



Your story – Introducing 7-day services to radiology: kick-starting a trust's ambition

In order to facilitate trust-wide 7-day service across North Lincolnshire and Goole NHS Foundation Trust, Ruth Kent and team started with their busy radiology department.

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Key recommendations:

- In order to facilitate trust-wide 7-day services, start with the department which is often seen as restricting such endeavours.
- Radiology is often cited as an obstacle in the system; to address and remove this perception, 'open' the service rather than have them 'on-call'.
- Help solve recruitment issues by offering loyalty bonuses to trainees from local universities.
- Engage and involve staff in how the new service design will affect them, for example wages and rotas.

In order to offer a full 7-day service, we identified diagnostics as the department to kick-start the initiative, specifically radiology.

Local context

NLaG serves a catchment population of more than **350,000 people** across North and North East Lincolnshire, and East Riding of Yorkshire. We provide acute hospital services out of our three major sites: Diana, Princess of Wales Hospital, situated in Grimsby; Scunthorpe General Hospital; and Goole and District Hospital. We provide a stroke thrombolysis service, meaning that immediate CT needs to be available 24/7.

The challenge

With **poorer outcomes at the weekends**, NLaG was an outlier with respect to mortality. It therefore became a trust-wide ambition to see a full 7-day service (7DS) implemented across all sites, in all appropriate departments. While this remains the desired goal, plans have been made to begin enabling this.

Our solution

In order to offer a full 7-day service, we identified diagnostics as the department to kick-start the initiative, specifically radiology. Historically **radiology has often been perceived as the bottleneck in patient pathways**, not just in our own Trust. We are keen to see that radiology is in fact the enabler for 7DS, not the disabler.

The radiology department

- ever-increasing volumes of referrals
- equipment already running at maximum capacity.

We believe that the underlying principle of implementing a 7-day service lies in its robustness. In other words the service had to be *sustainable* and offer an improvement to patient care to ensure its own longevity and that of the trust's ambitions.

Staff mix

Below is a list of **positions that we deemed as necessary to fill before we could go-live**. It should be noted that finding staff to fully complement the diagnostics 7DS was a particular issue.

- 5.7 work time equivalent (WTE) band 2 healthcare assistants (HCAs) and 2 WTE band 3 HCAs
- 11.2 WTE band 5 radiographer, x-ray
- 14.5 WTE band 6 radiographer, CT and magnetic resonance imaging (MRI)
- 1.2 WTE band 7 radiographer, ultrasound.

Methods

Workforce redesign:

- Consider the working patterns and the staff required to offer a 7-day service. This involved reducing the premium rates of pay for the weekend work pattern that was in place beforehand.
- Ensure all staff have cross-site, 7-day contracts to give a responsive, flexible workforce.
- Ensure that there are adequate support services in place (eg administration and portering) to ensure equitable service across 7 days.

Process redesign:

- Some modalities had already grown, offering an element of extended opening to meet capacity. For example the computerised tomography (CT) departments were open on evenings and some weekend hours, there was a lack of consistency in opening hours between departments and sites.
- Further support was required to meet the demand of a proposed 24/7 stroke thrombolysis service, which will provide computerised tomography (CT) within 15 minutes.

Key learning

There were a number of challenges to setting up this 7DS. The lion's share of these can be attributed to staff issues.

- **Resistance of existing staff**

This was an incredibly difficult challenge to overcome. Although it was agreed by many staff members that the pre-existing model of care for weekend radiography services – a single handed radiographer running an out-of-hours provision – was in need of change there was reluctance for it to actually happen.

The old out-of-hours service was well paid and the likelihood of losing a substantial percentage of their income led to **unease and hesitancy from members of staff**. The formal rotas and shift patterns we prepared helped ease this level of anxiety by giving staff clear indication of the impact to their salaries, details of pay protection and the opportunity to have one-to-one meetings with HR where desired.

- **Recruitment**

Even now this remains a barrier to the success of the service. We were able to fulfil the required positions; however **sacrifices and compromises had to be made**. We are a geographically challenged trust, meaning that the ability to recruit new radiographers and similar staff is limited. We made concessions by recruiting staff as trainees, from the existing band 5 staff, leaving a knock-on effect as additional staff would still need to be recruited. At least 50% of the staff was employed in this manner.

This also came at a time when other recruiters in the area were bringing on staff to set up their own 7-day services. On top of this, the average turnover of radiographers is 10 per site, per year. This equates to a serious issue when hiring.

To help overcome this barrier we have put in efforts to **recruit students from our universities to work in our trust**. We have offered a bursary scheme for final year students, as well as loyalty reward of a contribution to student loan payments following the completion of 3 years with NLaG.

