Telementoring in Gynaecology Endosurgical Procedures During the COVID-19 Pandemic

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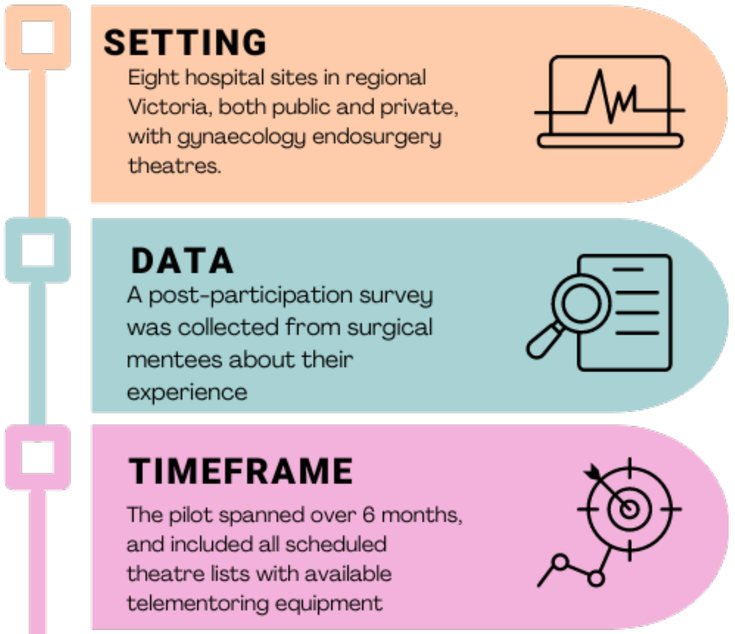
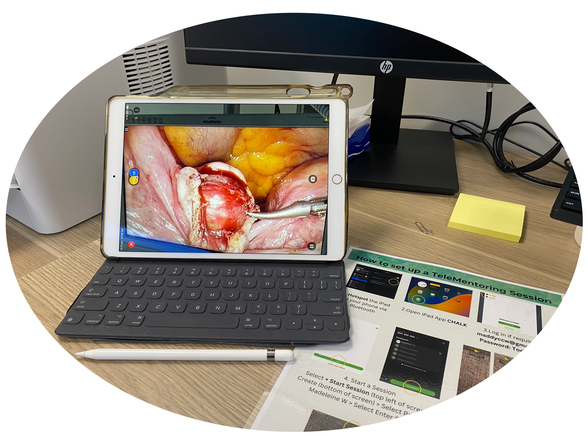
Introduction

The COVID-19 pandemic has had an unprecedented impact on surgical training.

Telementoring utilises information and communication technology (ICT) platforms to connect and transfer knowledge between an experienced surgeon and an expert during real time operating. Intra-operative mentoring has proven benefits for effective and safe surgical practices.



In theatre: Surgical mentee transmits live endoscopic image to surgical mentor via Ipad®



Offsite: Surgical mentor provides real time feedback via Vuforia Chalk® augmented reality platform

Results

Participant Demographics
- A total of 23 mentored sessions were conducted as part of this study.
- Primary surgeons were: 52% consultants, 39% senior registrars, and in 9% of cases, both a consultant and senior registrar jointly performed the procedure.

Acceptability and Feasibility
- No participant reported the telementoring to be significantly inconvenient or distracting.
- No participants reported major concerns about patient safety.
- All 23 participants reported that they enjoyed being involved in the telementoring sessions and expressed willingness to participate again in the future.

Utility of Telementoring
- All participants found telementoring to be useful for their surgical procedures.
- None of the participants felt that telementoring had a negative impact on their procedural skills, and 96% believed that it had a positive effect.

Conclusions

In response to the COVID-19 pandemic's disruption of surgical training, we explored using Virtual Interactive Presence and Augmented Reality (VIPAR) for remote mentoring in gynaecology endosurgery. VIPAR showed high acceptance, feasibility, and utility. Beyond pandemic challenges, this pilot program opens doors to improved surgical mentoring in rural Victoria. We're committed to advancing surgical mentoring through innovative technologies like VIPAR for current and future surgeons, ensuring excellence in regional gynaecology patient care.