

Differences in average length of stay for National Health Patients following elective joint arthroplasty in the private sector and National Health Service

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Background

The length of stay following joint replacement surgery has reduced significantly in recent years due to enhanced recovery, earlier mobilisation and improved surgical techniques (Maempel and Walmsley, 2015). There remains a perception that length of stay is reduced in private hospitals because of differences in patient selection.

Aims

This study aimed to compare whether average length of stay (AVLOS) differences within the private sector and NHS are a result of efficiency or selectivity for the treatment of NHS patients.

Methods

A retrospective study of 350 NHS Patients at Spire Cardiff hospital undergoing primary total (TKR) and unicompartmental (UKR) knee replacements and total hip replacements (THR) between November 2015 and June 2016 were matched for age and co-morbidities using the American Society of Anaesthetists Score (ASA score) with NHS patients from a local trust. The Surgeon and Anaesthetist approach did not differ between Spire Cardiff and the local NHS trust.

Results

Comparison of data revealed AVLOS for UKR/TKR at Spire Cardiff Hospital had a mean of 2.2 and median of 2 days compared to the trust mean AVLOS of 7.63 and median of 6 days (Fig 1). Whilst THR patients at Spire Cardiff hospital had a Mean AVLOS of 2.15 days and a median of 2 compared with the NHS trusts mean AVLOS of 8.45 days and a median of 5 days (Fig 2).

Further analysis revealed ASA grading to be identical for NHS and Spire Cardiff cohorts for THR and a 0.1 difference in mean but an identical median for TKR (Fig 3).

