NHCR
New Hampshire Colonoscopy Registry
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Merit-based Incentive Payment system (MIPS)
2019 Qualified Clinical Data Registry (QCDR) Measure Specifications

Summary Listing of QCDR measures supported by the NHCR

Measure #	Title	Description	Type / Priority
NHCR4	Repeat screening/surveillance colonoscopy recommended within 1 yr due to inadequate / poor bowel preparation	Percentage 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	Percentage of exams with polyps removed by piecemeal excision who are told to return in appropriate interval ≤1 year	Process / High Priority
GIQIC12	Appropriate Indication for Colonoscopy	Percentage of colonoscopy procedures performed for an indication that is included in a published standard list of appropriate indications and the indication is documented	Process
GIQIC15	Appropriate follow-up interval of 3 years recommended based on pathology findings from screening colonoscopy in average-risk patients	Percentage of average-risk patients aged 50 years and older receiving a screening colonoscopy with biopsy or polypectomy and pathology findings of 3-10 adenomas, Advanced Neoplasm (≥ 10 mm, high grade dysplasia, villous component), Sessile serrated polyp (SSP) ≥ 10 mm OR SSP with dysplasia OR traditional serrated adenoma who had a recommended follow-up interval of 3 years for repeat colonoscopy	Process / High Priority
GIQIC17	Appropriate follow-up interval of 5 years for colonoscopies with findings of sessile serrated polyps < 10 mm without dysplasia	Percentage of average-risk patients aged 50 years and older receiving a screening colonoscopy with biopsy or polypectomy and pathology findings of sessile serrated polyp(s) < 10 mm without dysplasia with a recommended follow-up interval of 5 yrs for repeat colonoscopy documented in colonoscopy report	Process / High Priority
GIQIC21	Appropriate follow-up interval of not less than 5 yrs for colonoscopies with findings of 1-2 tubular adenomas < 10 mm OR of 10 yrs for colonoscopies with only hyperplastic polyp findings in rectum or sigmoid	Percentage of average-risk patients aged 50-75 yrs receiving a screening colonoscopy with biopsy or polypectomy and pathology findings of 1-2 tubular adenomas<10 mm with a recommended follow-up interval of not less than 5 yrs OR pathology findings of only hyperplastic polyps in rectum or sigmoid with a recommended follow-up interval of 10 yrs for repeat colonoscopy documented in colonoscopy report	Process / High Priority

NHCR4: Repeat screening or surveillance colonoscopy recommended within one year due to inadequate / poor bowel preparation

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 / PRIORITY STATUS: Process / High Priority (Communication and Care Coordination)
NQS DOMAIN: Communication and Care Coordination
NQF#: N/A
MEANINGFUL MEASURE AREA: Appropriate use of Health Care
MEANINGFUL MEASURE AREA RATIONALE: Colonoscopies with poor bowel preparation are considered incomplete due to inadequate mucosal visualization, and shorter follow-up intervals are recommended to ensure effective care.[1-5] 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.[6]
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 ≤ 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. [7-9]
SPECIALTY: Gastroenterology
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.

NHCR5: 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 (<=1 year)
TYPE OF MEASURE / PRIORITY STATUS: Process / High Priority (Communication and Care Coordination)
NQS DOMAIN: Communication and Care Coordination
NQF#: N/A
MEANINGFUL MEASURE AREA: Appropriate use of Health Care
MEANINGFUL MEASURE AREA RATIONALE: Research supports close surveillance (repeat colonoscopy in <=1 year) in patients with polyps removed by piecemeal excision, in which polyp removal may be incomplete.[1,2,3] 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. [4,5]
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"
DENOMINATOR EXCEPTIONS: None
NUMERATOR: # of colonoscopies with polyps removed by piecemeal excision for which the recommended surveillance interval is ≤ 1 year
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. 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,[6] and another study reported follow-up intervals in patients with piecemeal excision ranging from 1 to 66 months.[1]
SPECIALTY: Gastroenterology
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.

