MHealthcare: The future of health management in India- A Feasibility Study by Acharya Narendra Dev College

The penetration of mobile has been in the nook and corner, but most people in India use the devise as a simple talking item. But this can be used for broader purpose. In this initiative Students of Acharya Narendra Dev College is preparing the feasibility study to explore the possibility for the large number of population.

India has one of the youngest populations in the world. However, it is also on its way to having the largest population in the world with non-communicable and chronic diseases (NCD). There are huge gaps between the demand for adequate healthcare and the delivery of the same. Almost 60 per cent of health workers reside in urban area. This mal-distribution is substantially exacerbated when adjusted for the larger share of the population residing in rural areas. The majority (70 per cent) of health workers are employed in the private sector.

Through this project, an effort is made towards understanding how to meet the demand for healthcare in India. The team feels that we need cost-effective and sustainable solutions to make the healthcare available to large segments of the population using innovative technologies (whether proprietary or a new developed one). We aim at studying integration of various technologies that have great potential in cutting costs and increase access to healthcare, empower patients to better manage their own health and reduce or prevent relapses One of the key aspects is to ensure that while the value is provided, the technology should be easy to use and assist with medical diagnosis, chronic disease management, patient involvement and education.

The mHealthcare offers to be potential future of Healthcare in India.looking at the inadequate healthcare personnel, reported non-compliance of patients and, penetration of mobile phones even in remote cornersThere is possible outcome as mobile devices could be effectively used in the better management of chronic diseases by improving physician's access (real time) to patient information,providing remote patient check-ups to increase medical complications and,decreasing re-admission rates and emergency room visits.   For the large-scale use of mobile devices as a popular and effective tool in healthcare in India, extensive studies are required to gauge understanding of the ability of the end-users to use the technology, to have a comprehensive data on the existing diagnostic facilities and their cost and to sensitize the masses to the concept of preventive healthcare. For such studies, students are conducting surveys in the Urban cities such as Delhi, Mumbai, Ahmadabad, Kanpur etc. Findings of the survey would help in proposing an effective model for healthcare in India.

For this students under the guidance of the faculty members and the project guide are conducting market survey for people in the age group 30 to 70: Students will conduct primary research (a market survey) to understand, the ability of people to use technology for the purpose of Healthcare, to study the prevalence of non-communicable diseases amongst the same group of people and to assess the understanding of the concept of preventive healthcare.

Second Improvising the existing low cost Glucometer to make it Bluetooth based/compatible for data transfer to a mobile phone.

Third to Build a Solution: Based on the data collected during this study and developing/improvising (of existing technology) of sensitive methods of detection of clinical parameters as well as utilization of a mobile application on a mobile device, students can build certain components of a solution and test them out on a volunteer target group.

The project is being done under the guidance of Dr. Urmi Bajpai,Associate Professor, Department of Biomedical Science, Dr. Sarita Kumar; Associate Professor, Department of Zoology,Dr. Vishal Dhingra; Associate Professor, Department of Electronics

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