



# Cracking Down on Colon Cancer: Increasing the Frequency of Completed Colorectal Cancer Screenings at Piedmont Athens Regional Community Care Clinic Locations

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## Background

- In the United States, colorectal cancer (CRC) is currently the second leading cause of cancer-related deaths and is predicted to be diagnosed in 4,940 individuals with 1,660 deaths in Georgia.<sup>1-4</sup>
- In the northeast region of Georgia, there was an average 69.5% survival rate of patients diagnosed with CRC from 1975-2016. Because of this, preventative measures have been taken to lower the mortality rate.<sup>5</sup>
- CRC screenings are beneficial because they can detect precancerous lesions which can lead to CRC.
- The three screening tiers available to eligible patients differ based on performance features, costs, and practical considerations.<sup>6</sup>

## Purpose

The aim of this investigation was to raise the percentage of colorectal cancer screening rates in three community clinics through the implementation of various interventions.

## Methodology

### Phase 1: Collection of Pre-Intervention Data

- Study conducted from June 2022 to October 2023 at three Piedmont Athens Regional Community Care Clinic locations at Prince Ave. (Athens), West Broad (Athens), and Royston
- Patient data collected from the electronic medical records with variables such as: age, gender, primary care physician (PCP), type of screening and test status
- Patient criteria and exclusion were taken into consideration.

### Phase 2: Implementation of Interventions

- Interventions included but were not limited to streamlined fecal immunochemical/fecal occult blood tests (FIT/FOBT), increased patient/staff education, whiteboard reminders during team huddles, designating a medical assistant to call offices/patients and remind them of their tests/referrals, and individual printed panels for each resident.

### Phase 3: Collection of Post-Intervention Data

- Resident physicians input data into Excel which specified age, gender, PCP, screening method, and whether it resulted or not.
- Data was analyzed in Excel and conclusions were made about the effectiveness of the interventions implemented.

## Results

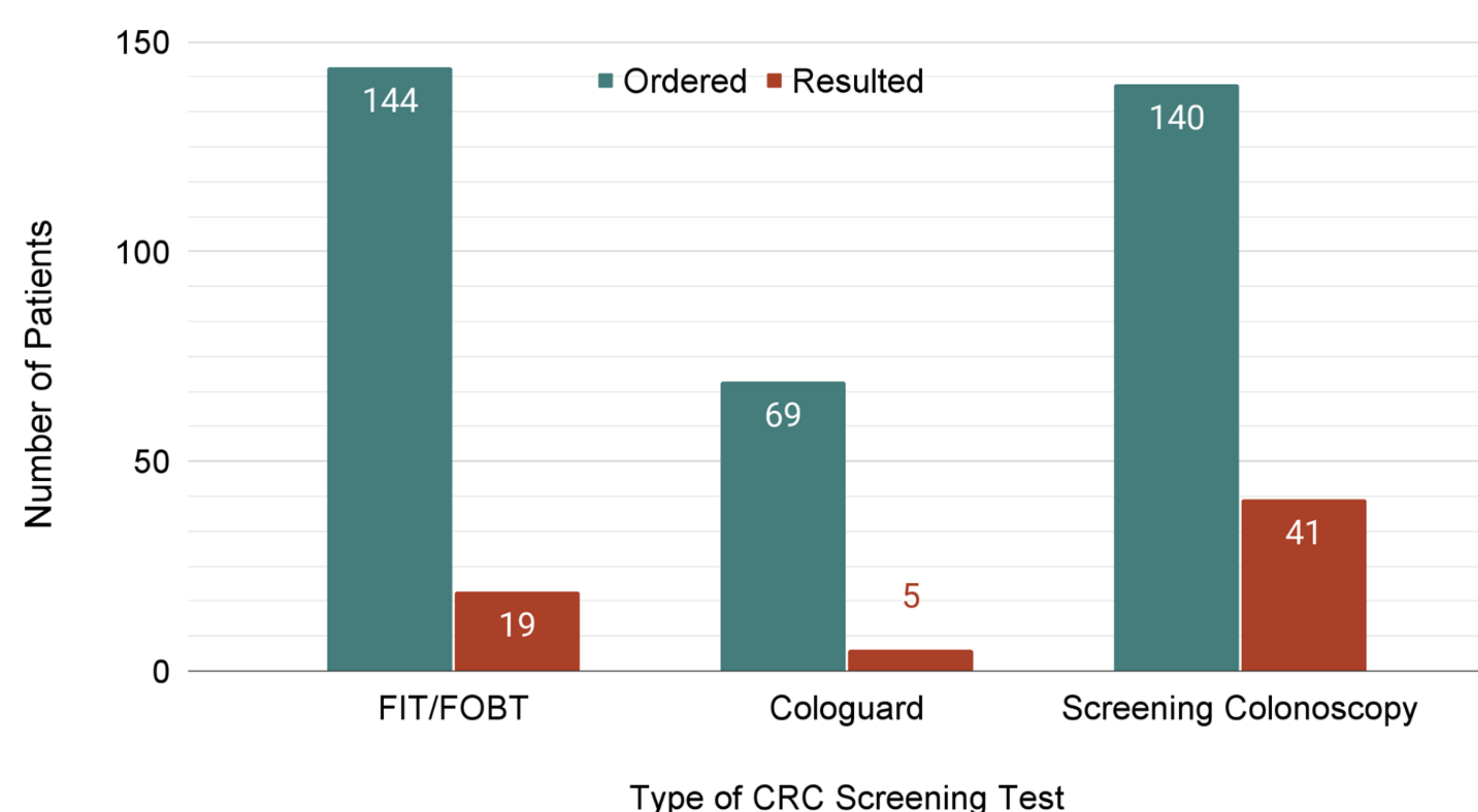
**Table 1. CRC Screening Tests Ordered and Resulted from Participants**

