

# Outpatient migration of radical prostatectomy for prostate cancer in the United States

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## INTRODUCTION

Prostate cancer is the second most common cancer in men. Surgical techniques have evolved from open surgery to the minimally invasive surgeries that can be safely performed in outpatient settings without compromising healthcare quality and costs. The increasing utilization of Robotic-Assisted Radical Prostatectomy (RARP) for the treatment of prostate cancer has made it both a familiar and popular surgical modality among contemporary urologists.

## STUDY OBJECTIVE

To examine temporal trends of outpatient radical prostatectomy for prostate cancer in the U.S. after the Centers for Medicare & Medicaid Services (CMS) removed laparoscopic radical prostatectomy from the inpatient-only procedure list, effective January 2018

## METHODS

- A retrospective cohort analysis was performed of adult males who underwent elective, primary radical prostatectomy for prostate cancer from January 1, 2014 to June 30, 2019 in the Premier Hospital Perspective Database®.
- Prostatectomies and surgical modalities were identified using ICD 9/10 and CPT codes. In/outpatient were based on inpatient or outpatient admission provided by Premier
- Patients with missing or extreme values of total cost and/or operating room/ (OR) time were excluded from the analysis.
- The proportion of outpatient surgery was calculated quarterly

## RESULTS

Figure 1. Patient Flow

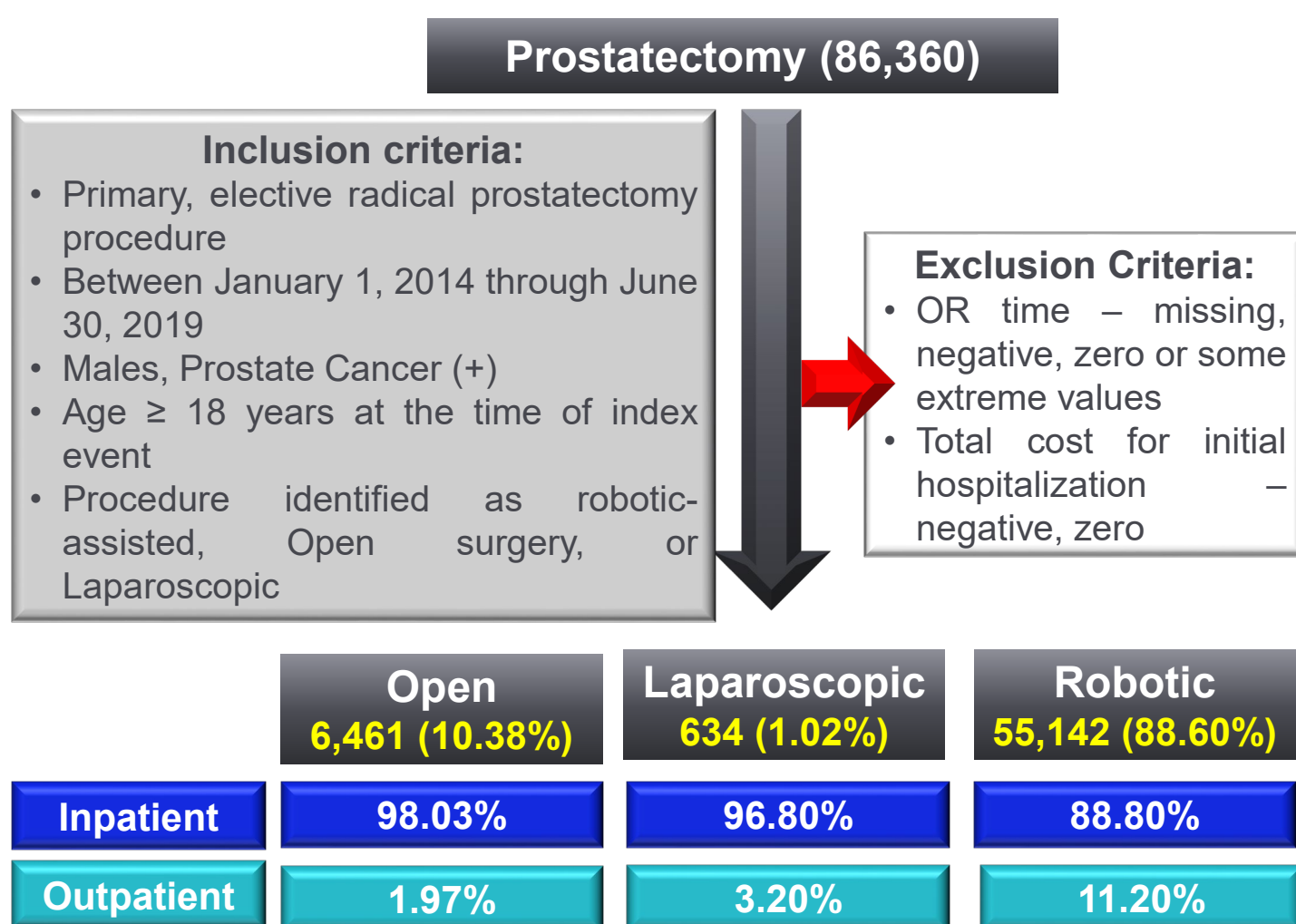
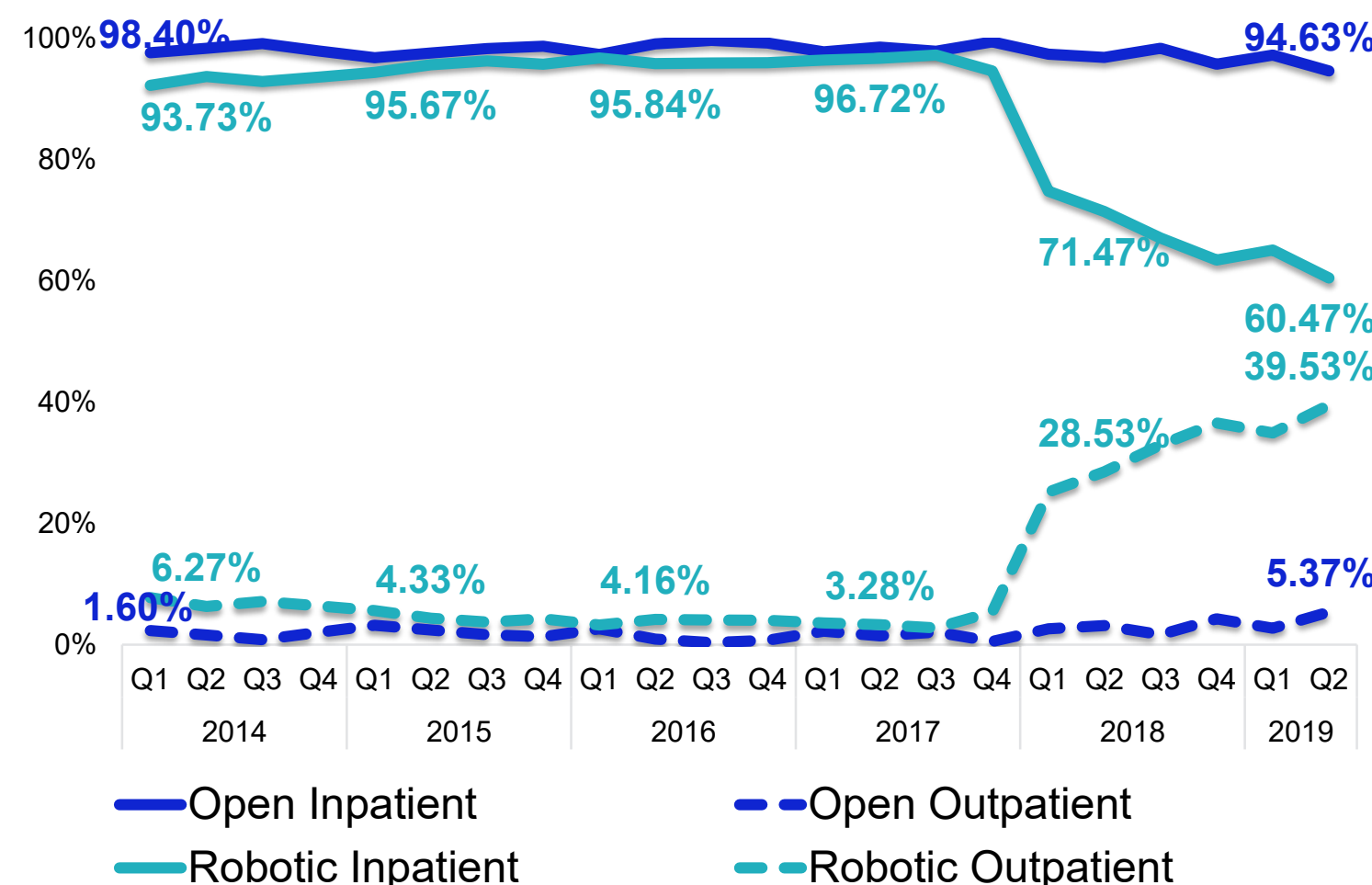


Figure 2. Payer Mix by Surgical Modality

Modality	Open		Robotic	
	Inpatient	Outpatient	Inpatient	Outpatient
<b>Payer Type</b>				
<b>Commercial</b>	45.45%	59.84%	52.89%	52.53%
<b>Medicaid</b>	5.07%	4.72%	3.82%	2.28%
<b>Medicare</b>	44.65%	28.35%	38.06%	40.03%
<b>Other</b>	4.83%	7.09%	5.23%	5.15%

Indicates for RARP, insurance type makes little difference in Outpatient migration; but for Open surgery, commercial patients are more likely to have Outpatient surgery. However, age is a big confounder, and hard to make a conclusion.

