

# Workflow focused teleradiology

The NHS is fast moving towards a filmless environment with the introduction of PACS into all hospitals. Having to print films is costly and no longer acceptable. And having to receive films from tertiary referrals is no longer feasible. Portsmouth Hospitals Trust (PHT) had a common problem, which involved both an Independent Sector Treatment Centre (ISTC) and a Ministry of Defence hospital, Royal Hospital Haslar (RHH).

## Portsmouth and ISTC

In 2005, a new ISTC was built at St. Mary's Hospital, presenting some problems that no-one had solutions to. Patients are referred from various sources, including their GP. Once imaged at the new site, the studies are needed at PHT. Each of these studies needs to be checked against RIS and the PACS environment.

## PHT and MOD

Orthopaedic clinics and theatres at RHH saw approximately 120 patients a day and each of these were imaged on the RHH Agfa PACS. But it was not possible to view the images taken at RHH on the PHT GE PACS. The obstacles were both security and the amount of manual work required. Having the image locally in the PHT PACS was required to use existing work practices such as desktop integration, voice recognition and, of course, orthopaedic templating.

The result was RHH printed films for immediate use at the orthopaedic clinics, so surgeons compared film against soft copy. And the surgeons couldn't template on PACS for RHH images either. One could request individual patients be transferred (where RHH and PHT system

administrators would manually work around the lack of integration). But the process was so onerous, routinely doing this for all patients was impossible.

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Grant Shaw, Orthopaedic Consultant – PHT, comments: "We have an Orthopaedic Department awkwardly split across two sites, one NHS, the other military. The split is compounded by having two entirely separate PACS. Inevitably, many of our patients have key radiology images on the wrong system at the time of surgery or a clinic. There is an almost impermeable military firewall preventing the PACS from sharing Dicom images in the normal way. All the indications are that bbRad will provide a seamless, near real-time, transfer of images between the sites, thus realising all the PACS advantages we had been expecting."

## Workflow

When receiving images from another PACS system, whether NHS or non-NHS, there is a considerable amount of work that is required to integrate both images and reports into your PACS. From query retrieve, creating the RIS exam, pasting in the report – all this takes time.

A few transfers a day might be acceptable but workload suddenly grows to unmanageable proportions with regular cross-site working,

*Portsmouth Hospital Trust solves teleradiology workflow issues with bbRad...*

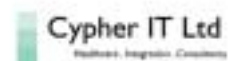
patient transfers, tertiary referral centres and the introduction ISTCs.

## bbRad – the solution

bbRad integrates the DICOM image from RHH and ISTC into PHT's PACS whilst ensuring that, as a 'foreign exam', it won't be archived to the data centre nor cause double counting of RIS activity.

bbRad is fully flexible to meet the specific workflow requirements of all three sites, therefore significantly reducing manual intervention by radiology staff. Perhaps most importantly, all the benefits PACS brings are still available when working with remote exams.

Philip Scott, Head of IT Projects and Development – PHT, says: "bbRad's fundamental benefit for us is sorting out workflow in these teleradiology transfers. It will reduce manual intervention for both sender and receiver. It should also improve turnaround time for clinicians and reduce the cover needed out of hours from the system administrator. For us, it is also vital to be able to link to the ISTC for a range of diagnostic images and, in time, we may expand its use to referrals between local NHS trusts."



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