



SEVEN DAY SERVICES CASE STUDY

NOVEMBER 2015

Northumbria Healthcare NHS Foundation Trust

Delivery of a seven day microbiology service to facilitate earlier diagnosis and treatment

AT A GLANCE:

- Seven day services established in 2013 by moving to a 24/7 on-site shift system, to increase the timely reporting of patient's results.
- Delivery of more timely microbiology results has contributed to improvements in the management of healthcare associated infections (HCAI), including C.difficile and MRSA, and in supporting the Trust to meet the Care Quality Commission's requirements for cleanliness and infection control. There has been a 40% reduction in cases of C.difficile.
- The Trust has improved patient safety and patient experience by increasing the timeliness of results being available.

Northumbria Healthcare NHS Foundation Trust reviewed working patterns and skill mix within the Microbiology department to support delivery of the pathology modernisation agenda and achievement of Department of Health standards.

A new seven day shift pattern was required to enable the team to provide safe, high quality care for all across the week. Prior to July 2013, the service was reliant upon staff volunteering to provide cover for the out of hours services including nights, weekends and bank holidays. The voluntary nature of the rota represented a risk to patient care, as service delivery could not be guaranteed.

A new, purpose-built specialist emergency care hospital opened in June 2015. Implementation of the new model of delivery enabled the team to accommodate the associated increase in workload.

How the improvements were made

- The trust proposed a five shift rota, which covered all staff grades from Band 2 microbiology laboratory assistants (MLA) to Band 7 Biomedical Scientists (BMS). Late, night and weekend shifts were evenly distributed among all staff, with exception of the Band 7 BMS role which did not include nightshift work. An impact assessment was undertaken to ensure no staff groups were disadvantaged.
- Consultation, supported by the human resources team and staff side representatives, was undertaken. One to one meetings were conducted to allow staff the opportunity to discuss concerns and increase their understanding of why change was necessary.

- During the consultation process, staff took ownership of shift requirements and this encouraged positive working relations between the trust and the team. Staff were allowed to revise the proposed rolling rota by including a mix of 7.5 and 10 hour shifts. This was later adopted and implemented. The change was a major one for all staff. Some concerns were raised by the MLA staff with regards to the nightshift, but they have now all embraced the new shift patterns in a professional manner and prioritised improvements to patient care beyond individual concerns.
- Work flow studies were carried out across the day to ensure use of resources were maximised and key tasks were allocated to the nightshift.
- An additional Band 6 BMS and Band 2 MLA were recruited to ensure compliance with the Working Time Directive and to allow for appropriate rest periods to be introduced. All staff received enhanced payments in line with Agenda for Change terms and conditions for shifts covering late, night and weekend working.
- A staff bank was created comprising Band 2 MLA and Band 6 BMS to reduce dependency on the utilisation of agency staff.

What was achieved?

- The Trust has in place a seven day microbiology service which operates a continual service 365 days a year, with samples being processed throughout the 24 hour period.
- The shift system covers the 24 hour period, seven days a week including bank holidays and participation is no longer voluntary. The department is now fully compliant with the working time directive.

- Staff have embraced the change positively and have adapted well to the new system.
- Testing is now more timely, enabling appropriate isolation and environmental cleaning to be instigated at an earlier stage.

What was the impact?

- Ensure improved sample flow, especially during the weekends. Prior to the change a sample taken on a Friday would not normally have been processed until a Monday.
- Improved turnaround times, with between 95 - 99% of specimens being reported within target turnaround time. In April 2012, 72.4% of systemic samples were processed within 72 hours by March 2015 this had reached 93.5%. For the same period, turnaround times for the testing and reporting of sputum specimens within 72 hours of receipt had increased from 78.9% to 92.6%.
- Calmer working environment for the staff as the service is continuous removing the pressure often faced due to the nature of workload variances.
- Changes to the service provided support to the Trust in delivering a zero-tolerance approach to hospital acquired infection and in achieving both the C.difficile and MRSA targets; thereby reducing the risk to patients and the associated financial penalties for breaching targets. Prior to 24/7 implementation, there were 53 C.difficile cases in 2012-13. In 2014-15 this figure had dramatically reduced to 31 cases i.e. a 40% reduction on the previous year.

- The infection prevention and control team, who also provide a seven day service, are able to be more proactive; responding quickly when detecting for example C.difficile positive patients.
- Changes to the rota have resulted in more effective budgetary management in relation to staffing costs.

TOP TIPS

- **Don't leap to solutions. Ensure you review all baseline information, including demands on the service, capacity available, processes, pathways and any issues impacting upon service delivery before making any changes.**
- **Communicate regularly with all your stakeholders to ensure they understand any changes to the service and any impact it may have upon them and their work.**
- **Develop a bank pool of staff to minimise agency costs.**
- **When planning shift patterns ensure you consider how all team members will access training.**
- **This is the start of a journey and will continue to develop and improve as the service develops.**

”Increased processing of specimens allows the infection prevention and control team to respond to individual cases in a more timely manner.”

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