Consortium

- 11 trusts
  - 2 large teaching
  - 3 DGH
  - 1 large children's
  - 1 cancer centre
  - 3 small specialist
  - 1 community
Outside

- One large DGH
- One medium DGH
- IOM
- Wales
- Lancs
- GM
LSP

- 9 PACS
- 11 trusts – one shared RIS instance
- 1 trust PACS only NO LSP RIS
- One trust ( WUH ) exited to Cerner EPR/PACS
The deadline

- 30 June 2013
- 8/10 with remote data
- 2/10 with local data
The process

- OJEU procurement

- Three workstreams
  - IT
  - Clinical/Operational
  - IG

- Core procurement team
Key features

- Retain RIS shared data
- Complete seamless image sharing
- Reporting from any site – seamless
- NHS number prime identifier
- Modern PACS
  - Web based
  - Integral 3D tools
  - PACS based reporting
OJEU

- Not advised
- No alternative at the time
- No need for business case
- Invitation to Tender -50
- Preliminary Qualifying Questionnaire – 6
- Shortlisted -3
- Site visits -1
OJEU

- Three lots
- PACS
- Shared RIS
- VNA
Project Team

- IT lead
  - Small team
- IG lead
  - Very small team
- Clinical lead
  - Large team
    - Radiologists
    - PACS managers
    - Clinicians
- Finance lead
Programme Team

- Programme manager
- Project manager
- Programme IT specialist
- Instance manager
- Two admin assistants / meeting coordinator
- External consultancy
  - PACS works
Process

- Specification
- Clinical scenarios
- Demos
- Site visit
Scoring

- Combined score
  - Questionnaire
  - Response to clinical scenarios
  - Demo of clinical scenarios
Time

- Hundreds of hours from teams
- Thousands of hours from core team
- Thousands of hours from vendors

Communication
- Email
- SharePoint site
Decision

- Clear blue water after scoring
- Large financial gap
- Site visit superfluous to scoring
Decision

- PACS: Carestream
- RIS: HSS
- VNA:
  - RLUH emc
  - Others Carestream
  - No proven xds/xdsi solution
PACS across Cheshire & Merseyside
Each Local Site -

Each hospital is implemented as a ‘single site’, with clustered, redundant components (Database, Application services, XDS capabilities) & DICOM MWL (Server(s) not shown)

3 Options:
Storage Volume varies from 13.5TB to 70TB
Standby 8TB to 70TB
Usable storage before lossless compression

Single Server with external RAID – maybe connected to an external Archive (VNA)
Clustered Servers with external RAID – maybe connected to an external Archive (VNA)
Deployment

- Data migration ongoing before system choice
- 3rd party data migration partners
- NHS number compliance 97-99.9%
- monthly ‘name and shame’

Issues related to
- GE data structure
- CSC capacity
- N3 /CFH slot planning
Deployment

- Local slot plan
- Fortnightly cycle
- Not ready… relegated to the end
- Very stretched
- Not enough vendor resource
- But delivered to schedule
Stats

- Approx 1.3M exams / year
- 4-8 years online in short term
- All exams in sts or vna
Management

- Instance coordinator (band 5)
- C&M system managers group
- PACS board defunct
- Loose governance arrangement
Image transfer stats

RLBUHT Image Transfer by PATIENT
What’s it like?

- Single PACS/RIS instance
- Acquisition and Reporting Separate
- Priors automatically and seamlessly displayed

- So seamless inadvertent reporting of other sites studies....
What’s it like?

- Clinician multisite work much easier
- MDTs instant online comparison
- Instant review of cases referred from other trusts
The good

- High clinical satisfaction with image availability
- Reduced overhead sending to Neuro Centre etc
- MDTs are massively better with reports /images online
- Lack of previous films is a rare occurrence that is actually annoying
- Big reduction in IEP usage
Just a quick note to say what a difference the region wide PACS system makes to us in oncology. When patients are crossing between the specialist small hospitals and the large hospitals, the PACS system makes management so much easier whether it is in our clinics, in MDTs [Multi-disciplinary Team Meetings] or when I ring a colleague in a different hospital and we can both view images and discuss management. A big thank you to you and your colleagues from me but above all my patients.

Prof Peter Clark
Consultant Oncologist
Clatterbridge Cancer Centre
The bad

- Period after system go live before global worklist go live
- Inadvertent X site reporting
- Few global worklist outages –
- Patient in theatre – images in another hospital
  - Workarounds used to be normal now maddening
- Few bugs due to multiple exams
The ugly

- Clatterbridge PAS issue caused big exam issue

1,500 cancer patient records mixed up by Wirral hospital

Clatterbridge Cancer Centre say patients were not at risk
Benefits

- Direct supplier relationship
- Cost!
- Image exchange staff less stretched
- Xsite reporting in infancy
  - Issues financial and systemic, not technical
Radcave light

- EWTD non compliance
- 8 registrars on call at night – lose eight days of training
- Two trusts linked for out of hour

- Rolling out to other departments 2015
  - Including two non Carestream sites
What next?

- Carestream agent at Wirral and Chester (August 2014)
- Global worklist extended to those sites
- Extension of regional on call
- Early phase of cross site specialist reporting
What’s missing?

- Structured teaching functionality
- Automated anonymisation

- MDT support
  - Drag and drop
  - Somerset system support
  - Presentation states

- Anything else?
What are we looking forward to?

- Vue motion prior comparison
- Vue motion global worklist
- Teleradiology functions for
  - Regional on call
  - Home working

- ? Xds integration with neighbours
- New patterns in trust cooperation?