

Peter Jarvis, Georgina Page, Helen Holt, Tristan Richardson, Helen Partridge.

Background

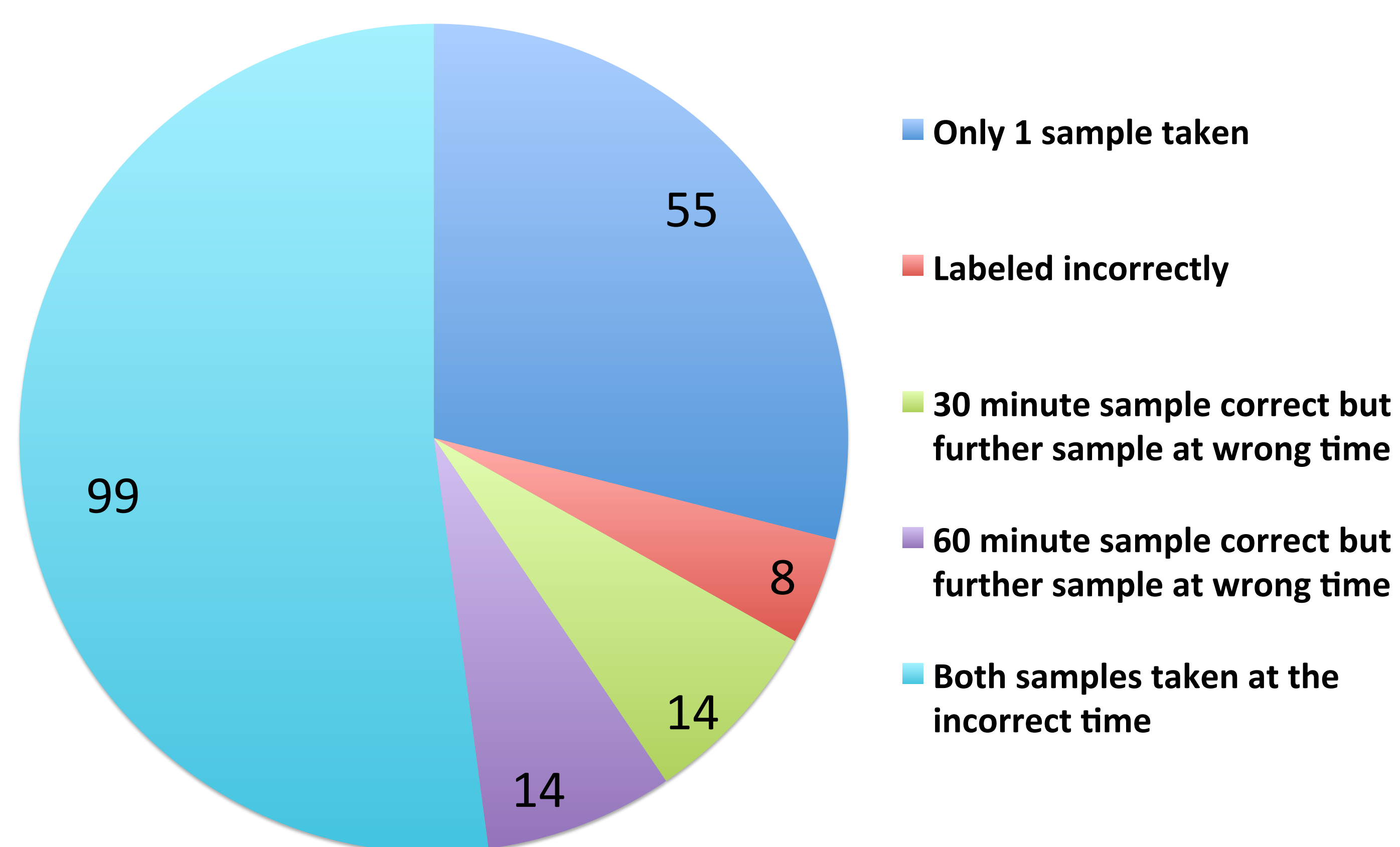
- Short synacthen tests (SSTs) are used to assess adrenal function by injecting tetracosactide and measuring blood cortisol after 30 and 60 minutes.
- Accurate timing of the samples helps with interpretation of the results
- Further tests taken after 60 minutes are unnecessary and do not aid result interpretation

Data

- Retrospective audit of 333 patients over 5 years undergoing SSTs at Royal Bournemouth Hospital
- Assessment of accuracy of sample timings for the SST
- A 10 minute window was allowed for each sample (25-35mins and 55-65mins)
- 2 tests were not included as no sample timings were recorded

