



# Enhancing Resident Education on Colorectal Cancer Screening and Surveillance: A Pilot Project



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## BACKGROUND

- The U.S. Preventive Services Task Force issued new guidelines for colorectal cancer (CRC) screening in 2021
- Adoption of these new recommendations by Internal Medicine (IM) residents has not been well studied
- Clinical practice paradigms are updated frequently but practices are ingrained in physicians during residency

## AIMS

- To investigate the knowledge of current CRC screening guidelines of IM residents at a large, metropolitan training hospital
- To implement an educational intervention and determine its merit in impacting resident learning

## METHODS

- A 13-question survey was designed to record demographics (5 questions) and test knowledge of CRC screening guidelines (8 questions) among IM residents
- The survey tested both understanding of CRC screening initiation for average-risk and high-risk patients and identifying an appropriate screening test with its respective associated intervals
- An educational pamphlet detailing these CRC screening guidelines was created and distributed to all IM residents
- Two months after distribution, a post-intervention survey was used to assess changes in resident knowledge and practice

## RESULTS

Figure 1: Pre- and Post-Educational Intervention Mean Scores across PGY-level

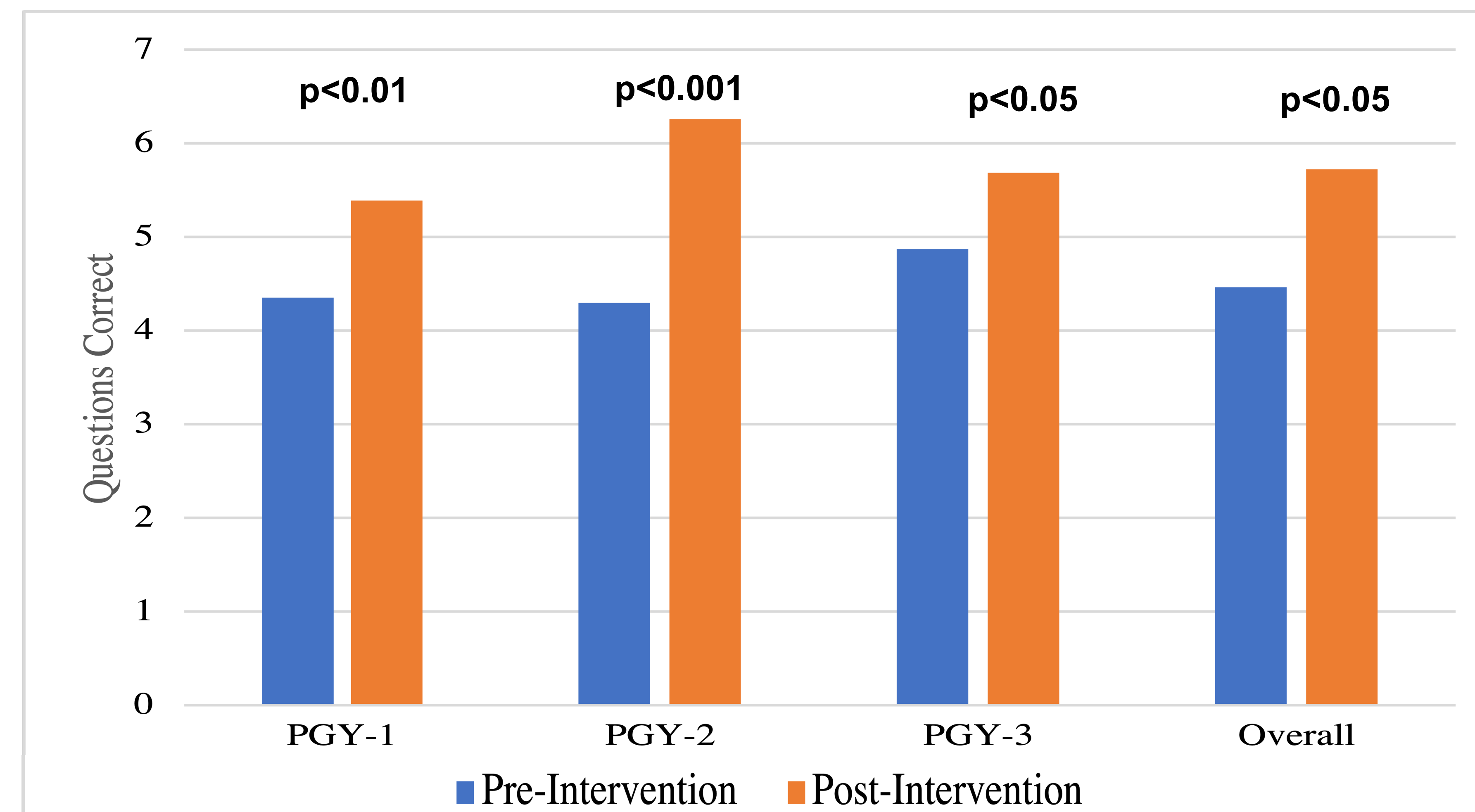


Table 1: Pre- and Post-Educational Intervention Results for Resident Knowledge

		Overall		
		Pre-Intervention (% Correct) (n=120)	Post-Intervention (% Correct) (n=112)	Relative % Change
Assessment of Appropriate CRC Screening Initiation	For the average risk American, CRC Screening should begin at what age?	55.3	87.5	58%
	For the average risk African American, routine CRC screening should begin at what age?	59.1	77.6	31%
	For patients with first degree relative diagnosed with CRC at 55 yo, routine screening should begin earliest at what age?	26.6	28.6	7.5%
Assessment of Methods of CRC Detection and Their Associated Intervals	Colonoscopy (q 10 years)	96.7	100	3.4%
	FIT (q 1 years)	46.7	73.2	57%
	Flexible Sigmoidoscopy (q 5 years)	57.5	79.4	38%
	FOBT (q 1 years)	45	51.7	15%
	Cologuard (q 3 years)	43.3	66.7	54%

## RESULTS

- 120 IM residents completed the pre-intervention survey, and 112 residents completed the post-intervention survey after distribution of the CRC guideline pamphlet
- The average questions correct across PGY levels were significantly improved after educational intervention (8 is perfect score, mean 4.46 pre-survey vs mean 5.74 post-survey, p< 0.05) [Figure 1]
- Residents overall showed improvement in identifying CRC screening initiation age across all PGY levels, however this was not uniform with every PGY level after educational intervention
- Residents overall showed improvement in identifying CRC screening tests with its respective intervals among all tests, however there were differences between PGY level after educational intervention [Table 1]

## CONCLUSIONS

- Overall, residents across all PGY levels showed improvement in knowledge after a very simple educational intervention
- Growth in knowledge was not uniform between every training year
- While residents in training are knowledgeable regarding CRC screening with colonoscopy in average-risk patients, there are deficiencies in areas of high-risk patients
- Targeted educational interventions specific to training level may optimize resident understanding of management for high-risk patients, alternative screening modalities, and dynamic CRC screening guidelines