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Will Aiming for Quantity Affect Quality? Establishing Open Access at a Fellow-run Gastroenterology Clinic.

Matthew Sullivan DO

Lehigh Valley Health Network, Matthew.Sullivan@lvhn.org

Patrick Hickey DO

Lehigh Valley Health Network, Patrick.Hickey@lvhn.org

Eric Nellis MD

Lehigh Valley Health Network, eric.nellis@lvhn.org

Abdul Aleem MBBS

Lehigh Valley Health Network, fnu_abdul.aleem@lvhn.org

Rajesh Essrani MD

Lehigh Valley Health Network, Rajesh.Essrani@lvhn.org

See next page for additional authors

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Authors

Matthew Sullivan DO, Patrick Hickey DO, Eric Nellis MD, Abdul Aleem MBBS, Rajesh Essrani MD, and Hiral N. Shah MD

Will Aiming for Quantity Affect Quality?

Establishing Open Access at a Fellow-run Gastroenterology Clinic

Matthew J. Sullivan, DO,¹ Patrick Hickey, DO,¹ Eric Nellis, MD,¹ Abdul Aleem, MD,² Rajesh Essrani, MD,² and Hiral N. Shah, MD¹

¹Division of Gastroenterology and Hepatology, ²Department of Internal Medicine, Lehigh Valley Health Network, Allentown, Pa.

BACKGROUND

- Colorectal cancer screening is indicated for all patients at average risk of colorectal cancer starting at age 50.
- The USPSTF released new guidelines for colorectal cancer screening in 2016. In this update, the USPSTF does not emphasize a specific screening approach, but lists colonoscopy as one of seven available modalities.¹
- Adenoma detection rate (ADR) is considered the primary measure of the quality of inspection. Studies have shown that there is a 3% reduction in colorectal cancer incidence and a 5% reduction in cancer mortality for each 1% increase in ADR.²
- Other quality measures include withdrawal time with a recommended time of 6 minutes or greater, and cecal intubation rate with adequate photo-documentation with a performance target of $\geq 95\%$.²
- Bowel preparation can affect all quality measures. A strong recommendation was given to provide both oral and written patient education instructions for bowel preparation and emphasize the importance of compliance.³
- Open access colonoscopy (OAC) is the process by which a patient is referred directly for colonoscopy, without the need for a pre-colonoscopy office visit with the endoscopist. This has been shown to lead to decreased wait time for patients, and decreasing wait time improves colonoscopy adherence rates.⁴
- Literature demonstrates no differences in understanding or patient satisfaction compared with having a prior office visit⁵ and no differences in cancellation and no show rates.⁶ A study of 368 patients who underwent open access colonoscopy demonstrated 87% of patients to have good or excellent bowel preparation.⁷
- One study based in New York City looked specifically at screening colonoscopy among African American and Hispanic patients. Use of an open access pathway and a bilingual patient navigator resulted in successful completion of screening colonoscopy in 66% of patients.⁸

OPEN ACCESS STUDY

STUDY AIMS:

- Determine the prevalence of the exclusion criteria which prohibit patients from entering the open access pathway and therefore require a pre-colonoscopy office visit.
 - Determine how the exclusion criteria ultimately affect the quality and outcomes of screening colonoscopies for the patients with at least one of the exclusion criteria present.
- Hypothesis:** Patients at average risk for colorectal cancer who underwent screening colonoscopy after a pre-procedure office visit and have at least one of the exclusion criteria for OAC will be found to have a lower ADR compared to those who do not have any of the exclusion criteria.
 - Exclusion Criteria:** Moderate COPD or worse, moderate asthma or worse, NYHA Class III CHF or worse, CKD4 or worse, hemoglobin A1c $>8\%$, hemoglobin $< 9\text{g/dL}$, BMI ≥ 40 , requirement of supplemental oxygen, prior history of complications from anesthesia or difficult intubation, active ASCVD (angina, acute myocardial infarction, or stroke in the 3 months leading up to screening colonoscopy), presence of an AICD or pacemaker, non-ambulatory status, and use of a systemic anticoagulant or an anti-platelet agent other than aspirin
 - Study Design:** Retrospective chart review of screening colonoscopies scheduled for the two GI fellows following an office visit at LVPP Specialties from July 1, 2016 to June 30, 2017. Charts were reviewed to determine if the patients would have been eligible for OAC. Eligible patients were then compared to ineligible patients using ADR, bowel preparation adequacy, number of incomplete colonoscopies, and any procedure related complications.

RESULTS

41 total screening colonoscopies were scheduled, however there were 11 “no shows” resulting in only 30 completed procedures. Twenty eight patients would have been eligible for OAC. Overall, there was no statistically significant difference between the two groups in terms of bowel preparation adequacy, cecal intubation rate, or detection of at least one adenoma.

