



# New Hampshire Colonoscopy Registry

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## Merit-based Incentive Payment system (MIPS) 2018 Qualified Clinical Data Registry (QCDR) Measure Specifications

This document contains a listing of the clinical quality measures which the New Hampshire Colonoscopy Registry (NHCR), a CMS-Approved Qualified Clinical Data Registry (QCDR), can report to CMS for the Merit-based Incentive Payment system (MIPS) in 2018. For detailed specifications of the MIPS measures listed in the shaded portion of the table below, please email [christina.m.robinson@dartmouth.edu](mailto:christina.m.robinson@dartmouth.edu). Detailed specifications of the non-MIPS measures can be found on pages 2-5 of this document.

### Summary Listing of MIPS and non-MIPS measures supported by the NHCR

	Measure #	Measure Title	Measure Description	Measure Type/Priority
<b>MIPS MEASURES</b>	185	Colonoscopy Interval for Patients with a History of Adenomatous Polyps – Avoidance of Inappropriate Use	Percentage of patients aged 18 years and older receiving a surveillance colonoscopy, with a history of a prior adenomatous polyp(s) in previous colonoscopy findings, which had an interval of 3 or more years since their last colonoscopy	Process / Appropriate Use
	320	Appropriate Follow-Up Interval for Normal Colonoscopy in Average Risk Patients	Percentage of patients aged 50 to 75 years of age receiving a screening colonoscopy without biopsy or polypectomy who had a recommended follow-up interval of at least 10 years for repeat colonoscopy documented in their colonoscopy report	Process / Appropriate Use
	343	Screening Colonoscopy Adenoma Detection Rate	The percentage of patients age 50 years or older with at least one conventional adenoma or colorectal cancer detected during screening colonoscopy	Outcome / High Priority
	425	Photodocumentation of Cecal Intubation	The rate of screening and surveillance colonoscopies for which photodocumentation of landmarks of cecal intubation is performed to establish a complete examination	Process
	439	Age Appropriate Screening Colonoscopy	The percentage of patients greater than 85 years of age who received a screening colonoscopy from January 1 to December 31	Efficiency / Appropriate Use
<b>NON-MIPS MEASURES</b>	NHCR4	Repeat screening or surveillance colonoscopy recommended within 1 year due to inadequate / poor bowel preparation	% of patients recommended for repeat screening or surveillance colonoscopy within one year or less due to inadequate/poor bowel preparation quality	Process / High Priority
	NHCR5	Repeat colonoscopy recommended due to piecemeal resection	% of exams with polyps removed by piecemeal excision who are told to return in appropriate interval $\leq 1$ year	Process / High Priority
	NHCR6	Appropriate Indication for Colonoscopy	% of colonoscopies performed for a clinically appropriate indication	Process

## **DETAILED SPECIFICATIONS OF NHCR QCDR MEASURES**

### **NHCR 4: Repeat screening or surveillance colonoscopy recommended within one year due to inadequate / poor bowel preparation**

**MEASURE OWNERS:** This measure is co-owned by the New Hampshire Colonoscopy Registry and GIQuIC

**MEASURE DESCRIPTION:** Percentage of patients recommended for repeat screening or surveillance colonoscopy within one year or less due to inadequate/poor bowel preparation quality

**TYPE OF MEASURE:** Process / High Priority

**NQS DOMAIN:** Communication and Care Coordination

**NQS DOMAIN RATIONALE:** Since screening and surveillance colonoscopies with a poor bowel preparation are considered incomplete due to inadequate mucosal visualization, shorter intervals for follow-up have been recommended.<sup>1-5</sup> National guidelines issued in 2012 by the US Multi Society Task Force on Colorectal Cancer recommend repeat colonoscopies within a year following most colonoscopies with poor bowel prep.<sup>6</sup>

**DENOMINATOR:** # of screening and surveillance colonoscopies with bowel preparation documented as inadequate/poor

**DENOMINATOR EXCLUSIONS OR EXCEPTIONS:** None

**NUMERATOR:** # of screening and surveillance colonoscopies with bowel preparation documented as inadequate/poor and whose recommended follow-up was  $\leq 1$  year

**NUMERATOR EXCLUSIONS:** None

**INVERSE MEASURE:** No

**PROPORTIONAL MEASURE:** Yes

**CONTINUOUS VARIABLE MEASURE:** No

**RATIO MEASURE:** No

**RISK ADJUSTED:** No

**DATA SOURCE:** NHCR Procedure form, (Q. 2 Indication for Procedure, Q. 4 Bowel preparation quality, Q. 9, Follow-up recommendation)

