Quality ID #404: Anesthesiology Smoking Abstinence – National Quality Strategy Domain: Effective Clinical Care

2018 OPTIONS FOR INDIVIDUAL MEASURES:
REGISTRY ONLY

MEASURE TYPE:
Intermediate Outcome

DESCRIPTION:
The percentage of current smokers who abstain from cigarettes prior to anesthesia on the day of elective surgery or procedure

INSTRUCTIONS:
This measure is to be submitted each time an elective surgery, diagnostic, or pain procedure is performed under anesthesia during the performance period. There is no diagnosis associated with this measure. It is anticipated that eligible clinicians who provide the listed anesthesia services as specified in the denominator coding will submit this measure.

Measure Submission:
The listed denominator criteria is used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions allowed by the measure. The quality-data codes listed do not need to be submitted for registry submissions; however, these codes may be submitted for those registries that utilize claims data.

DENOMINATOR:
All patients aged 18 years and older who are evaluated in preparation for elective surgical, diagnostic, or pain procedure requiring anesthesia services and identified as a current smoker prior to the day of the surgery or procedure with instruction from anesthesiologist or proxy to abstain from smoking on the day of surgery or procedure

DENOMINATOR NOTE: Preoperative smoking cessation instruction can be performed by an anesthesiologist or proxy, including but not limited to a surgeon, nursing staff, or other preoperative care team member, as part of preoperative evaluation.

Denominator Criteria (Eligible Cases):
Patients aged ≥ 18 years on date of encounter
AND
Patient procedure during the performance period (CPT): 00100, 00102, 00103, 00104, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00165, 00166, 00168, 00170, 00172, 00174, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00218, 00220, 00222, 00300, 00320, 00322, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00533, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00563, 00565, 00566, 00567, 00580, 00600, 00604, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00645, 00670, 00700, 00703, 00705, 00707, 00730, 00731, 00732, 00735, 00745, 00750, 00752, 00755, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00811, 00812, 00813, 00820, 00830, 00832, 00840, 00842, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00872, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00916, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00950, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01222, 01230, 01232, 01234, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01430, 01432, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01670, 01680, 01710, 01712, 01714, 01716, 01730, 01732, 01740,
AND
Current smoker (e.g. cigarette, cigar, pipe, e-cigarette or marijuana): G9642

AND
Elective surgery: G9643

AND
Received instruction from the anesthesiologist or proxy prior to the day of surgery to abstain from smoking on the day of surgery: G9497

NUMERATOR:
Patients who abstained from smoking prior to anesthesia on the day of surgery or procedure

Definition:
Abstinence - Defined by either patient self-report or an exhaled carbon monoxide level of < 10 ppm.

Numerator Options:
Performance Met: Patients who abstained from smoking prior to anesthesia on the day of surgery or procedure (G9644)

OR
Performance Not Met: Patients who did not abstain from smoking prior to anesthesia on the day of surgery or procedure (G9645)

RATIONALE:
Each year, millions of cigarette smokers require surgery and anesthesia in the US. Smoking is a significant independent risk factor for perioperative heart, lung, and wound-related complications. There now is good evidence that perioperative abstinence from smoking reduces the risk of heart, lung, and wound-related perioperative complications, and that the perioperative period represents a “teachable moment” for smoking cessation that improves long-term abstinence rates; over 100,000 smokers quit in the US each year as a result of having a surgical procedure. Repeated exposure to tobacco cessation education and interventions is an effective approach to improve smoking abstinence. Although evidence suggests that the longer the duration of abstinence the better, there is also evidence that even brief abstinence (e.g., abstaining from smoking on the morning of surgery) can dramatically reduce both nicotine and carbon monoxide levels and reduce risks for complications such as intraoperative myocardial ischemia. Evidence shows that tobacco interventions can 1) increase perioperative abstinence rates in surgical patients who smoke and 2) decrease the rate of perioperative complications. Thus, this measure, which incents the provision of tobacco interventions by clinicians as a part of routine clinical practice, will significantly improve the health of smokers who require surgery.

CLINICAL RECOMMENDATION STATEMENTS:

It is essential that clinicians and health care delivery systems consistently identify and document tobacco use status and treat every tobacco user seen in a health care setting.

Tobacco dependence treatments are effective across a broad range of populations. Clinicians should encourage every patient willing to make a quit attempt to use the counseling treatments and medications recommended in this Guideline.

Brief tobacco dependence treatment is effective. Clinicians should offer every patient who uses tobacco at least the brief treatments shown to be effective in this Guideline.
Approximately one of every five American adults smoke cigarettes and up to half of these individuals will die prematurely because of their use of tobacco. The majority of these smokers want to quit. Each year, millions of cigarette smokers require surgery and anesthesia in the United States. Smoking has a direct impact on postoperative outcomes such as wound healing, and abstinence from smoking may improve these outcomes. In addition, surgery may represent a teachable moment for promotion of long-term smoking cessation: i.e., smokers may be more receptive to messages urging them to quit. For these reasons, the scheduling of surgery represents an excellent opportunity for cigarette smokers to quit smoking. Patients should abstain from smoking for as long as possible both before and after surgery, and they should obtain help in doing so. Patients can receive help in a variety of ways, including telephone quitlines (1-800-QUITNOW), which are of proven efficacy and are now readily available to all Americans.
2018 Registry Flow for Quality ID #404: Anesthesiology Smoking Abstinence

