

Improved Adherence to Colorectal Cancer Screening Recommendations for First-Degree Relatives of Patients with Advanced Adenomas

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Background and Aims

- Advanced adenomas (AA) represent a subset of colorectal polyps ≥ 1 cm and/or those with high-risk histologic features such as villous or high-grade dysplasia.
- AA confer an increased risk of colorectal cancer (CRC) to affected individuals and their first-degree relatives (FDR), with the latter having up to a 2-fold increased risk of developing CRC.
- Patients largely remain unaware of this associated risk leading to inadequate screening of their FDR.

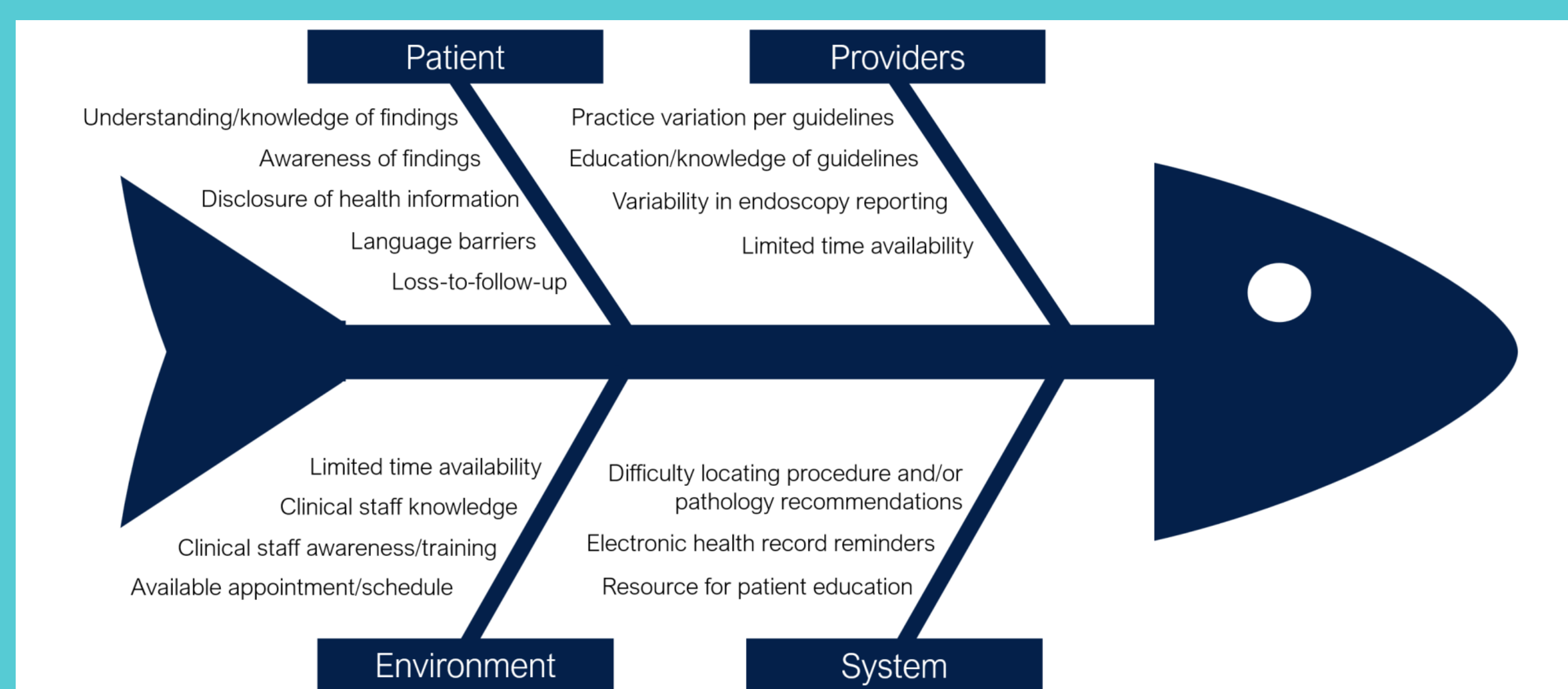


Figure 1. Fishbone diagram of potential causes of low recommendation rate

- We aimed to address patient-, provider-, system-, and environmental barriers to improve guideline-based recommendations for CRC screening in FDR of patients with AA.

