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The Integration of Patient Health Record Generated from Wearable and Internet of Things Devices into Health Information Exchanges

Authors : Dalvin D. Hill, Hector M. Castro Garcia

Abstract : A growing number of individuals utilize wearable devices on a daily basis. The usage and functionality of these wearable devices vary from user to user. One popular usage of said devices is to track health-related activities that are typically stored on a device’s memory or uploaded to an account in the cloud; based on the current trend, the data accumulated from the wearable device are stored in a standalone location. In many of these cases, this health related datum is not a factor when considering the holistic view of a user’s health lifestyle or record. This health-related data generated from wearable and Internet of Things (IoT) devices can serve as empirical information to a medical provider, as the standalone data can add value to the holistic health record of a patient. This paper proposes a solution to incorporate the data gathered from these wearable and IoT devices, with that a patient’s Personal Health Record (PHR) stored within the confines of a Health Information Exchange (HIE).

Keywords : electronic health record, health information exchanges, internet of things, personal health records, wearable devices, wearables
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