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Data Privacy: Stakeholders' Conflicts in Medical Internet of Things

Authors: Benny Sand, Yotam Lurie, Shlomo Mark

Abstract : Medical Internet of Things (MIoT), AI, and data privacy are linked forever in a gordian knot. This paper explores the conflicts of interests between the stakeholders regarding data privacy in the MIoT arena. While patients are at home during healthcare hospitalization, MIoT can play a significant role in improving the health of large parts of the population by providing medical teams with tools for collecting data, monitoring patients' health parameters, and even enabling remote treatment. While the amount of data handled by MIoT devices grows exponentially, different stakeholders have conflicting understandings and concerns regarding this data. The findings of the research indicate that medical teams are not concerned by the violation of data privacy rights of the patients' in-home healthcare, while patients are more troubled and, in many cases, are unaware that their data is being used without their consent. MIoT technology is in its early phases, and hence a mixed qualitative and quantitative research approach will be used, which will include case studies and questionnaires in order to explore this issue and provide alternative solutions.

Keywords: MIoT, data privacy, stakeholders, home healthcare, information privacy, AI

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