# Team Raccoon #127

Beginning of something big.



Two Raccoons and a Yellow Jacket

#### Who is Team Raccoon?

Yosen Lin - UCSD - BS Data Science '25

Prathish Murugan - UCSD - MS Data Science '25

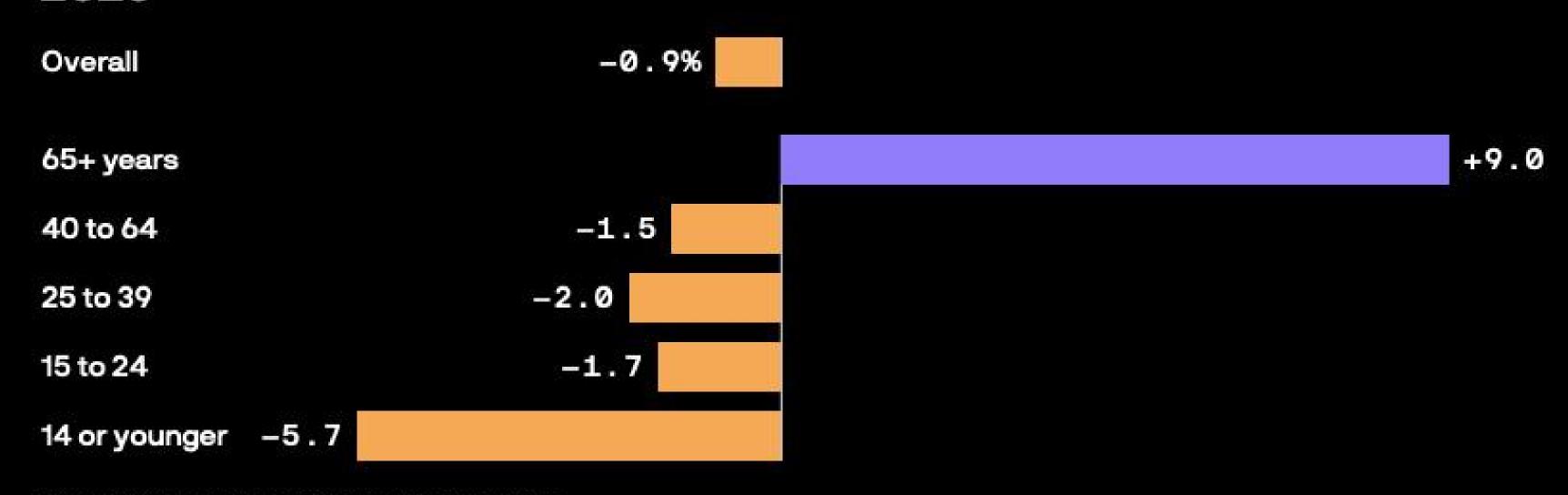
Richard Selznick - Georgia Tech - MS Computer Science '23

