

# Healing the helpless

Telemedicine can effect real change in the medical scenario of our country



SUNITA MAHESHWARI

**T**elemedicine has been trumpeted as the great healthcare hope for rural India – a technology that can transform health statistics of remote areas. Telepathology, teleradiology and teleophthalmology are all ways of accurately diagnosing diseases from a distance. They have moved beyond the pilot stage to actual implementation in different parts of the world, including India.

The advantages of telemedicine are manifold. Taking a doctor to an area where there is no doctor and in a vast country such as ours, where large tracts of the country have patients but no doctors; taking medical help to patients where no medical help exists; diagnosing a medical condition before it becomes untreatable – telemedicine truly has potential. However, telemedicine consultation has its share of controversies too. If you can't touch a patient, how can you accurately diagnose his condition? Can a patient and doctor who see each other on a TV screen actually bond? Is the doctor at the other end legally liable for the patient seen on a telemedicine link?

Several studies have been done to assess these issues. A recent study in the US had patients answer a questionnaire at the end of the telemedicine consultation and 85 per cent were satisfied. Similarly, a survey conducted by SGPGIMS (UP) on the tele-follow-up programme for patients in Orissa revealed that 99 per cent were satisfied with telemedicine technology. And newer technologies such as telemedicine boxes and software, rather than just a video conferencing link for consultations, have increased its scientific value.

However, in terms of legal liability, this still remains a grey area. In teleradiology, the radiologist who gives the report based on the images transmitted to him is legally liable. But in telemedicine consultations, where a doctor does not necessarily have all the clinical data available, the legal liability issue is more fuzzy.

The 'tools' of telemedicine, including digital stethoscopes (to listen to the heart and lungs), digital otoscopes (so one can see inside the ear), oxygen saturation probes (to assess the oxygen level), blood pressure monitors, etc, make telemedicine consultation more scientific and data-based. So, why is it that telemedicine has not had a bigger impact in the country? Although some hospital groups

have made an effort in this direction and the government of India, via ISRO, is keen to make this happen across the country, every village is still not connected to the city centre.

There are several reasons telemedicine has not been able to occur on a giant scale in India. Firstly, there is the infrastructure issue – poor bandwidth in some areas, expensive bandwidth in others. Although ISRO does provide a free VSAT link to certain centres that offer telemedicine consultations, this free VSAT link is not available to all centres in India. Implementation is another major hindrance.

Also, training is needed at the village end – of technicians, IT staff and local doctors. And pushy administrators are needed to ensure that the link is up and the doctor is available. Acceptance is another hurdle. For a village doctor and villager, using high-end technology may be too inhibiting. However, once the benefits are seen, the acceptance rate rises, as with mobile telephony and rural Internet services.

Lastly, the viability issue has to be addressed. Thus far, the model in India is VSAT links to hospitals that offer free telemedicine services. The advantage for the hospital is that if the patient requires hospitalisation and surgery, the 'tele' patient gets converted to an in-patient. So, thus far, telemedicine has been done by large hospital groups as part of their CSR and to improve bed occupancy levels. These hospitals have specialists, whose expertise can be used to treat patients in distant lands. However, since the specialists work in a busy hospital, making time for the consultation becomes an issue. And as they are not paid for these consultations, the desire to make this a high throughput service is minimal. So, typically, large hospitals see 10-15 patients per day on telemedicine and this is considered a 'success'.

The government, via ISRO connectivity, should connect all district and village-level hospitals to the closest tertiary care centres. The private sector should also be involved. Every private hospital can be connected to one remote site, thus distributing the load of patients. Hence, telemedicine can be a health innovator and effect real change in the medical scenario of our country.

*The author is chief dreamer, Teleradiology Solutions. She has vast practical experience in telemedicine, having helped set up and run Teleradiology Solutions*