

Comparison of Surgical Outcomes in Robotic-Assisted Radical Prostatectomy Performed at a Teaching and Non-Teaching Hospital

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Introduction and Objective

- Patients often worry that trainee involvement in a surgical procedure will result in worse clinical outcomes.
- Robotic-assisted radical prostatectomy (RARP) has become the most widely used surgical approach for prostatectomy in the United States.
- Prior studies have shown no difference in surgical outcomes of RARP in the presence or absence of residents and fellows at academic centers, but few studies have compared teaching and non-teaching hospitals.
- We report our findings in our comparison of surgical outcomes in RARP performed by a single surgeon at a teaching and non-teaching hospital.

Methods

- Retrospective review of all patients who underwent RARP by a single surgeon between September 2019 and April 2021 at an academic hospital, University of Colorado Hospital (UCH) and a non-teaching community hospital UCHealth Highlands Ranch (HRH).
- Intraoperative outcomes include estimated blood loss and operative time. Postoperative outcomes include 90-day complication rate and rate of positive surgical margin.
- Complications were categorized using the Clavien-Dindo grading system.
- Patients were matched by age, PSA level, and Gleason grade group.

Results

- 141 total RARP procedures were compared (UCH, N=76, HRH, N=65).
- No statistically significant difference was observed in short-term complication rate, positive margin rate, postoperative length of stay, or intraoperative blood loss.
- RARP performed at the academic teaching hospital showed a statistically significant longer operating time.

Table 1. Demographics

	UCH (N=76)	HRH (N=65)
Age	64.14	62
PSA	7.54	7.96
Gleason grade group	2.7	2.48

Figure 1. Operative time (hours).

