

Introduction

- There has been a profound impact of COVID-19 in the elderly
 - Over 80% of hospitalizations, 74% of deaths
- During the height of the pandemic, over 50% of elderly individuals reported delaying or avoiding medical care secondary to concerns related to COVID-19.
- This led to delays/cancellations in cancer surveillance screenings.
- **AIM:** Evaluate the impact of COVID-19 on endoscopic ultrasound (EUS) and screening colonoscopies in the outpatient setting in the Medicare population.

Materials and Methods

- The Centers for Medicare Services Physician/Supplier Procedure Summary (PSPS) Database displays Part B claims organized by CPT code.
- EUS CPT codes 43237, 43238, 43240, 43242, 43253, 43259 and screening colonoscopies CPT Codes G0105, G0121 were analyzed from the years 2010-2020.
- Services at the top 4 outpatient places-of-service (ambulatory surgery centers, office, and off- and on-campus outpatient hospitals) were extracted and totaled to evaluate outpatient volumes
- Procedures were normalized by the number of Original Medicare beneficiaries per year to produce the number of procedures per 1,000 Medicare enrollees.
- The compound annual growth rates (CAGRs) of this normalized value as well as absolute volumes were calculated.
- CAGRs were calculated for two time periods: 2010-2019 (pre-COVID) and 2019-2020 (COVID).
- A linear regression model trained on historical procedure volume data from 2010 to 2019 was additionally performed to estimate anticipated yearly procedure volume for both EUS and screening colonoscopy for 2020.