Start

Patient Age at Date of Service ≥ 18 years

- Yes
  - Procedure as Listed in Denominator (1/1/2018 thru 12/31/2018)
    - Yes
      - Patients Who Abstained From Smoking Prior to Anesthesia on the Day of Surgery or Procedure
        - Yes
          - Data Completeness Met + Performance Met
            - G9644 or Equivalent (40 procedures)
        - No
          - Data Completeness Met + Performance Not Met
            - G9645 or Equivalent (30 procedures)
    - No
      - Identified as Current Smoker G9642 or Equivalent
        - Yes
          - Patients Who Did Not Abstain From Smoking Prior to Anesthesia on the Day of Surgery or Procedure
            - Yes
              - Data Completeness Not Met
                - Quality-Data Code or Equivalent Not Submitted (10 procedures)
            - No
          - Not Included in Eligible Population/Denominator

- No
  - Not Included in Eligible Population/Denominator

Elective Surgery G9643 or Equivalent

- Yes
  - Received Instructions from the Anesthesiologist or Proxy Prior to the Day of Surgery to Abstain from Smoking on the Day of Surgery G9497 or Equivalent
    - Yes
      - Include in Eligible Population/Denominator (80 procedures)
    - No
      - Include in Eligible Population/Denominator

- No
  - Include in Eligible Population/Denominator

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The measure diagrams were developed by CMS as a supplemental resource to be used in conjunction with the measure specifications. They should not be used alone or as a substitution for the measure specification.

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2018 Registry Flow for Quality ID #404: Anesthesiology Smoking Abstinence

**SAMPLE CALCULATIONS:**

Data Completeness =
\[
\frac{\text{Performance Met (a=40 procedures) + Performance Not Met (c=30 procedures)}}{\text{Eligible Population / Denominator (d=80 procedures)}} = \frac{70 \text{ procedures}}{80 \text{ procedures}} = 87.50\%
\]

Performance Rate =
\[
\frac{\text{Performance Met (a=40 procedures)}}{\text{Data Completeness Numerator (70 procedures)}} = \frac{40 \text{ procedures}}{70 \text{ procedures}} = 57.14\%
\]

* See the posted Measure Specification for specific coding and instructions to submit this measure.

NOTE: Submission Frequency: Procedure

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2018 Registry Flow for Quality ID
#404: Anesthesiology Smoking Abstinence

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in submitting this Individual Specification. This flow is for registry-data submission.

1. Start with Denominator
2. Check Patient Age:
   a. If the Age is greater than or equal to 18 years of age on Date of Service and equals No during the Performance Period, do not include in Eligible Patient Population. Stop Processing.
   b. If the Age is greater than or equal to 18 years of age on Date of Service and equals Yes during the Performance Period, proceed to check Procedure Performed.
3. Check Procedure Performed:
   a. If Procedure as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Procedure as Listed in the Denominator equals Yes, proceed to check Identified as Current Cigarette Smoker.
4. Check Identified as Current Smoker:
   a. If Identified as Current Smoker equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Identified as Current Smoker equals Yes, proceed to check Elective Surgery.
5. Check Elective Surgery:
   a. If Elective Surgery equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Elective Surgery equals Yes, proceed to check Received Instruction to Abstain from Smoking on the Day of Surgery by Anesthesiologist or Proxy prior to the Day of Surgery.
6. Check Received Instruction to Abstain from Smoking on the Day of Surgery by Anesthesiologist or Proxy prior to the Day of Surgery:
   a. If Received Instruction to Abstain from Smoking on the Day of Surgery by Anesthesiologist or Proxy prior to the Day of Surgery equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Received Instruction to Abstain from Smoking on the Day of Surgery by Anesthesiologist or Proxy prior to the Day of Surgery equals Yes, include in Eligible Population.
7. Denominator Population:
   a. Denominator Population is all Eligible Patients in the Denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d equals 80 procedures in the Sample Calculation.
8. Start Numerator
9. Check Patients Who Abstained From Smoking Prior to Anesthesia on the Day of Surgery or Procedure:
   a. If Patients Who Abstained From Smoking Prior to Anesthesia on the Day of Surgery or Procedure equals Yes, include in Data Completeness Met and Performance Met.
b. Data Completeness Met and Performance Met letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a equals 40 procedures in the Sample Calculation.

c. If Patients Who Abstained From Smoking Prior to Anesthesia on the Day of Surgery or Procedure equals No, proceed to Patients Who Did Not Abstain From Smoking Prior to Anesthesia on the Day of Surgery or Procedure.

10. Check Patients Who Did Not Abstain From Smoking Prior to Anesthesia on the Day of Surgery or Procedure:

a. If Patients Who Did Not Abstain From Smoking Prior to Anesthesia on the Day of Surgery or Procedure equals Yes, include in Data Completeness Met and Performance Not Met.

b. Data Completeness Met and Performance Not Met letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter c equals 30 procedures in the Sample Calculation.

c. If toPatients Who Did Not Abstain From Smoking Prior to Anesthesia on the Day of Surgery or Procedure equals No, proceed to Data Completeness Not Met.

11. Check Data Completeness Not Met:

a. If Data Completeness Not Met equals No, Quality Data Code or equivalent not submitted. 10 procedures have been subtracted from the Data Completeness Numerator in the Sample Calculation.

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**SAMPLE CALCULATIONS:**

<table>
<thead>
<tr>
<th>Data Completeness=</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Met (a=40 procedures) + Performance Not Met (c=30 procedures) = 70 procedures = 87.50%</td>
</tr>
<tr>
<td>Eligible Population / Denominator (d=80 procedures) = 80 procedures</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Performance Rate=</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Met (a=40 procedures) = 40 procedures = 57.14%</td>
</tr>
<tr>
<td>Data Completeness Numerator (70 procedures) = 70 procedures</td>
</tr>
</tbody>
</table>
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