#### Who is our solution for?

- Senior Patients
- English as a Second Language
- Mental Health

# Aging senior population

Population change in San Diego metro area by age group, 2020 to 2023



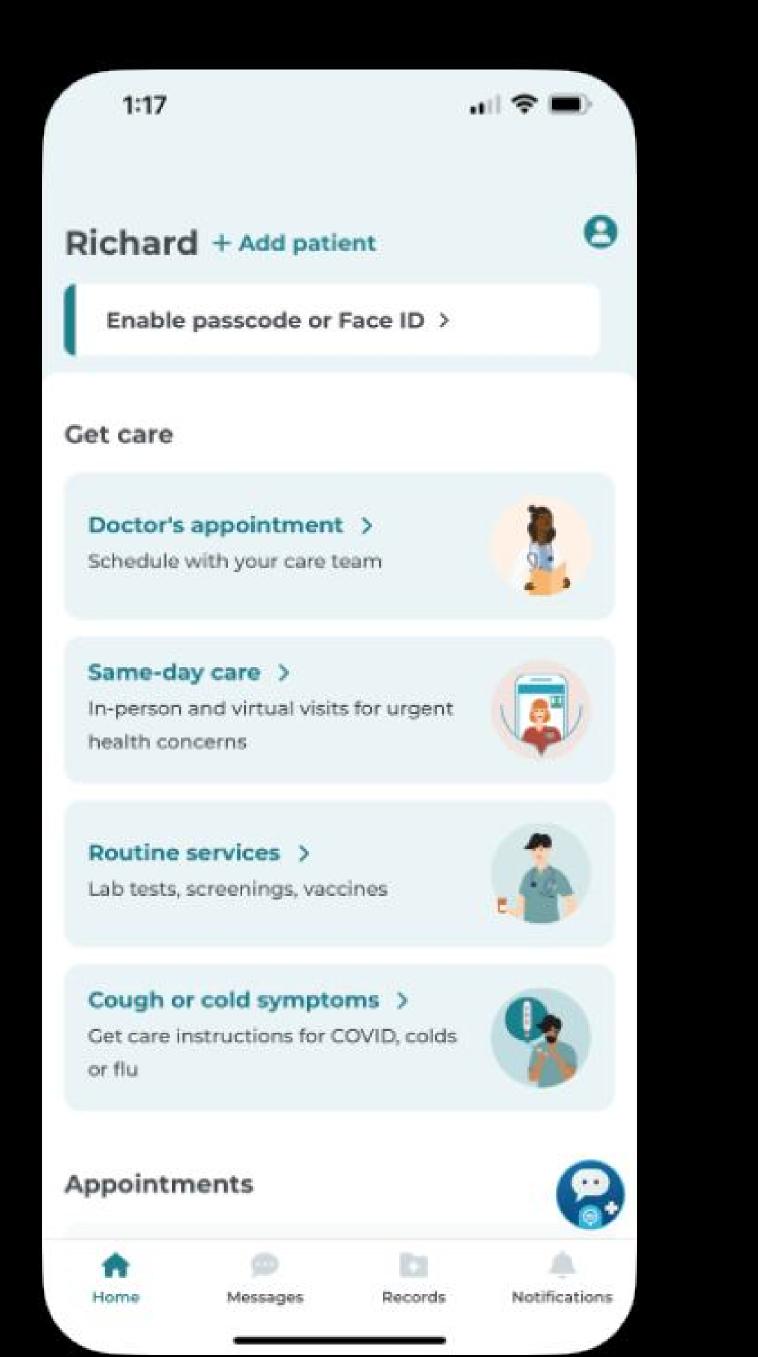
Data: U.S. Census Bureau; Chart: Alice Feng/Axios

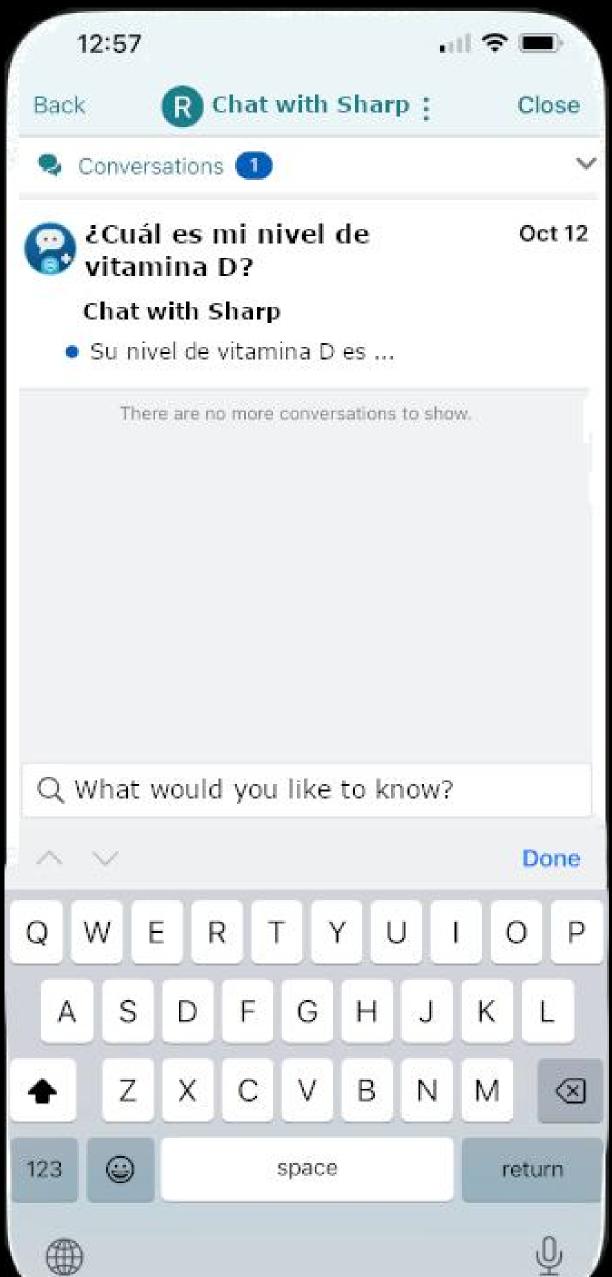
## English as a Second Language:

