



# New Hampshire Colonoscopy Registry

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## Physician Quality Reporting System (PQRS) Qualified Clinical Data Registry (QCDR) 2016 non-PQRS Measure Specifications

This document contains a listing of the clinical quality measures collected by the New Hampshire Colonoscopy Registry (NHCR) that can be reported to CMS for the Physician Quality Reporting System (PQRS). Detailed specifications of the non-PQRS measures can be found on pages 2-5 of this document.

Note: In order to participate in the PQRS program, a **provider must successfully report at least 9 individual measures**, including **at least one outcome measure**. These 9 measures must cover at least 3 National Quality Strategy (NQS) domains. Measures with a 0% performance rate will not count. The NHCR currently collects all data required to submit 11 quality measures (3 PQRS and 8 non-PQRS) on behalf of participating providers.

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

	Measure #	Measure Title	Measure Description	NQS Domain	Type
MEASURES PQRS	PQRS#185	Colonoscopy Interval for Patients with a History of Adenomatous Polyps - Avoidance of Inappropriate use	Percentage of patients aged 18 yrs. 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	Communication & Care coordination	Process
	PQRS#320	Appropriate Follow-up interval for normal colonoscopy in average risk patients	Percentage of patients aged 50 yrs. and older 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 colonoscopy report	Communication & Care coordination	Process
	PQRS#343	Screening Colonoscopy Adenoma Detection Rate	Percentage of patients aged 50 yrs. or older with at least 1 adenoma or other colorectal cancer (CRC) precursor or CRC detected during screening colonoscopy	Effective Clinical Care	Outcome
ESURES PQRS-NON	NHCR1	Adequacy of Bowel Preparation	Percentage of colonoscopies in which bowel preparation quality is adequate	Effective Clinical Care	Process
	NHCR2	Successful Cecal Intubation	Percentage of colonoscopies in which completion status is Cecum, Terminal Ileum, or Anastomosis	Effective Clinical Care	Process
	NHCR3	Incidence of perforation	Percentage of total patients experiencing an immediate perforation	Patient Safety	Outcome
	NHCR4	Repeat colonoscopy recommended due to poor bowel preparation	Percentage of patients recommended for repeat colonoscopy due to inadequate bowel prep	Efficiency and cost reduction	Outcome
	NHCR5	Repeat colonoscopy recommended due to piecemeal resection	Percentage of exams with polyps removed by piecemeal excision who are told to return in appropriate interval $\leq 1$ year	Effective Clinical Care	Outcome
	NHCR6	Age inappropriate screening colonoscopy	Percentage of patients undergoing screening colonoscopy who are 85 or older	Efficiency and cost reduction	Outcome
	NHCR7	Documentation of family history	Percentage of colonoscopies with family history documented in a first degree relative	Effective Clinical Care	Process
	NHCR8	Documentation of Indication for exam	Percentage of colonoscopies for which an indication for exam is recorded	Effective Clinical Care	Process

## DETAILED SPECIFICATIONS OF NHCR NON-PQRS MEASURES

### **NHCR 1: Adequacy of Bowel Preparation**

**DESCRIPTION:** Percentage of colonoscopies in which bowel preparation quality is adequate

**NQS DOMAIN:** Effective Clinical Care

**TYPE OF MEASURE:** Process

**NUMERATOR:** # of colonoscopies with adequate bowel prep quality

**DENOMINATOR:** all colonoscopies

**DENOMINATOR EXCLUSIONS / EXCEPTIONS:** none

**RATIONALE AND REFERENCES:** Because adequacy of bowel preparation affects the ability to detect polyps during colonoscopy,<sup>1,3</sup> an adequate preparation is essential in order to ensure optimal visualization of the colon. National guidelines which recommend screening and surveillance intervals assume adequate bowel preparation.<sup>4</sup> Up to a third of colonoscopies have been found to have fair or poor bowel preparation,<sup>4,5,6</sup> and it has been estimated that inadequate bowel prep increases colonoscopy costs from between 12 to 22 percent.<sup>7</sup> The American College of Gastroenterology / American Society for Gastrointestinal Endoscopy (ACG/ASGE) Task Force on Quality in Endoscopy recommends that the percentage of outpatient colonoscopies with inadequate bowel preparation that require repeat colonoscopy within a year should not exceed 15%.<sup>4</sup>

**DATA SOURCE:** NHCR Procedure form, (Q. 4. Bowel preparation quality). Adequate includes responses of "Excellent", "Good", and "Fair".

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### **NHCR 2: Successful Cecal Intubation**

**DESCRIPTION:** Percentage of colonoscopies in which completion status was Cecum or Terminal Ileum or Anastomosis (stratified by indication: all indications, screening)

**NQS DOMAIN:** Effective Clinical Care

**TYPE OF MEASURE:** Process

**NUMERATOR:** # of complete colonoscopies (End of procedure status = Cecum, terminal ileum, anastomosis)

**DENOMINATOR:** all colonoscopies

**DENOMINATOR EXCLUSIONS / EXCEPTIONS:** Inadequate (poor) bowel preparation

**RATIONALE AND REFERENCES:** Low cecal intubation rates are associated with higher rates of interval proximal colon cancer,<sup>8</sup> and a substantial number of colorectal neoplasms are found in the proximal colon. The ASGE /ACG Task Force on Quality in Endoscopy recommends cecal intubation rates of  $\geq 90\%$  overall, and  $\geq 95\%$  in screening colonoscopies.<sup>4</sup>

