



Survey on Impact of Robotic Surgery on Gynaecological Oncologists

Dear Colleague

We would be grateful if you could answer the following survey to try and ascertain the impact of robotic surgery on Gynaecological Oncologists.

This survey is for individuals who are either Gynaecological Oncologists or undergoing Gynaecological Oncology training who perform robotic surgery. This survey is part of a wider process evaluation study on the integration of robotic surgery into routine practice and impact on surgical teams, communication, collaboration, decision making as well as the facilitators and barriers to setting up a robotic service. Please be assured that all responses will be anonymous and individuals will not be identifiable through their participation/responses. Participating in our survey will take no longer than five minutes of your time.

Many thanks for your collaboration.

Dr Faiza Gaba on behalf of GO SOAR (Global Gynaecological Oncology Surgical Outcomes Collaborative)

Please complete the following questions about yourself and clinical practice setting

| | | |
|-----------|---|--|
| Q2 | Job Title | |
| | Consultant..... | <input type="checkbox"/> Trainee/Fellow <input type="checkbox"/> |
| Q3 | Gender | |
| | Male | <input type="checkbox"/> Female |
| | Transgender male | <input type="checkbox"/> Transgender female |
| | Gender variant-non conforming..... | <input type="checkbox"/> Other |
| | Other, please specify | |
| | <input type="text"/> | |
| Q4 | Age (years) | <input type="text"/> |
| Q5 | How many years of postgraduate experience do you have? | <input type="text"/> |

Q6 How many years of laparoscopic surgical experience do you have?

Q7 How many operative laparoscopic cases (excluding diagnostic laparoscopies) for oncology do you perform per year as primary/ lead surgeon?

Q8 How many years of robotic surgical experience do you have?

Q9 How many robotic cases for oncology do you perform per year as primary/lead surgeon?

Q10 In total, how many surgical gynaecological oncology cases per year does your centre undertake (includes total number of open, laparoscopic, robotic, vaginal cases)?

Q11 Which type of healthcare sector you work in? *(tick all that apply)*

Government/State funded ☐ Private ☐

Q12 Hospital type

University/Academic..... ☐ District General ☐

Please state, what proportion (%) of your surgical cases are :

Q13 Robotic

Q14 Laparoscopic

Q15 Open

Q16 In your centre, has the introduction of robotic surgery increased the uptake of minimal access surgery overall?

Yes ☐ No ☐

Please state, what proportion (%) of your robotic surgical cases take place for the following gynaecological cancers :

Q17 Endometrial

Q18 Cervical

Q19 Ovarian

The following questions are to understand the impact of robotic surgery on your surgical practice in the operating theatre

Q20 In comparison to laparoscopic surgery, my intra-operative situational awareness (defined as the perception of elements in the environment, the comprehension of their meaning, and the projection of their status in the near future) with robotic surgery is reduced

| | | | |
|---------------------------------|--------------------------|---------------|--------------------------|
| Strongly agree | <input type="checkbox"/> | Agree | <input type="checkbox"/> |
| Neither agree or disagree | <input type="checkbox"/> | Disagree..... | <input type="checkbox"/> |
| Strongly disagree | <input type="checkbox"/> | | |

Q21 Reasons for reduced situational awareness (*tick all that apply*)

| | |
|---|--------------------------|
| Surgeon sits at a console away from the patient and the rest of the operating room team..... | <input type="checkbox"/> |
| Reduced visual perception (i.e. less able to pick up on non-verbal visual cues in the operating room) | <input type="checkbox"/> |
| Impaired communication with the operating room team | <input type="checkbox"/> |
| Other | <input type="checkbox"/> |
| Other, please specify | |
| <input type="text"/> | |

Q22 When compared to laparoscopic surgery, my surgical ability is negatively impacted with robotic surgery by lack of tactile information/haptic feedback

| | | | |
|---------------------------------|--------------------------|---------------|--------------------------|
| Strongly agree..... | <input type="checkbox"/> | Agree | <input type="checkbox"/> |
| Neither agree or disagree | <input type="checkbox"/> | Disagree..... | <input type="checkbox"/> |
| Strongly disagree | <input type="checkbox"/> | | |

