## Controlling the Impact of COPD on Health Status

### Measure Specifications

<table>
<thead>
<tr>
<th>Measure</th>
<th>Controlling the Impact of COPD on health status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>The percentage of patients aged 50 – 80 years whose self-reported impact of COPD on their health status was low, stable or improved, as determined by the COPD Assessment Test (CAT) or Clinical COPD Questionnaire (CCQ).</td>
</tr>
<tr>
<td><strong>Measurement Period</strong></td>
<td>April 1, 2018 through March 31, 2019</td>
</tr>
</tbody>
</table>
| **Eligible Population** | **Eligible Specialties**: Family Medicine, Internal Medicine, Pulmonary Medicine, Geriatric Medicine  
**Eligible Providers**: Medical Doctor (MD), Doctor of Osteopathy (DO), Physician Assistant (PA), Advanced Practice Registered Nurses (APRN)  
**Ages**: 50 years or older at the start of the measurement period AND less than 81 years at the end of the measurement period |
| **Event** | Patient had an office visit performed or supervised by an eligible provider in an eligible specialty as an established patient (Established Patient Value Set) for any reason at least once during the measurement period. |
| **Diagnosis** | Patient had COPD (COPD, Emphysema, and Chronic Bronchitis Value Set) as a diagnosis on any contact during the measurement period or the 12 months prior to the start of the measurement period OR had COPD present on an active problem list at any time during the measurement period. |
| **Denominator** | The number of patients in the eligible population who have a diagnosis of COPD that is confirmed with a spirometry result of FEV1/FVC less than 0.7. |
| **Numerator** | The number of patients in the denominator whose impact of COPD on their health status was assessed with an allowable tool* at least once during the measurement period AND whose impact of COPD on their health status:  
- Was low. Low impact is demonstrated by a CAT score being less than 10 OR CCQ score being less than 1.0 at any time during the measurement period,  
OR  
- Was stable or improved. Stable or improved is demonstrated by a CAT score that did not increase by 2 or more OR a CCQ score that did not increase by 0.4 or more. The CAT/CCQ scores used for calculating a change are the earliest and most recent tool administrations during the measurement period. The timing between the administrations must be at least 90 days. |

* CAT (COPD Assessment Test) and the CCQ (Clinical COPD Questionnaire-week version)
## Controlling the Impact of COPD on Health Status
### Measure Specifications

| **Required Exclusions** | The following exclusions must be applied to the eligible population:
| | • Patients with severe cognitive impairment (*Severe Cognitive Impairment* Value Set)
| | • Patients with cystic fibrosis (*Cystic Fibrosis* Value Set)
| **Allowable Exclusions** | The following exclusions are allowed to be applied to the eligible population:
| | • Patient was a permanent nursing home resident at any time during the measurement period
| | • Patient was in hospice or receiving palliative care at any time during the measurement period
| | • Patient died prior to the end of the measurement period
| **Calculated Exclusion** | The following exclusions are calculated and applied after data submission:
| | • Patient without spirometry test (value and date)
| | • Patient whose most recent spirometry test value is greater than or equal to FEV1/FVC 0.7

Spirometry test can occur **any time** prior to or during the measurement period. If there is more than one spirometry assessment, the most recent test value prior to the end of the measurement period is used for calculating any potential exclusion.

| **Measure Scoring** | Rate/Proportion |
| **Interpretation of Score** | Higher score indicates better quality |
| **Measure Type** | Outcome, Patient Reported |
| **Risk Adjustment** | Data elements determined to be useful for assessing risk and predicting future outcomes will be collected as part of the data submission. Proposed elements include:
| | • Age
| | • Gender
| | • FEV1/FVC result
| | • Congestive Heart Failure
| | • BMI |
Controlling the Impact of COPD on Health Status

Measure Logic / Flow Chart

Was the patient 50 years or older at the start of the measurement period AND less than 81 years at the end of the measurement period?

Did the patient have at least one Established Patient office visit (Established Patient Value Set) with an eligible provider in an eligible specialty during the measurement period?

Did the patient have COPD (COPD, Emphysema, and Chronic Bronchitis Value Set) as a diagnosis on any contact during the measurement period or the 12 months prior to the start of the measurement period OR on their active problem list during the measurement period?

Did the patient have spirometry testing performed at any time and was the most recent spirometry FEV1/FVC result less than 0.7?

During the measurement period, did the patient complete at least one allowable COPD PROM?

