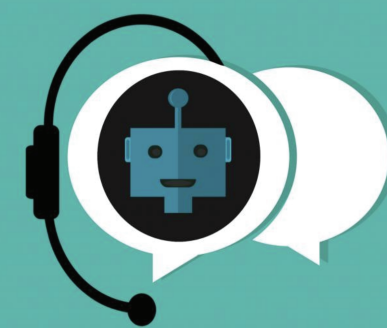


An Assessment of Healthcare Chatbots in App Stores: A Content Analysis



AIM

The purpose of this study was to characterize the purpose, features, and content of chatbot applications available for use by the general public and the evidence on their effectiveness.

BACKGROUND

Chatbots have been increasingly supporting consumers, and health professionals in healthcare [1]. But, little is known about the current state of healthcare chatbots in app stores.

METHODS

A systematic review of the two major smartphone app stores: Apple App Store and Google Android Play Store.

Chatbot apps were included in the review if they

- (1) focused on consumers or healthcare professionals;
- (2) involved a conversational interface; &
- (3) were in English.

RESULTS

431 Chatbot Apps found
27 Met the inclusion criteria

48%
(13/27) Symptom Checkers

26%
(7/27) Mental Health Applications

26% (7/27) evidence-based in their design

60% (16/27) with no evaluation of their effectiveness

37% (10/27) with no disclosure of risks to use them

CONCLUSIONS

Healthcare chatbots are an emerging class of technology that support natural language interaction with consumers, carers and health professionals. Despite their increasing adoption, there is a lack of evidence on the effectiveness and safety risks of commonly available healthcare chatbots in two major app stores.

FUTURE WORK

Future efforts should focus on improving the evidence base for chatbots' effectiveness and developing some reporting standards for presenting the capabilities and limitations in a more transparent way.

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