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HCA MIDWEST HEALTH
OVERLAND PARK REGIONAL MEDICAL CENTER

Retrospective Analysis of Surgical Time Proficiency During Laparoscopic Myomectomies

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Background

- It has also been suggested that female specific surgery (Gynecology) is underestimated in terms of actual surgery time compared to the CMS allotted time when compared to more male specific surgery (Urology) which is overestimated in terms of actual procedure time compared to the CMS allotted time[1, 2]
  - Therefore, the accuracy of surgeon estimates for total procedure time is unknown
- Our hypothesis is that laparoscopic myomectomy procedure times will extend beyond the corresponding time allotted by E&M code
  - Thus leading to inaccurate patient counseling

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Methods

- Retrospective Cohort Study of surgical patients undergoing laparoscopic myomectomy
  - CPT 58545 (laparoscopy, surgical, myomectomy, excision; 1 to 4 intramural myomas with total weight of 250 g or less and/or removal of surface myomas)
  - CPT 58546 (laparoscopy, surgical, myomectomy, excision; 5 or more intramural myomas and/or intramural myomas with total weight greater than 250 g)

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Methods

- Identify patient comorbidities such as obesity, prior abdominal surgeries, history of anemia and increased patient age
- Identify estimated blood loss as documented in the patient's chart in the EMR which has been associated with adverse postoperative outcomes
- Endpoints: Identify surgical times and rate at which laparoscopic myomectomy procedures extend beyond allotted time given by E&M code compared to surgeon start/end time inclusive to cases starting on July 1, 2016 through July 1, 2022

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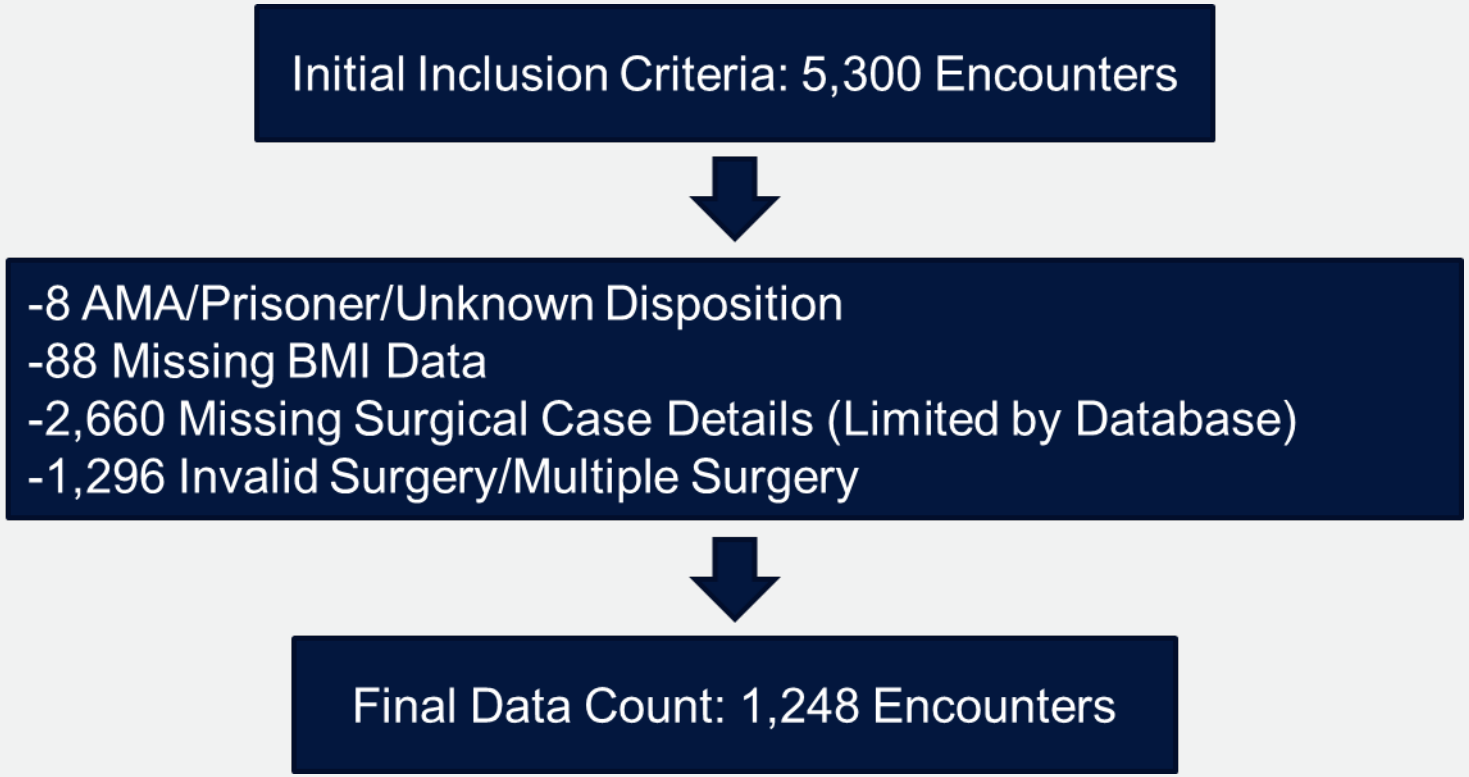
Methods



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Results

- For CPT 58545 (<5 myomas), 18.66% of the patients had a surgical time at or under the 120-minute allotment (164 out of 879 patients)
  - CMS time allotment – 120 minutes
- For CPT 58546 (>= 5 myomas), 45.53% of the patients had a surgical time at or under the 180-minute allotment (168 out of 369 patients)
  - CMS time allotment – 180 minutes

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Results

- Increased BMI and increased surgical time was not statistically significant
- Patients with procedures with ≥5 myomas:
  - Statistically likely to have history of endometriosis
  - Length of stay roughly one day longer (0 vs 1 day)
  - RBC transfusion utilized

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Conclusion

- Surgeons have been underestimating total procedure time when counseling patients
- Statistically likely that in patients with ≥5 myomas removed at time of laparoscopic myomectomy that there is an increased history of endometriosis, increased length of stay and increased utilization of RBC transfusions
- With higher BMIs it is not statistically significant that procedure times will be increased

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