≣IQVIA

Use of PLICS to assess theatre utilization

Problem statement

To review theatre utilization of Main hospital against their capacity and understand how an improvement in utilization can result in utilization savings being made by the organization. Scope was restricted to all procedures performed in Main hospital in 2019.

Methodology and outputs used

The data was extracted from HIS and PLICS solution. Full capacity was calculated basis daily operational hours and total working days per month, assuming 5 working hours after factoring in preparation time. Direct and indirect costs were considered for theatre cost analysis.

Outcome

The analysis revealed that the overall operating rooms were booked for 87% against full capacity, however the utilized hours are 13% less than booked hours. The difference of 13% between booked and utilized theatre time is resulting in \$436K loss per month to the Hospital.



ANALYSIS OF BOOKED VS UTILIZED HOURS

Booked hours analysis				Utilized hours analysis			
Booked hours (2019)	Booked hours/ month	Assumed capacity/ month	% booked time vs capacity	Utilized hours (2019)	Utilized hours/ month	% of utilized hours vs booked hours	% utilized hours vs capacity
57,688	4,807	5,500	87%	50,443	4,204	87%	76%

Utilization cost analysis									
Annual running cost for theatre	Average monthly cost	Cost per utilized hour	Cost per booked hour	Loss due to unutilized time/month					
\$41.0M	\$3.4M	\$710	\$603	\$0.5M					

Post the presentation of the above analysis, a task force was created and within 2 quarters, the utilization improved, driving down the cost per utilized hour to \$693 and thereby generating an annual saving of \$100,000.