

**Health for Remote Communities** 

## AI Matters to Our Telehealth Program

- AI is the capability of a machine to imitate intelligent human behavior.
- A chatbot is a computer program that uses artificial intelligence (AI) to understand questions in human languages and respond to them, simulating human conversation. Medical chatbots have additional training to suit their purpose.

Happy Summer everyone! I am writing to share some exciting developments in the field of healthcare and how they can benefit Health Access Sumbawa's telehealth program.



**Telehealth Initiative:** As you know, Health Access Sumbawa is always looking for new tools that can improve healthcare in remote communities in Indonesia. Our Telehealth initiative is an example. *I'm happy to report that over the past 6 months we have successfully established workable wi-fi at both of our clinics in Sumbawa!* 

Advancements in AI: Artificial Intelligence has been making great strides recently, particularly in healthcare.

The latest chatbots leverage powerful AI technologies such as natural language processing, speech recognition, and speech synthesis. These technologies enable medical chatbots to understand and respond to patient queries more accurately and efficiently. Additionally, AI powered chatbots can learn autonomously and improve their usefulness over time. They already score above average on medical licensing exams and receive high marks from users on empathy.

**Benefits for Health Access Sumbawa:** Our midwives and nurses often work alone in isolated village clinics. Consulting with a human doctor can be costly and hard to

schedule. This is where AI can make a big difference. IA chatbots have the potential to become expert medical advisors and educators available 24 x 7, 365 days a year.



Advantages of Medical Chatbots: Medical chatbots provide instant access to expert medical information at low or no cost. They are highly scalable, meaning that the number of consultations is not limited. They can help patients become better informed, leading to improved health outcomes. And because they are multilingual, they can communicate with users almost anywhere.

**Limitations of Medical Chatbots:** Of course, there are also some limitations to using chatbots compared to

talking to a human doctor. A human clinician can ask questions and observe the patient, prescribe therapy, schedule tests or suggest in-person patient visits to a hospital or doctor's office. Local doctors will be more aware of the culture and the local healthcare environment.

Additional Considerations: Medical chatbots must outperform human practitioners in minimizing medical errors. They should appear empathetic, and their data must be secure and unbiased. That's a lot to ask, but the day when we can say these things with confidence may be less than a year away.

**Our Commitment:** HAS will be an early adopter of this exciting new technology. We recently applied to Google to take part in their selective field test of med-PaLM2, their medical chatbot. Hopefully we will be accepted into this program soon. I'll keep you posted on our progress.

We send out our annual newsletter in October, so be on the lookout for that. Lots of exciting projects and progress to tell you about. Thank you for partnering with HAS. Together, we are having a real impact on the health of remote underserved communities.

Very best wishes to you all,

Jack

Jack Kennedy www.healthaccesssumbawa.org / <u>healthaccesssumbawa@outlook.com</u>

Health Access Sumbawa Inc, 392 E Neck Rd, Nobleboro ME 04555August 18th, 2023P.S. While AI is a powerful productivity tool, the quality of patient care will always<br/>depend on the skill and dedication of our resident clinicians.