

CADTH Reference List

# Robot Assisted Gynecological and Urological Surgeries: A Reference List

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## Key Message

One primary qualitative study that explores patients' perspectives of robotic assisted surgery broadly and may include people living with gynecologic or urologic conditions was found.

One primary qualitative study that explores the perspectives of people living with gynecologic conditions regarding experiences with, or expectations of, robotic assisted surgery for these conditions was found. One study that explores provider experiences of robotic assisted surgeries broadly, which may include gynecologic or urologic robotic assisted surgeries, was found. No primary mixed methods studies that explore the perspectives of people living with gynecologic or urologic conditions, or their providers, were found.

## Research Question

What literature is available that explores the perspectives of people living with gynecologic or urologic conditions, or their providers, regarding experiences with, or expectations of, robotic assisted surgery for these conditions?

## Methods

### Literature Search Methods

A limited literature search was conducted by an information specialist on key resources including Medline, Scopus, Cumulative Index to Nursing and Allied Health Literature (CINAHL), the Cochrane Database of Systematic Reviews, the International HTA Database, and the websites of Canadian and major international health technology agencies, as well as a focused internet search. The search strategy comprised both controlled vocabulary, such as the National Library of Medicine's MeSH (Medical Subject Headings), and keywords. The main search concept was robotically-assisted surgery. CADTH-developed search filters were applied to limit retrieval to qualitative studies. Where possible, retrieval was limited to the human population. The search was completed on August 11, 2022, and limited to English-language documents published since January 1, 2020. Internet links were provided, where available.

The abbreviated timeline for the search strategy was chosen due to the completion of a CADTH rapid review of patient and provider experiences with robotic surgical systems in 2020. The search strategy for this review captured experiences with robotic assisted gynecologic and urologic surgeries as well as a broader set of robotic assisted surgeries from January 1, 2010, to January 1, 2020. An information specialist rescreened the literature search results to verify that all relevant studies for this reference list had already been captured in that search strategy and included in the review. When doing so, they found that 1 eligible study had been missed.

### Selection Criteria

One reviewer screened literature search results (titles and abstracts) and selected publications according to the inclusion criteria presented in [Table 1](#). Full texts of study publications were not reviewed.

**Table 1: Selection Criteria**

Criteria	Description
<b>Sample</b>	Adults receiving, or having received, a robotic surgery for a gynecologic (e.g., hysterectomy) or urologic (e.g., nephrectomy) condition Clinical practitioners involved in the delivery of robot assisted surgeries for gynecologic and urologic conditions
<b>Phenomenon of interest</b>	Surgery performed with any robotic surgical system
<b>Design</b>	Any qualitative design using qualitative data collection and analysis methods, such as ethnography, grounded theory, phenomenology, discourse analysis.
<b>Evaluation</b>	Issues emerging from the literature that relate to the research questions, including but not limited to perspectives on, expectations of, and experiences with robotic surgery in general and in comparison, to each technique. As appropriate, differences will be explored by characteristics of the intervention (e.g., device features), as well as patient characteristics including, for example: <ul style="list-style-type: none"> <li>• body habitus</li> <li>• age</li> <li>• type and severity of condition</li> <li>• geographies (i.e., urban, rural, remote)</li> <li>• typically marginalized or vulnerable populations (e.g., immigrants and refugees; Indigenous Peoples; lesbian, gay, bisexual, transgender, queer, 2-spirited, and other persons).</li> </ul>
<b>Research type</b>	Primary qualitative studies, primary mixed methods studies

### Results

Qualitative rapid response reports are organized by types of study designs – primary qualitative studies and primary mixed methods studies.

One primary qualitative study that explores patients’ perspectives of robotic assisted surgery broadly and may include people living with gynecologic or urologic conditions was found. One primary qualitative study that explores the perspectives of people living with gynecologic conditions regarding experiences with, or expectations of, robotic assisted surgery for these conditions was found. One study that explores provider experiences of robotic assisted surgeries broadly, which may include gynecologic or urologic robotic assisted surgeries, was found. No primary mixed methods studies that explore the perspectives of people living with gynecologic or urologic conditions, or their providers, were found.

Additional references of potential interest that did not meet the inclusion criteria are provided in [Appendix 1](#). This includes 1 study on experiences of robotic assisted hysterectomies for people living with early-stage endometrial cancer that was missed in CADTH's previous 2020 rapid qualitative review of experiences with and expectations of robotic surgical systems.

## References

### Primary Qualitative Studies

1. Wu Q, Pei H, Ran X, et al. Qualitative Study on the Information Needs of Patients Undergoing Da Vinci Robotic Surgery. *Clin Nurs Res*. 2022;10547738221103337. [PubMed](#)
2. Kurt G, Akyuz A, Seven M, Dede M, Yenen MC. Robotic Gynecologic Surgery: What it Means for Women. *Konuralp Med J*. 2021;13(1):473-480. [PubMed](#)
3. El-Hamamsy D, Walton TJ, Griffiths TRL, Anderson ES, Tincello DG. Surgeon-Team Separation in Robotic Theaters: A Qualitative Observational and Interview Study. *Female Pelvic Med Reconstr Surg*. 2020;26(2):86-91. [PubMed](#)

### Primary Mixed Methods Studies

None identified.

## Appendix 1: References of Potential Interest

### Previous CADTH Reports

4. Experiences with and expectations of robotic surgical systems: a rapid qualitative review. (*CADTH Rapid response report: summary with critical appraisal*). Ottawa (ON): CADTH; 2020: <https://www.cadth.ca/sites/default/files/pdf/htis/2020/RC1251%20RSS%20for%20Gyno%20Uro%20Surgery%20Final.pdf>. Accessed 2022 Aug 17.
5. Herling SF, Palle C, Moeller AM, Thomsen T. The Experience of Robotic-Assisted Laparoscopic Hysterectomy for Women Treated for Early-Stage Endometrial Cancer: A Qualitative Study. *Cancer Nurs*. 2016;39(2):125-33. [PubMed](#)

### Systematic Reviews

6. Moloney R, O'Brien B, Coffey JC, Coffey A, Murphy F. Patients' Perceptions After Robot-Assisted Surgery: An Integrative Review. *AORN J*. 2020;112(2):133-141. [PubMed](#)

### Additional References

7. Cormi C, Parpex G, Julio C, et al. Understanding the surgeon's behaviour during robot-assisted surgery: protocol for the qualitative Behav'Robot study. *BMJ Open*. 2022;12(4):e056002. [PubMed](#)
8. Noel J, Moschovas MC, Sandri M, et al. Patient surgical satisfaction after da VinciR single-port and multi-port robotic-assisted radical prostatectomy: propensity score-matched analysis. *J Robot Surg*. 2022;16(2):473-481. [PubMed](#)
9. Esperto F, Prata F, Antonelli A, et al. Bioethical implications of robotic surgery in urology: a systematic review. *Minerva Urol Nephrol*. 2021 Dec;73(6):700-710. [PubMed](#)
10. Satchidanand A, Higginbotham J, Bisantz A, et al. "Put the what, where? Cut here?!" challenges to coordinating attention in robot-assisted surgery: a microanalytic pilot study. *BMJ Open*. 2021;11(7):e046132. [PubMed](#)
11. Drust WA. Recapturing Control: Robotics and the Shift from Medicalized to Biomedicalized Surgery. *Social Focus*. 2020;53(2):207-219.