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Programming Tools for Messenger-Based Chatbot System Organization: Implication for Outpatient and Translational Medicines

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Abstract

© 2016, Springer Science+Business Media New York. The implementation of translational medicine is associated with considerable costs of equipment, staff competence, and doctor-patient (DP) and clinic-patient (CP) communication. The application of DP and CP systems evolved from e-mail letters to website assistance chat and smartphone apps in the context of the m-health paradigm. The rapid development of mobile messengers and chatbot systems has opened a new niche for DP and CP communication, providing a high population penetration rate with perfect capabilities for personalization. This article provides a model of chatbot system organization as well as programming tools for its implementation. The integration of machine conversation systems supplemented by natural spoken language together with m-health devices and mobile apps is a good solution for a variety of tasks in translational and outpatient medicine. The usage of chatbot systems as a communication device for the purposes of translational medicine is going to reduce costs and time on routine operations.

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Keywords

Ambulatory medicine, Artificial intelligence, Chatbot, Communication, Outpatient medicine, Translational medicine

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