Methods

- A pre-post study was conducted at a single academic center between 7/2020-5/2022 including adults undergoing outpatient screening/surveillance colonoscopies.
- The primary outcome was adherence to CRC screening recommendations for FDR of patients with AA.
- Data was collected by chart review of the endoscopy report and post procedure pathology follow up letters.

Interventions

Interventions included:

- Surveying faculty/fellows to identify barriers in knowledge and adherence to guidelines
- Developing patient educational material in various languages about AA and importance of FDR screening (Figure 2)
- Developing an automated prescriptive template in endoscopy report writer (EndoPRO) to standardize screening recommendations (Figure 3)
- Educating providers and nurses (Figure 4)
- Compiling quarterly compliance report cards

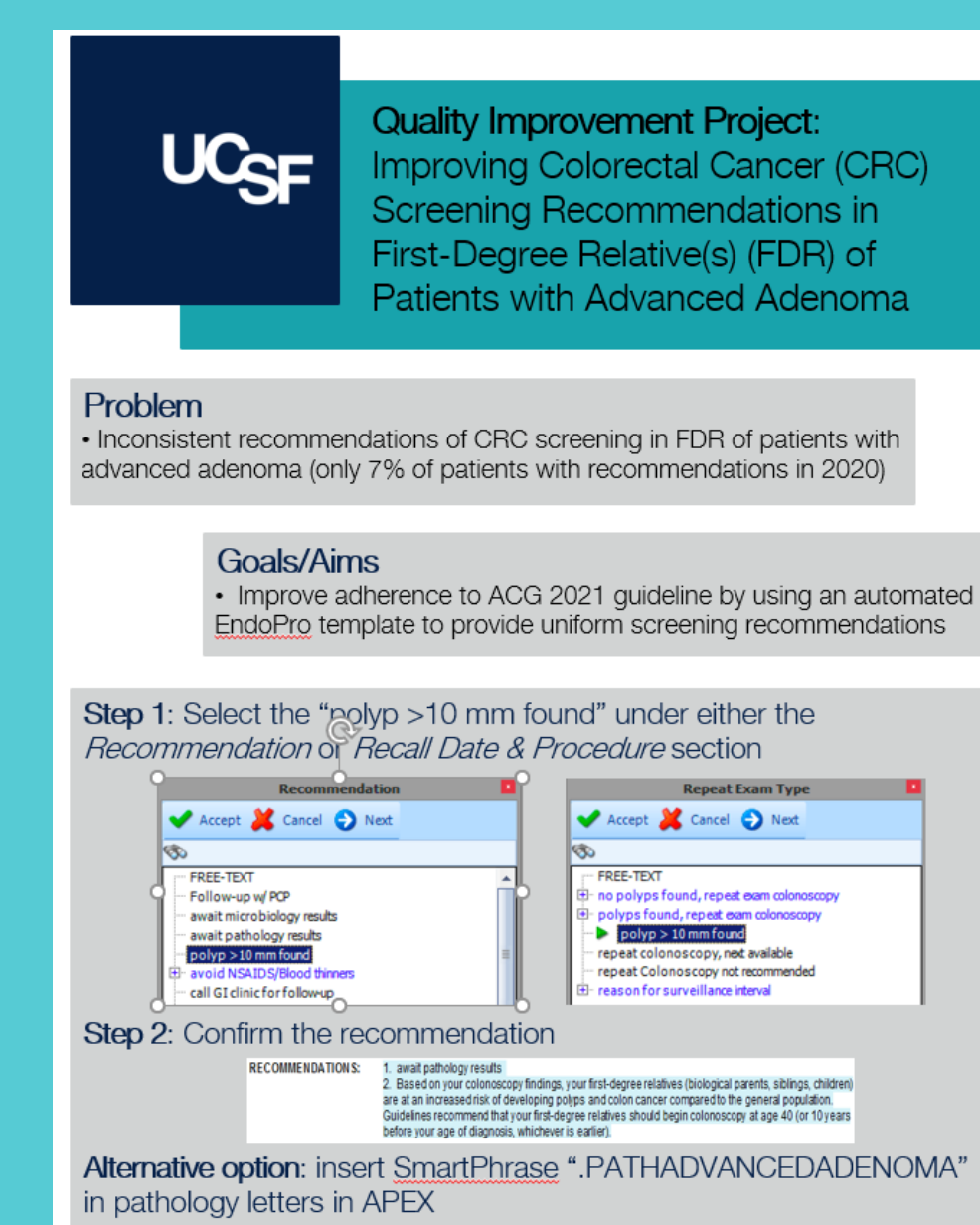
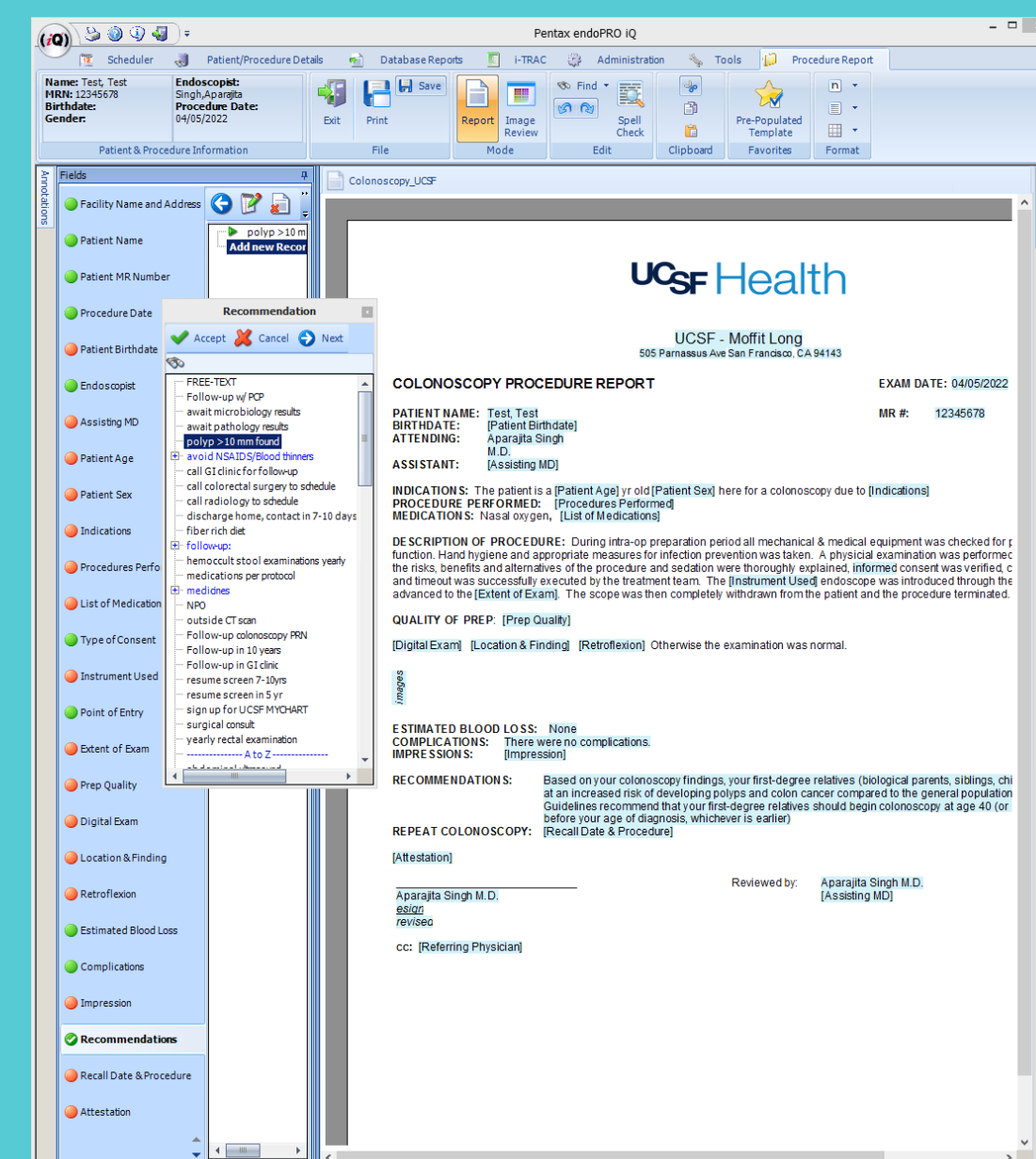
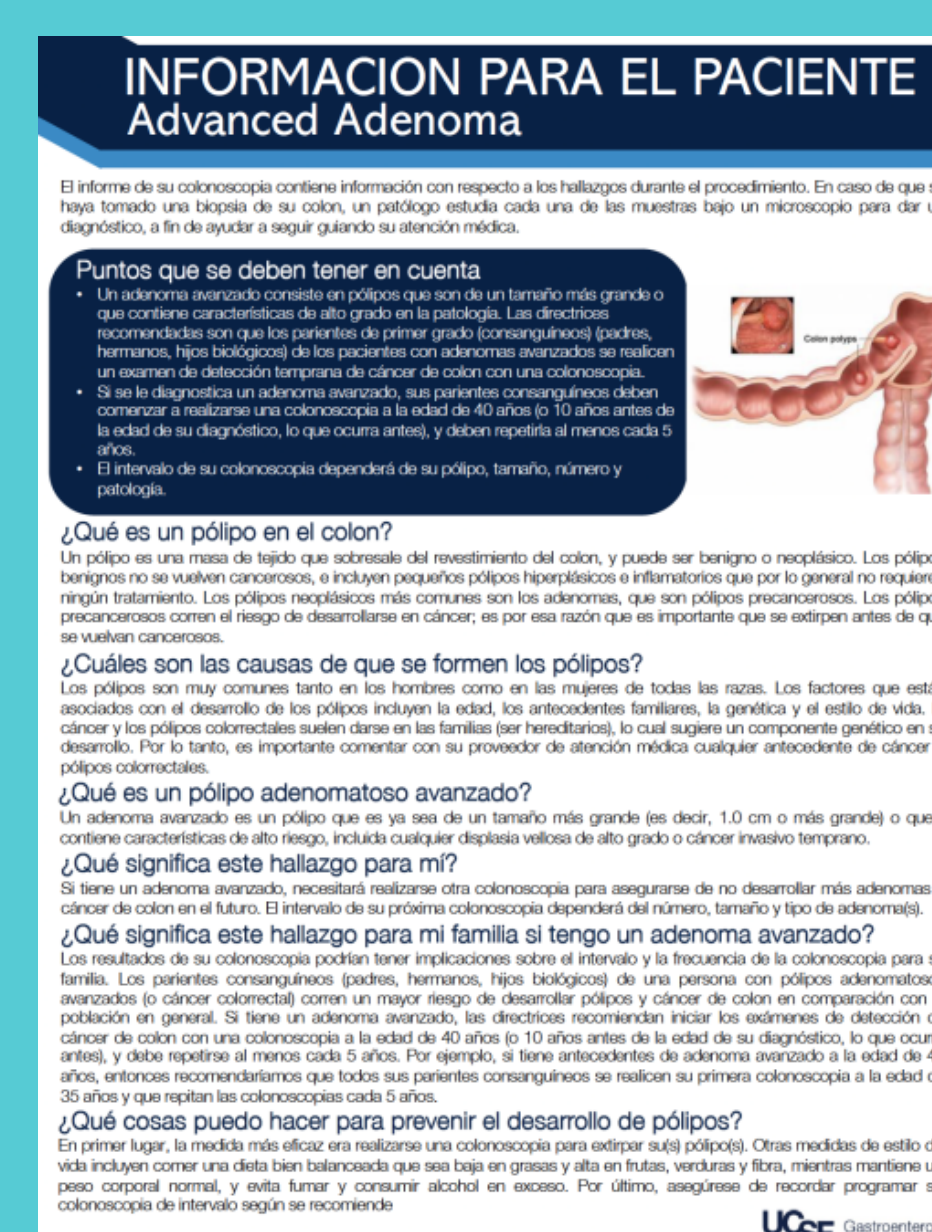


