

Surgical Robotic Arms

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Purpose of Study

The purpose of this study is to determine if surgical arms are a positive or negative advancement within the medical field. In order to make this determination I examined the advantages and disadvantages of surgical arms and how they have performed in the past to determine whether they are overall a positive or negative. Depending on the impact of these advantages and disadvantages I will determine if surgical arms are positive or negative advancements.

Background

Surgical Arms or Robotic Surgery is a type of minimally invasive surgery in which- doctors use very small surgical instruments that fit into a patient's body through a series of tiny incisions. These instruments are mounted on three robotic arms, allowing the surgeon maximum range and precision of motion as he or she performs the procedure.

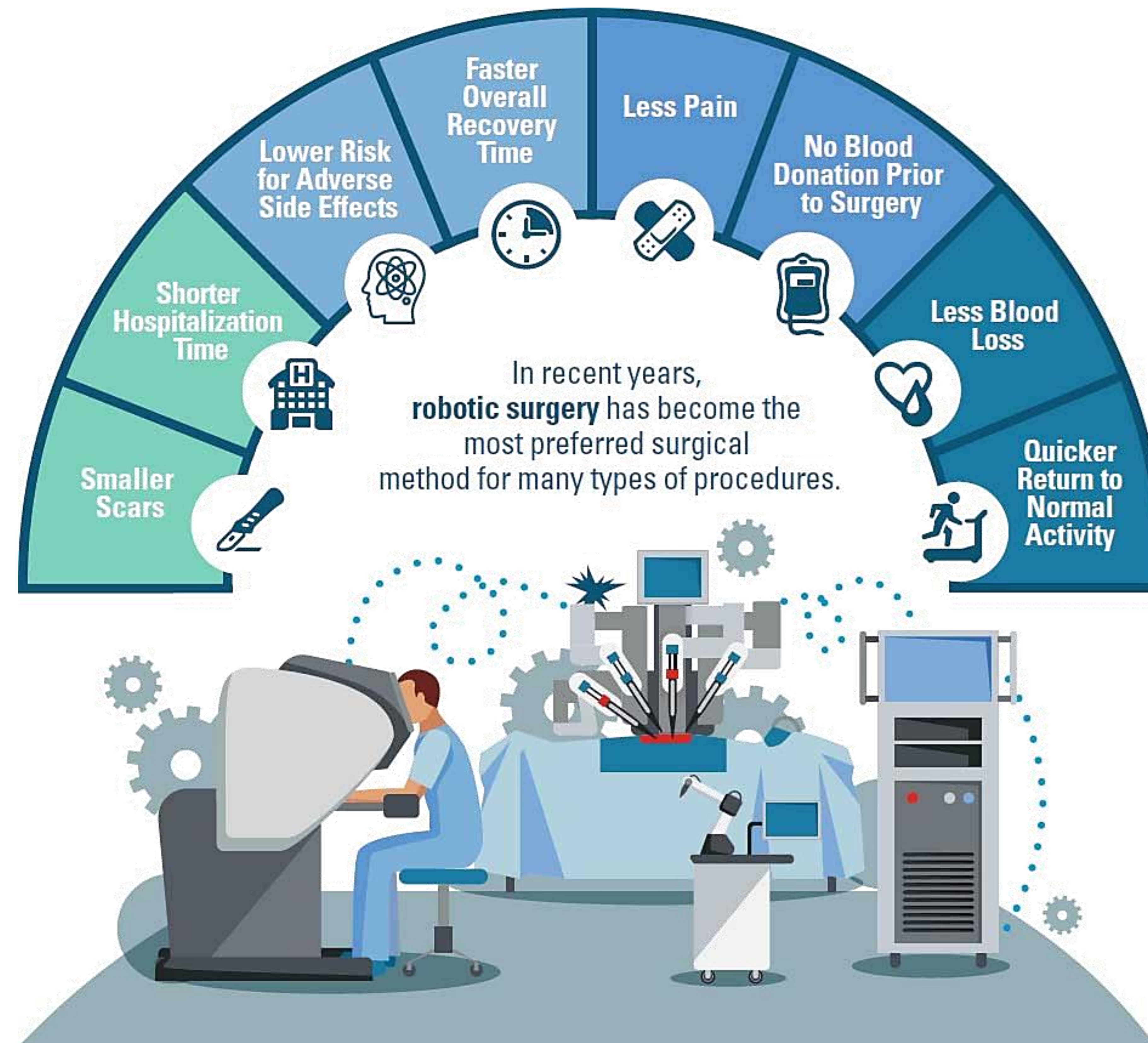
Methodology

Current methods of robotic surgery are using a camera arm and mechanical arms with surgical instruments and that doctors can control the arms with a console. This console can help surgeon's control surgery by giving them a better view.

- Some challenges of robotic surgery are
- Only available in centers that can afford the technology and have especially trained surgeons.
 - Surgeon may need to convert to an open procedure with larger incisions if there are complications. These include scar tissues from previous surgeries that make it difficult for robotic technology to complete the procedure.
 - Risk of nerve damage and compression
 - Robotic malfunction, which is extremely rare

Addressing the Disparity

Overall, there has been a big difference with traditional surgery and robot assisted surgery. Traditional and robotic surgery are both minimally invasive and very commonly used by surgeons for procedures of the abdomen and pelvis. These two types of surgeries differ from traditional open surgery because they require small incisions and use a camera that magnifies the view of the procedure.

