

Understanding Barriers to Medical Instruction Access among Older Adults: Implications for AI-Assisted Tools

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ABSTRACT



- Recalling medical instructions provided during patient-physician conversations can be challenging among older adults who visit doctors multiple times per year.
- Several Interventions exists for patients to help them recall medical information provided during doctor's visit:



- However, these methods can be challenging for some older adults to access at home.

OBJECTIVES

The objectives of this research are to understand barriers to medical instruction access among older adults to identify implications for how AI-Assisted tools might:

- Improve patient-physician communication among older adults
- Augment access to medical conversations provided during doctors' visits
- Organize medical information in an effective and relevant format

METHODS

Participants

- We recruited 12 older adult patients who manage diabetes
- Participants ages ranged from 62-81 (AVG=70.66, SD=6.76)
- Participants included 11 females and one male

Procedure

- We conducted semi-structured interviews.
- We asked about:
 - Current diabetes management
 - Tools and techniques for recalling information
- We shared a prototype of an automatic transcription of patient-physician conversations and asked for feedback,

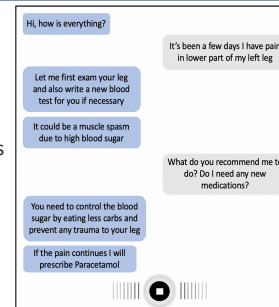


Figure 1. Automatic transcription of patient-physician conversation

RESULTS

- Participants shared their **information gathering experiences** : using personal notes, relying on family caregiver, using online services, and asking for verbal repetition
- Participants shared **challenges accessing medical instructions**: hearing information, recalling medical instructions, and difficulty navigating e-health portals
- Participants shared that **automated transcription** could help but also suggested that additional organization, summary, and highlighting of information would be useful.

CONCLUSION

- For older adults who often visit multiple doctors to manage chronic diseases, recalling medical instructions can be challenging.
- Automatic transcription of patient-physician conversations for later access can improve their ability to review and consult the doctor's recommendations.
- AI-assisted tools that summarize, classify, and highlight medical transcripts could be useful for later access (See Figure 2.).

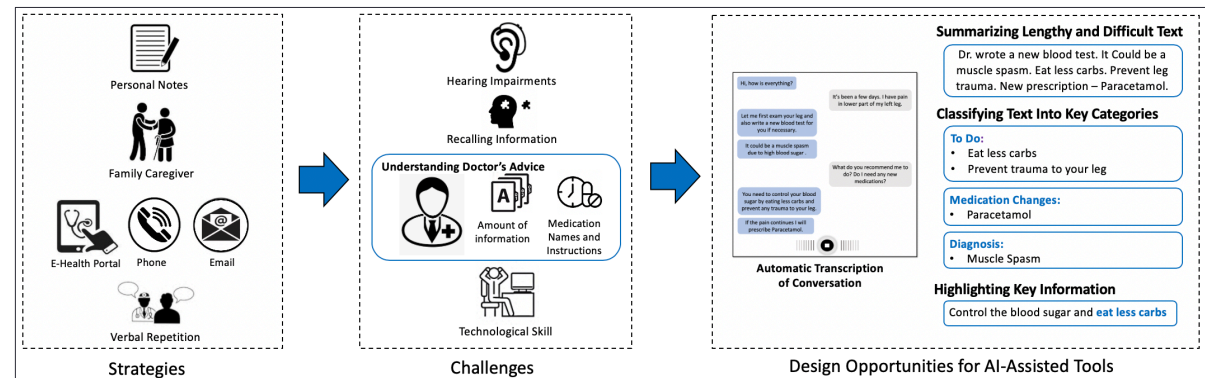


Figure 2. A model of strategies and challenges to recall medical instructions provided during doctors' visits and design opportunities for AI-assisted tools.