	Ordered (650)	Resulted (353)
<b>FIT/FOBT</b>	<b>144 (22.15%)</b>	<b>19 (13.19%)</b>
<b>Cologuard</b>	<b>69 (10.62%)</b>	<b>5 (7.25%)</b>
<b>Screening Colonoscopy</b>	<b>140 (21.54%)</b>	<b>41 (29.29%)</b>
<b>Total</b>	<b>353 (54.31%)</b>	<b>65 (18.41%)</b>

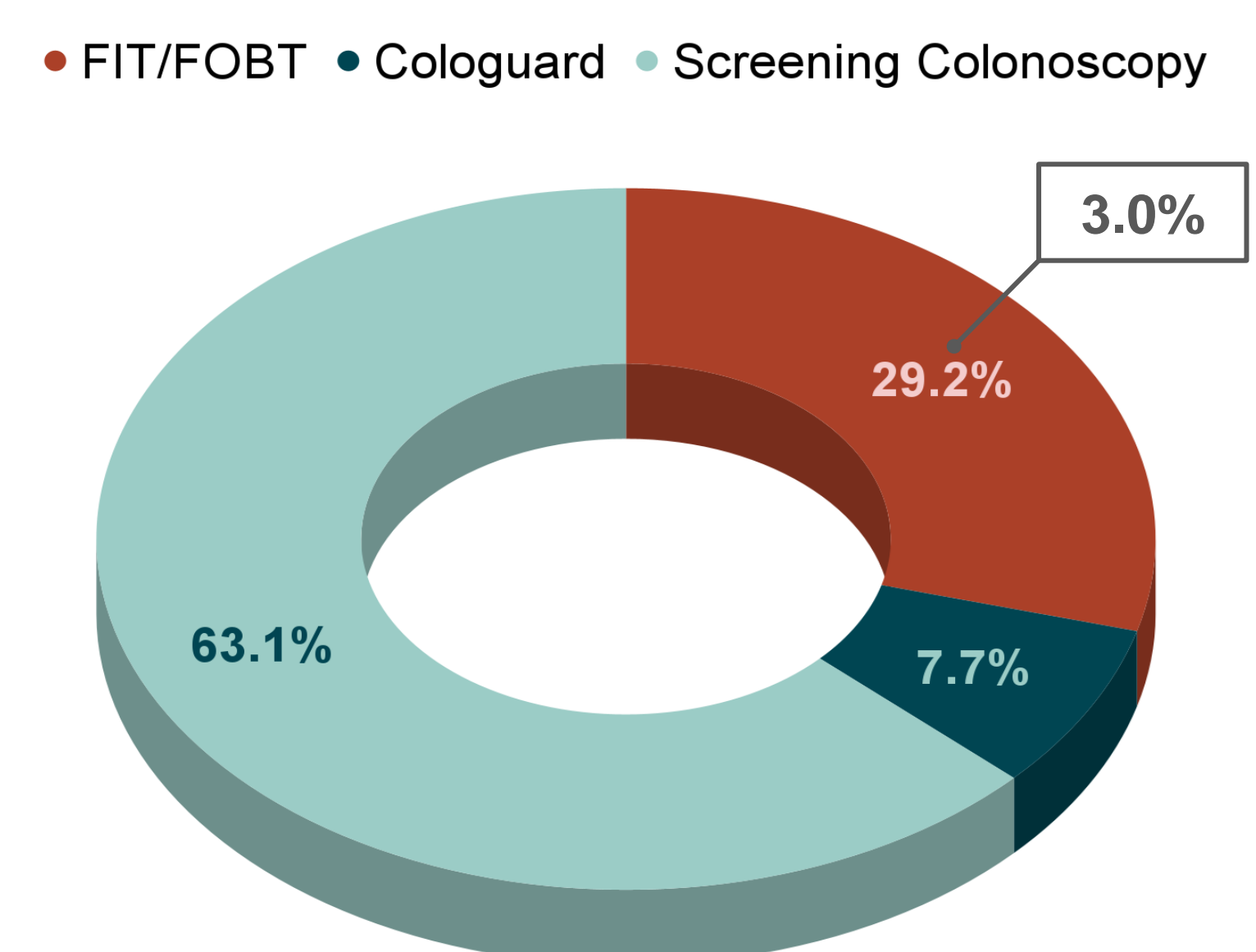
**Figure 1. Demographics of the study**

Male	Female
331	319
50.92%	49.08%

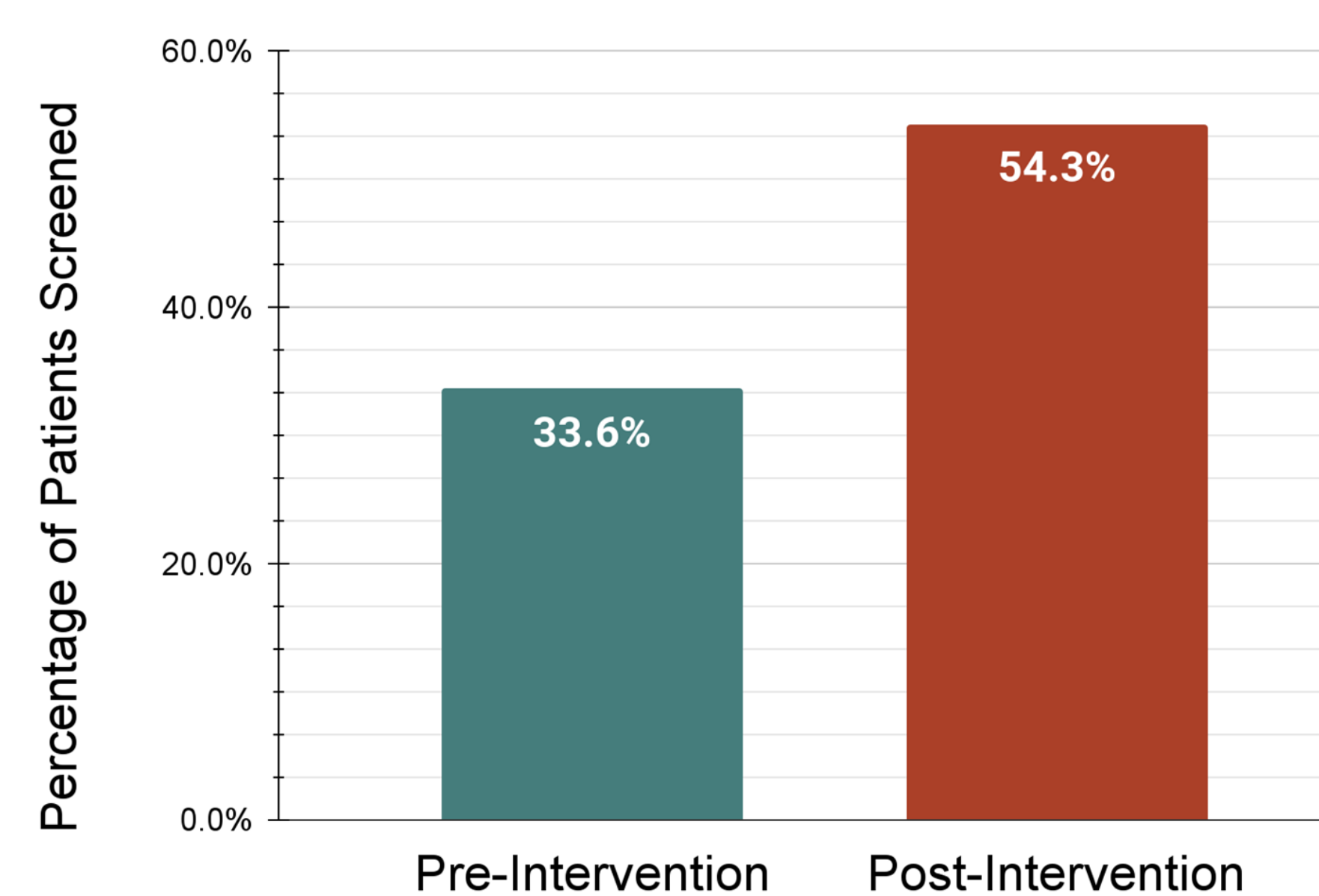
**Figure 2. Number of CRC Screening Tests Ordered (out of 650) and Resulted (out of 353)**



**Figure 3. Percentage of Screening Tests Resulted Post-Intervention (n=353)**



**Figure 4. Pre-Intervention vs. Post-Intervention Total Ordered Screening Tests**



## Screening Methods Utilized

Colonoscopy	FIT/FOBT	Cologuard
<ul style="list-style-type: none"> <li>• Tier 1 - "Gold Standard"</li> <li>• Length of the colon is viewed with a colonoscope</li> <li>• Allows