

Conversations with ALEX



	SAY...	OR THIS...
Greeting	Hello ALEX	Good Morning
	What is your name?	
Chief Complaint	What brings you in today?	Can you tell me what's going on?
Chief Complaint Additional Concerns	Anything else going on?	Is there anything else you'd like to talk about while you're here?
Location	Where is the location of the pain?	Can you point again to where it hurts?
Intensity	On a scale of 1 to 10, how would you rate the pain?	How bad is the pain on a scale of 1 to 10?
Quality (Character)	How would you describe it if you put it into words?	Can you describe the pain?
Onset	How long has this been going on?	When did it start?
Radiation	Does the pain go or move anywhere?	Does the pain travel anywhere?
Aggravating Factors	What makes your pain worse?	Do you find that anything makes the pain worse?
Alleviating Factors	Has anything seem to make the pain better?	What have you noticed anything that makes the pain better?
Associated Factors	Do you have any other symptoms?	Have you had any other symptoms accompanying it?
Past Medical History	How has your health been in general?	Do you have any other medical conditions that I should know about?
Allergies	Do you have any allergies?	Are you allergic to any medications?
HITS - Hospitalization, Injuries, Trauma, and Surgery	Do you have any serious medical conditions? Have you been hospitalized? Have you had any surgeries?	Any recent illnesses? Any hospitalizations? Any surgeries?
Family History	Are you parents living? Do your parents have any health problems? Is there a history of high blood pressure, cancer, asthma, diabetes ... etc.) in your family?	Tell me about your family history? Has anyone in the family suffered from anything like this? Any family history of medical problems?
Social History	How old are you? What is your occupation? Do you use tobacco products? Do you drink alcohol - wine, beer, liquor?	What is your age? What do you do for a living? Do you smoke? Any alcohol use?
Medications	Are you taking any prescription medications?	Are you taking any over-the-counter medications?
Effect on patient's life	How has the pain affected your daily life?	How has this affected you?
Health Maintenance	Do you do any preventative health maintenance such as screenings, routine physicals, or see a healthcare provider regularly?	Do you seen any other doctors regularly?
Closing of Interview	Do you have any questions for me?	Is there anything more I can do for you?
Easter Eggs	What is your favorite movie?	Are you seeing someone?
	What is the meaning of life?	Will you take over the world?

COMMUNICATION TIPS

Interact with ALEX as you would with any human patient: using good communication techniques.

1. **Start the conversation** by touching ALEX's shoulder (deltoid area).
2. The **"be-beep" sound** means ALEX is listening and you can begin talking.
3. Speak **naturally**.
4. **Use short and concise** questions and statements.
5. Ask **one question at a time** and avoid leading questions.
6. **Pause** after each question and **listen** for ALEX's answer.
7. You can **ask your next question** right after his answer.
8. If ALEX didn't understand, **restart** the conversation and try **rephrasing** the question.
9. **End the conversation** by touching either shoulder or saying *"OK, thank you ALEX"*. He will confirm he is no longer listening with the "be-boop" sound.

SPEECH FAQs



à é î ã ü



ALEX™ uses Google™'s automatic speech recognition, Cloud Speech API to transcribe human speech (in this case, short utterances of commands, questions, or dictations) into text; and various Machine Learning technologies to select the most likely appropriate response depending on the phonetic content of the transcript.

Don't worry if you have an accent! Using Google™'s speech services, ALEX's speech recognition is enhanced with each passing day as millions of users around the world grow the repository with each interaction. ALEX will do his best to understand your accent, and 9 times out of 10 he'll get it right.

Concerned about a noisy environment? Don't be! Google's speech Noise Robustness handles noisy audio from many environments without requiring noise cancellation. On the other hand, strong echoes might be challenging - if possible, place him in an acoustically friendly environment. Having a few pillows and blankets around could make all the difference.

Speech recognition and natural language processing is an evolving technology. ALEX's integration with Google Cloud Speech and cloud connectivity status ensures he has the most recent gains in this field. Just like Amazon™'s Echo™ Alexa™ or Apple™'s Siri™, he lives on the cutting edge. Be patient with ALEX, spend some time with him and get to know him. He is the future.