CASE STUDY
Radiology Department - Productivity Improvement & Cost Reduction Programme

Background
The client was a large Imaging department providing diagnostic imaging to patients across two main sites, with a team of radiologist consultants reporting on scans.

The Trust were faced with a large backlog of unreported scans and a rising extra spend on both insourcing and outsourcing of reports. Furthermore, the department were tasked with identifying savings by conducting a workforce review with the aim of reducing the running costs of the department. Finally, the Trust were consistently breaching in both the scanning of patients from the referral date and the completion of the report.

Meridian were invited to conduct an analysis to identify opportunities to reduce the backlog of reporting and the amount spent on insourcing and outsourcing of reports and furthermore identify any opportunities to reduce the running costs of the department.

The analysis focused on identifying the potential to increase the amount of reporting done within scheduled reporting sessions and identifying the potential to improve the utilisation of the scanning resources, reducing the operating costs.

Study Findings
The analysis of the radiology department conducted by Meridian commenced on the 8th September and finished on the 12th September. The analysis found that;

- Radiologists were not being scheduled for all of the reporting sessions detailed in their job plans due to an ineffective radiologist’s rota. On average approximately 36% of reporting time was lost per session equating to around £170,000 annualised direct pay cost;
- Radiologists were not meeting the targets set out in their job plans;
- Radiologists experience a high number of interruptions during the reporting sessions, which created a poor working environment resulting in low productivity with the average productivity of radiologists in the department being as low as 47% in x-ray reporting.
- An average weekly spend on insourcing reporting of £9,813.83, with no control over the allocation of extra work;
- A very low utilisation of scanning equipment, for example;
  - X-ray rooms utilised for 33% of opening hours;
  - Ultra-sound sessions utilised for 40% of the opening hours.
- No management controls in place, with little to no communication between the booking, scanning and reporting areas of the department, the former two being governed by the availability of radiologists. This often resulted in patients not being booked for exams before the breach date.

Meridian proposed to implement a program with the aim of putting 50% of the insourcing reporting back into the radiologists reporting sessions, and to reduce the operating costs of the department by 15%. This proposal was accepted and the project commenced on the 15th September 2014.

Project
The project lasted for 14 weeks and addressed the issues in the three main areas of the department, namely reporting, scanning and booking. With such a tight timescale, and a workforce review being conducted alongside the project, engagement with the management of the areas was crucial to ensure the necessary behavioural change that was required. The key events in the project were;

Reporting
The first area addressed was to ensure that radiologists were being scheduled for the reporting sessions detailed within their job plans. Meridian introduced a new rota tool derived directly from the job plans with a default starting point of having every consultant scheduled for every session in their job plan. Working with the lead radiologists responsible for organising the rota, this tool was developed to ensure it was as user friendly as possible and could be integrated into use effectively.

- An interruption reduction program was introduced through gate-keeper protocols which ensured that only absolutely urgent
calls were put through to reporting radiologists;  
- Introduced a points-based system for reporting. This system was aimed at capturing the complexity of scans which therefore recognises a consultant reporting on more complex scans, allowing a more representative setting of work-to-time targets;  
- The combination of the rota with new targets allowed the development of a capacity plan, and reports on consultant performance against their expected output resulting in more transparency and a basis to highlight and challenge variances;  
- New work allocation processes and more flexible cold reporting sessions were introduced. Work was allocated to them which allowed for control over what reported to be gained and thus respond to the needs of the department.  
- The allocation of insourcing was redefined so that extra work was allocated rather than radiologists being allowed to assign themselves extra work, resulting in much more control over extra spending on insourcing.

Scanning  
- They first stage of the project in this area was to gain control of spend on agency and bank staff through the development of an authorisation form, giving management control to allow agency and bank only when absolutely necessary.  
- Meridian worked with radiographers to establish norms for scanning times with the aim of these times being used to create book guidelines, whereby exams were booked to times representative of the scan itself. From this an accurate representation of the capacity and demand was possible, and a capacity and demand tool was developed with Band 7 radiographers.  
- With an appreciation of the capacity and demand, the opening hours of the imaging could be modified to reflect the demand, ensuring full utilisation of equipment and staff.

Booking  
- In line with the scanning, new booking guidelines were developed with the booking team to allow them to ensure the scanning rooms were effectively utilised.  
- A booking utilisation report was developed which made management aware of the current levels of booking without manually checking the diaries on a daily basis.

Results  

The major result of the Meridian programme was a much greater degree of control of the service. The capacity and demand tools developed with the department allowed the service to respond to the demand both in terms of the scanning of patients and the reporting of scans.  

Specifically related to the reporting, the introduction of the new rota tool resulted in a higher number of reporting session available, with the first week with the new rota releasing an extra 36 hours of reporting.  

Extra spend on insourcing and outsourcing of reporting was also reduced – by week 12, 0 scans were outsourced, and during the working week 0 scans were reported as extra sessions, with a final weekly cost of £1,160.50 compared to the average of £9,813.83 prior to the commencement of the program.

Control of the reporting backlog was also gained, as by week 12 there no scans were older than 2 weeks, with the exception of specialised scans, which in turn reduces the number of scans that can be done in extra sessions thereby reducing spend.

Moving to a booking template whereby the booking slots reflected the scanning duration allowed for a greater throughput of scans, meaning the same number of scans could be completed in a much shorter time frame. The consequential adaptation of the department opening hours to reflect the demand allowed a reduction of run time and therefore operating costs. Weekly savings of £7,180 were identified.

The increased control over spend on bank and agency staff resulted in a reduction in weekly spend of £3,802.38.

Contact Us  

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Meridian Productivity was established in 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.

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