

The South African Telemedicine System

In July 1998 the South African Department of Health convened a National Telemedicine Task Team to co-ordinate the introduction of Telemedicine into the delivery of health services in South Africa. The Task Team is composed of representatives of the Department of Health, MRC, Department of Communications and Telkom.

The South African Telemedicine System's objective is to deliver health care services that are of a high quality and are cost-effective to South African communities, particularly women and children in rural areas.

Telemedicine is a priority tool in the delivery of health care as well as enhancing the knowledge of those working in the medical field. Telemedicine is a combination of information and telecommunication technologies, which together provide medical services regardless of distance and medical personnel on site.

The South African Telemedicine System has been driven by its long-term goal, which is "to make telemedicine live up to its potential as a valuable tool to improve access to high quality and cost effective health care services in South Africa."

The telemedicine system has been developed under the auspices of the National Health Information System (NHIS/SA) committee. Various Provinces are participating in the project with teleradiology being tested in the Free State, Mpumalanga, KwaZulu-Natal and North West and telepathology in the Eastern Cape.

For the Province of KwaZulu-Natal the antenatal teleultrasound screening and teleophthalmology were initially selected as pilot projects, right now Teleradiology has been introduced recently to be tested in KwaZulu-Natal with Greys acting as a receive site. It is the intention that these various pilot projects serve to test the effectiveness and medium term benefits of telemedicine before any further rollout of the project is undertaken.

2) Implementation

The National Telemedicine project is being implemented in 3 phases over a period of five years.

- **PHASE I** : April 1999 to March 2001 - 28 Pilot sites over 6 Provinces involving Teleradiology, Tele-ultrasound (Antenatal services), Telepathology, Teleophthalmology and the establishment of the National Telemedicine Research Centre.
- **PHASE II**: April 2001 to March 2002 - Involves the development an effective Telemedicine connection between **75-sites** divided into Various Provincial **NETWORKS** for management purposes.

- **PHASE III:** April 2002 to March 2004, Additional sites as required and affordable to meet the rural healthcare needs. Transformation from Pilot stage to clinical and operational stage.

The Telemedicine equipment was designed to support the following clinical applications:

TELEMEDICINE SITES AND APPLICATIONS				
PROVINCE	TOTAL SITES	MODULE	RECEIVE SITE(S)	SEND SITE(S)
Eastern Cape	2	Tele-pathology	Umtata hospital	Lusikisiki
Free State	4	Tele-Radiology	Universitas hospital	Harrismith hospital Zastron hospital Senegal hospital
KwaZulu-Natal	13	Tele-Radiology	Grey's hospital	Edendale hospital Christ The King hospital
		Tele-Ophthalmology	Edendale and King Edward VIII hospitals	Madadeni hospital Christ The King hosp
		Antenatal Tele-Ultrasound	King Edward VIII hospital	G.J.Crookes hospital Stanger hospital Mahatma Ghandi hospital Osindisweni hosp Port Shepstone hosp Phoenix CHC Ngwelezane hosp KwaDabeka CHC
Northern Cape	2	Ante-natal Tele-Ultrasound	Kimberly hospital	Kuruman hospital
Mpumalanga	5	Tele-Radiology And Research Center	Witbank hospital	Pretoria Academic hospital Themba hospital Ermelo hospital Philadelphia hosp
North West	4	Tele-Radiology	Klersdorp hosp	Bophelong hosp Taung hosp Lehurutshe hosp