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 unicondylar (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 ALVOS 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 2.1 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).

**Conclusion**

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.

**Acknowledgements:** All Patients, consultants and staff who have been involved in this study

**Disclosers:** Spire Cardiff Hospital has no financial disclosures that would be a potential conflict of interest with this presentation.