**DATA SOURCE:** NHCR Procedure form, (Q. 6, End of procedure status, Q. 4 bowel preparation quality)

### **NHCR 3: Incidence of perforation**

**DESCRIPTION:** Percentage of total patients experiencing an immediate perforation (stratified by indication: all indications, screening)

**NQS DOMAIN:** Patient Safety

**TYPE OF MEASURE:** Outcome

**NUMERATOR:** # of colonoscopies with perforation recognized immediately at colonoscopy

**DENOMINATOR:** all colonoscopies

**DENOMINATOR EXCLUSIONS / EXCEPTIONS:** None

**RATIONALE AND REFERENCES:** Perforation, while rare, is the most serious complication presenting in the short term after colonoscopy. A study among Medicare patients found the overall risk of perforation to be 1 in 500, while the risk in screening patients was less than 1 in 1000.<sup>9</sup> Published rates of perforation vary widely.<sup>10-12</sup> Incidence of perforation by procedure indication is recommended by the ASGE/ACG Task Force on Quality in Endoscopy as a colonoscopy quality indicator, with a benchmark of <1:500 colonoscopies for all exams and <1:1000 for screening colonoscopies.<sup>4</sup>

**DATA SOURCE:** NHCR Procedure form, (Q.8, immediate complications = perforation).

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### **NHCR 4: Repeat colonoscopy recommended due to poor bowel preparation**

**DESCRIPTION:** Percentage of patients recommended for repeat colonoscopy due to inadequate (poor) bowel preparation quality

**NQS DOMAIN:** Effective Clinical Care

**TYPE OF MEASURE:** Outcome

**NUMERATOR:** # of colonoscopies with bowel prep documented as poor and whose recommended follow-up was ≤ 1 year

**DENOMINATOR:** # of colonoscopies with bowel prep documented as poor

**DENOMINATOR EXCLUSIONS / EXCEPTIONS:** None

**RATIONALE AND REFERENCES:** 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>13-17</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>18</sup> Limited evidence suggests that adherence to this guideline is surprisingly inconsistent, with intervals following poor bowel prep often highly variable.<sup>19-21</sup>

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

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

**DESCRIPTION:** Percentage of exams with polyps removed by piecemeal excision who are told to return in appropriate interval  $\leq 1$  year

**NQS DOMAIN:** Effective Clinical Care

**TYPE OF MEASURE:** Outcome

**NUMERATOR:** # of colonoscopies with polyps removed by piecemeal excision who are told to return for surveillance in  $\leq 1$  year

**DENOMINATOR:** all colonoscopies with piecemeal excision

**DENOMINATOR EXCLUSIONS / EXCEPTIONS:** None

**RATIONALE AND REFERENCES:** The USMSTF recommends consideration of a short interval for repeat colonoscopy ( $<1$  year) if there is any question about the completeness of resection of large polyps removed using piecemeal resection.<sup>18</sup>

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

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## **NHCR 6: Age inappropriate screening colonoscopy**

**DESCRIPTION:** Percentage of patients undergoing screening colonoscopy who are 85 or older

**NQS DOMAIN:** Outcome

**TYPE OF MEASURE:** Efficiency and cost reduction

**NUMERATOR:** # of patients 85 or older with screening colonoscopy

**DENOMINATOR:** # of patients  $\geq 50$  yrs with screening colonoscopy

**DENOMINATOR EXCLUSIONS / EXCEPTIONS:** none

**RATIONALE AND REFERENCES:** The USPSTF recommends against screening for colorectal cancer in adults older than 85 years, as the benefits are less likely to outweigh the potential harms.<sup>22</sup>

**DATA SOURCE:** NHCR Patient information form (patient DOB), NHCR Procedure form (Q.1, Date of Procedure, Q. 2, Indication for procedure = “screening, no symptoms or family history”)

## **NHCR 7: Documentation of family history of colorectal cancer**

**DESCRIPTION:** Percentage of colonoscopies with family history of colorectal cancer documented

**NQS DOMAIN:** Effective Clinical Care

**TYPE OF MEASURE:** Process

**NUMERATOR:** # of colonoscopies with family history of colorectal cancer noted on procedure form

**DENOMINATOR:** all colonoscopies

**DENOMINATOR EXCLUSIONS / EXCEPTIONS:** none

**RATIONALE AND REFERENCES:** A key factor in effective colonoscopy utilization is the follow-up intervals that are recommended for screening and surveillance. Accurate assessment of individual patient risk, which includes knowledge of family history of colon cancer, is necessary to derive appropriate follow-up recommendations.<sup>23</sup>

**DATA SOURCE:** NHCR Procedure form (Q. 2: Indication = screening exam for family history of colon cancer, first degree relative = yes)

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## **NHCR 8: Documentation of Indication for exam**

**DESCRIPTION:** Percentage of colonoscopies for which an indication for exam is recorded

**NQS DOMAIN:** Effective Clinical Care

**TYPE OF MEASURE:** Process

**NUMERATOR:** # of colonoscopies for which indication for exam is documented on procedure form

**DENOMINATOR:** all colonoscopies

**DENOMINATOR EXCLUSIONS / EXCEPTIONS:** none

**RATIONALE AND REFERENCES:** The ASGE / ACG Task Force on Quality in Endoscopy has included the documentation of indication of colonoscopy as a quality measure, with a performance target of >80%.<sup>4</sup> When colonoscopy is done for an appropriate indication, more clinically relevant diagnoses are made. The documentation of colonoscopy indication is important both to ensure the appropriateness of care, and also to potentially inform appropriate surveillance follow-up recommendations.

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

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