

# Intra-specialty Assessment of Adenoma Detection Rates

Anna Shu, DO | Monica Zipple, MD | Jason D'John, DO | Edwin Itenberg, DO FACS | St. Joseph Mercy Oakland, Pontiac, MI

## Introduction

- Colonoscopy is an effective preventive measure for colorectal cancer (CRC) through the detection of precursor lesions, or adenomas
- Adenoma detection rate (ADR) is defined as the proportion of screening colonoscopies that results in detection of at least one histologically confirmed adenoma or adenocarcinoma
- The American College of Gastroenterology recommends a goal ADR of >30% for men and >20% for women
- The objective of this study was to assess for ADR variation between endoscopists at a community based hospital

## Methods

- Retrospective, single-institution review of screening colonoscopies performed by GI or CRS between January 1, 2017 and December 31, 2017.
- Exclusion criteria:
  - Patient age <50 years
  - Failure of cecal intubation
  - History of CRC and/or colon resection, polyposis syndromes or IBD, previous colonoscopy
- ADR was calculated by gender for each specialty and by individual provider
- Groups were compared using Fisher's exact test
- Logistic regression analysis using a full versus reduced model test was used to assess for ADR variation by endoscopist

## Results

- A total of 469 ICD codes were identified; 295 included in final analysis
- Total ADR was higher in the GI group at 34% compared to CRS at 23.4% although this did not meet statistical significance ( $p = 0.41$ )
  - Goal ADR targets were met in women for both GI & CRS at 27.1% and 20.6% respectively
  - National standards were met for men in the GI group (40%) but not the CRS group (26.7%)

**Table 1. Adenoma Detection Rate by Provider Specialty**

	≥1 adenoma (n)	Colonoscopies (n)	ADR (%)
GI	35	103	34
<i>Male</i>	22	55	40
<i>Female</i>	13	48	27.1
CRS	45	192	23.4
<i>Male</i>	24	90	26.7
<i>Female</i>	21	102	20.6

- Binary logistic regression analysis showed that ADR was associated with individual endoscopist ( $p = 0.00079$ )

**Table 2. Adenoma Detection Rate by Individual Endoscopist**

Endoscopist	≥1 adenoma (n)	Colonoscopies (n)	ADR (%)
A	8	18	44.4
B	12	39	30.8
C	1	18	5.5
D	37	122	30.3
E	8	70	11.4

## Discussion

- ADR monitoring plays a critical role in the assessment of CRC risk reduction
- Our results do not demonstrate differences in ADR between GI and CRS endoscopist specialties
- There was a statistically significant difference in ADR by individual endoscopist
  - Endoscopist-related factors may play a role in ADR variation
  - Potential variables include level of experience, age, level of fatigue, and daily number of procedures performed
- Limitations include small sample size, retrospective analysis
  - No data collected on quality of bowel prep, withdrawal time, or other factors related to the procedure

## References

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