During the measurement period, did the patient complete at least two allowable COPD PROM’s with at least 90 days in between completion?

Did the CAT increase by 2 or more, or did the CCQ increase by 0.4 or more between the earliest and latest tool administrations during the measurement period?

Additional optional exclusions include: permanent nursing home residents, hospice or palliative care, and death.

All patients in the eligible population must be included in data file for submission.

PATIENT INCLUDED IN ELIGIBLE POPULATION

PATIENT INCLUDED IN NUMERATOR

PATIENT NOT INCLUDED IN NUMERATOR

PATIENT NOT INCLUDED IN DENOMINATOR

PATIENT NOT INCLUDED IN DATA SUBMISSION
## Data Elements and Field Specifications

Use this section to build your data submission. The specifications contain detailed information regarding each column in the submission file, including column order, definitions, examples, and appropriate formatting.

<table>
<thead>
<tr>
<th>Column</th>
<th>Field Name</th>
<th>Notes</th>
<th>Excel Format</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Clinic ID</td>
<td>Enter the <strong>MNCM Clinic ID</strong> of the clinic to which the patient is attributed based on the attribution methodology detailed in Section V-A. Clinic IDs are listed in the MNCM Data Portal on the Clinics tab. Do NOT use the medical group ID. A blank field will create an ERROR upon submission. <strong>Quality Check:</strong> Verify that the ID in each cell matches the clinic ID in the MNCM Data Portal.</td>
<td>Text</td>
<td>905</td>
</tr>
</tbody>
</table>
| B      | Patient ID       | Enter a unique patient ID to identify each patient. The patient’s medical record number may be used. Medical groups or clinics that choose not to use the medical record number should:  
- NOT use the patient’s Social Security Number  
- Maintain a crosswalk between the patient ID and the medical record number or patient name and Date of Birth (DOB)  
A blank field will create an ERROR upon submission. **Quality Check:** Verify there are no duplicate patient records. | Text         | 56609    |
| C      | Patient Date of Birth | Enter patient’s date of birth. Patient must be 50 years or older at the start of the measurement period AND less than 81 years at the end of the measurement period.  
- The date of birth range for this age group is 04/01/1938 to 04/01/1968  
A blank field or value outside of the allowable range will create an ERROR upon submission. **Quality Check:** Verify each date of birth is within the accepted range. | Date (mm/dd/yyyy) | 05/08/1945 |
## Controlling the Impact of COPD on Health Status
### Data Collection

<table>
<thead>
<tr>
<th>Column</th>
<th>Field Name</th>
<th>Notes</th>
<th>Excel Format</th>
<th>Example</th>
</tr>
</thead>
</table>
| D      | Patient Gender                  | Enter the patient’s gender: Female = F  Male = M  Unknown = U

Unknown should be utilized for transgender or androgynous patients or in situations when the patient’s gender is not available in the record.

A blank field will create an ERROR upon submission.

**Quality Check**: Verify that each cell has one of the accepted codes. |
|        |                               |                                                                                                                          | Text         | F       |
| E      | Provider NPI Number            | Enter the 10-digit National Provider Identifier (NPI) of the provider to which the patient is attributed based on the attribution methodology detailed in Section V-A. |

A blank field will create an ERROR upon submission.

**Quality Check**: Verify each cell has data. |
|        |                               |                                                                                                                          | Text         | 1997993992 |
| F      | Provider Specialty Code       | Enter the specialty code of the physician. If the provider is not a physician, enter the specialty code of the supervising physician.

1 = Family Medicine  2 = Internal Medicine
5 = Geriatric Medicine  26 = Pulmonary Medicine

A blank field will create an ERROR upon submission.

**Quality check**: Verify each cell has an accepted code. |
|        |                               |                                                                                                                          | Number       | 26      |
## Controlling the Impact of COPD on Health Status