Figure 2. Sample patient education/informational material about AA. **Figure 3.** EndoPro documentation Template. **Figure 4.** Education flyer for providers

Results

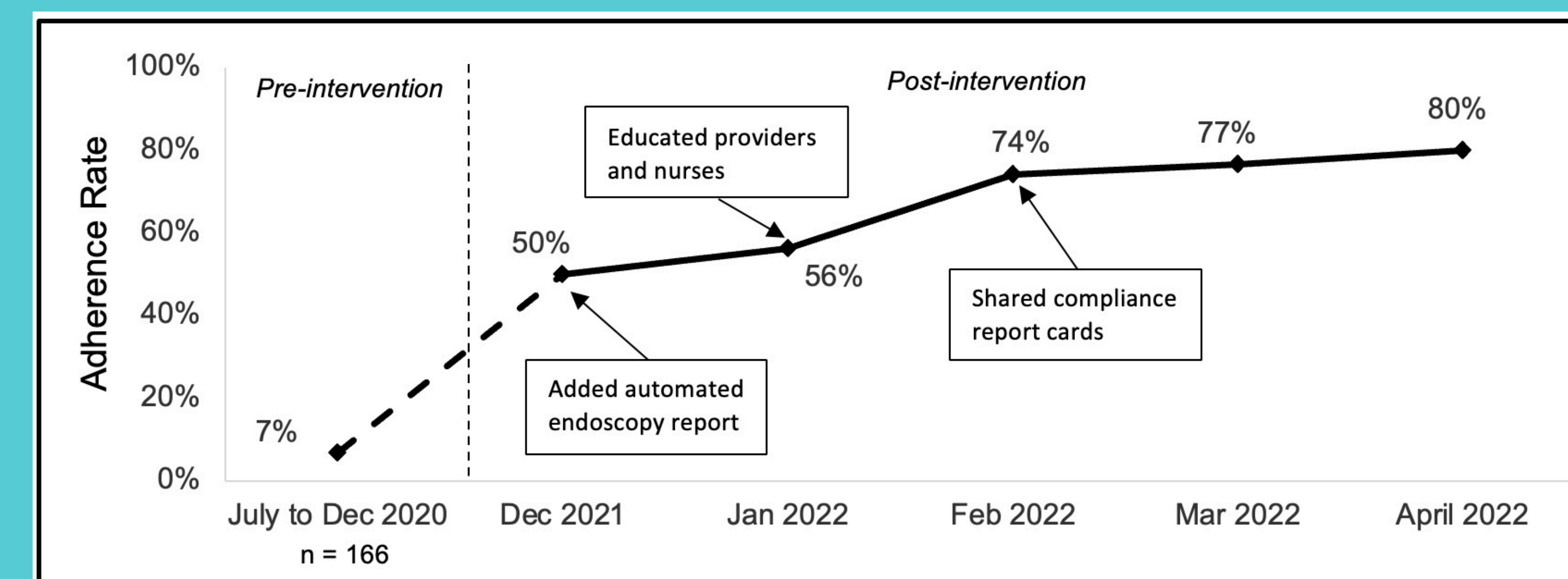


Figure 5. Adherence rate of recommendations for CRC screening in first-degree relative of patients with AA

- Monthly rates of adherence to recommendations increased, from a baseline of 7%, to 50% (after automated endoscopy report implemented), 56%, 74%, 77% and 80%, respectively (Figure 5)

Discussion

- Earlier and more intensive screening of FDRs in those with AA is considered an untapped opportunity with a potential to substantially reduce the burden of CRC.
- Here we propose a multifaceted intervention with stakeholder and patient education and automation of the process to improve compliance with the recommendations.
- Such novel workflows can play a key role in reducing the burden of CRC by targeting high risk individuals for CRC screening.

Results

- Prior to the intervention, only 7% (11 of 166) with AA received appropriate CRC screening recommendations for their FDR.
- On the pre-intervention survey (n=38), suboptimal adherence was due to:
 - Low familiarity with guidelines (47%)
 - Variability in delivery of screening recommendations
 - Limited time available to communicate recommendations and provide patient education resources

Conclusion

- Our QI interventions led to a 73% improved rate in appropriate guideline-based CRC screening recommendations for high-risk individuals.