

# Return on Investment Case Study

## West Suffolk Hospital

Through their work with the Surgical Ambulatory Emergency Care network, West Suffolk Hospital have managed to reduce the number of bed days being occupied by surgical patients. The following case study aims to identify this reduction, and calculate the financial saving associated with these improvements.

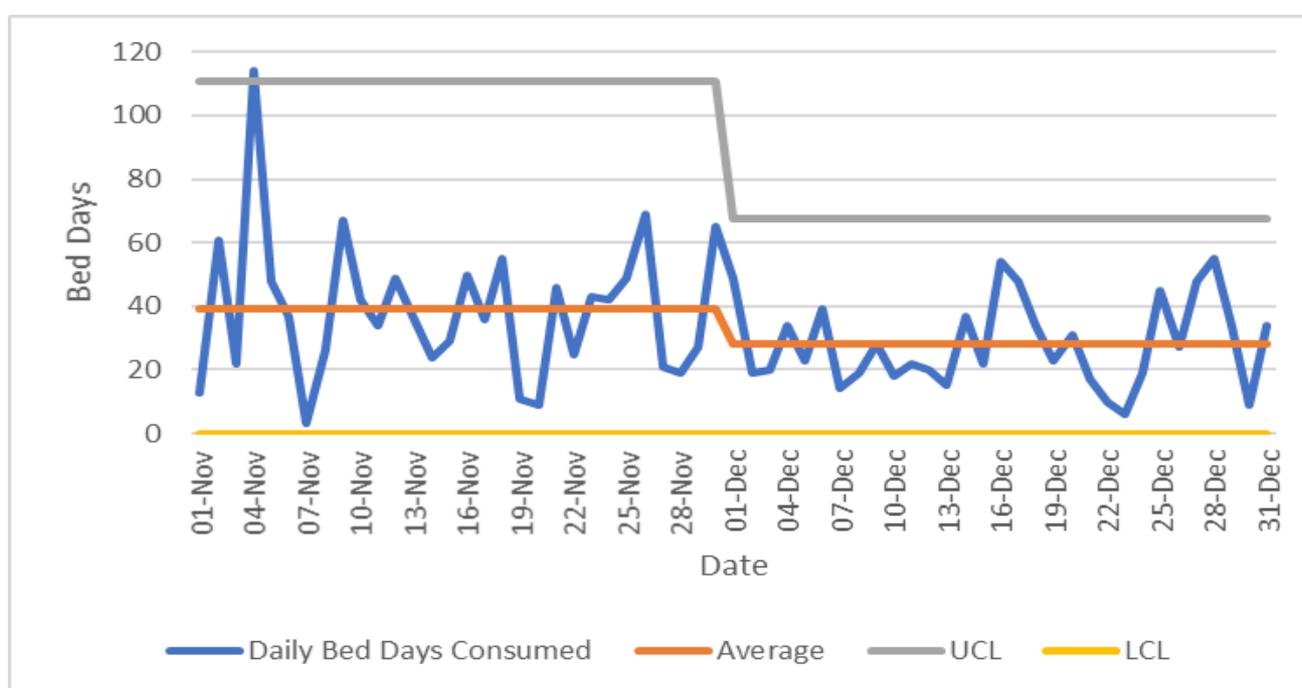


Figure 1: Daily number of bed days occupied by patients admitted under General Surgery staying at least one night, as well as the average, upper control limit (UCL) and lower control limit (LCL).

The daily number of bed days occupied by patients aged 16 and above admitted under General Surgery for at least one night in November or December 2018 can be seen in Figure 1. The average, upper control limit and lower control limits were calculated separately for November and December to identify the reduction across this time period.

To calculate the reduction in occupied bed days, the difference between the daily average, upper control limit, and 80% control limit between the two months were calculated (see Table 1). A 27.98% decrease was observed in the average, dropping from 39.10 to 28.16 occupied bed days per day. This decrease was even greater for the 80% and upper control limits, which decreased by 25.68 and 43.41 daily bed days respectively.

Date	Average	80% Limit	Upper Control Limit
<b>01.11.2018 – 30.11.2018</b>	39.10	73.42	110.73
<b>01.12.2018 – 31.12.2018</b>	28.16	47.74	67.32
<b>Difference:</b>	10.94 (↓27.98%)	25.68 (↓34.98%)	43.41 (↓39.20%)
<b>Saving per week:</b>			
£59/day	£4,518.22	£10,605.84	£17,928.33
£171/day	£13,095.18	£30,738.96	£51,961.77
<b>Saving per month:</b>			
£59/day	£19,578.95	£45,958.64	£77,689.43
£171/day	£56,745.78	£133,202.16	£225,167.67
<b>Saving per year:</b>			
£59/day	£234,947.44	£551,503.68	£932,273.16
£171/day	£680,949.36	£1,598,425.92	£2,702,012.04

Table 1: Calculation of the reduction in occupied bed days and the financial saving per week when using either £59 or £171 as the daily bed day cost.

Two different pricings were used to calculate the financial saving associated with the observed reduction in occupied bed days. First, the price of £59 per day, which was the price provided by Audit Commission data. Second, a daily cost of £171, as calculated by the Royal Bournemouth Hospital.

Based upon the £59 and £171 daily bed day costs, it is estimated that between £19,578.95 and £56,745.78 was saved in December alone. This saving can be scaled up to predict that between £234,947.44 and £680,949.36 will be saved on average per year.

To find out more about the Surgical Ambulatory Emergency Care network, or to read additional case studies, please go to [www.ambulatoryemergencycare.org.uk](http://www.ambulatoryemergencycare.org.uk)

