

Improving eHealth

by

Making Medicine Mobile (M³)

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1- Introduction.

eHealth and Telemedicine, day by day

- eHealth and Telemedicine are still a new induction in the Health care sector worldwide and particularly in developing country like Pakistan. Nevertheless we can see already day by day its application to bring cost-effective health solutions to a wider spectrum of population.

- eHealth and Telemedicine becomes nowadays the most progressive and result-oriented wing of the Health sector that will boost the healthcare services ahead globally and especially in developing countries.

Pakistan Health indicators, an open invitation for eHealth

Pakistan is a densely populated developing country with a population of 158 million inhabitants (UNPD 2005). About one third of the population lives below poverty line. On the other hand, 75% of Health financing is out-of-pocket of the Government (Human Development Report 2005).

The Health indicators are also not favorable, e.g. The Doctors and Nurses ratio to population is 1:1475 and 1:3644 respectively which is simply inadequate (Federal Govt. health indicators 2007). So these poor health indicators favor eHealth as revolutionary solution to not all these problems but many of these.

eHAP Foundation, a core step towards eHealth improvement

Founding eHAP in 2008, was the need of the hour. eHealth and Telemedicine can precisely cope such worst circumstances and poor health conditions only if provided a platform for healthcare professionals and their market partners. So they can discuss current activities and more possibilities for its role in society healthcare matters.

And eHAP has proved its capabilities to be the most suitable eHealth platform by announcing the 1st eHealth Conference in Pakistan. Respected Dr. Asif Zafar and his ambitious team are worth admiring to make the participation of international keynote speakers possible. It will broaden our vision to think smart and implement effectively.

2- Methodology

Current Telemedicine scenario

It is good and encouraging for us that some telemedicine projects are managed successfully. These include JPMC Karachi based telemedicine project, linking GIMS Gambat and DHQ Shikarpur, in Sindh Province and Holy Family Hospital Rawalpindi based project, linking Taxila, and Gilgit. Gujar khan, Pindi Gheb, Fateh and Jhand.

Stationary Telemedicine setups are facilitating less population with many limitations. And if we make our eHealth projects compact and mobile, then obviously it would set new standards to achieve more in less.

Making Medicine Mobile (M³) Concept

The current Telemedicine projects are mostly based on “store and forward information” style with the help of stationary telemedicine equipments. By M³ concept, we can surprisingly implement our eHealth strategies on large scale by covering more areas in same budget (finance and time).

Mobile Care Unit (MCU) development

Focusing **M³** concept in mind, Mobile Care Unit (**MCU**) is a successful result of M/s TMA – Medical, Austria's 11 years R&D based hardworking in Medical field, S & M development and diagnostic devices distribution.

Designed for stationary or portable use within telemedicine applications, the MCU is a stand alone multi-device examination system operated and controlled by a dedicated tablet-PC. The MCU enables a wide range of examinations (12-ECG, SPIRO, NIBP, SPO2 etc.)

MCU, Improving eHealth one step ahead

- A homogeneous electronic medical record is created and will be transmitted using various internet connectivity methods (LAN, WLAN, 3G, WiFi, VPN, and Satellite etc).

- The compact MCU enables its holder to not only serve at main center (Hub) or sub-centers (spokes) but also move in critical situations anytime anywhere while remain connected to the other operating MCUs or Telemedicine devices for further assistance or 2nd opinion.

MCU usage by Fire-Brigades in France

For example the Fire brigades in France are using the MCU between Islands and the continent in Bretagne area.

Population is located in the Islands.

