

Socioeconomic Status – An Important Determinant for Follow Up for Surveillance Colonoscopy After Endoscopic Mucosal Resection



Rebecca Sullivan, MD; Yassmin Hegazy, MD; Ashutosh Tamhane, MD, PhD; Bijal Vashi, MS; Lonnie Hannon, PhD; Ariann Nassel, MA; Sergio Sanchez-Luna, MD; Ali Ahmed, MD; Kondal Kyanam, MD; Shajan Peter, MD; Ramzi Mulki, MD The University of Alabama, Birmingham, AL

Introduction

- In 2021, Alabama has significantly higher incidence of colorectal cancer at 43.5 compared to US of 39.5, and African Americans have a higher rate compared to Caucasian.
- Evidence shows that surveillance colonoscopy after polypectomy with highrisk adenoma can reduce the risk of developing colorectal cancer
- Our objective is to identify risk factors associated with poor follow up after undergoing colonoscopy with EMR.

Methods

- Retrospective chart review of patients with EMR between June 2016-March 2022. Demographics were collected
- Census data was used to evaluate income, median household income, and educational attainment.
- Poor follow up was defined as those who failed to follow up and/or presented for surveillance colonoscopy > 1 month after the recommended timeframe.

Results

- Initial chart review = 520 patients → 73
 excluded due to lack of referral data,
 59 with recent EMR whose
 recommended colonoscopy has not
 passed.
- A total of 388 patients were included, 293 (75.5%) had poor follow up and 95 (24.5%) had good follow up.

	Overall	Follow-up	
	N=388	Poor n=293 (75.5%)	Good n=95 (24.5%)
Age (years), mean (SD)	63 (10.4)	64 (10.4)	62 (10.4)
Sex: Male	52.1%	75.3%	24.8%
Female	47.9%	75.8%	24.2%
Race/ Ethnicity: Caucasian	67.8%	73.8%	26.2%
African American	28.1%	77.1%	22.9%
Other	2.8%	90.9%	9.1%
Type of insurance: Private	45.9%	74.7%	25.3%
Medicare	47.4%	75.0%	25.0%
Medicaid	4.6%	88.9%	11.1%
Uninsured	2.1%	75.0%	25.0%
BMI: less than 24.9 – Underweight/ Normal	24.8%	72.8%	27.2%
between 25.0 and 29.9 – Overweight	32.4%	70.0%	30.0%
more than 30.0 – Obese	42.9%	80.5%	19.5%
** First colonoscopy: Yes	17.0%	75.8%	24.2%
No	44.6%	69.9%	30.1%
** Outside Hospital Referral: Yes	31.7%	86.2%	13.8%
No	67.8%	70.7%	29.3%

Table 1: Table 1: Descriptive characteristics and comparison of poora vs goodb follow up in patients who underwent EMR at UAB between June 2016-March 2022.

**Statistically significant at 0.05 level (two-tailed test)

Results continued

- A significant association of poor follow up when index colonoscopy were performed at OSH (p=0.003) and if the index colonoscopy was their first colonoscopy (p=0.04)
- Census data revealed lower median home values were associated with poor follow up (\$168,382 vs \$185,034).
- There was a trend to poor follow up in patients with obesity (80.5%), former alcohol use (88.9%), patients insured by Medicaid (88.9%), and minority populations including African American, and Hispanic/ other ethnicities (77.1%, 90.9%, respectively).

Conclusion

- Our study illustrates that social economic status has a significant impact on surveillance colonoscopy after EMR, and outside hospital referrals are more likely to have poor follow up compared to inhouse referrals.
- Given the potential impact this data has for reducing risk of developing CRC in lower social economic individuals, further studies are needed to validate these findings and stratify predictors of poor follow up.

References

- 1. Alabama Statewide Cancer Registry (ASCR) DY-IaMADoPH.
- 2. Surveillance E, and End Results (SEER) Program SEER*Stat Database: Incidence SEER Research Data, 18 Registries, Nov 2020 Submission. www.seer. cancer.gov Data Years: 2009-2018.
- 3. Atkin W WK, Brenner A, et al. Adenoma surveillance and colorectal cancer incidence: a retrospective, multicentre, cohort study. Lancet Oncol. 2017; 18: 823-834.
- 4. Lieberman D, Gupta S. Does Colon Polyp Surveillance Improve Patient Outcomes? Gastroenterology. 2020;158(2):436-440.