Graph 1. Prevalence of Open Access Pathway Exclusion Criteria (n=30)

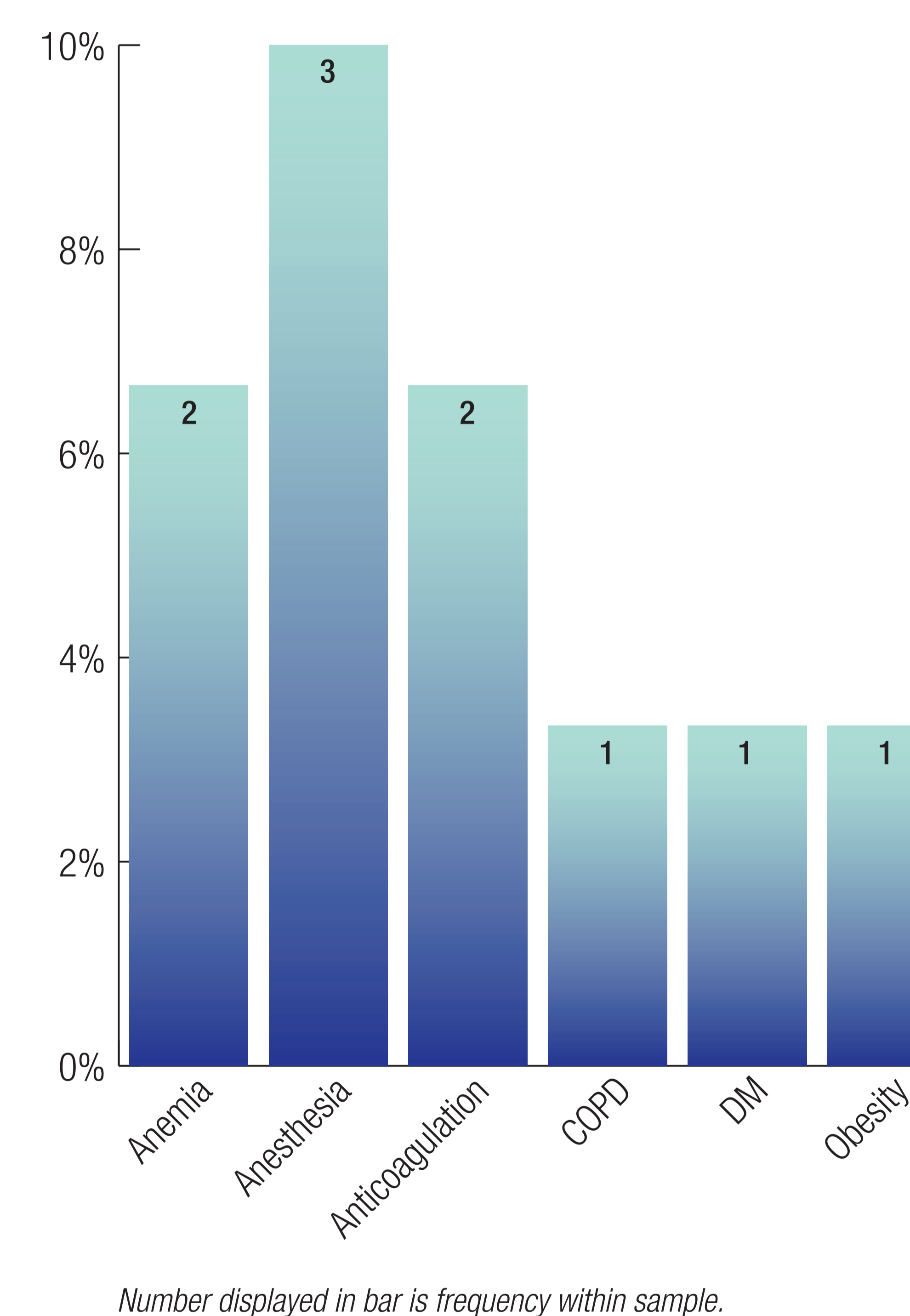


Table 1. Comparison of demographics between eligible and ineligible patients.

Variable	Eligible (n=20)	Ineligible (n=10)	P
Age Mean \pm SD	55.15 \pm 4.92	56 \pm 5.40	0.53
Sex n (%)			0.69
Male	9 (45)	3 (30)	
Female	11 (55)	7 (70)	
Race n (%)			0.04
White	4 (20)	7 (70)	
Hispanic	13 (65)	3 (30)	
Black	1 (5)	–	
Other	2 (10)	–	
Language n (%)			0.12
English	9 (45)	8 (80)	
Spanish	11 (55)	2 (20)	

Table 2. Results of screening colonoscopies between patients eligible for open access colonoscopy and those ineligible.

	Eligible	Ineligible	Overall
Adenoma Detection Rate	10%	33.3%	16.6%
Inadequate Bowel Prep	4 (20%)	1 (10%)	5 (16.6%)
“No Shows”	8 (28.6%)	3 (23.1%)	11 (26.8%)

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DISCUSSION

- Our study did not reveal a significant difference in quality indicators between the two groups, but interestingly, the ADR for ineligible patients (33.3%) was higher than that for eligible patients (10%).
- Eligible patients also had a disproportionately higher number of inadequate bowel preparations and a higher number of “no shows” on scheduled procedure dates. If there is an expected added benefit from an office visit prior to screening colonoscopy, the ADR for open access may be even lower with OAC.
- Re-evaluation of our exclusion criteria and the true benefit of a pre-procedure office visit are required.
- We also identified a need for exposure to more screening colonoscopies for our fellows. This led to a shift in practice patterns at LVPP Specialties leading to additional pre-colonoscopy office visits scheduled with Gastroenterology, thereby leading to a higher number of screening colonoscopies performed during our training.
- The lower overall number of screening colonoscopies and limited experience of our first-year fellows likely contributed to the substandard overall ADR of 16.6%.
- Future directions include expanding the current database to include the screening colonoscopies performed during the 2017–2018 academic year and re-running the statistical analysis.
- Discussions on implementation of an open access pathway at LVPP Specialties are currently on hold, but as our experience grows, we hope to resume discussion soon.