### Data Collection

<table>
<thead>
<tr>
<th>Column</th>
<th>Field Name</th>
<th>Notes</th>
<th>Excel Format</th>
<th>Example</th>
</tr>
</thead>
</table>
| G      | Spirometry Date         | Enter the date of the **most recent** spirometry result (FEV1/FVC) recorded in the medical record.  
- Do NOT enter a test date that occurred after the end of the measurement period. A date after the end of the measurement period will create an ERROR upon submission.  
- A test result from a provider outside of the reporting medical group is allowed if the result is documented in the reporting medical group’s patient record and is the most recent test result prior to the end of the measurement period.  
Leave BLANK if a spirometry test was not performed. Patients that do not have a spirometry test result or that have a spirometry test result greater than or equal to 0.7 **must** be included in the data file. | Date  
(mm/dd/yyyy) | 5/10/2015 |
| H      | Spirometry Result       | Enter the FEV1/FVC result of the **most recent** spirometry test performed.  
Leave BLANK if a spirometry test was not performed. Patients that do not have a spirometry test result or that have a spirometry test result greater than or equal to 0.7 **must** be included in the data file. | Number, decimal value | 0.6 |
| I      | Congestive Heart Failure| Enter the code that corresponds to whether or not the patient has a diagnosis of Congestive Heart Failure (Congestive Heart Failure Value Set) on an active problem list or coded on any prior contact.  
- **0** = No, the patient does not have a diagnosis of CHF  
- **1** = Yes, the patient does have a diagnosis of CHF  
A blank field will create an ERROR upon submission.  
**Quality check:** Verify each cell has an accepted code. | Number; Whole numbers only | 1 |
| J      | Height                  | Enter the patient’s height in inches. Submit the value as recorded in the patient record, including decimal points if applicable.  
Height must be collected (measured) in a clinical setting and not a patient reported value.  
Leave BLANK if height is not documented in the medical record.  
**Quality Check:** If data is entered, verify that the value is reasonable for a patient’s height measured in inches. | Number | 68.5 |
## Controlling the Impact of COPD on Health Status
### Data Collection

<table>
<thead>
<tr>
<th>Column</th>
<th>Field Name</th>
<th>Notes</th>
<th>Excel Format</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>Weight</td>
<td>Enter the patient’s weight in pounds. Submit the value as recorded in the patient record, including decimal points if applicable. Use the most recently recorded weight during the measurement period. Weight must be collected (measured) in a clinical setting and not a patient reported value. Leave BLANK if weight within the measurement period is not documented in the medical record. Quality Check: If data is entered, verify that the value is reasonable for a patient weight measured in pounds.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Number</td>
<td>132.4</td>
</tr>
</tbody>
</table>

### Instructions for COPD PRO Fields:
- If a COPD PRO tool (CAT or CCQ) was not completed during the measurement period, leave fields L through T BLANK.
- Assessment tools must be administered according to the PRO tool developer’s instructions and completed in their entirety (all questions answered) to be valid. **Do not submit scores from incomplete or invalid tools.** See Appendix C for more information.
- If the patient has only one assessment during the measurement period, enter data pertaining to that assessment in all applicable COPD PRO fields.
- If the patient has multiple PRO assessments during the measurement period:
  - all assessments must be completed with the same PRO tool to allow comparison;
  - the lowest score may be from any time during the measurement period;
  - the earliest score must be the first assessment during the measurement period;
  - the latest score must be the last (most recent) assessment during the measurement period.
- Depending on the number of times a patient is assessed with a PRO tool during the measurement period, some of the dates and scores for lowest, earliest and latest fields may be the same. This is expected and acceptable.

Please see Appendix C for more information about the PRO tools for this measure.

<p>| L      | COPD PRO Lowest Score Date | Enter the date of the lowest scoring COPD patient reported outcome tool administered any time during the measurement period. Leave BLANK if patient was not assessed with a COPD PRO. | Date (mm/dd/yyyy) | 11/10/2018 |</p>
<table>
<thead>
<tr>
<th>Column</th>
<th>Field Name</th>
<th>Notes</th>
<th>Excel Format</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>CAT PRO Lowest Score Value</td>
<td>Enter the result of the <strong>lowest</strong> scoring COPD Assessment Test (CAT) patient reported outcome tool administered any time during the measurement period. Leave BLANK if patient not assessed with CAT PRO tool. <strong>Quality Check:</strong> If data is entered, verify that the value is a whole number between zero and 40.</td>
<td>Number; whole</td>
<td>2</td>
</tr>
<tr>
<td>N</td>
<td>CCQ PRO Lowest Score Value</td>
<td>Enter the result of the <strong>lowest</strong> scoring Clinical COPD Questionnaire (CCQ) patient reported outcome tool administered any time during the measurement period. Leave BLANK if patient not assessed with CCQ PRO tool. <strong>Quality Check:</strong> If data is entered, verify that the value is a decimal between zero and six.</td>
<td>Number; decimal</td>
<td>1.6</td>
</tr>
<tr>
<td>O</td>
<td>COPD PRO Earliest Score Date</td>
<td>Enter the date of the <strong>earliest</strong> COPD patient reported outcome tool administered during the measurement period. Leave BLANK if patient was not assessed with a COPD PRO.</td>
<td>Date (mm/dd/yyyy)</td>
<td>5/14/2018</td>
</tr>
<tr>
<td>P</td>
<td>CAT PRO Earliest Score Value</td>
<td>Enter the result of the <strong>earliest</strong> COPD Assessment Test (CAT) patient reported outcome tool administered during the measurement period. Leave BLANK if patient not assessed with CAT PRO tool. <strong>Quality Check:</strong> If data is entered, verify that the value is a whole number between zero and 40.</td>
<td>Number; whole</td>
<td>8</td>
</tr>
</tbody>
</table>
## Controlling the Impact of COPD on Health Status

