

Racial disparities in completion of bidirectional endoscopies in patients with iron deficiency anemia

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INTRODUCTION

- Iron deficiency anemia (IDA) is incredibly common
- Of patients with **iron deficiency anemia**...



8.9% are found to have a lower gastrointestinal (GI) malignancy



2.0% are found to have an upper GI malignancy



American Gastroenterological Association (AGA) guidelines recommend a bidirectional endoscopy for all postmenopausal women and men with iron deficiency anemia

- Few studies have examined completion rate of bidirectional endoscopy in patients with IDA by race in clinical practice

AIMS

- Determine rate of **compliance** with AGA guidelines for completion of bidirectional endoscopy for patients with IDA
- Assess whether **racial disparities** exist in the completion of bidirectional endoscopy for patients with IDA

METHODS

Study Population



Patients diagnosed with **IDA** between January 2020 and December 2023 at a large academic medical center

Inclusion Criteria



Age **60-85** at diagnosis
Ferritin **<45**
Hemoglobin **<13** in men and **<12** in women
Alive 1 year after IDA diagnosis

Exclusion Criteria

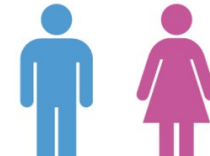


Low ferritin prior to study period

DEMOGRAPHICS



2,068 total patients
Median age: **71.0**



42.1% 57.9%



Median hemoglobin: **11.1**



Median ferritin: **27.0**

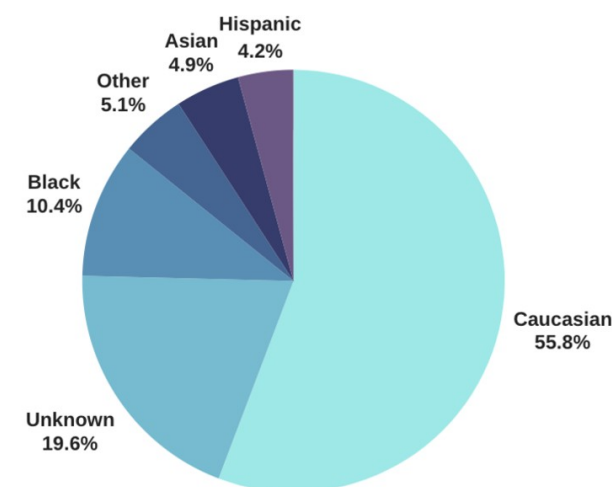


Figure 1: Study population by race

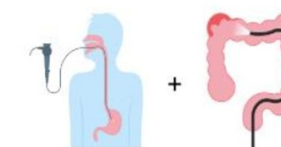
RESULTS



EGD compliance: **31.72%**



Colonoscopy compliance: **29.83%**



Bidirectional endoscopy compliance: **20.79%**

Table 1: EGD compliance at 1 year by race

	Caucasian	Asian	Black	Hispanic	Other	Unknown
Odds Ratio	1.0	0.87	0.74	0.85	0.90	0.93
p-value	1.0	0.55	0.059	0.55	0.74	0.54

Table 2: Colonoscopy compliance at 1 year by race

	Caucasian	Asian	Black	Hispanic	Other	Unknown
Odds Ratio	1.0	0.77	1.22	1.30	0.63	0.76
p-value	1.0	0.23	0.20	0.28	0.07	0.04

Table 3: Bidirectional endoscopy compliance at 1 year by race

	Caucasian	Asian	Black	Hispanic	Other	Unknown
Odds Ratio	1.0	0.79	0.79	1.10	0.66	0.82
p-value	1.0	0.37	0.20	0.69	0.16	0.18

CONCLUSIONS

- Overall completion rate of bidirectional endoscopy for patients with IDA was **low** regardless of race
- Black patients with IDA trended towards **lower completion rates** of upper endoscopy than Caucasian patients ($p = 0.06$)
- Patients who did not specify race had lower colonoscopy completion rates than Caucasian patients
- No differences in bidirectional endoscopy completion rate by race
- Quality improvement efforts should be targeted towards **increasing compliance** with AGA guidelines

REFERENCES

Ko, Cynthia W., Shazia M. Siddique, Amit Patel, Andrew Harris, Shahnaz Sultan, Osama Altayar, and Yngve Falck-Ytter. "AGA Clinical Practice Guidelines on the Gastrointestinal Evaluation of Iron Deficiency Anemia." *Gastroenterology* 159, no. 3 (September 2020): 1085–94.
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