Measure XXXX: Inflammatory Bowel Disease: Postoperative monitoring for recurrence of Crohn’s Disease at 6 to 12 months after Surgical Resection in Patients with Crohn’s Disease - National Quality Strategy Domain: Patient Safety

DESCRIPTION:
Percentage of patients that received a surgical resection that were monitored for recurrence between 6 and 12 months after surgical resection. Monitoring may include endoscopy, fecal calprotectin (FC), computed tomography enterography (CTE), or MR enterography (MRE).

INSTRUCTIONS: This measure is to be reported a minimum of once per reporting period for all patients with a surgical resection for Crohn’s disease seen during the reporting period OR the prior year who have at least 12 months of observation after their resection date. This measure is intended to reflect the quality of services provided for patients with Crohn’s disease. This measure may be reported by physicians or other qualified healthcare professionals who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding. Reporting period is defined from January 1 to December 31 of the reporting year.

ICD-10 Procedure Codes:
- 0 Section: Medical and Surgical
- D Body System: Gastrointestinal System
- T Operation: Resection: Cutting out or off, without replacement, all of a body part
- Body Part
  - B Ileum
  - C Ileocecal Valve
  - E Large Intestine
  - F Large Intestine, Right
  - G Large Intestine, Left
  - H Cecum
  - K Ascending Colon
  - L Transverse Colon
  - M Descending Colon
  - N Sigmoid Colon
All Approaches, Devices and Qualifiers are allowed

Measure Reporting via Registry:
ICD-10-CM diagnosis codes, CPT codes, and patient demographics are used to identify patients who are included in the measure’s denominator. The listed numerator options are used to report the numerator of the measure.

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

DENOMINATOR
All patients with a diagnosis of Crohn’s Disease with an intestinal surgical resection within the 6 months prior to the start of the reporting period.

Denominator Criteria (Eligible Cases):
All patients with a diagnosis of Crohn’s Disease that had a surgical resection within the 6 months prior to the start of the reporting period.

AND
Diagnosis for Crohn’s Disease (ICD-10-CM): K50.00, K50.01, K50.011, K50.012, K50.013, K50.014, K50.018, K50.019, K50.1, K50.10, K50.11, K50.111, K50.112, K50.113, K50.114, K50.118, K50.119,
NUMERATOR:
Patients with a diagnosis of Crohn's Disease who had monitoring between 6 months and 12 months after the date of surgical resection. Monitoring may include endoscopy, fecal calprotectin (FC), computed tomography enterography (CTE), MR and/or enterography (MRE).

Patient encounter during the reporting period (CPT): 83003, G0104, G0105

NUMERATOR INSTRUCTIONS:
This measure is to be reported a minimum of once per reporting period for all patients with a surgical resection for Crohn's disease seen during the reporting period OR the prior year who have at least 12 months of observation after their resection date. This measure is intended to reflect the quality of services provided for patients with Crohn's disease. This measure may be reported by physicians or other qualified healthcare professionals who perform the quality actions described in the measure based on the services provided and the measure-specific numerator coding. Post-Op monitoring is not provider specific.

ICD-10-PCS
- 0 Section: Medical and Surgical
- D Body System: Gastrointestinal System
- J Operation: Inspection
- D Body Part: Lower intestinal tract
- 8 Approach: Via natural or artificial opening, endoscopic
- All Devices and Qualifiers are Allowed

Numerator Options:

Performance Met: All patients with a diagnosis of Crohn's Disease who were monitored for recurrence between 6 months and 12 months after the date of surgical resection. (GXXXX)

OR

Medical Performance Exclusion: Patient was NOT monitored for recurrence between 6 and 12 months after the date of surgical resection for medical reasons (e.g. benefits of not monitoring outweigh the risk, or other medical reasons). (GXXX)

OR

Patient Performance Exclusion: Patient was NOT monitored for recurrence between 6 and 12 months after the date of surgical resection for patient reasons (e.g. patient declined, cost of tests, time related to accessing testing equipment or other patient reasons). (GXXX)

OR
**Performance Not Met:** Patient did NOT monitored for recurrence between 6 and 12 months after the date of surgical resection for reasons not specified. (GXXXX)

**Rationale:**
Endoscopic recurrence almost always precedes symptomatic recurrence following surgery for Crohn's disease. The high likelihood of benefit from detection of endoscopic recurrence by colonoscopy, the risk of which is as high as 90% within a year of surgery in those not receiving any prophylaxis, is strongly recommended by society guidelines (AGA, 2016).