Q23 In comparison to laparoscopic surgery, my intra-operative complications with robotic surgery are

| | | | | | |
|----------------------|--------------------------|-----------------------|--------------------------|---------------|--------------------------|
| Higher | <input type="checkbox"/> | Somewhat higher | <input type="checkbox"/> | The same..... | <input type="checkbox"/> |
| Somewhat lower | <input type="checkbox"/> | Lower | <input type="checkbox"/> | | |

Q24 **Reasons for higher intra-operative complication rate (*tick all that apply*)**

Lack of tactile information/haptic feedback ☐

Less experience with robotic when compared to laparoscopic surgery ☐

Other ☐

Other, please specify

Q25 **In terms of physical fatigue, robotic surgery when compared to laparoscopic surgery is**

Very much less physically tiring..... ☐ Somewhat less physically tiring..... ☐

As physically tiring..... ☐ Somewhat more physically tiring..... ☐

Very much more physically tiring..... ☐

Q26 **In terms of mental fatigue, robotic surgery when compared to laparoscopic surgery is**

Very much less mentally tiring..... ☐ Somewhat less mentally tiring..... ☐

As mentally tiring..... ☐ Somewhat more mentally tiring..... ☐

Very much more mentally tiring..... ☐

Q27 **In terms of stress, robotic surgery when compared to laparoscopic surgery is**

Very much less stressful ☐ Somewhat less stressful ☐

As stressful ☐ Somewhat more stressful..... ☐

Very much more stressful..... ☐

Q28 **Have you ever had to take time of work (sick leave) due to a musculoskeletal injury sustained whilst performing laparoscopic surgery?**

Yes ☐ No ☐

Q29 How long (in days) did you take off?

Q30 **Have you ever had to take time of work (sick leave) due to a musculoskeletal injury sustained whilst performing robotic surgery?**

Yes ☐ No ☐

Q31 How long (in days) did you take off?

Q32

In terms of total operating time (time period includes docking as well as surgical procedure but excludes anaesthetic time), my robotic surgical cases take longer than laparoscopic surgery

Strongly agree

Agree

Neither agree or disagree

Disagree

Strongly disagree

Q33

Reasons for increased surgical time (tick all that apply)

Surgeon speed slower with robotic surgery

Increased time associated with set up and docking of ports

Operating team less experienced with robotic surgery

Other

Other

Q34

My rate of conversion to open surgery with robotic surgery when compared to laparoscopic surgery is

Higher

Somewhat higher

The same

Somewhat lower

Lower

Q35

Reasons for increased conversion rate (tick all that apply)

Less experience with managing intra-operative complications robotically

It takes longer to manage a complication robotically

Patient cases undergoing robotic surgery are surgically more complex

Other

Other

Q36

My learning curve for robotic surgery when compared to laparoscopic surgery was

Much steeper

Steeper

The same

Less steep

Much less steep

Q37

If cost or theatre access were not an issue, for patients suitable for minimal access surgery, would you prefer robotic over laparoscopic surgery

Yes

No

Q38

Reasons you would prefer robotic surgery (tick all that apply)

Less physical exhaustion for the surgeon

Less mental exhaustion for the surgeon

Enhanced visualisation in 3D of the surgical field

Greater surgical dexterity

Greater surgical precision

Less reliance on a surgical assistant

Fewer distractions when operating

Other

Other

Q39

Reasons you would NOT prefer robotic surgery (tick all that apply)

Less experience with robotic surgery

Negative impact on communication in the operating theatre

Negative impact on team work in the operating theatre

Lack of tactile information/haptic feedback

Spatial configuration of equipment in the operating theatre

Other

Other

Q40

Any other comments?

Thank you for taking the time to complete this questionnaire

Click the Submit button below to finish