

## **The new paradigm in telehealth – Keeping Information Technology Videoconferencing systems simple.**

Many video conferencing and scheduling systems used for telehealth are complex, require intensive maintenance and support and high levels of skills for users. In Aboriginal communities in East Arnhem Land, telehealth has improved health service delivery for very remote Aboriginal people by providing improved and speedier diagnosis, increasing access to specialists and a wider range of health service providers, reducing the need to travel to major centres to access services, providing on-going professional development for remote clinical staff, providing better supervision for GP registrars and facilitating culturally sensitive group decision making.

At the commencement of the work the communities did not have access to internet. Galat satellite systems were deployed to provide uncontended access to internet. These systems were supplemented by broadband internet provided by nbn. Cisco videoconferencing Codec Systems were deployed in the three very remote community health centres and training and support provided for 12 months. During this time, a number of technical issues arose requiring high level technical support on a frequent basis. Faults included connectivity routing, failure of remote control devices, hardware failure due to high environmental temperatures and network management and configuration.

Failures in the video conferencing technology and software resulted in staff using smart phone video conferencing solutions. These were found to be robust and reliable and provided adequate optics for diagnostic purposes. These very remote clinics are often not manned by skilled clinicians as the nursing and GP staff are located remotely and often the Aboriginal Health Professionals in the communities are on escort services with patients away from community. To improve the reliability, robustness and ease of use, a simpler video conferencing solution was developed with the aim to facilitate un-skilled community members the ability to initiate telehealth consults with minimum supervision.