

PUKKA-J 'S TELERADIOLOGY SYSTEM IMPROVES THE "OUT-OF-HOURS" IMAGING SERVICES AT THE PRINCESS ALEXANDRA HOSPITAL TRUST, STEVENAGE

Pukka-j recently supplied its PACSPost on-call teleradiology system, designed to provide a hospital-to-home remote viewing service, to The Princess Alexandra Hospital Trust, Stevenage.

With a system of aging laptops, the Hospital sought an alternative solution for its remote viewing facilities, initially for CT images. Prime considerations for the new system were the secure transmission of images and the access to images from the remote locations. The NHS Code of Connection stipulates that images must be securely transferred from the hospital to an external system. They must be viewed via secure access and suppliers must conform to Caldicott and legal requirements for security and confidentiality of personally identifiable data; additionally, suppliers must demonstrate that they can provide the level of security this requires.

With consultant radiologists working seven consecutive days, and nights on call, often having to do a number of cases on several consecutive nights, and also continue to work full normal day duties, an efficient remote viewing system was paramount if accurate diagnoses are to be made. In addition, the radiographers at Princess Alexandra were very keen not to interrupt their current workflow by working on an additional system to the CT scanner console.

Pukka-j's PACSPost provided an elegant solution to all these criteria. To provide a secure environment for the transmission of images, the data is encrypted from the moment it is sent from inside the Trust until it is decoded by a validated on-call radiologist. It is never unencrypted at the external server and only exists as fragmented encrypted emails outside of the on-call radiologist's browser, the image data held on the external PACSPost server not being visible as DICOM data. This ensures that sensitive data is never, at anytime visible. The email can only be decrypted and read by Pukka-j software and the intended on-call radiologist account holder. The images are held for 'review only' on the computer monitor and are not written to the computer's hard disk, thus ensuring that data is not held longer than is necessary. On the on-call radiologist's PC, the image data is held in the browser's 'sandbox' memory only.

For functional servers such as Telemedicine servers, it is important that they manage themselves. The Pukka-j Dicom Ager allows for automatic deletion of any DICOM object when it reaches a preset age on the server. This can be days, months or years, depending on the size of server and its role. For Princess Alexandra Hospital, Pukka-j configured the service to delete, automatically, data after four days.

Addressing the requirements of the radiographers, Pukka-j created an enhancement to its PACSPost service. Radiographers simply export images specified for the on-call radiologists, direct from the CT scanner console, the images being transmitted direct to the Pukka-j DICOM Server. The DICOM Server translates the DICOM images into email; the email is encrypted and automatically forwarded out through the Trust's firewall, to a secure Pukka-j external Server, ready for on-call radiologists to collect from their home-based PC's.

Liz Mazura, Radiology Services Manager, says, "We went looking for a teleradiology system as we were experiencing problems with our old service. We selected the Pukka-j system because it brings to us more than we ever knew we needed. It is a solution that solves a lot of problems, and we are delighted with the service."