



Mobile-Phone -Based Remote Patient's Vital Signs Monitoring and Automated Alerts

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Abstract

This paper focuses on Mobile-Phone-based Remote Patient's Vital Signs Monitoring and Intelligent Alerts System which, using pervasive technologies simplifies the human life by automated functioning of medical sensor devices and an intelligent data record system with validation and transmission of health tips to the patients as well as to the guardians. The proposed system consists on different components which automatically perform patient's vital signs monitoring (e.g. body temperature, heart-rate, breathing rate, activity and posture) and carry out remedial actions in emergency condition (e.g. medicine dose tips, precautions alert to patient, alert to hospital staff in emergency conditions etc) as well as directly from the specialists to the patients on their mobile-phones as the proposed system include a mobile application as well. In order to achieve the robustness in examining the patients remotely, the system will provide the real time intelligent Content Management System(CMS), installed at respective hospital, capable of making intelligent decisions based on patient's medical status and information generated from patient side. A mobile (Android) application is also the part of the system to facilitate the patient to be examined with the mobility and to view the current conditions and the alerts generated automatically by the CMS as well as from the specialist. This system will not only deal the critical patients but also the normal persons (busy personnel's and traders or business) can take benefit to retain their health by subscribing to the proposed packages of Automated Tips and Alerts by the system. This system is also beneficial for specialists to monitor their patient remotely via mobile application.

Keywords: *Patient Monitoring (RPM); Vital Signs (VS); Remedial Actions; Personal Digital Assistant (PDA); Automated Alerts*

Full Text: www.ijcsma.com/publications/october2013/V1I409.pdf