**NUMBER OF PERFORMANCE RATES TO BE SUBMITTED:** 1

**EVIDENCE OF A PERFORMANCE GAP AND CITATIONS:** Evidence suggests that adherence to this guideline is surprisingly inconsistent, with intervals following poor bowel prep often highly variable.<sup>7-9</sup>

**SPECIALTY:** Gastroenterology

**VARIANCE:** NHCR range (2017): 0 - 100% (mean: 41.6%); GIQuIC Variance (2017) 0 - 100% (mean 41.5%)

#### **REFERENCES**

1. Rex DK, Johnson DA, Anderson JC, et al. American College of Gastroenterology guidelines for colorectal cancer screening 2009 [corrected]. Am J Gastroenterol 2009;104:739-50.

2. Rex DK, Bond JH, Winawer S, et al. Quality in the technical performance of colonoscopy and the continuous quality improvement process for colonoscopy: recommendations of the U.S. Multi-Society Task Force on Colorectal Cancer. *Am J Gastroenterol* 2002;97:1296-308.
3. Bond JH. Should the quality of preparation impact postcolonoscopy follow-up recommendations? *Am J Gastroenterol* 2007;102:2686-7.
4. Levin TR. Dealing with uncertainty: surveillance colonoscopy after polypectomy. *Am J Gastroenterol* 2007;102:1745-7.
5. Rex DK, Bond JH, Feld AD. Medical-legal risks of incident cancers after clearing colonoscopy. *Am J Gastroenterol* 2001;96:952-7.
6. Lieberman DA, Rex DK, Winawer SJ, et al. Guidelines for colonoscopy surveillance after screening and polypectomy: a consensus update by the US Multi-Society Task Force on Colorectal Cancer. *Gastroenterology* 2012;143:844-57.
7. Ben-Horin S, Bar-Meir S, Avidan B. The impact of colon cleanliness assessment on endoscopists' recommendations for follow-up colonoscopy. *Am J Gastroenterol* 2007;102:2680-5.
8. Larsen M, Hills N, Terdiman J. The impact of the quality of colon preparation on follow-up colonoscopy recommendations. *Am J Gastroenterol* 2011;106:2058-62.
9. Menees SB, Elliott E, Govani S, et al. The impact of bowel cleansing on follow-up recommendations in average-risk patients with a normal colonoscopy. *Am J Gastroenterol* 2014;109:148-54.

### **NHCR 5: Repeat colonoscopy recommended due to piecemeal resection**

**MEASURE OWNERS:** This measure is owned by the New Hampshire Colonoscopy Registry

**DESCRIPTION:** Percentage of colonoscopies with polyps removed by piecemeal excision after which patients are told to return in appropriate interval  $\leq 1$  year

**TYPE OF MEASURE:** Process / High Priority

**NQS DOMAIN:** Communication and Care Coordination

**NQS DOMAIN RATIONALE:** Research supports close surveillance in patients with polyps removed by piecemeal resection.<sup>1,2,3</sup> The USMSTF recommends consideration of a short interval for repeat colonoscopy ( $\leq 1$  year) if there is any question about the completeness of resection of large polyps removed using piecemeal resection.<sup>4,5</sup>

**DENOMINATOR:** all colonoscopies with polyps removed by piecemeal excision

**DENOMINATOR EXCLUSIONS:** Colonoscopies with no piecemeal excision; colonoscopies for which the only follow-up recommendation is "Pending pathology"

**NUMERATOR:** # of colonoscopies with polyps removed by piecemeal excision for which the recommended surveillance interval is  $\leq 1$  year

**NUMERATOR EXCLUSIONS:** None

**DENOMINATOR EXCEPTIONS:** None

**INVERSE MEASURE:** No

**PROPORTIONAL MEASURE:** Yes

**CONTINUOUS VARIABLE MEASURE:** No

**RATIO MEASURE:** No

**RISK ADJUSTED:** No

**DATA SOURCE:** Other: NHCR Procedure form, (Q. 3 b treatment = Piecemeal excision , Q. 9 Follow-up recommendation)

**NUMBER OF PERFORMANCE RATES TO BE SUBMITTED:** 1

**EVIDENCE OF A PERFORMANCE GAP AND CITATIONS:** Documented performance gaps exist for this measure. A recent survey of Veterans Administration gastroenterologists found that 40% incorrectly reported the surveillance interval following piecemeal excision as longer than that recommended by guidelines,<sup>6</sup> and another study reported follow-up intervals in patients with piecemeal excision ranging from 1 to 66 months.<sup>1</sup>

