A group of 50 Port Elizabeth nurses are fighting off their colleagues and the doctors they work with to hold onto SmartPhones that provide them with instant and almost limitless access to a clinical library and treatment guidelines.

They are the guinea pigs in a 22-month-old mobile health information pilot project, a joint initiative of the Eastern Cape Health Department, MTN, Nelson Mandela University and global telecommunications company, Qualcomm Wireless Reach. It is expected to boost patient care in the city’s three major hospitals, and perhaps eventually province-wide and even nationally.

The Eastern Cape’s Health Director-General, Dr Siva Pillay, was enthusiastic about the expansion potential of what he says will one day be as common a clinical tool as the stethoscope, citing uses such as teaching, accessing patient histories and clinical records (encrypted for confidentiality) and vital drug data (dosages, indications, availability, etc.).

Emphasising the power of public/private partnerships, Pillay said that during times of resource constraints, embracing technology was paramount if his provincial department was to become cost-effective. (His budget deficit was last year reduced from R2.4 billion to R1.6 billion through a series of rationalisation and fraud-busting efforts.)

Pillay warned the 50 nurses present at the Port Elizabeth beachfront hotel launch of the device not to ‘confuse information with knowledge’, while commending them for embracing a technology that had at first intimidated them.

Leela McCollough, Director of Information Services at the United States-based Academy for Educational Development (AED), reminded her 50 trainees, carefully chosen from a variety of hospital departments, how they were tempted to ‘pull their hair out’ when training started in January 2009. She said many of them had been forced to learn how to type and played simple games on the device simply to become familiar with it, even though most of them had used cell phones before.

McCollough said AED had three aims: to demonstrate to the nurses that they could use mobile devices in a clinical care setting, that they could access the information on it and, most importantly, that they could apply that information in practice.

Each device has a library of some 30 documents and over 1 000 pages of text, ranging from local treatment guidelines (HIV/AIDS, primary care) to local disease directories, autism, cancer, cholera, diarrhoea, epilepsy and malaria. Users can also surf the Net, download e-mails and/or attachments onto their memory card, send e-mails and make calls.

Ongoing training and technical support is being provided at all three hospitals, with nurses themselves doing peer group training while AED up-skills the relevant IT staff and MTN stays on permanent standby in case their help is needed.
Dr Essie Ricks, a senior lecturer in the Nursing Science Department at Nelson Mandela University, evaluated the project and said 80% of the group, most of whom had no prior computer skills, experienced the device (after training) ‘as good to very good’, with over 90% finding the Eastern Cape disease directory on it the most helpful and 86.5% voting for the standard treatment guidelines as their favourite folder. Over 70% of the group found the device ‘very easy’ to use while nearly 90% said it helped them update their knowledge of the management and treatment of various conditions.

Ricks said the device aroused intense interest among other nurses and doctors, who pleaded for there to be ‘one per ward’ and vowed to buy one if they could source one.

The SmartPhone meant nurses could access information and share it with colleagues and patients, especially those working in remote clinics, who needed such back-up to function optimally. Rare and complex cases could be more quickly and successfully treated and fast-moving epidemics kept up with.

The value of the device comes into sharp focus when you consider how few public health workers have access to vital health information tools, reflecting the broader picture where 10.8% of South Africans have Internet access and only 0.09% broadband Internet access.

One of the biggest advantages of the device’s popularity for her was ‘exposure to other units, which makes you more generalist’. ‘Yes we gave our teachers grey hair but we can show them now. I wasn’t even computer literate and today I can say I’m a champion,’ she grinned.

The doctors find this fascinating. I work in cardiology and the doctors … I have to fight to get it back from them sometimes. I’ve also helped a lot of students with their research,’ she revealed.

‘Will nurses and doctors like it enough to pay R100 per month to have it or will the health department subsidise it at R50 per nurse? Whatever model we consider it must be sustainable, collaborative and financially viable,’ she added.

Qualcom and other stakeholders in the project are probing the Universal Service and Access Agency of South Africa (USAASA) to try and access its huge reserves established to roll out technology to rural areas. USAASA was established in 2005 under the Electronic Communications Act to promote universal access in under-serviced areas of South Africa and is funded via a special tax on telecommunication operators. It has built up huge reserves, now the subject of heated debate around their use.

Izindaba Chief Correspondent Chris Bateman