Results

EUS per 1,000 Beneficiaries

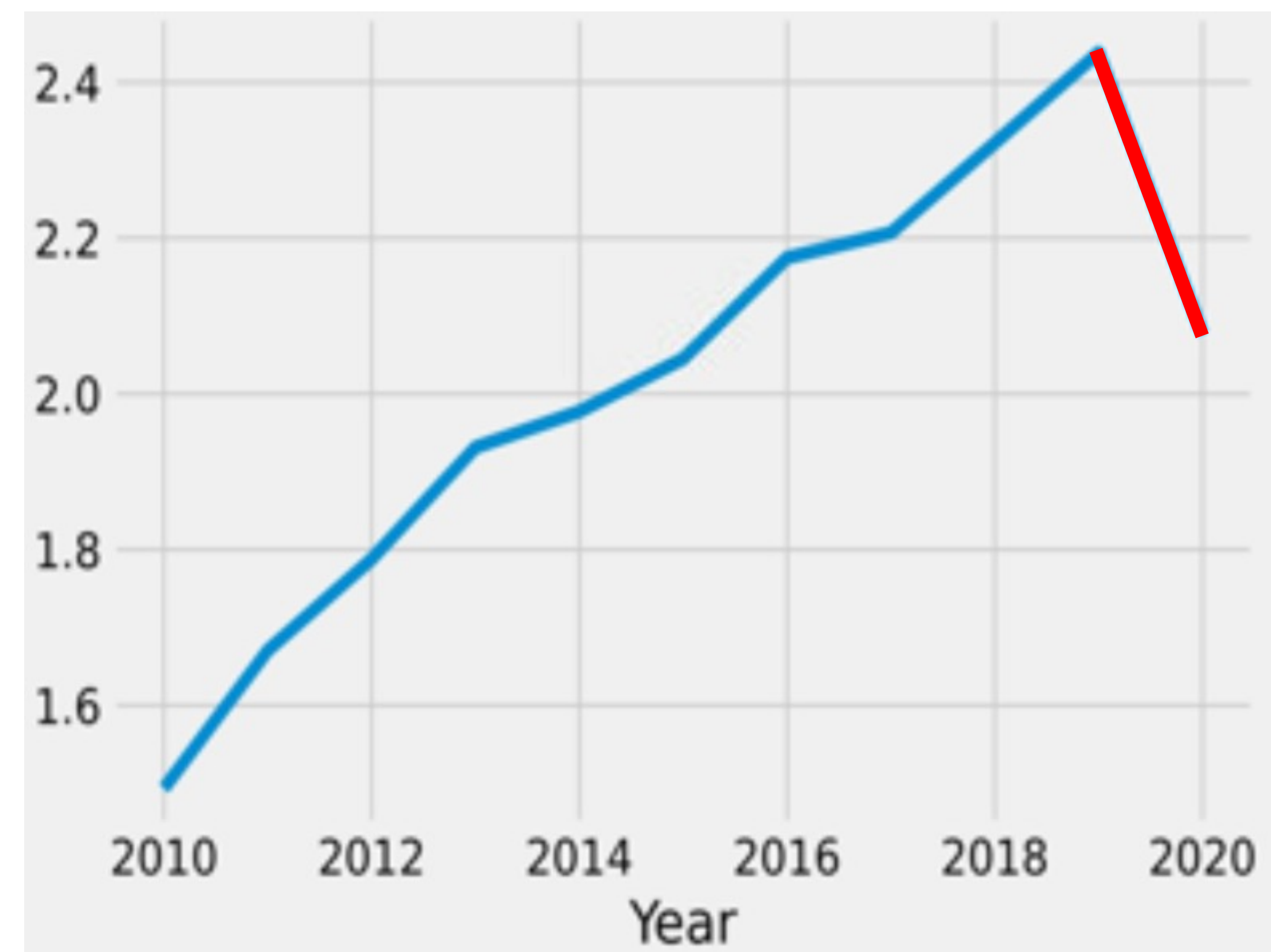


Figure 1. Outpatient EUS per 1,000 Medicare Beneficiaries from 2010-2020

— Historical ERA — COVID ERA

Colonoscopy per 1,000 Beneficiaries

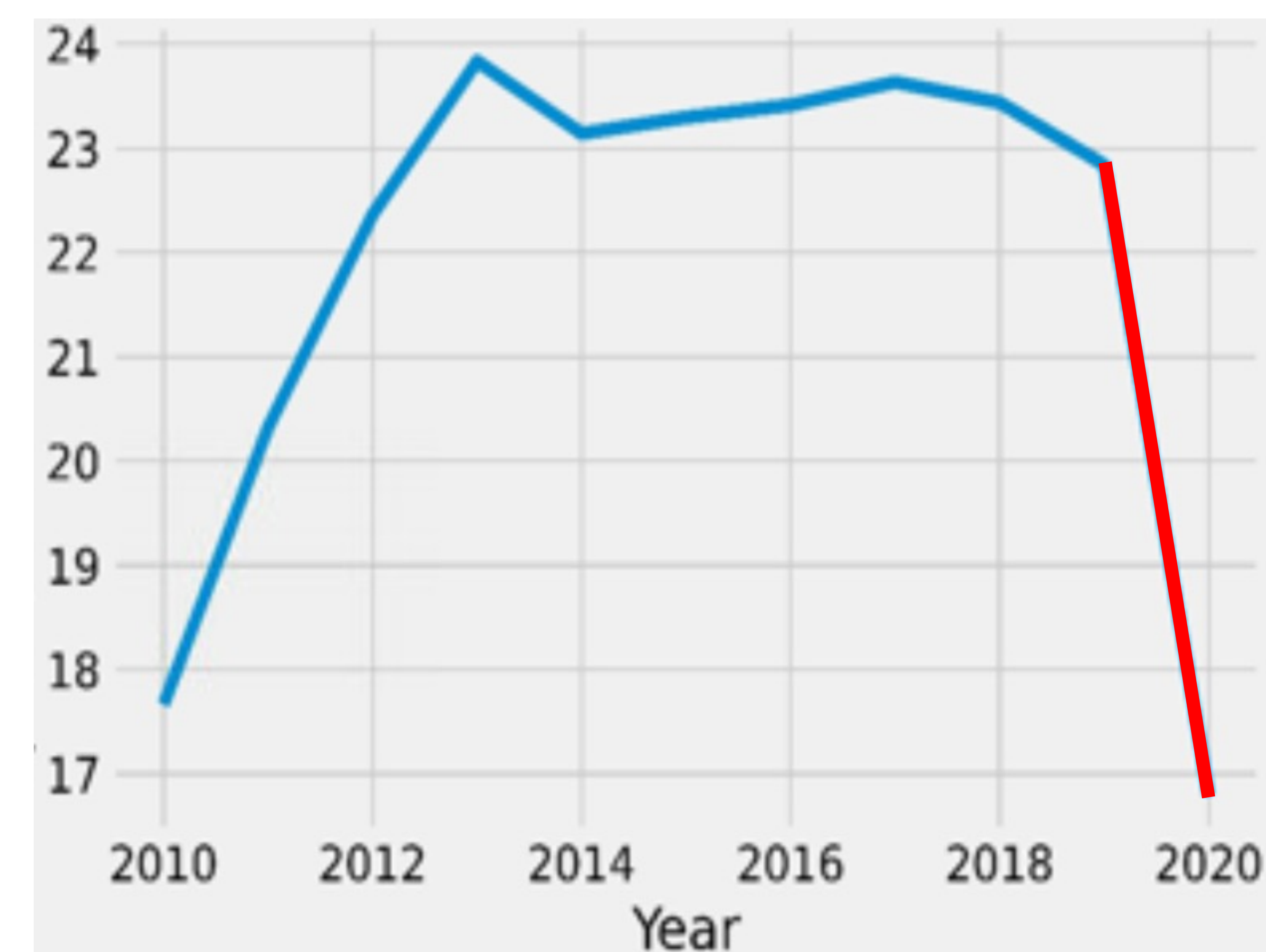


Figure 2. Screening colonoscopies per 1,000 Medicare Beneficiaries from 2010-2020

— Historical ERA — COVID ERA

Procedure	CAGR ₁₀₋₁₉	CAGR ₁₉₋₂₀	Absolute reduction from 2019 to 2020	Predicted 12-month procedure volume for 2020	Actual 12-month procedure volume for 2020	95% CI
Outpatient EUS	5.6%	-14.81%	-16.95%	84,043	66,976	83,606-84,480
Screening Colonoscopies	5.9%	-26.47%	-26.47%	772,091	541,522	758,819-786,091

Table 1. CAGRs and linear regression model for outpatient EUS and screening colonoscopies

Conclusions and Discussion

- COVID-19 significantly impacted outpatient utilization of EUS and screening colonoscopies.
- This is a significant concern as missed or delayed diagnoses could directly impact the incidence of avoidable gastrointestinal malignancies in the Medicare population within the next 5-10 years.
- Further evaluation in mitigation and catch-up strategies are warranted.
- Future directions include analyzing local endoscopy data and cancer incidence rates with reference to the observed trends in EUS and colonoscopy screenings from this CMS database

References

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