GIQIC12: Appropriate Indication for Colonoscopy

DESCRIPTION: Percentage of colonoscopy procedures performed for an indication that is included in a published standard list of appropriate indications and the indication is documented.
TYPE OF MEASURE / PRIORITY STATUS: Process / N/A
NQS DOMAIN: Effective Clinical Care
NQF#: N/A
MEANINGFUL MEASURE AREA: Appropriate use of Health Care
MEANINGFUL MEASURE AREA RATIONALE: When colonoscopy is done for an appropriate indication, more clinically relevant diagnoses are made.
DENOMINATOR: all colonoscopies
DENOMINATOR EXCLUSIONS OR EXCEPTIONS: None
NUMERATOR: Number of colonoscopies performed for an indication included in published standard lists of appropriate indications
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).
NUMBER OF PERFORMANCE RATES TO BE SUBMITTED: 1
EVIDENCE OF A PERFORMANCE GAP AND CITATIONS: In 2012, ASGE updated its indications for endoscopic procedures, Appropriate Use of Gastrointestinal Endoscopy.(1) This list was determined by a review of published literature and expert consensus. Studies have shown that when colonoscopy is done for appropriate reasons, significantly more clinically relevant diagnoses are made.(2,3,4)

Based on the evidence GIQuIC's supporting societies agree the performance target for an appropriate indication measure should be > 80%.

SPECIALTY: Gastroenterology
REFERENCES:
(1) ASGE Standards of Practice Committee, Early DS, Ben-Menachem T et al. Appropriate use of GI endoscopy. Gastrointest Endosc 2012;75:1127-31.
(2) Balaguer F, Llach J, Castells A, et al. The European panel on the appropriateness of gastrointestinal endoscopy guidelines colonoscopy in an open-access endoscopy unit: a prospective study. Aliment Pharmacol Ther 2005;21:609-13.
(3) Vader JP, Pache I, Froehlich F, et al. Overuse and underuse of colonoscopy in a European primary care setting. Gastrointest Endosc 2000;52:593-99.
(4) de Bosset V, Froehlich F, Rey JP, et al. Do explicit appropriateness criteria enhance the diagnostic yield of colonoscopy? Endoscopy 2002;34:360-8.

GIQIC15: Appropriate follow-up interval of 3 years recommended based on pathology findings from screening colonoscopy in average-risk patients

DESCRIPTION: Percentage of average-risk patients aged 50 years and older receiving a screening colonoscopy with biopsy or polypectomy and pathology findings of 3-10 adenomas, Advanced Neoplasm (≥ 10 mm, high grade dysplasia, villous component), Sessile serrated polyp ≥ 10 mm OR sessile serrate polyp with dysplasia OR traditional serrated adenoma who had a recommended follow-up interval of 3 years for repeat colonoscopy.
TYPE OF MEASURE / PRIORITY STATUS: Process / High Priority (Communication and Care Coordination)
NQS DOMAIN: Communication and Care Coordination
NQF#: N/A
MEANINGFUL MEASURE AREA: Appropriate use of Health Care
MEANINGFUL MEASURE AREA RATIONALE: Colonoscopies should follow recommended post-polypectomy surveillance intervals to be clinically effective and to minimize risk and further to be cost-effective.
DENOMINATOR: All complete and adequately prepped screening colonoscopies of average-risk patients aged 50 years and older with biopsy or polypectomy and pathology findings of 3-10 adenomas, OR Advanced Neoplasm (≥ 10 mm, high grade dysplasia, villous component) OR Sessile serrated polyp ≥ 10 mm OR sessile serrated polyp with dysplasia OR traditional serrated adenoma
DENOMINATOR EXCLUSIONS OR EXCEPTIONS: None
NUMERATOR: Number of average-risk patients aged 50 years and older receiving a complete and adequately prepped screening colonoscopy with biopsy or polypectomy and pathology findings of 3-10 adenomas OR Advanced Neoplasm (≥ 10 mm, high grade dysplasia, villous component) OR Sessile serrated polyp ≥ 10 mm OR sessile serrated polyp with dysplasia OR traditional serrated adenoma who had a recommended follow-up interval of 3 years for repeat colonoscopy
NUMERATOR EXCLUSIONS: None
INVERSE MEASURE: No
PROPORTIONAL MEASURE: Yes
CONTINUOUS VARIABLE MEASURE: No
RATIO MEASURE: No
RISK ADJUSTED: No
DATA SOURCE: NHCR Data Collection Forms, Web-Based data collection, Paper Medical Record, EMR
NUMBER OF PERFORMANCE RATES TO BE SUBMITTED: 1
EVIDENCE OF A PERFORMANCE GAP AND CITATIONS:
The Guidelines for Colonoscopy Surveillance After Screening and Polypectomy: Consensus Update by the US Multi-society Task Force on Colorectal Cancer(1) presents recommendations for surveillance intervals in individuals with baseline average risk. Colonoscopies should follow recommended post-polypectomy surveillance intervals to be clinically effective and to minimize risk and further to be cost-effective. Average-risk patients aged 50 years and older receiving a screening colonoscopy with biopsy or polypectomy and pathology findings of 3-10 adenomas, advanced neoplasm (≥ 10 mm, high grade dysplasia, villous component), sessile serrated polyp ≥ 10 mm OR sessile serrate polyp with dysplasia or traditional serrated adenoma should receive a recommended follow-up interval of 3 years for repeat colonoscopy.

