

Case Study 1.1

Lean in the lab: Level loading specimen delivery

The problem:

Like many pathology labs, NGH staff experienced the common problems associated with batched deliveries. On one day the NGH lean team observed over 1100 specimen bags arriving in the lab during 1 hour. This put pressure on all areas of the lab and caused backlogs throughout the whole department.

Majority of the specimen deliveries during the peak hour came from GPs. These were delivered by an external NHS transport team.



Specimens arriving in batches



Specimens batched, waiting to be processed

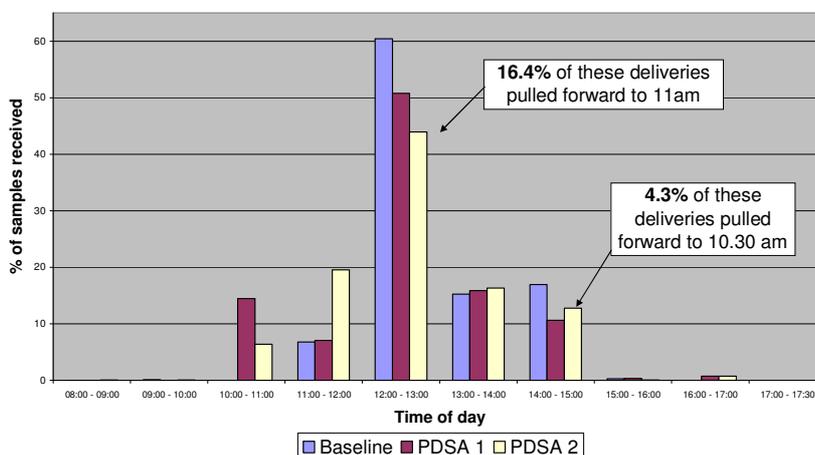
Actions taken:

- Members of the lean team met with the transport manager to discuss options for bringing the deliveries forward in the day, and the lean team accompanied the drivers on their routes to understand the process for collection and delivery.
- Analysis of driver routes and volume of specimens from each GP practice identified that over 30% of the GP specimens came from 6 practices in the town centre and 3 from the Daventry area in the South of Northamptonshire.
- The GP practices were telephoned at 10am one morning to ask how many specimens they had ready for collection at that time, (although their scheduled collection was at a later time). The lean team found that there was a substantial amount of specimens ready earlier in the day.
- The team undertook a PDSA (Plan, Do, Study, Act) trial of an additional collection from these practices earlier in the day, which resulted in some improvement in the flow of work. Further opportunity for improvement was identified.
- A 2nd PDSA was undertaken on a different day of the week, which included the original surgeries plus 4 additional pick-ups from the Daventry and South Northamptonshire area.

Results:

The 2nd PDSA trial reduced the volume of deliveries to pathology between 12.00 and 1.00 p.m. dramatically. This resulted in a more level workload and improved the overall turnaround time.

% of GP work comparison pre and post PDSA cycle



Next steps:

The pathology team are currently liaising with a range of transport providers to establish this delivery route on a permanent basis.

Contact us:

If you would like more information on this, or any other lean service improvements at NGH please contact the lean team on: lean@ngh.nhs.uk.