

# Case Study 1.4

## Lean in the lab: Immunology process changes

### The problem:

NGH immunology laboratory staff were unhappy with their turnaround time for rheumatoid tests. Specimens were processed in large batches which meant that it took much longer for rheumatoid tests to be processed than many other pathology tests, and there was wide variation in the turnaround time. Some patients' specimens were analysed very quickly, and others had to wait a long time for their results. The pre-analytical process had been improved as part of a rapid improvement "kaizen" event, which had made a slight improvement, but the immunology team were keen to improve this further.

### Actions taken:

- Firstly the immunology staff were invited to assess the current process and discuss the causes of the delays.
- It was clear that the single large batch each day was causing delays, so the team decided to try a PDSA (Plan, Do, Study, Act) trial to reduce the batch size and increase the frequency of analysis to every hour.
- The automatic authorisation rules on the analyser were refined to ensure that the simple specimens were automatically authorised without the need for a Biomedical Scientist to review them.

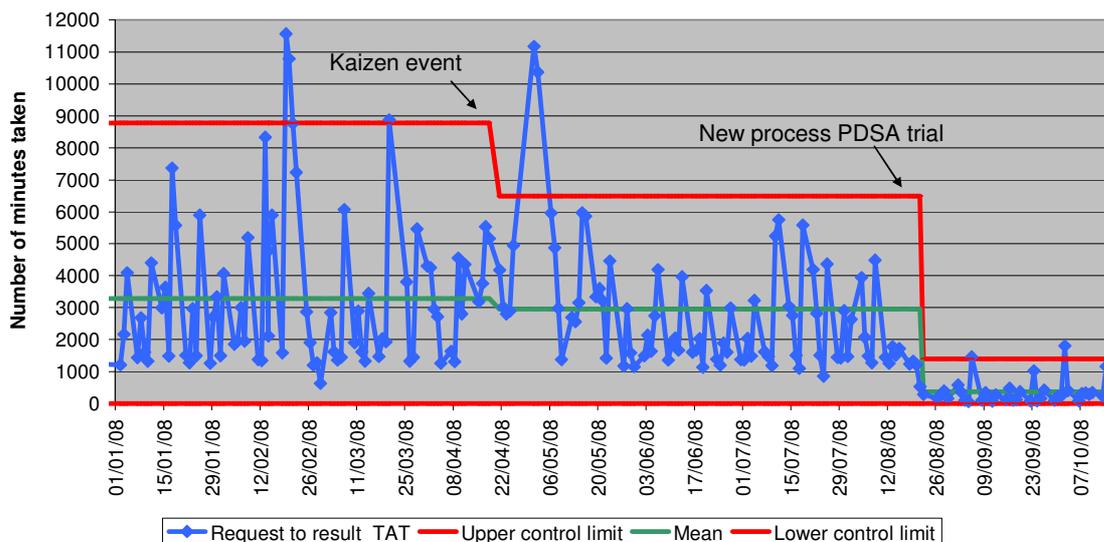


Immunology staff were pleased with the new process which offered patients much quicker results

### Results:

The PDSA trial made a massive difference to the turnaround time for rheumatoid specimens. The average (mean) turnaround time reduced by 43 minutes from over 49 minutes to under 6 minutes. Staff were pleased with the new process and have chosen to make it their new standard process.

2.1.08 - 15.10.08 daily averages (mon - fri)



### Contact us:

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