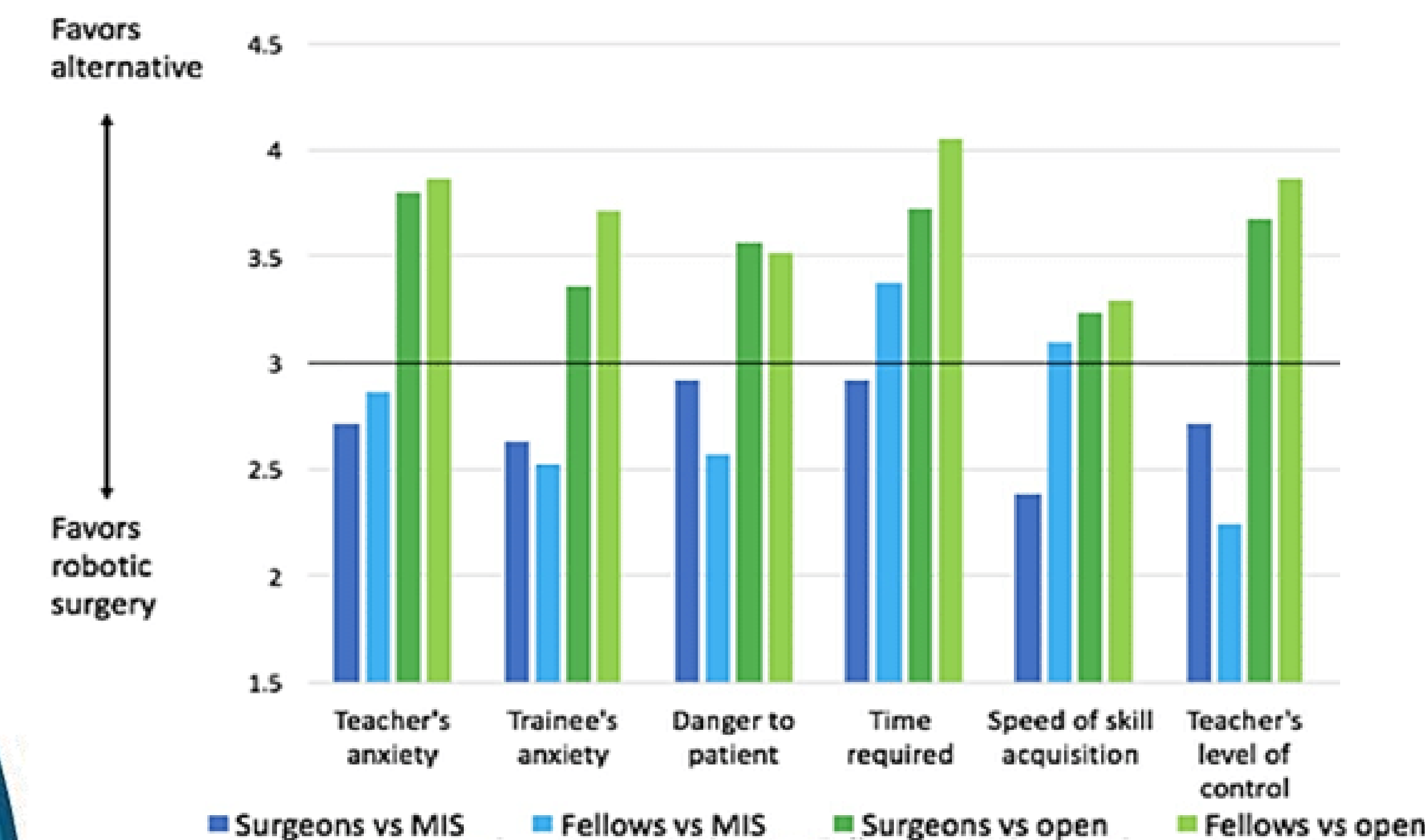


Recommendations

Robotic surgery is in fact recommended because of most of the benefits. A robotic surgery could benefit you directly with shorter recovery time and it could give the surgeon better visualization leading to a more precise surgery.

Data

This data shows that less people prefer to have robotic surgery because of how it uses modern technology. More people including surgeons and medical fellows place their trust an alternative to open surgery that their own experiences has been scientifically proven to be less dangerous.



Conclusion

In conclusion, my research has concluded that there are more advantages compared to disadvantages in utilizing robotic technology during surgery. It is a modern and innovative addition to the surgical room and should be expanded into every surgical room in the country. Overall, this technology deserves more recognition as a modern advancement in the medical field.

References

- Data was obtained from:
The Centers for Disease Control and Prevention
PUBMED
WedMD
NYU
- Photo Cred: <https://www.researchgate.net/publication/335460806/Comparing-robotic-vs-traditional-MIS-and-open-surgery.png>
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