Global harnessing of advanced mHealth for community mobilization

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WHO defines health as a "state of complete physical, mental and social well-being and not merely the absence of disease or infirmities". Health care services are the most vital services for all the people around the world. Provision of health care services has increased in recent years but still there is acute scarcity of the medicine specialists and health care providers in the rural, hilly, slum and other hard to reach areas across the world. There is a need of sustainable, reliable, adaptable, accessible, economical and secure health system for providing health facilities in such areas.

mHealth system uses mobile and wireless technologies in the health sector in the developing world. mHealth has the strong ability to change the face of health service delivery across the globe. A powerful combination of advanced, reliable technologies and mHealth models drives for an effective change for clinical health care. This model not only improves healthcare access for the vast and underserved rural areas but also enhances the patient care facilities for urban people using therapies like Ayurveda, Allopathy, Homeopathy, Amchi, Siddha, Naturopathy and Yoga. The development of mHealth field arises from two factors one is high population growth and high burden of disease prevalence. This has made the use of mobiles for providing health benefits to the society. mHealth technology is being promoted by almost all the member countries of WHO.

There is an urgent need of safe, user friendly, noninvasive, safe, economical, medical intelligent unit for acquiring the vitals of patients using sensors .These vitals are measured using precise sensors, signals are then processed through the processing unit and then displayed on java enabled mHealth applications and then transmitted to the hospital using advanced cellular technologies like 2G, 3G, 4G, Wi-Fi, Wi-Max, Satellite communication, etc. These vitals are then stored on the hospital health server. Health professional will study the vital of the patient and prescribe the treatment again using advanced wireless technologies on the patient hand held device. Hospital also keeps record of the physician suggestion for further treatment in their server.

As the patient data is increasing every day hence mHealth Data Archival System also known as Electronic Health Records are required. The use of electronic health records offers significant benefits in health care units. Electronic health records are required for both developed and the developing countries for to access patient history, lab test reports and records from distant locations. It is integrated with Unique Identification Number, National Identification Number, and ADHAAR number of the patient. This will make treatment of patients possible anywhere across the world without any paper health record. This system is capable of providing patient's treatment compliance, data collection and disease surveillance, health information systems, support tools for health workers, health promotion, disease prevention, emergency medical response systems, record of health data, economical treatments, appointment reminders, referral of patients, avoiding frequent visits to hospital, health services in remote, super specialist services, emergency medicine, mobile patient monitoring, mobile medical date, mobile robotic system, post hospital care, Tele-communication collaboration, medical information, pre- and post-operative treatment and data collection.

For effective mHealth implementation the constraints like geographical constraints, Environmental constraint, network Connectivity, mHealth Awareness (Hardware & Software), Artifacts, Economic and Financial Problems, Specialist mHealth doctors and their Authentication, Skilled Health Workers and Technicians, partnership of public and private sector, Techno Commercial model, Robust model

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from success and sustainability to be taken care .

This method will help a lot in eradicating various diseases from the society and providing health services in remote, hilly, rural, slums areas across the world. In many countries it can work for appointment reminder, referring patient from one hospital to another. mHealth will help elder people who are not able to visit their doctor again and again. In future this can lead to the concept of virtual hospitals and will make benefits of modern medicine available to all the societies. This will make medical facilities available to every person on this earth irrespective of their

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economic status and geographical areas. This will make world a better place to live in.

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Footnote

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