



## Personal Health Management System for Diabetics: A research Proposal

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**Abstract:** According to WHO (WHO, 2013) fact sheets on diabetes, there is an estimated 347 million people worldwide who has diabetes and in 2010 there was an estimated 3.4 million deaths related to it. And 80% of these deaths are from low- and middle-income countries. WHO is projecting that in 2030, diabetes will be the 7<sup>th</sup> leading cause of death in the world. But there are ways in order to avoid the possibility of death for a diabetic and that is to have a healthy lifestyle - healthy diet, regular physical activity, maintaining a normal body weight and avoiding tobacco. In order to do this, one has to constantly monitor what they have taken in and what they have done within their day. With the advancement in technology, one can already have such power within the palm of their hands.

The study formulated an ICT-solution that would help people suffering from diabetes to monitor their health status through their mobile phone. The mobile personal health record (mPHR) is a portable tool that an individual can use to store, keep track and share their medical health records through the utilization of mobile devices.

In order to come up with the appropriate application design, some medical specialists and diabetics were interviewed regarding the management of their illness. A prototype was developed that will allow possible users to test the usability of the application. The prototype has three main modules and these are the journalizing module, records management module and the reports generation module. eJournal enables users to record their activities such as their medicine intake and food intake, eRecord module enables users to store different laboratory results and other transactions with the doctor and eNotify module reminds users when to take their medication or if they have consultation/appointments.

**Key Words:** Diabetes; eHealth; Health Manager; Personal Informatics; Mobile Application