Evidence from surveys indicates that post-polypectomy surveillance colonoscopy in the United States is frequently performed at intervals that are shorter than those recommended in guidelines, that knowledge of guideline recommendations is high, and lack of guideline awareness is unlikely to account for overuse of colonoscopy. These surveys underscore the importance of measuring intervals between examinations in continuous quality improvement programs.(2)

SPECIALTY: Gastroenterology

REFERENCES:
(1) 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.
(2) Rex, DK, et al. Quality indicators for colonoscopy. Gastrointest Endosc 2015;81:31-53 / DOI: http://dx.doi.org/10.1016/j.gie.2014.07.058

GIQIC17: Appropriate follow-up interval of 5 years for colonoscopies with findings of sessile serrated polyps < 10 mm without dysplasia

DESCRIPTION: Percentage of average-risk patients aged 50 years and older receiving a screening colonoscopy with biopsy or polypectomy and pathology findings of sessile serrated polyp(s) < 10 mm without dysplasia with a recommended follow-up interval of 5 years for repeat colonoscopy documented in their colonoscopy report.
TYPE OF MEASURE / PRIORITY STATUS: Process / High Priority (Communication and Care Coordination)
NQS DOMAIN: Communication and Care Coordination
NQF#: N/A
MEANINGFUL MEASURE AREA: Appropriate use of Health Care
MEANINGFUL MEASURE AREA RATIONALE: Colonoscopies should follow recommended post-polypectomy surveillance intervals to be clinically effective and to minimize risk and further to be cost-effective.
DENOMINATOR:
All complete and adequately prepped screening colonoscopies of average-risk patients aged 50 years and older with biopsy or polypectomy and pathology findings of sessile serrated polyp(s) < 10 mm without dysplasia
DENOMINATOR EXCLUSIONS OR EXCEPTIONS: None
NUMERATOR: Number of average-risk patients aged 50 years and older receiving a complete and adequately prepped screening colonoscopy with biopsy or polypectomy and pathology findings of sessile serrated polyp(s) < 10 mm without dysplasia who had a recommended follow-up interval of 5 years for repeat colonoscopy
NUMERATOR EXCLUSIONS: None
INVERSE MEASURE: No
PROPORTIONAL MEASURE: Yes
CONTINUOUS VARIABLE MEASURE: No
RATIO MEASURE: No
RISK ADJUSTED: No
DATA SOURCE: NHCR Data Collection Forms, Web-Based data collection, Paper Medical Record, EMR
NUMBER OF PERFORMANCE RATES TO BE SUBMITTED: 1
EVIDENCE OF A PERFORMANCE GAP AND CITATIONS:
The Guidelines for Colonoscopy Surveillance After Screening and Polypectomy: Consensus Update by the US Multi-society Task Force on Colorectal Cancer(1) presents recommendations for surveillance intervals in individuals with baseline average risk. Colonoscopies should follow recommended post-polypectomy surveillance intervals to be clinically effective and to minimize risk and further to be cost-effective. Average-risk patients aged 50 years and older receiving a screening colonoscopy with biopsy or polypectomy and pathology findings of sessile serrated polyp(s) < 10 mm with no dysplasia should receive a recommended follow-up interval of 5 years for repeat colonoscopy.