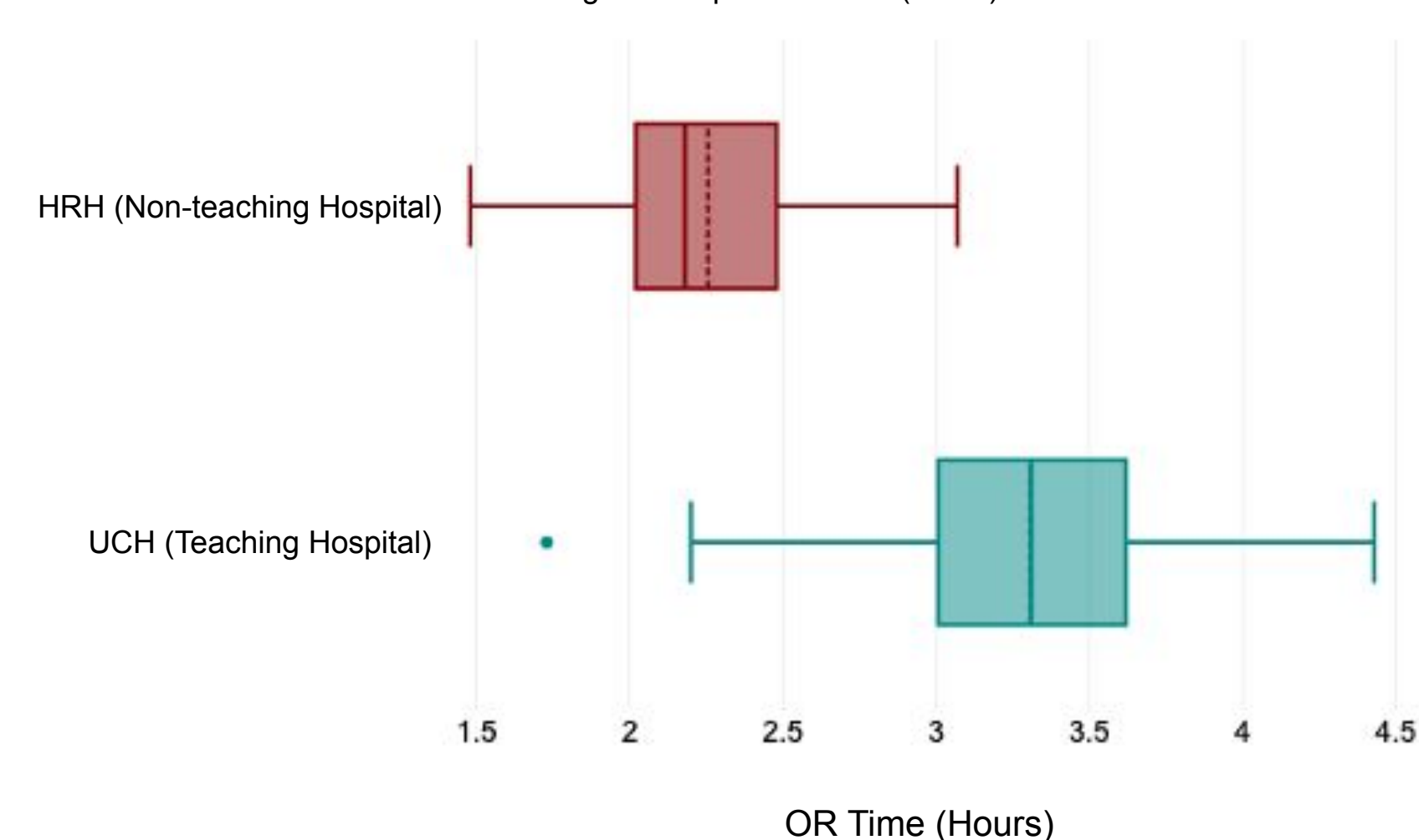


Figure 2. Length of stay (hours) after RARP procedures.

