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Current Trends and Barriers to Video Management and Analytics as a Tool for Surgeon Skilling

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1. Introduction

New age computing tools such as cloud computing and Artificial Intelligence (AI) when leveraged along with the video feed generated by the laparoscope, opens novel use cases for surgeons and the surgical team.

2. Objective

To better understand surgeon's current practices and perceptions of video management and analytics and gather blinded feedback on a new surgical videorecording product.

3. Methodology

- We surveyed 230 surgeons (general surgeons, gynecologists, urologists, colorectal/GI surgeons) and hospital administrators across US and Europe through a structured questionnaire on their current video recording practices.
- Blinded concept describing a new surgical video recording product was tested in the same structured questionnaire.
- Respondents were asked to read through the descriptions, and to answer questions on how the product could impact their current recording habits or the recording habits of surgeons at their institution.

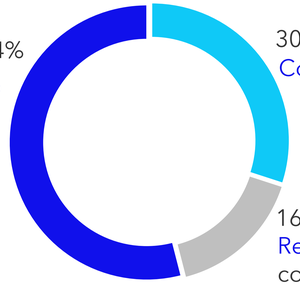
Acknowledgement: research was executed by Inspired Health



Touch Surgery™ Enterprise
A cloud-based solution for surgical video storage, analysis, and dissemination, designed for surgical professionals to access training materials and videos – anytime, anywhere.

4. Results

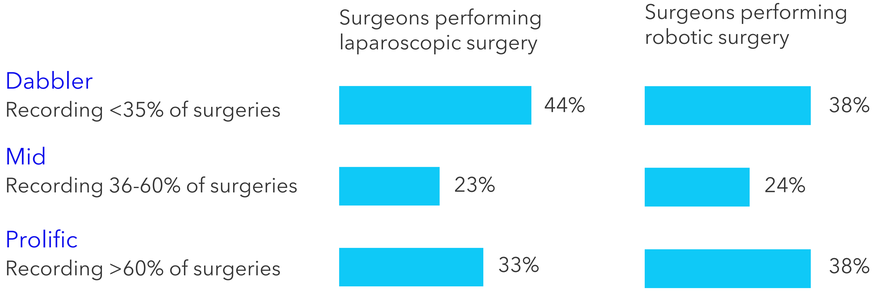
Of the surveyed surgeons:



54%
Record surgical video to assess surgical techniques, document practice, submit cases for conferences, share with colleagues for training

30%
Consider recording in the future

16%
Reject recording surgical video due to concerns about medico-legal liability, lack of meaningful benefit, security of videos, price, or patient privacy



- Reasons cited for not recording all surgeries:
  - no value in recording simple cases,
  - forgetting to record,
  - OR's not equipped with recording equipment,
  - legal concerns,
  - labor intensity, and
  - inability to access videos across devices.

- 74% of respondents are very likely or quite likely to recommend the product for adoption at their facility.
- 100% of respondents found the AI algorithm that automatically blurs video outside of the patient's body to protect patient and staff privacy to be appealing.
- Respondents who currently record videos found the product's ease-of-use, elimination of manual uploading and the ability to quickly find, review, comment on and share full procedural videos to be most appealing.
- Respondents who currently do not record videos found having access to the case video immediately after the case is finished to be most appealing.

6. Conclusions

Tools that address barriers to recording, accessing, and managing surgical case videos are critical to improving surgeon skills. In our experience, tools such as Touch Surgery™ Enterprise makes it easy and secure to record, manage and analyze surgical videos.

Touch Surgery™ Enterprise is not intended to direct surgery, or aid in diagnosis or treatment of a disease or condition.

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