

## AB037. SOH23ABS\_176. Evolution of robotic colorectal surgery: a 6-year single institutional experience

# Esther Man Yu Lim, Michael Flood, Anna Fullard, Eoghan Condon, Calvin Coffey, Colin Peirce

Department of Surgery, University Hospital Limerick, Limerick, Ireland

**Background:** The advent of robotic surgery has aimed to assist surgeons in the challenges posed by open and laparoscopic approaches. Implementation of any new technology that involves a multidisciplinary team can take time. The aim of this study was to assess the perioperative and short-term outcomes of a robotic colorectal surgery service over time.

**Methods:** A retrospective analysis was conducted of a prospectively maintained database of consecutive robotic colorectal resections on the Da Vinci Xi platform, between June 2016 and June 2022. The first 100 robotic cases were compared with the second hundred. Outcome measures included robot docking time, operative time, length of stay and morbidity. Statistical analysis was performed using RStudio.

**Results:** There was no difference in patient demographics, operative characteristics or conversion rates between the two groups. Docking time remained unchanged after 100 cases, though total operative time shortened (271 *vs.* 226, P=0.002). Additionally, there were no differences in 30-day morbidity, mortality or readmission rates.

Conclusions: Despite improvements in operative times,

short-term patient outcomes remained a static measure. Regular changes to the members of the operative, nursing and anaesthetic teams likely limits optimisation of console docking times.

Keywords: Colorectal; Da Vinci Xi; robotic; surgery; short term outcomes

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#### Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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