New digital x-ray imaging system

NHS Grampian's Radiology Department will begin to rollout a new digital x-ray imaging system - PACS (Picture Archiving and Communication System) - next month. The rollout is part of the Scottish Government programme to update imaging systems across all Health Boards.

The rollout takes place over the next four months with hard copy x-ray films being phased out from February.

As part of the rollout, all clinicians currently using hard copy x-ray films will be trained in the use of PACS. In addition, computer hardware used for image viewing in wards and clinics, will be replaced to ensure it meets minimum PACS requirements.

In medical imaging, picture archiving and communication systems (PACS) consists of computers and servers dedicated to the storage, retrieval, distribution and presentation of images, with images stored in DICOM format - (Digital Imaging and Communications in Medicine). Electronic images and reports are available digitally via PACS; this eliminates the need to manually file, retrieve or transport film packets. A PACS consists of four major components: the imaging modalities such as CT and MRI, a secured network for the transmission of patient information, workstations for interpreting and reviewing images, and long and short term archives for the storage and retrieval of images and reports. Combined with available and emerging Web technology, PACS has the ability to deliver timely and efficient access to images, interpretations and related data. PACS breaks down the physical and time barriers associated with traditional film-based image retrieval, distribution and display.

James Steel, Radiographer/PACS Manager said of the new system: - "PACS is an exciting development for NHS Grampian. It will bring faster access to images and reports for doctors across Grampian and streamline patient care. PACS makes available to doctors digital image manipulation tools to better demonstrate pathologies/conditions, such as magnification, accurate measurements and contrast /density manipulation. Unlike conventional imaging, PACS images are rapidly accessible in multiple locations simultaneously, lending its self to teleradiology and making it easier to gain second opinions or discuss cases with remote colleagues."