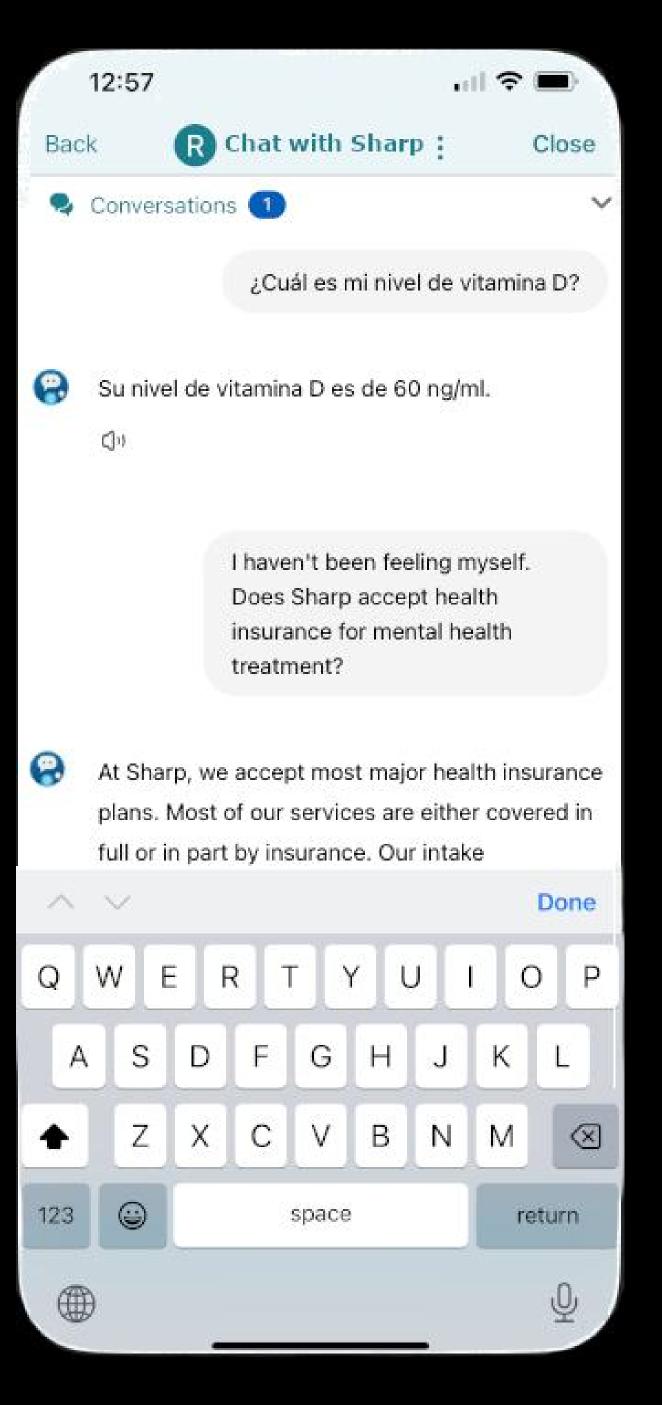
Approximately 400,000 people in San Diego County, aged five years or older, speak English less than "very well"!

This group, referred to as Limited English Proficient (LEP), accounts for about 13% of the county's population.

They have difficulty communicating in English and find it intimidating.



