

Interventional Study to Improve Compliance with Post-Colonoscopy Surveillance Interval Guidelines

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Background:

- Research suggests that colonoscopy is over utilized in patients undergoing colorectal cancer (CRC) or adenoma surveillance.

Aims:

- To improve endoscopist compliance with the Canadian Association of Gastroenterology (CAG) guidelines on CRC surveillance.

Methods:

- In 2014, a sample of surveillance colonoscopies conducted by each endoscopist at one of five hospitals in Eastern Health (EH) Newfoundland were analyzed.
- The endoscopist recommendation for the next surveillance colonoscopy was compared to that of the CAG guidelines based upon the findings and polyp histology.
- A three-part intervention was undertaken.
 - First, each endoscopist was informed of their own compliance rate and that of the group.
 - Second, a survey was conducted to ascertain how endoscopists decided upon surveillance intervals and barriers to following guidelines.
 - Finally, the group met to discuss the survey results and identify ways to optimize compliance.
- In 2016 and 2017, the endoscopist compliance rate was reassessed and compared to 2014. Only endoscopists who contributed patients to all three time periods were included in the analysis.
- Approximately 25 cases were chosen for each endoscopist at each time point. Data were entered into SPSS version 20.0 for analysis. The study received approval from the local Health Research Ethics Board.

Results:

- In 2014, 526 surveillance colonoscopies performed by 18 endoscopists (10 Surgeons, 8 Gastroenterologists) were reviewed.
- Surveillance intervals were appropriate in 72.6% of cases.
- Endoscopist compliance rates ranged from 50.0% to 100%.
- Fourteen endoscopists completed the survey on guideline compliance and 85.7% indicated they used the CAG guidelines to determine surveillance intervals.
- The three most common reasons for deviating from guidelines were poor bowel preparation (71.4%), booking the next procedure prior to reviewing polyp histology (50%) and patient preference for a different interval (50%).
- These results prompted EH to emphasize to patients the importance of high-quality bowel preparation and to utilize split dose preparations more frequently.
- In 2016 and 2017, 536 and 448 surveillance colonoscopies performed by the same endoscopists were reviewed.
- Surveillance intervals were appropriate in 82.3% (56-100%) of cases in 2016 ($p<0.05$ compared to 2014) and 82.1% one year later ($p=0.05$).
- Compliance rates improved for both Surgeons (70.3%-74.6%-79.5%) and Gastroenterologists (73.4%-89.9%-85.6%) following these interventions.

	Compliance	p-value
Pre-Intervention 2014	72.6%	
Post-intervention 2016	82.3%	<0.05
Post-intervention 2017	82.1%	<0.05

Table 1: Compliance with Published Guidelines

Conclusions:

- A multi-faceted intervention was associated with an improvement in compliance with the CAG colonoscopy surveillance guidelines.
- This improvement persisted over time.

