

*“Unification**Standardisation**Optimisation”*

## Client Case Study

# RIS PACS & CardioPACS

## Specialist NHS Trust

Solutions Change provided supplier Programme and Project Management for a specialist NHS Foundation Trust in the London area. The scope included a replacement RIS, PACS and CardioPACS, with data migration from legacy systems in Radiology and Cardiology.

### Requirements

The stated requirements included:

- **Unification** of the Trust-wide Radiology workflow;
- **Standardisation** of the Trust wide Radiology datasets to facilitate improved Management and Financial reporting;
- **Customisation** of RIS functionality to meet Specialist requirements, e.g.; Cardiology, Nuclear Medicine and Cardiac Magnetic Resonance Imaging.
- **Workflow optimisation** within Radiology through RIS/PACS Desktop integration and the adoption of Speech Recognition technologies in Radiology Reporting Suite;
- **Systems replacement** of the existing end-of-life PACS equipment in as short a time-frame as possible. Aging systems presented the risk of failure and excessive downtime with a potentially catastrophic effect on Clinical Services;
- **Disaster Recovery** by providing the capability to failover onto alternate systems across sites for both RIS and PACS;
- **Seamless integration** with existing IT system technologies including, HIS, EPR, and the Trust's Contract and Financial Systems;
- **Enhanced Clinical Governance** by supporting clinical decision making through having high availability of diagnostic studies and reports;
- **Continuing operational service**, whilst the project was being delivered ensuring that diagnostic images were available as required for clinical service.

### How did the Trust approach the Programme?

As a non-LSP PACS site the Trust was required to follow the OJEC rules and process for going out to Tender. This involved publishing the Invitation to Tender (ITT) and a detailed Outline Business Specification (OBS).

- The Trust supplied a detailed OBS outlining the required functional and technical specifications. The more precise this OBS can be, the more likely it is that a system that meets all (or most) requirements will be selected. The OBS and supplier responses to the OBS can also assist with workflow design decisions during the deployment.
- A formal Project Board comprised of all major stakeholder groups was established which managed the procurement and deployment. It convened at least once a month. The Project Board was chaired by a senior clinical “champion” and formal agendas and papers were distributed, thus ensuring that the meetings were managed and any decisions taken were properly recorded and communicated.
- Once the OJEU procurement process was completed and the Supplier selected, the project moved into the deployment phase. At this point there was input from supplier representatives from Professional Service for project management, implementation specialists, configuration and training specialists and Service Management.

## CLIENT CASE STUDY

**COLLABORATIVE WORKING:  
EXPERIENCE, EXPERTISE, SKILLS,  
KNOWLEDGE, LEARNING FROM  
SELF AND OTHERS.**

## STATISTICS

- **RIS data migration  
11 years, 1 million  
+ records**
- **Legacy PACS data  
migration 600,000  
studies**
- **2 legacy Cardio  
PACS migrations**
- **2500 staff**
- **Multiple sites**
- **7 interfaces**

**How did the Project do it?**

The recommended PRINCE2® methodology was used to deliver the Project Board reporting and escalation structure, together with the essential documentation library including:

- Project Initiation Document;
- Project Plan;
- Risk and Issues Logs
- Quality Plan;
- Test Plan;
- Training Strategy and Plan;
- Lessons Learned; and
- Benefits Realisation.

Specialist input was sourced for each aspect to ensure a quality deployment.

**Challenges**

A project of this scale, complexity of scope and dependencies presented many challenges:

**Time for delivery of project:** Speed was of the essence as existing contracts were due to terminate and would be expensive to extend. This risk could significantly detract from any contingency budget associated with the project.

**Mandatory data fields:** The new systems had to accommodate mandatory fields required for data standards and central reporting together with a road map for the delivery of new Data Set Control Notes (DSCN's) from Central Government.

**Managing expectations of change:** Legacy systems are often 'data rich' as they have been developed over a period of time, and are used extensively for proprietary internal reporting purposes. These proprietary reports needed to be developed in the new systems in order to support the Trust in its day-to-day running as well as for monthly, quarterly and annual returns.

**Data quality and migration:** The Trust required 11 years of RIS data to be migrated to the new system. Factors to be considered in project planning and scheduling for go-live were: time to fix-up data quality errors and time it would take to physically migrate the total data .

**Migration methods:** The migrated PACS data could only be useful during transition if it matched the patient return profile. It was not useful if migrated in a linear fashion based on a number of previous months as patients return at intervals which can vary from 6 months to 2 years so a method had to be established to make sure that patient studies were available at the time of their appointment.

**Minimal downtime for operational service:** The Go-live process to switch over to new systems had to be achieved without any significant downtime to the Trust which needed to maintain its operational performance to meet the standards and targets required of it.

**How did we help?**

Solutions Change provided Professional Services to deliver the deployment of the new systems, including:

- Programme Management to provide Quality Assurance and full Reporting and Escalation procedures for the Project Board;
- on-site Project Management with staff with relevant clinical and PRINCE2® experience;
- formal Go-Live procedures;
- full Project documentation;
- full contract review and formal sign-off procedures;
- resolutions for outstanding deliverables;
- financial and contract delivery sign-off.

**Successes**

A project is usually judged a success if on time and on budget but other factors need to be considered such as:

- successful completion of a full training programme for all users of the new system;
- the seamless transfer of business operations to the new system;
- fully tested hardware, applications software, failover procedures, back-up procedures and disaster recovery;
- engagement of senior and ground-level members of the Clinical and Administration teams, collaboratively working to ensure that the configuration design would meet the operational workflow requirements;
- minimised disruption by the Project work to Clinical Services by scheduling technical engineer work on quiet periods e.g. Audit days / non-clinic days / periods.

**About Solutions Change**

*Solutions Change is an organisation providing Professional Services and Solutions to the Healthcare Sector, primarily in the UK. We specialise in Project and Programme Management in addition to many other Professional Services related to programmes of work involving changes in people, process and technology. We sub-specialise in RIS and PACS for Radiology and Cardiology. The organisation has existed since 2002, employing individuals who are highly experienced in large, complex projects and programmes.*

Further information and contact at:

[www.solutionschange.com](http://www.solutionschange.com)

