

Khayelitsha Site Visit and Training Report: Dr. Savvas Andronikou 04/11/2012

Date of visit: 31 October 2012

Time of Visit: 13H30 – 15H30

Host: Dr. Natasha O Connel (District Paediatrician / Head of paediatric services)



Site visit:

Khayelitsha hospital is an amazing new structure serving a community in need as a district hospital. The building itself is modern and attractive and very different from the Khayelitsha clinic site. There is excellent security and the clinical staff is of the highest quality, specialized 'family physicians' serving as medical officers, and supervised by a paediatric specialist and senior emergency room staff.

The radiology department comprises 2 new Toshiba X-ray units with a modern CR system and one ultrasound unit for trauma FAST scans. 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 digitally on a digital archive but there is no PACS system in play and images and reports are printed for the referring clinicians. There is no radiologist nor any budget plan to employ one.

Referrals for imaging originate either at the emergency room or in the wards. The WFPI on site volunteer Mr. Raymond Nel is one of the senior radiographers. He has to convert DICOM images to JPEGs, scans in request cards and prepares these as emails, which are sent to myself (acting as the administrator for distributing to the WFPI tele-reporting volunteers). Reports are returned to Mr. Nel, who prints these on the back of the request cards and distributes hard copies to the wards, where clinicians are expected to sign-off that they have received and read the reports.

Problems encountered and discussed:

- There are many unreported radiographs [that I was not aware of]
- There are built in time delays
 - o From request to performance of CXR
 - o Time to collect a group of CXR's for sending
 - o Scanning forms, converting to JPEG and building emails
 - o Response time of administrator for distributing to volunteer readers
 - o Time-zone delays (USA, South America, Asia)
 - o Time by reporters to report and return
 - o Time to print reports and distribute
 - o Time to clinicians reading reports
- There is no audit process for detecting unreported films and unread reports
- There is no QA currently for film quality and system function

Training Course:

There were 32 participants. A training program used for Medecins Sans Frontiers was executed. This involves reading of 15 radiographs on a prescribed answer sheet with only 3 permissible answers. These were then read before a training lecture and after a training lecture, demonstrating key features of TB and some tricks for identifying lymphadenopathy.



Top left: Participants reporting training radiographs
Top right: after the course participants discuss the course
Bottom left: Natasha O Connel (district pediatrician), Savvas Andronikou (WFPI outreach) and Raymond Nel (Radiographer and on-site WFPI volunteer)

Quality Improvement Suggestions:

- Monthly visit (Andronikou) involving QA and staff teaching / training
- Audit non-reported films
- Recording process of reported films by copying in administrator on reports
- Modify distribution of cases to readers who are prompt
- Plan radiographer QA handover
- Make a portfolio for future projects

Outcome:

It was made very clear to me that clinicians valued the reports highly. They are extremely grateful for the service of the WFPI and use it to direct management and often call back patients where fractures or other abnormalities are missed. I was asked to do further teaching and a monthly clinico-radiology meeting. Our program impressed them so much that I was also asked if I could initiate an adult reading program of the same kind. I have responded to both requests.

Savvas Andronikou
(Outreach chairman for WFPI)