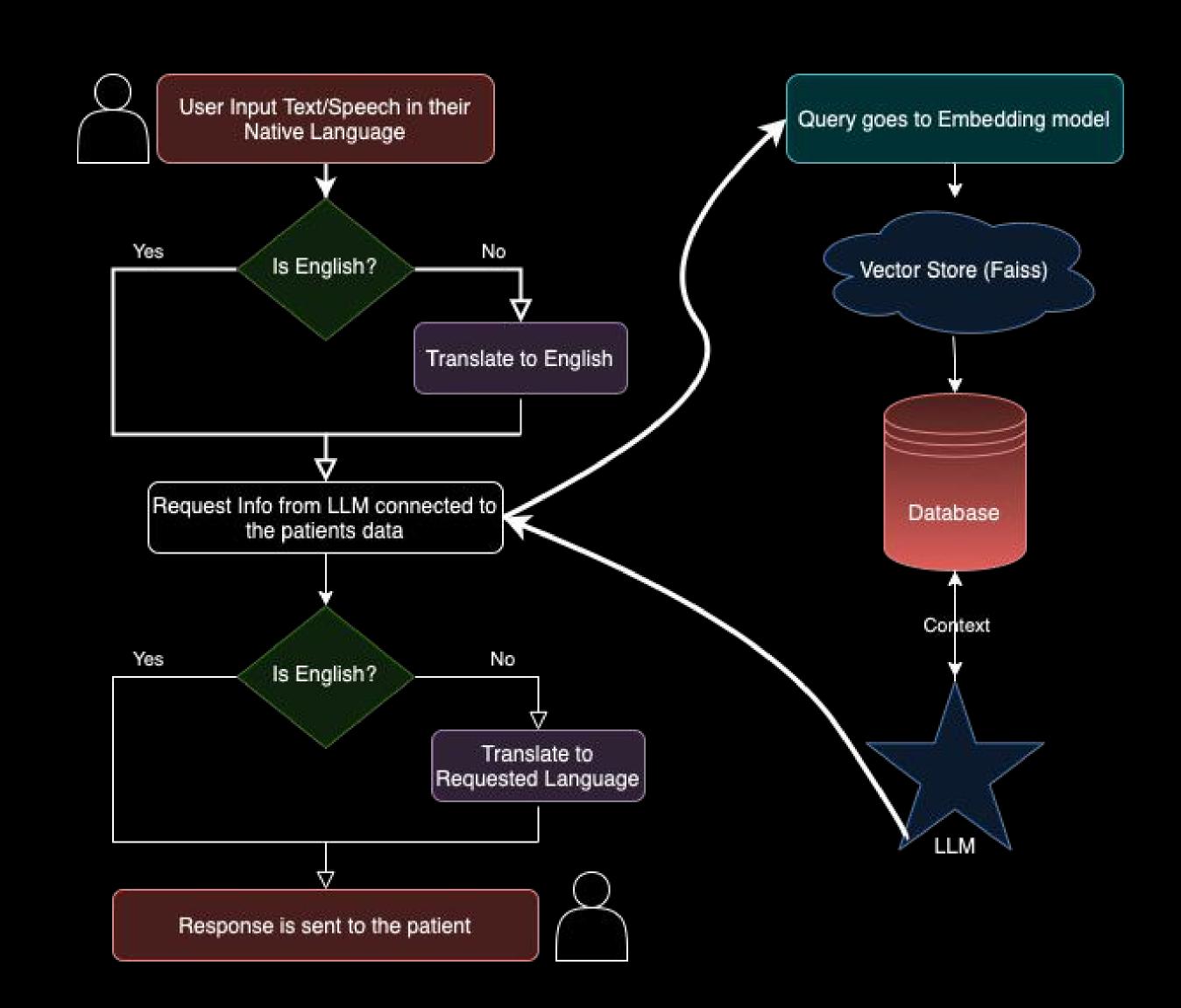




#### Stack:

- No Language Left Behind (local translations)
- Prefer everything local on Sharp servers & Open Source
- Text to Speech: Massively Multilingual Speech (MMS): English Text-to-Speech (facebook/mms-tts-eng)
- Speech to Text: Whisper ASR (openai/whisper-large) with Translation

## Flow:



### Why it solves the problem:

- Allows quick, direct access to patient results through easy question-and-answer format.
- Supports communication in 200 languages via the No Language Left Behind model.
- Reduces HIPAA and compliance risks by using local LLMs within SHARP's server facilities.

# Thank you for your time!

We are happy to answer any questions!