for removal of precancerous polyps</li> </ul>	<ul style="list-style-type: none"> <li>• Tier 1</li> <li>• At-home test that screens for blood in the stool</li> </ul>	<ul style="list-style-type: none"> <li>• Tier 2</li> <li>• At-home test that screens for cancerous DNA in the stool</li> </ul>

## Discussion

- Even though FIT/FOBT screenings were most commonly ordered post-intervention, colonoscopies had the highest resulting rate (Table 1, Figure 2).
- The demographics in this study were distributed fairly evenly, with 50.92% males to 49.08% females (Figure 1).
- The rate of colonoscopies resulted also increased post-intervention compared to the pre-intervention (Figure 3).
- There was a clear deficit in the number of colorectal cancer (CRC) screenings performed at the Piedmont Athens Regional Community Care Clinics at the time of the pre-intervention assessment compared to the average 71% screening rate in Georgia (Figure 4).<sup>7</sup>
- Following the implementation of interventions, ordered CRC screenings increased to 54.3%, which was in closer proximity to the current average (Figure 4).

## Conclusion

- After the application of targeted interventions to both physicians and patients, there was an increase in the overall percentage of colorectal cancer screenings performed at the three Piedmont Athens Regional Community Care Clinics.
- Screening percentages should be monitored more closely pre- and post-intervention, as well as making the criteria for the Excel spreadsheet more standardized.
- The long-term sustainability of these interventions and specific effectiveness should also be explored.

## References

- The QR Code below will hyperlink to a document with all references utilized in this research.