- **Funding**

Getting funding was necessary to support the recruitment process, as well as the increased cost of service during the protection period. For the latter we were effectively paying staff for the old style service, on top of the increased numbers of staff brought in to support rotas and enhanced pay for the unsocial hours worked by all staff.

The trust is committed to a vision of 7-day working and we were granted funding by the NLaG Trust Board. Longer term savings on the on-call costs, along with additional activity income and facilitating other services moving to 7-day working were justification for the investment.

Outcomes

24/7 improved access to plain film radiography.

Overnight, instead of there being a single radiographer working, there is now **a team of two radiographers and HCA support**. This means that it has become very rare for the department to be left unmanned and as such accident and emergency (A&E), and ward patients are benefiting from improved access to imaging.

24/7 access to stroke CT scans within 15 minutes.

All radiographers are now trained to undertake CT scans for stroke. This means that even outside CT operating hours there is a member of staff on duty who can undertake CT scans within 15 minutes, facilitating early thrombolysis when required. The stroke service at Scunthorpe has been accredited according to the quality standards for the NICE pathway for stroke. This has allowed us to offer a 24/7 thrombolysis service which has been in place since October 2013. Patient outcomes have improved and we have reduced mortality associated with strokes in our trust.

Over 7 days, CT scanners open 7.30am–8.30pm and MRI scanners open 7.30am–10.30pm

To put in to context what we have achieved in CT & MRI:

- 2010/11 total CT & MRI exams performed: 53,752
- 2014/15 total CT & MRI exams performed: 98,083

This rise in activity has been achieved **while maintaining our 6 week waiting lists in these modalities**.

Ultrasound departments open 8am–6pm, over 7 days.

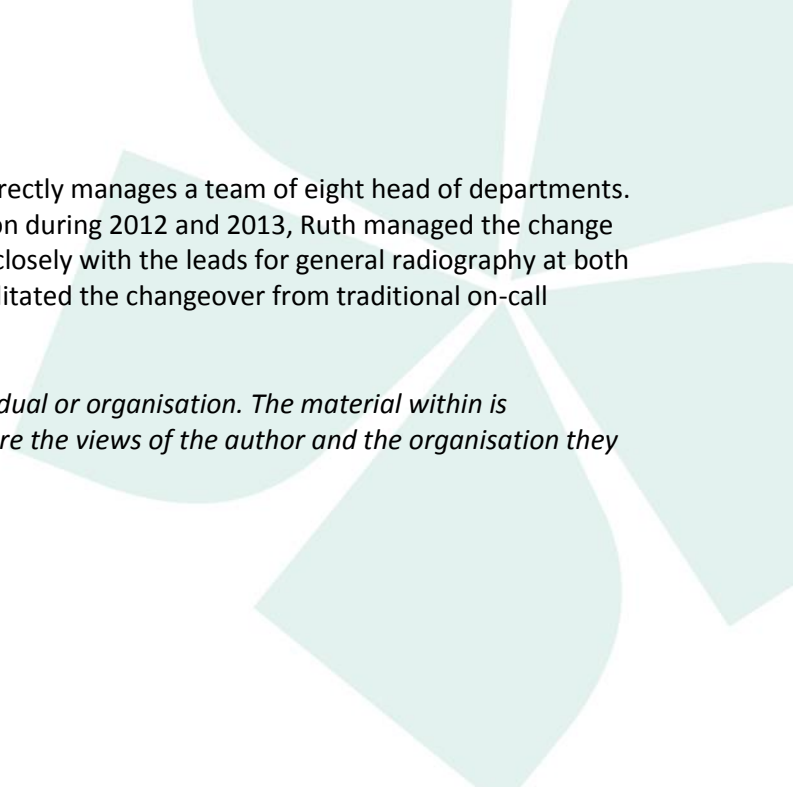
Improved access for inpatient scanning, facilitating discharge over the weekend period.

What next?

As noted we saw the push to see radiology become a 7-day service a start to a goal to make all services across the Trust operational 7 days a week. To date we have departments such as pharmacy and endoscopy taking the reshaping model on-board. In order to be able to offer a true 7 day service, both departments have completed the consultation process and are recruiting to the required establishment.

Who's involved?

Ruth Kent has worked within radiology for Northern Lincolnshire and Goole NHS Foundation Trust continuously since 1988. She is currently head of radiology services for the trust.



With more than 100 radiographers in post, Ruth directly manages a team of eight head of departments. As part of the reshaping diagnostics implementation during 2012 and 2013, Ruth managed the change to 7-day working in both CT and MRI. She worked closely with the leads for general radiography at both sites to develop rotas and shift patterns which facilitated the changeover from traditional on-call working to a full shift system within radiology.

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