**SPECIALTY:** Gastroenterology

**VARIANCE:** NHCR variance 0-100%, (mean 17.3%)

**REFERENCES:**

1. Kim B, Choi AR, Park SJ, et al. Long-Term Outcome and Surveillance Colonoscopy after Successful Endoscopic Treatment of Large Sessile Colorectal Polyps. *Yonsei medical journal*. Sep 2016;57(5):1106-1114.
2. Sakamoto T, Matsuda T, Otake Y, Nakajima T, Saito Y. Predictive factors of local recurrence after endoscopic piecemeal mucosal resection. *Journal of gastroenterology*. Jun 2012;47(6):635-640.
3. Seo GJ, Sohn DK, Han KS, et al. Recurrence after endoscopic piecemeal mucosal resection for large sessile colorectal polyps. *World journal of gastroenterology : WJG*. Jun 14 2010;16(22):2806-2811.
4. Winawer SJ, Zauber AG, Fletcher RH, et al. Guidelines for colonoscopy surveillance after polypectomy: a consensus update by the US Multi-Society Task Force on Colorectal Cancer and the American Cancer Society. *Gastroenterology*. May 2006;130(6):1872-1885.
5. Lieberman DA, Rex DK, Winawer SJ, Giardiello FM, Johnson DA, Levin TR. Guidelines for colonoscopy surveillance after screening and polypectomy: a consensus update by the US Multi-Society Task Force on Colorectal Cancer. *Gastroenterology*. Sep 2012;143(3):844-857.
6. Shah TU, Voils CI, McNeil R, Wu R, Fisher DA. Understanding gastroenterologist adherence to polyp surveillance guidelines. *The American journal of gastroenterology*. Sep 2012;107(9):1283-1287.

**NHCR 6: Appropriate Indication for Colonoscopy**

**MEASURE OWNERS:** This measure is owned by the New Hampshire Colonoscopy Registry

**DESCRIPTION:** percentage of colonoscopies performed for a clinically appropriate indication

**TYPE OF MEASURE:** Process

**NQS DOMAIN:** Effective Clinical Care

**NQS DOMAIN RATIONALE:** The ASGE / ACG Task Force on Quality in Endoscopy has included the documentation of an appropriate indication for colonoscopy as a quality measure, with a performance target of >80%.<sup>1</sup> When colonoscopy is done for an appropriate indication, more clinically relevant diagnoses are made. The documentation of an appropriate indication for colonoscopy is important both to ensure the appropriateness of care, and also to potentially inform surveillance follow-up recommendations.

**DENOMINATOR:** all colonoscopies

**DENOMINATOR EXCLUSIONS OR EXCEPTIONS:** None

**NUMERATOR:** Number of colonoscopies performed for an indication included in published standard lists of appropriate indications, such as peer reviewed publications

**NUMERATOR EXCLUSIONS:** None

**INVERSE MEASURE:** No

**PROPORTIONAL MEASURE:** Yes

**CONTINUOUS VARIABLE MEASURE:** No

**RATIO MEASURE:** No

**RISK ADJUSTED:** No

**DATA SOURCE:** Other: NHCR Procedure form (Q.2, Indication for Procedure).

**NUMBER OF PERFORMANCE RATES TO BE SUBMITTED:** 1

**EVIDENCE OF A PERFORMANCE GAP AND CITATIONS:**

Studies have found that between 23 - 39% of colonoscopies are completed for indications which are not considered appropriate. <sup>2,3</sup> Avoiding inappropriate colonoscopy increases cost efficiency and prevents unnecessary risk of complication.

**SPECIALTY:** Gastroenterology

**VARIANCE:** NHCR Data (145 endoscopists): Range 73% - 100% (mean 97%)

**REFERENCES:**

1. Rex DK, Schoenfeld PS, Cohen J, et al. Quality indicators for colonoscopy. *Gastrointestinal endoscopy*. Jan 2015;81(1):31-53.
2. Siddique I, Mohan K, Hasan F, Memon A, Patty I, Al-Nakib B. Appropriateness of indication and diagnostic yield of colonoscopy: first report based on the 2000 guidelines of the American Society for Gastrointestinal Endoscopy. *World journal of gastroenterology : WJG*. Nov 28 2005;11(44):7007-7013.
3. Morini S, Hassan C, Meucci G, Toldi A, Zullo A, Minoli G. Diagnostic yield of open access colonoscopy according to appropriateness. *Gastrointestinal endoscopy*. Aug 2001;54(2):175-179.