**CLINICAL RECOMMENDATION STATEMENTS:**
Endoscopic monitoring is suggested in those who receive pharmacologic treatment after surgery and the guidelines recommend that patients receive pharmacologic management after surgery (AGA 2016). Endoscopic monitoring may prompt the initiation or modification of medical therapy if endoscopic recurrence is detected. Endoscopic monitoring can prompt changes in medical management in those who are receiving medications post-operatively. The guidelines include recommendations for medications that have been shown to maintain remission in patients with Crohn's disease, including patients who take the medications post-operatively. Endoscopic monitoring provides an opportunity to monitor disease activity and adjust medications accordingly to prevent clinical recurrence in the presence of endoscopic recurrence. While no studies on patients' values and preferences was available to inform this recommendation, the patient representative on the panel expressed that many patients who are not on any pharmacological prophylaxis may prefer to know if there is endoscopic recurrence, as it may prompt initiation of medical therapy.

The use of fecal calprotectin (FC) to monitor for recurrence of disease following bowel resection for Crohn's disease has been widely studied. A systematic review and meta-analysis conducted in 2015 included 10 studies and 613 patients (Qui Y, et al. 2015). The pooled sensitivity and specificity values for assessing suspected endoscopic recurrence were 0.82 (95% confidence interval (CI), 0.73-0.89, 8 studies, n = 391) and 0.61 (95% CI, 0.51-0.71), respectively. The overall positive and negative likelihood ratios were 2.11 (95% CI, 1.68-2.66) and 0.29 (95% CI, 0.197-0.44), respectively. In a subsequent study, Wright et al. studied the utility of serially measured (months 6, 12, and 18 postoperatively) FC, serum C-reactive protein (CRP) levels, and Crohn's disease activity index (CDAI) in predicting endoscopic recurrence (Wright EK.; et al; 2015). Ileocolonoscopies were performed 6 and 18 months after surgery with endoscopic recurrence graded according to the Rutgeert's score (for anastomotic recurrence) or Crohn's Disease Endoscopic Index of Severity and simple endoscopic score for Crohn's disease (for luminal recurrence), accordingly. Patients with endoscopic recurrence had higher FC values. Combined 6- and 18-month FC levels correlated significantly with presence and severity of endoscopic recurrence, whereas CRP level and the CDAI did not. A cutoff of FC > 100 μg/g identified patients with endoscopic recurrence with 89% sensitivity and 58% specificity. The negative predictive value (NPV) of a FC of >100 μg/g was 91%. In this cohort, colonoscopy could have been avoided in 47% of patients without endoscopic recurrence, but at the cost of missing 11% of patients with endoscopic recurrence. A FC of <51 μg/g in patients in remission at 6 months after surgery predicted maintenance of remission (NPV 79%). Taken together, these data strongly support the predictive value of FC to detect recurrence of inflammation following surgery for Crohn's disease.

Computed tomography enterography (CTE) in the small bowel of CD is a reliable method in assessing POR in patients with CD who have undergone ileocolic resection. CTE may serve as an important complementary tool to endoscopy for evaluation of the postoperative course of CD (Mao R; et al, 2013). Furthermore, computed tomography enterography with water enema (CTE-WE) provides a good distention of both sides of ileocolic anastomoses allowing the detection of synchronous inflammatory lesions. (Paparo et. al., 2013). MR enterography provides imaging and detection of inflammatory changes in the small bowel in patients with CD (Sailer J.; et al; 2008). CT was found to be a reliable method in the diagnosis of CD relapse and show agreement with the approved
endoscopic Rutgers score and in the case of suspected clinical relapse, CT could be used as the first examination if conducted according to the guidelines (Minordi, LM.; et al, 2009).

References


