Health Monitoring Using Mobile Phones

Abstract:- The consumers and healthcare service providers using smart phones are growing exponentially throughout last decade. According to the statistics obtained from [1], the adoption of this technology is rapid; two-thirds of physicians and 42% of the public used smartphones as of late 2009. As of February 2010, there were nearly 6,000 such apps within the Apple App Store. Of these, 73% were intended for use by consumer or patient end-users, while 27% were targeted to healthcare professionals. So, the continued rapid smartphone growth, adoption of health monitoring, the accuracy and applicability of these technologies to healthcare problems remains a challenge.

In our presentation, we plan to elucidate on how recent advancement in wireless communication and smartphone technology have empowered tremendous improvement in health monitoring services. Some of the first developments in these fields that have introduced the mobile health monitoring have been presented in [3], which is designated as MobiHealth project. It is a health service platform based on a mobile phone as a base station for the wireless sensors (uses UMTS or GPRS) worn on the body. It provides services like collecting and storage of the received data, forwarding of data to a doctor or medical centre. In another project, Choi et al. [4], have proposed a system for ubiquitous health monitoring in the Bedroom via a Bluetooth Network and Wireless LAN, where information gathered from sensors connected to the patient's bed is transmitted to a monitoring station outside of the room for analyzing. Jovanov et al. [2] presented a Wearable health systems using WBAN for patient monitoring consisting of physiological sensors, personal server and health care servers and related services. Some other works in this area also discussed the barriers of adoption of this technology on large scale and also presented some ideas to mitigate them. Maged et al [5] presents these changes happening in the mobile and health care industry with example of an android app eCAALYx.

These papers gave us the motivation to indulge ourselves into mobile health and inspired us to cater to some of the not-so-explored areas in this domain which we are going to work on in our project.

References

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