

## CASE STUDY

# Radiology Department - Productivity Increase & Cost Reduction Programme

### Background

Meridian's client is one of the leading NHS Trusts in the south of the UK. It provides care and support for over half a million patients from its region and neighbouring counties every year.

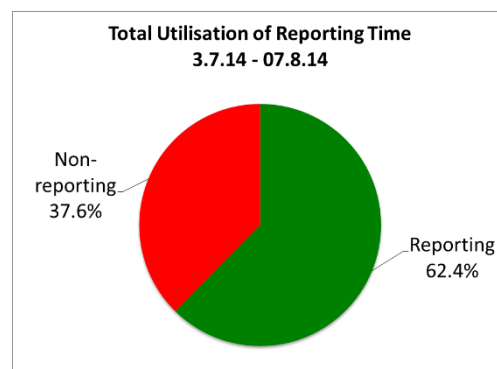
Its radiology department alone performs over 260,000 examinations annually, from six sites across the county.

Working within the Radiology Department, Meridian addressed the Trust's major clinical concerns over the increasing reporting backlog and rising insourcing costs.

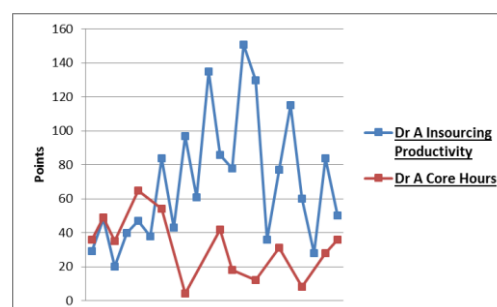
### Study Findings

During a two week analysis phase, Meridian were able to identify several major issues, which were preventing the Radiology Department from working to its full potential. These issues were:

1. ca. 40% of the reporting time lost to different interruptions.



2. High insourcing costs with decreasing productivity in core hours.



3. Excessive backlog of unreported scans.

List	No of unreported scans
GPs plain films	942
A&E plain films	631
General CT	353
General MRI	304
Inpatients plain films	3284
Outpatients plain films	4606
Specialist CT MR	84
MSK	163

### Project

The project focused on the three areas mentioned above, which were highly interconnected and needed a systematic approach. The proposed, agreed and implemented system entailed:

- Redefinition of a "duty radiologist" role and directing it at proactive interception of interruptions;
- Protected reporting sessions, with interruptions being eliminated before reaching the reporting radiologist;
- Agreement to productivity norms (based on previous thorough observations and data analysis) and development of a fair productivity measuring system, taking the complexity of reports into account;
- Establishing insourcing "ground rules" and allowing for insourcing only when compliant with the new system and having reached a defined productivity level in core hours;
- Development of Capacity Scheduling Control, which allowed the Department to plan their activities 8 weeks ahead based on forecasted demand.

In addition to the above mentioned points, Meridian identified opportunities for additional income from private dental patients, whose exams have not been charged for (potential for £70,000+ annual income for the Trust). With Meridian's presence "on the ground", the team were also able to support the Radiology Management in their day-to-day operations, e.g. by improving their leave tracking and insourcing spend spreadsheets and by enabling them to obtain the right data from the clients' IT system.



## Results

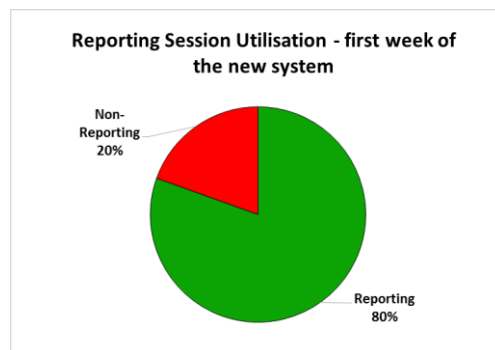
After just two weeks using the new system, the situation changed radically. The backlog shrunk to the following cases:

List	No of unreported scans
GPs plain films	27
A&E plain films	55
General CT	141
General MRI	329
Inpatients plain films	2584
Outpatients plain films	713
Specialist CT MR	63
MSK	145

And kept on decreasing.

Other main results were:

- Achievement of **double** the annualised savings initially proposed;
- **Elimination of 50% of interruptions** by redirecting them to the duty radiologist / non-reporting sessions.

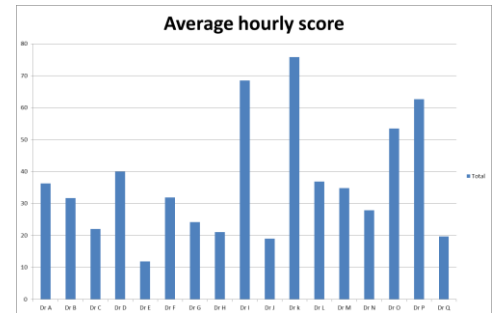


- **Productivity increase of 200%** against the base level;
- **75% increase in reporting output, with 300% increase in plain film reporting;**
- **Reduction of the insourcing spend by 90%;**
- State-of-the-art productivity measuring system specific to Radiology, which takes the complexity of reports into consideration;
- Operational improvement of the Radiology Department and its positive impact on radiographers and other clinicians.

In particular, the last benefit was immediately noticeable in the behavioural change apparent across the department. Phone calls around unreported scans (which previously happened multiple times a day) vanished and staff were able to focus on their other tasks.

The radiographers praised the easy access to a radiologist and felt that having a duty radiologist at hand had a huge impact on the pace the department could work at (previously they had to look for radiologists in their offices, which are dispersed throughout the department, therefore losing a significant amount of time that could be spent on patient contact).

The Operations Manager has been equipped with a set of controls to help manage the department on a day-to-day basis. As part of these controls, a Weekly Productivity Overview that is fully integrated with the format of the data the IT system produces. By inputting the data into a template specifically designed for this purpose, he can track radiologists' productivity and the attainment of the points' target. Productivity graphs as the one below are being produced and distributed on a weekly basis:



Based on this graph, the Operations Manager is enabled to make a decision around a Consultants' eligibility for insourcing.

## Contact Us

For more information on Meridian's work in healthcare, please contact:

James Quinn  
 Tel. +44 (0) 7971 400423  
 quinn@meridianpl.co.uk

Meridian Productivity was established 1996, and has been extensively involved in the Healthcare industry across the United Kingdom, Republic of Ireland, Holland, Belgium, Spain and the Czech Republic. Meridian assists clients across the Healthcare environment (private and public) in achieving improved operating efficiencies and performance, through the development of bespoke management and behavioural processes. These processes are all designed and implemented to ensure that our client organisation can be assured of returning the best performance on the resources applied.

We work with about 20 to 25 organisations a year, both in the public and private sectors, helping them to reduce their operating costs, improve their productivity and provide value for money.

Find out how Meridian can benefit your organisation.

Contact us today:  
 T: +44 (0) 131 625 8500  
 E: info@meridianpl.co.uk  
 W: www.meridianproductivity.com

