

Khayelitsha, Western Cape, South Africa - background

Wikipedia describes Khayelitsha as a partially informal township in Western Cape, South Africa, located on the Cape Flats in the City of Cape Town. The name is Xhosa for *New Home*. It is reputed to be the largest and fastest growing township in South Africa. Today Khayelitsha has an estimated population of 406,779 (as of 2005), and runs for a number of kilometres along the N2. The ethnic makeup of Khayelitsha is approximately 90.5% Black African, 8.5% Coloured and 0.5% White, with Xhosa being the predominant language of the residents. Khayelitsha has a very young population with fewer than 7% of its residents being over 50 years old and over 40% of its residents being under 19 years of age.

Disease Burden – Africa through to Western Cape

The top 30 infant mortality rates in the world are African.

Two thirds of HIV infections are in sub-Saharan Africa.

91% of newly HIV infected children are born in Africa

More than 90% of children with TB live in the developing world

The incidence TB in sub-Saharan Africa is nearly twice South-East Asia (350/100,000).

South Africa has the highest rate of TB in the world at 948/100,000. The Western Cape of South Africa has the highest prevalence in the country.

Khayelitsha District Hospital



Khayelitsha District Hospital is a brand new hospital opened in Khayelitsha in February 2012. It offers district level care including a large 24 hour Emergency Centre as well as medical wards, surgical wards, obstetric wards, gynaecology wards, paediatric wards and nursery. The hospital building itself is modern and attractive and very different from the original Khayelitsha clinic site, famous for its HIV treatment programs run by Medecins Sans Frontiers. There is excellent security and the clinical staff is of the highest quality. There are specialized 'family physicians' serving as medical officers, and supervised by a paediatric specialist (the district paediatrician) and senior emergency room staff. The total bed number at KH is 230. There are 32 paediatric beds, 12 neonatal nursery beds and 10 KMC (kangaroo care) beds for growing premature babies. There is also a 6-bed short stay paediatric ward in the Emergency Centre. Paediatric outpatient clinics take place 3 times a week.

The radiology department

The radiology department comprises 2 new Toshiba X-ray units with a modern CR system and one ultrasound unit for trauma FAST scans (which is available for other

uses also). There are two senior radiographers and another 4 radiographers who are fully trained, but have no specific additional pediatric training and experience. The images are stored on a digital archive but there is no PACS system and images and reports are printed for the referring clinicians. There is no radiologist, nor is there any budget to employ one. Referrals for imaging originate either at the emergency room or in the wards.

WFPI collaboration with Khayelitsha District Hospital - history

Previously (June 2012 on), a WFPI on site volunteer (who was one of the senior radiographers) converted DICOM images to JPEGs, scanned in request cards and sent emails to the outreach administrator for distributing to the WFPI tele-reporting volunteers. Reports returned were printed on the back of the request cards and distributed as hard copies to the wards, where clinicians were expected to sign-off that they had received and read these. The on-site volunteer has since left this employment creating a temporary halt (Feb – Oct 13) to reporting activities. This interruption of activity may have posed some problems, but also offered a number of new possibilities including a change of reporting platform (away from the labour intensive and administrator dependent e-mail format) and an opportunity to engage a partner such as Stanford University, which can trial a resident driven tele-reporting effort. If successful this may pave the way for future advancement using a sister-University system for new projects.

WFPI Reporting for Khayelitsha re-started in October 2013, via a WFPI-Stanford University partnership.

A Q&A study of the first reporting period (June 12 – Feb 13) was conducted in October/November 2013, with the results to be published in the Pediatric Radiology journal.