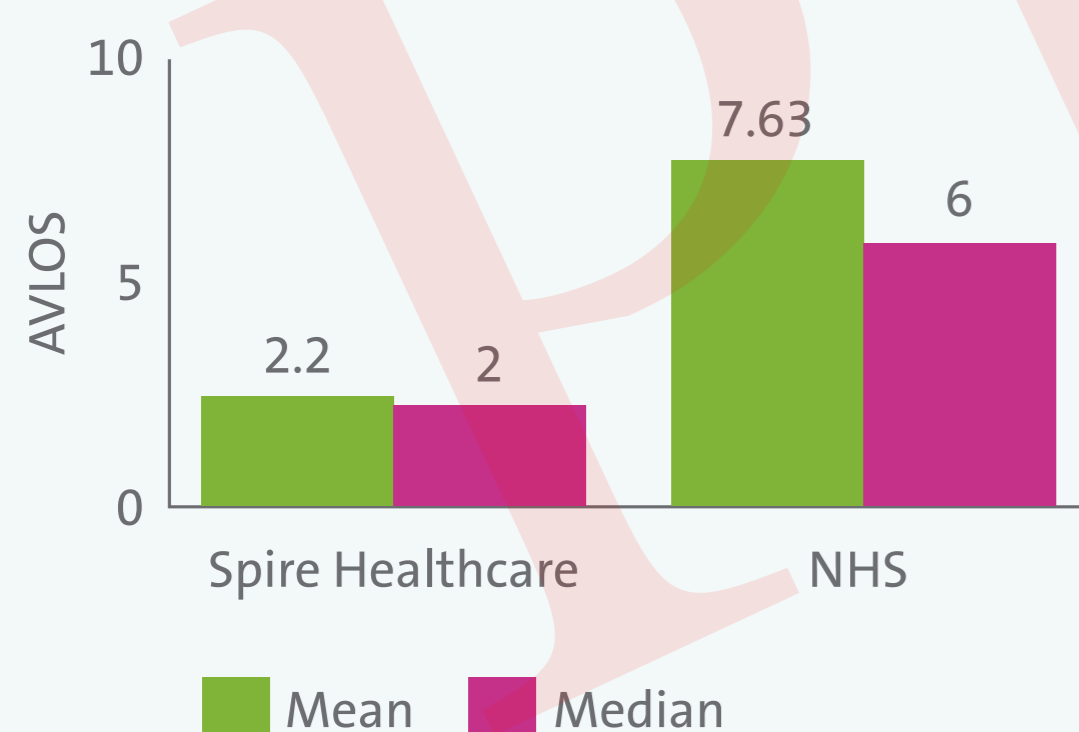


Fig 1: Comparison of AVLOS for TKR at Spire Cardiff and a local NHS trust

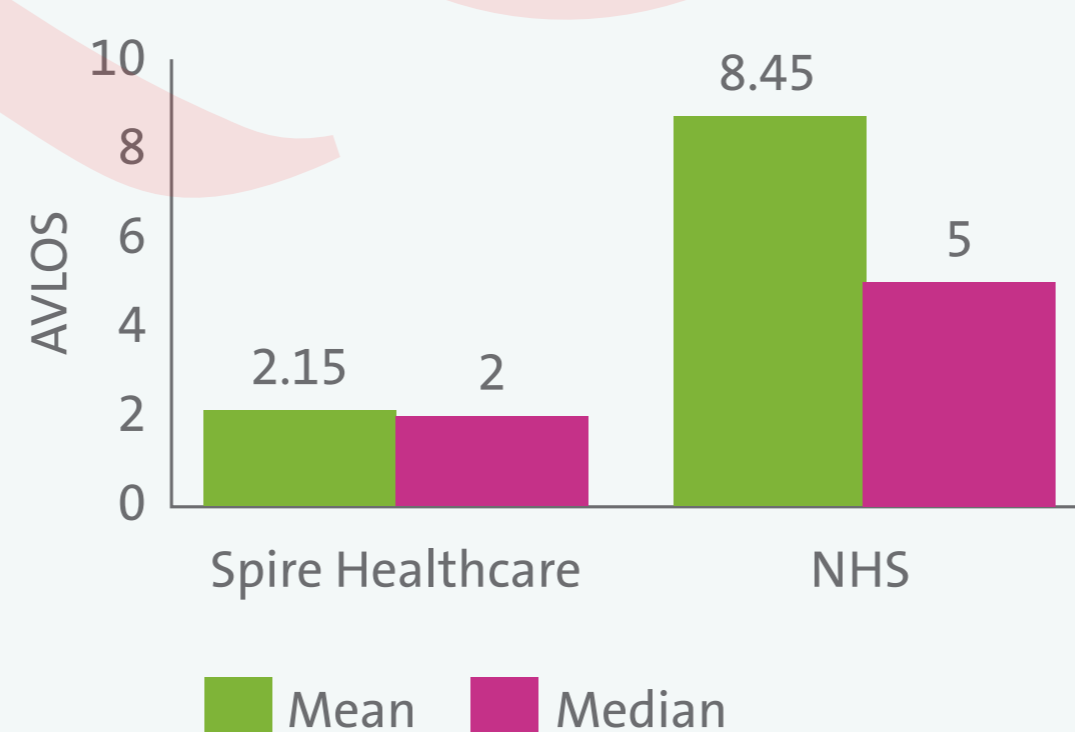


Fig 2: Comparison of AVLOS for THR at Spire Cardiff and a local NHS trust

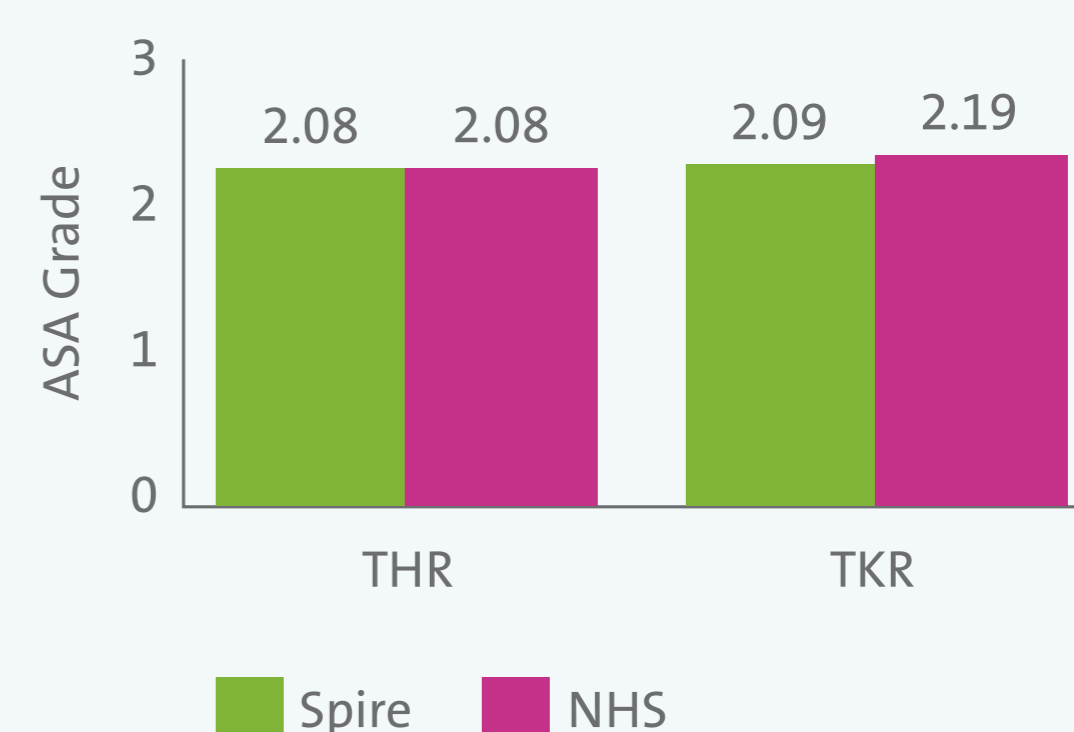


Fig 3: Comparison of mean ASA grading for Spire Cardiff and a local NHS trust THR and TKR/UKR patients

Conclusion

Spire Cardiff hospital introduced an enhanced recovery after surgery (ERAS) pathway in 2011. Following this there was a remarkable reduction in AVLOS; however the opinion amongst local NHS trusts was that this was due to patient selectivity and not efficiency.

In November 2015 Spire Cardiff Hospital commenced an NHS contract for Hip and knee arthroplasty patients from a local NHS trust allowing the opportunity to audit and compare AVLOS results. Data reveals a significantly reduced AVLOS for NHS THR and TKR/UKR patients at Spire Cardiff Hospital compared to a local NHS trust. The Surgeon and Anaesthetist approach did not differ between the two patient groups.

Comparison of ASA grading data revealed no differences in the complexity of the patients treated at Spire Cardiff Hospital to a local NHS trust (Fig 3). This suggests efficiency and ERAS not selectivity is responsible for a reduced AVLOS following THR and TKR/UKR.

To investigate patient satisfaction further research using SF36 and Oxford Joint scoring is required.

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