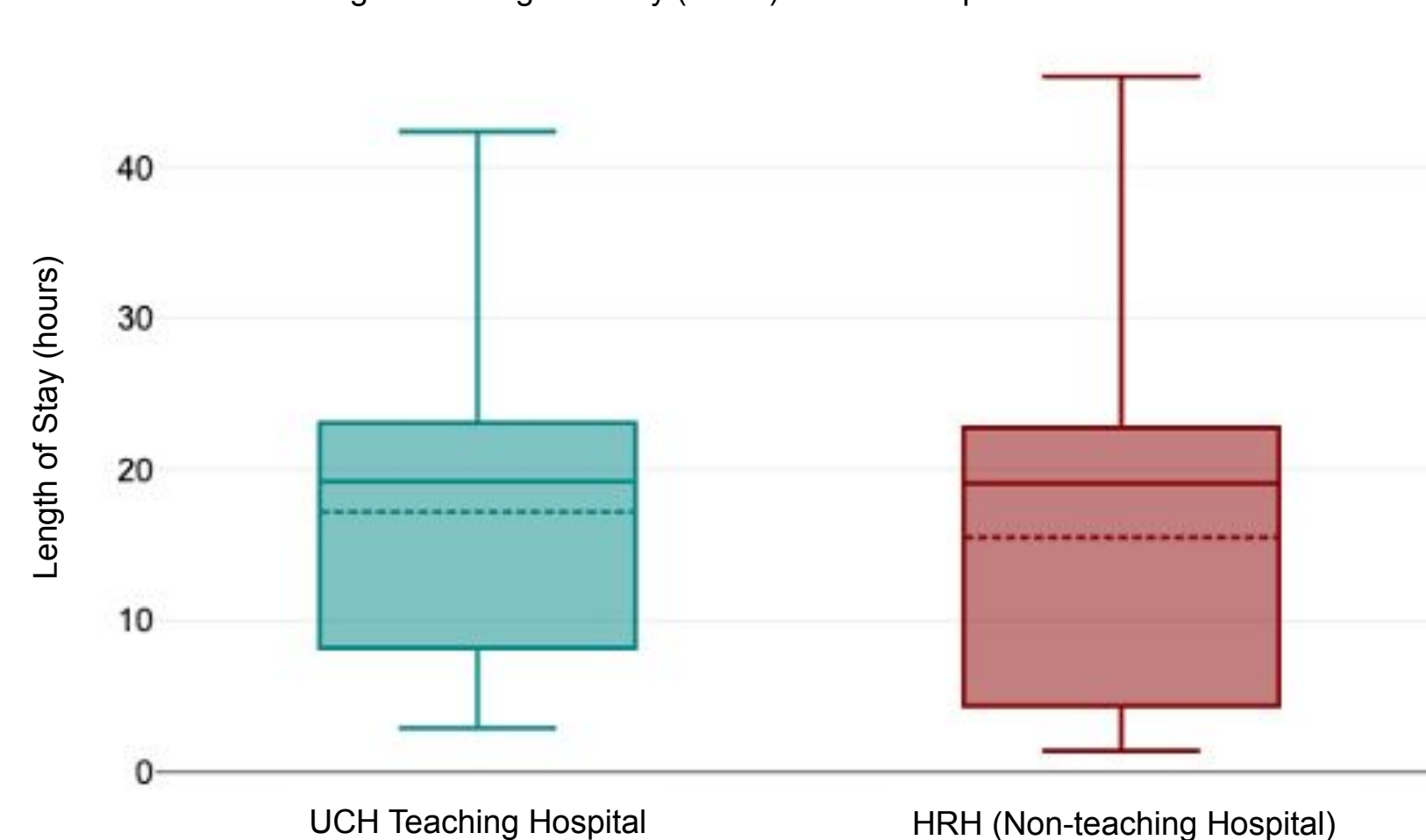
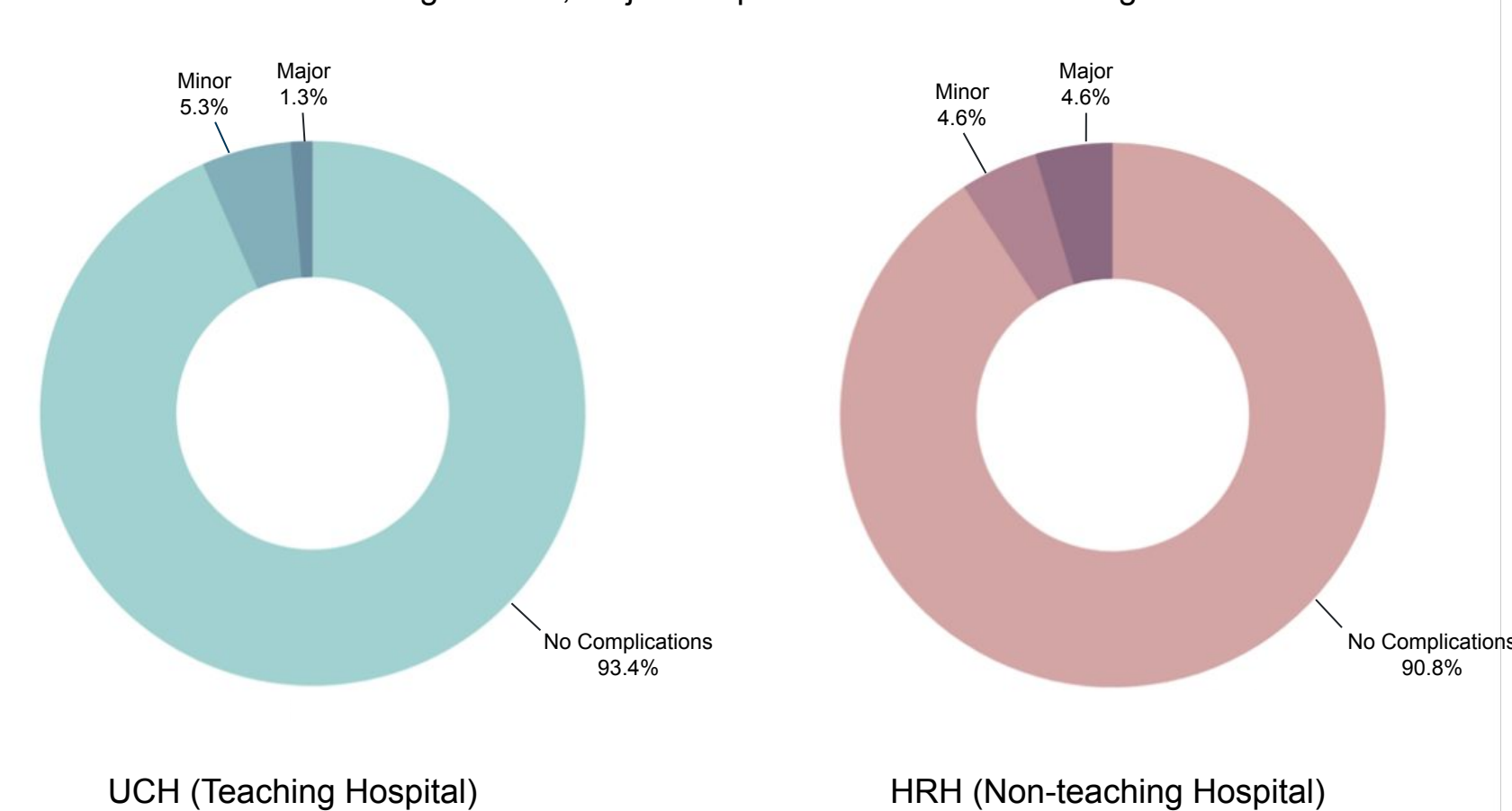


Figure 3: Rate of postoperative complications of RARP procedures. Minor complication = Clavien-Dindo grade ≤ 2, Major complication = Clavien-Dindo grade ≥ 3.



Conclusions

- Patients who underwent RARP at a teaching hospital did not lead to worse intra or postoperative outcomes compared to those performed at a non-teaching hospital, though operative time was longer with trainee involvement.

Discussion

- Patients can be reassured that meaningful short-term perioperative outcomes are not impacted by resident or fellow trainee involvement in care related to the RARP procedure.

Selected References

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Disclosures

- The authors have no financial disclosures to report.

For questions or complete bibliography:

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