Evidence from surveys indicates that post-polypectomy surveillance colonoscopy in the United States is frequently performed at intervals that are shorter than those recommended in guidelines, that knowledge of guideline recommendations is high, and lack of guideline awareness is unlikely to account for overuse of colonoscopy... These surveys underscore the importance of measuring intervals between examinations in continuous quality improvement programs.(2)

SPECIALTY: Gastroenterology

REFERENCES:
(1) 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.
(2) Rex, DK, et al. Quality indicators for colonoscopy. Gastrointest Endosc 2015;81:31-53 / DOI: http://dx.doi.org/10.1016/j.gie.2014.07.058

GIQIC21: Appropriate follow-up interval of not less than 5 years for colonoscopies with findings of 1-2 tubular adenomas < 10 mm OR of 10 years for colonoscopies with only hyperplastic polyp findings in rectum or sigmoid

DESCRIPTION: Percentage of average-risk patients aged 50 years to 75 years receiving a screening colonoscopy with biopsy or polypectomy and pathology findings of 1 or 2 tubular adenomas < 10 mm with a recommended follow-up interval of not less than 5 years OR pathology findings of only hyperplastic polyp findings in rectum or sigmoid with a recommended follow-up interval of 10 years for repeat colonoscopy documented in their colonoscopy report
TYPE OF MEASURE / PRIORITY STATUS: Process / High Priority (Appropriate Use)
NQS DOMAIN: Efficiency and Cost Reduction
NQF#: N/A
MEANINGFUL MEASURE AREA: Appropriate use of Health Care
MEANINGFUL MEASURE AREA RATIONALE: Colonoscopies should follow recommended post-polypectomy surveillance intervals to be clinically effective and to minimize risk and further to be cost-effective.
DENOMINATOR: All complete and adequately prepped screening colonoscopies of average risk patients aged 50 years to 75 years with biopsy or polypectomy and pathology findings of: (Strata 1) 1 to 2 tubular adenomas < 10 mm OR (Strata 2) only hyperplastic polyp(s) in rectum or sigmoid
DENOMINATOR EXCLUSIONS: None
DENOMINATOR EXCEPTIONS: Patients aged 66 to 75
NUMERATOR: Number of average-risk patients aged 50 years to 75 years receiving a complete and adequately prepped screening colonoscopy with biopsy or polypectomy and: (Strata 1) pathology findings of 1 to 2 tubular adenomas < 10 mm who had a recommended follow-up interval of ≥ 5 years for repeat colonoscopy OR (Strata 2) pathology findings of only hyperplastic polyp(s) in rectum or sigmoid who had a recommended follow-up interval of 10 years for repeat colonoscopy documented in their colonoscopy report
NUMERATOR EXCLUSIONS: None
INVERSE MEASURE: No
PROPORTIONAL MEASURE: Yes
CONTINUOUS VARIABLE MEASURE: No
RATIO MEASURE: No
RISK ADJUSTED: No
DATA SOURCE: NHCR Data Collection Forms, Web-Based data collection, Paper Medical Record, EMR
NUMBER OF PERFORMANCE RATES TO BE SUBMITTED: 2
EVIDENCE OF A PERFORMANCE GAP AND CITATIONS:
The Guidelines for Colonoscopy Surveillance After Screening and Polypectomy: Consensus Update by the US Multi-society Task Force on Colorectal Cancer(1) presents recommendations for surveillance intervals in individuals with baseline average risk. Colonoscopies should follow recommended post-polypectomy surveillance intervals to be clinically effective and to minimize risk and further to be cost-effective. Average-risk patients aged 50 years and older receiving a screening colonoscopy with biopsy or polypectomy and pathology findings of 1–2 small (< 10 mm) tubular adenomas should receive a recommended follow-up interval of 5 to 10 years for repeat colonoscopy. Average-risk patients aged 50 years and older receiving a screening colonoscopy with biopsy or polypectomy and pathology findings of distal small lesions (<10 mm) hyperplastic polyps should receive a recommended follow-up interval of 10 years for repeat colonoscopy.

Evidence from surveys indicates that post-polypectomy surveillance colonoscopy in the United States is frequently performed at intervals that are shorter than those recommended in guidelines, that knowledge of guideline recommendations is high, and lack of guideline awareness is unlikely to account for overuse of colonoscopy... These surveys underscore the importance of measuring intervals between examinations in continuous quality improvement programs.(2)

REFERENCES:
(1) 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.
(2) Rex, DK, et al. Quality indicators for colonoscopy. Gastrointest Endosc 2015;81:31-53 / DOI: http://dx.doi.org/10.1016/j.gie.2014.07.058