

# Software Agent for Medical Questioning

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# Physicians are Poor Interviewers

- Interrupt patients in less than 24 seconds
- Use terminology that is not well understood by patients.
- Ask only 59% of essential history items
- Do not elicit 54% of patient problems

# Computers are Great Interviewers

- Never interrupt
- Use patient-friendly language
- Using branching questionnaires, will never forget questions
- Studies have shown that patients report sensitive information to computers more reliably than to physicians
  - Includes alcohol and drug abuse, sexual activity, suicide attempts, and abuse

# Computerized Medical Questionnaires Exist Already

- But they require a person to choose the appropriate questionnaire
- But they are not patient-friendly
- But they don't integrate well into clinical workflow

# Software Agent for Medical Questioning

- Create a natural language interface to allow patients to express their complaints
- Use a conversational strategy to confirm results and choose the correct questionnaire
- Use affective techniques and empathetic statements to improve patient experience
- Store the results in a personal health record so that they can be seamlessly integrated into clinical workflow