How were the samples taken

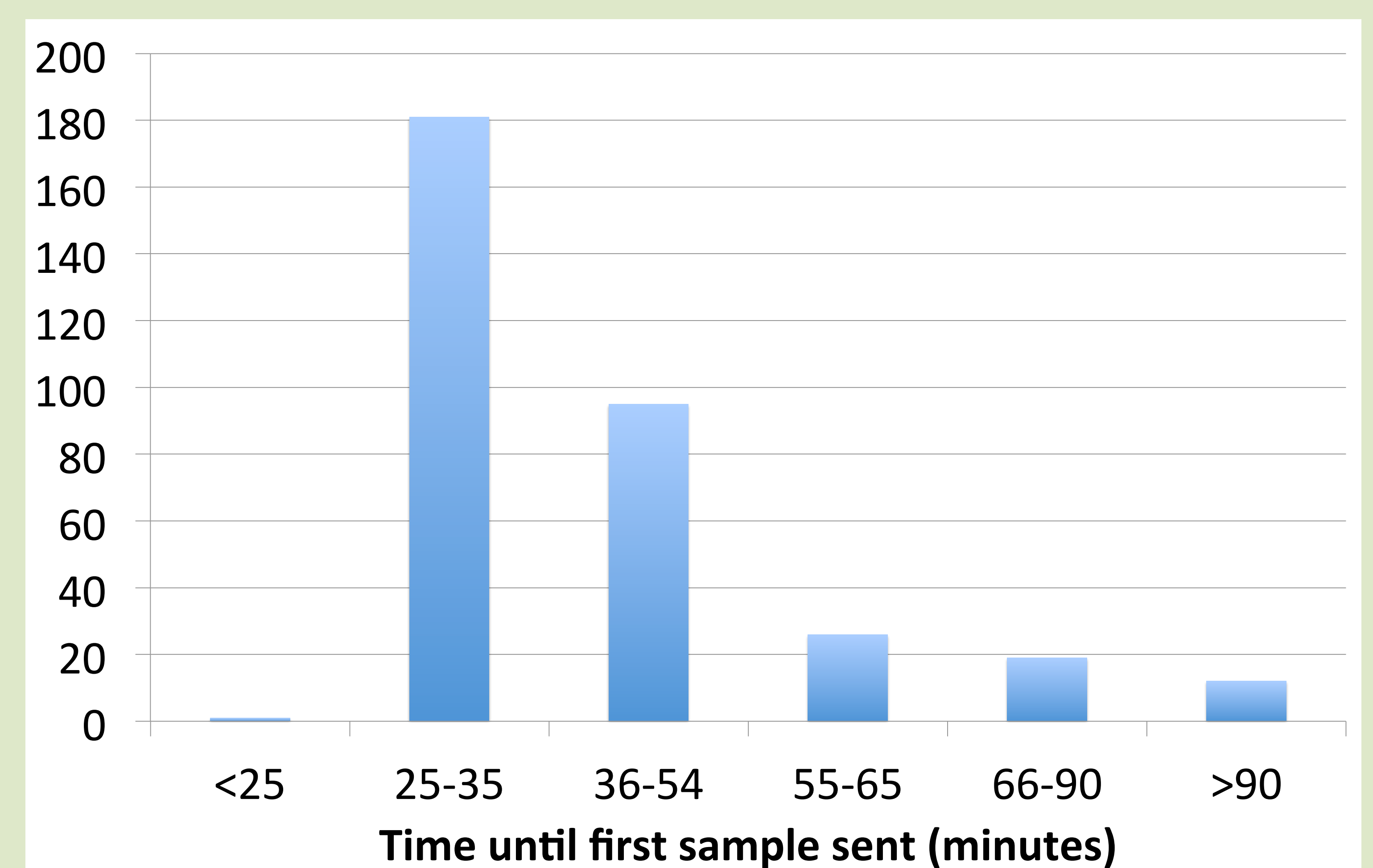
How were the SSTs performed incorrectly?



- 190/331 (57%) of SSTs were not performed correctly
- No second sample was sent in 17% (57/331) of tests

The 30 minute gap between samples was incorrectly maintained in 80% of tests despite this leading to the second sample also being taken late

Timing of samples



- 46% (151/331) of first samples were taken outside of the 10 minute sample window
- Median time for first sample was 35 minutes (range 13-197 minutes)
- 47% (129/274) of second samples were taken outside of the 10 minutes sample window
- Median time for second sample was 65 minutes (30-198)
- The majority of both first and second samples were taken late

Conclusion

- The majority of SSTs done at Bournemouth are performed incorrectly
- Poorly performed tests will impact on interpretation of results
- At the time these tests were analysed approximately £2000 was spent injecting Synacthen and interpreting cortisol levels in samples taken at the incorrect times
- The price of Synacthen has now risen from £4.87 to £45.71 since this audit. The potential cost implications are now much greater
- All SSTs are now discussed with the endocrine department at RBH
- A new proforma is being developed to highlight the importance of sample timing