

## **Telemedicine as an innovation system in the developing world**

*S.P. Sood<sup>1</sup>, V.W. Mbarika<sup>2</sup>, N. Prakash<sup>3</sup>*

*1 C-DAC School of Advanced Computing (University of Mauritius), Mauritius; 2 Southern University and A&M College, LA, USA; 3 GGS Indraprastha University, India.*

[sood@spsood.com](mailto:sood@spsood.com)

An innovation can be a) development of a new technology b) refinement of existing technology c) development of new applications for existing technologies. As regards development of new technology, it involves strong information flows and generates new processes. From the developing world's perspective, telemedicine can be seen as an innovation [as (a)].

Contribution of an innovation system to the socio-economic growth can be realized only if the innovation gets widely diffused and adopted. Although many telemedicine pilots have been funded in the developing world, but telemedicine is still awaiting widespread diffusion and adoption in the healthcare delivery systems across the developing world. Integration into the mainstream medicine has been painstakingly slow and highly challenging.

It is well understood, innovation systems are highly complex. They not only demand close coordination as far as technological and organizational constraints are concerned but also need a very clear understanding about users. It is pertinent for technologists and information systems researchers to clarify to the managers, the state of knowledge involved in managing and using an innovation. There is thus a need to understand the nature of telemedicine technology as an innovation. It may also be worthwhile to map it based on the model of innovation that fits most closely.

We shall present the outcome of an analysis performed on telemedicine technology as an innovation in developing world. We shall also highlight and delineate appropriate model of innovation. It is expected that eventually this endeavour shall facilitate uniform diffusion and faster adoption in the developing world.

Keywords : Telemedicine, Innovation, Developing country, Diffusion.