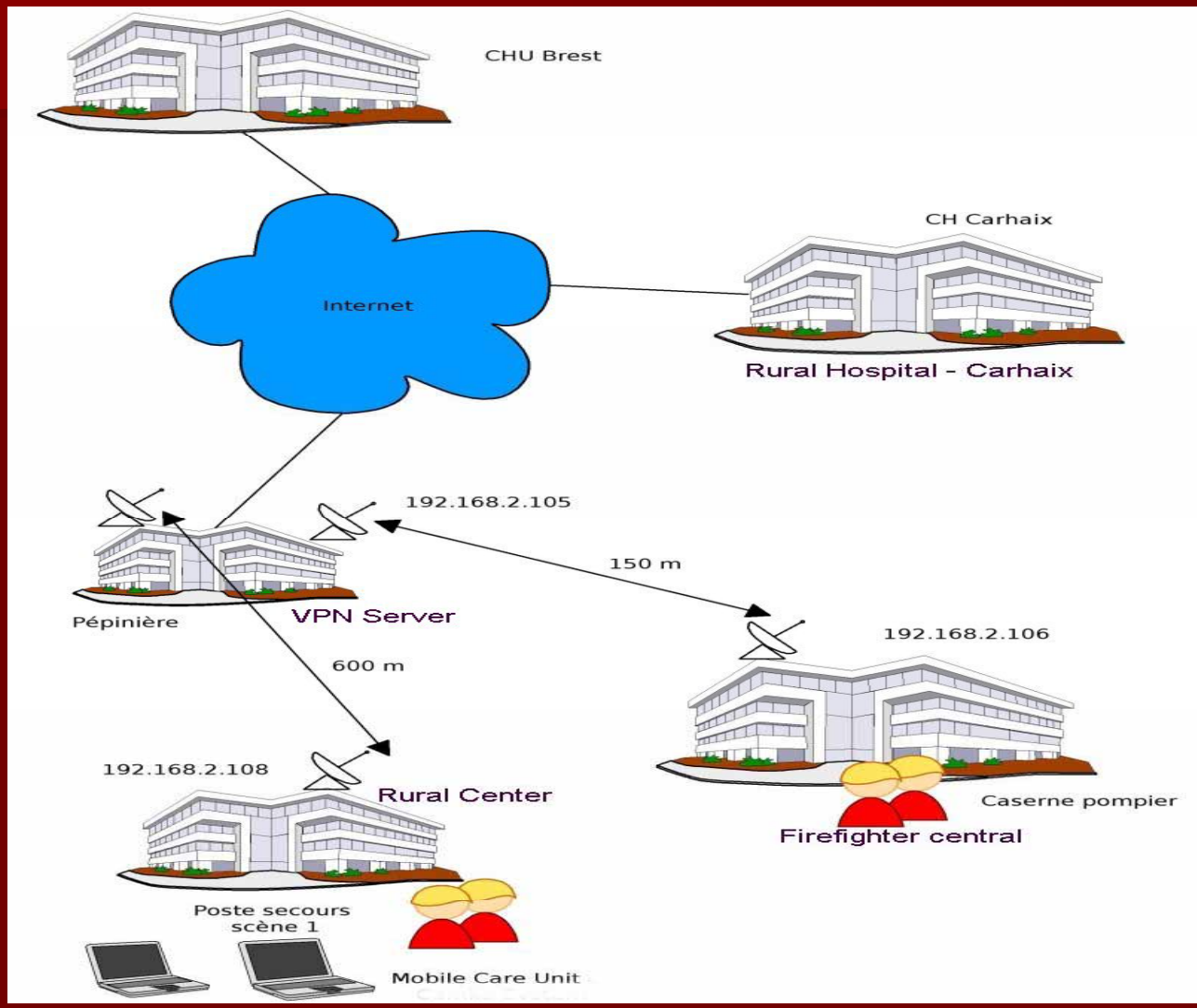
A Nurse can give consultation in a Medical Center where is installed the Mobile Care Unit.

In case of emergency cases, she can connect the Fire brigades call center and the doctor can give instructions.

Videoconference is also used for the remote consultation.

The nurse can also take the MCU with her and using 3G can transmit to the Call center.

MCU usage by Fire-Brigades in France (fig. 1)



3- Results

Making Medicine Mobile (**M³**) based working, supported by eHAP dedicated team and smart hi-output telemedicine devices like MCU, will take eHealth in Pakistan towards new heights of glories. The more we go mobile, the better & cost-effective quality healthcare, people would get.

4- Conclusion

M³ concept has the capability to make it possible for eHealth to serve at its best. This improvement in eHealth would help us to plan and execute eHealth projects successfully on large scale. Positive results & successful continuity of the projects would lead us to prove and make eHealth sector, an effective and beneficial addition to conventional healthcare system.

Our concrete result oriented working in more and more areas (Urban & Rural) to facilitate further population would aware people & healthcare professionals about eHealth importance and benefits. This pro-eHealth environment would convince Govt. and private sectors to support and invest in eHealth as an essential part of conventional Healthcare.

Thanks everybody here in Auditorium and
eThank to all participating online.

Discussion is open to all.

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