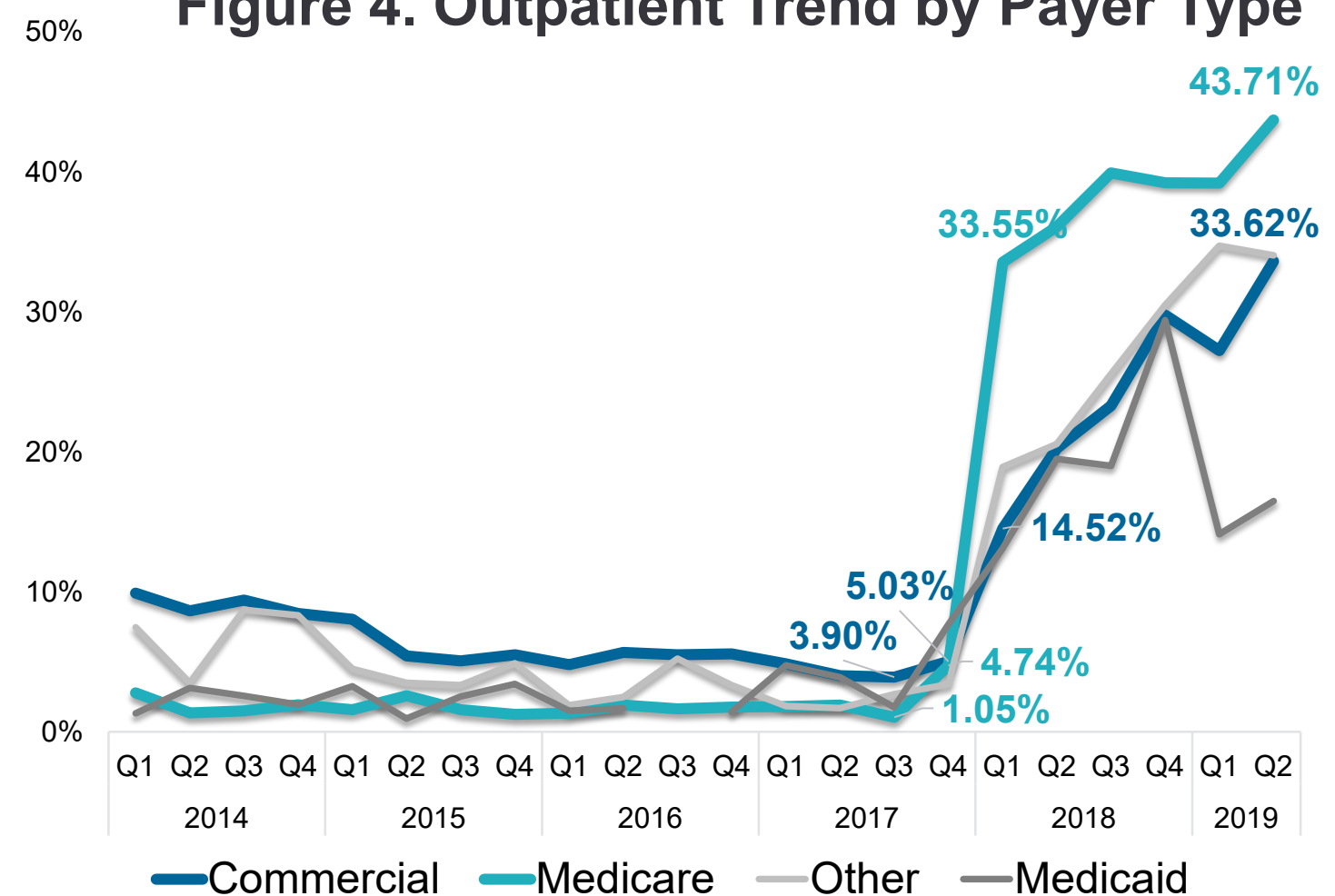
Figure 3. Surgical Modality Trend



The proportions of outpatient prostatectomy increase was primarily observed in patients who underwent RARP after 2018.

*Note:* Exclude Laparoscopic Assisted Radical Prostatectomy since they account to <1.1% and trend may not be explainable by quarter.

Figure 4. Outpatient Trend by Payer Type



The outpatient migration trend was observed not only among patients primarily covered by Medicare but also among patients with commercial insurance.

## CONCLUSION

- Since January 2018, a significant shift from the inpatient to outpatient setting for radical prostatectomy was observed, mainly among patients undergoing RARP.
- Both patients with Medicare and with commercial insurance coverage experienced the shift to outpatient prostatectomy.
- Further studies are needed to investigate the safety, effectiveness and cost-effectiveness of outpatient migration.