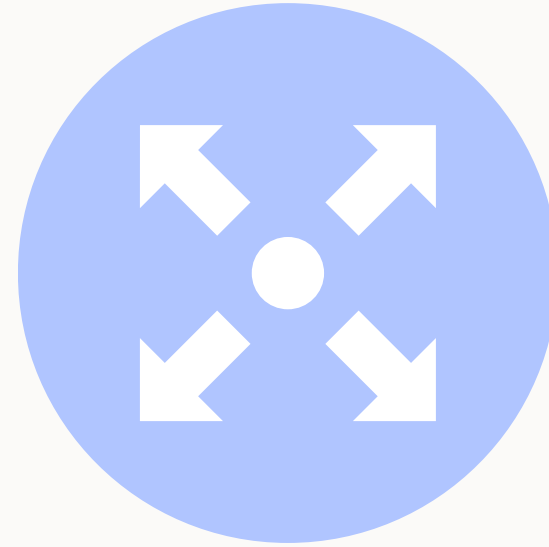
*Bottom-up calculation assuming \$20 pricing.

FUTURE WORK



MORE CASES

Students will be able to select from a variety of cases. Instructors and students will be able to design their own standardized cases for use in both studying and evaluation.



EXPANDING APPLICATIONS

There are many opportunities beyond single exam prep. For example, the same tool can be used in preparing workers in suicide hotlines.



IMPROVE REALISM

Try to get more emotional responses in voice and experiment with avatars/image generation to convey how the patient is feeling visually.

OUR TEAM



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Primary care physician
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Full-stack software
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