### Data Collection

<table>
<thead>
<tr>
<th>Column</th>
<th>Field Name</th>
<th>Notes</th>
<th>Excel Format</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q</td>
<td>CCQ PRO Earliest Score Value</td>
<td>Enter the result of the <strong>earliest</strong> Clinical COPD Questionnaire (CCQ) patient reported outcome tool administered during the measurement period. Leave BLANK if patient not assessed with CCQ PRO tool. <strong>Quality Check:</strong> If data is entered, verify that the value is a decimal between zero and six.</td>
<td>Number; decimal</td>
<td>0.7</td>
</tr>
<tr>
<td>R</td>
<td>COPD PRO Latest Score Date</td>
<td>Enter the date of the <strong>latest</strong> COPD patient reported outcome tool administered during the measurement period. Leave BLANK if patient was not assessed with a COPD PRO.</td>
<td>Date (mm/dd/yyyy)</td>
<td>2/21/2018</td>
</tr>
<tr>
<td>S</td>
<td>CAT PRO Latest Score Value</td>
<td>Enter the result of the <strong>latest</strong> COPD Assessment Test (CAT) patient reported outcome tool administered during the measurement period. Leave BLANK if patient not assessed with CAT PRO tool. <strong>Quality Check:</strong> If data is entered, verify that the value is a whole number between zero and 40.</td>
<td>Number; whole</td>
<td>6</td>
</tr>
<tr>
<td>T</td>
<td>CCQ PRO Latest Score Value</td>
<td>Enter the result of the <strong>latest</strong> Clinical COPD Questionnaire (CCQ) patient reported outcome tool administered during the measurement period. Leave BLANK if patient not assessed with CCQ PRO tool. <strong>Quality Check:</strong> If data is entered, verify that the value is a decimal between zero and six.</td>
<td>Number; decimal</td>
<td>0.7</td>
</tr>
</tbody>
</table>
Controlling the Impact of COPD on Health Status
Appendices

Appendix C: Patient Reported Outcome (PRO) Tools

The most important step in measuring the impact on health status and quality of life for patients with COPD is to implement the administration of a PRO tool into your clinic’s work flows. Participation in pilot testing requires the consistent use of a PRO tool to assess patients and documentation of the tool results in the medical record.

NOTE: All patients who meet eligible population criteria must be included in the data submission file, whether or not they were assessed with a PRO.

The COPD measure development group evaluated several tools for assessing COPD outcomes and creating a performance metric based on the scores of these PRO tools. The two PRO tools specified for use for this measure are:

- COPD Assessment Test (CAT)
- Clinical COPD Questionnaire (CCQ)

Participation in the pilot testing does not require the use of both tools, though if there are differences in provider preference, it is acceptable for a practice to implement both tools. If an individual patient is assessed multiple times during the measurement period all assessments for that patient must be completed with the same PRO tool to allow for the comparison of scores.

Documentation of tool results in the medical record can be accomplished using several options including but not limited to storing a paper tool in a paper record, scanning a paper tool into an electronic record, storing the results of a paper tool in discrete fields in an electronic record or creating electronic entry systems.

Additional Information about PRO Tools

Ideally tools are completed by the patient at the time of the visit; however office visits are not required for tool completion. Any provider or office staff may administer the PRO tool to the patient. PRO tool results must be documented in the medical record.

Acceptable Modes of Administration for Patient Reported Outcome (PRO) Tools

<table>
<thead>
<tr>
<th>Administration Mode</th>
<th>CAT</th>
<th>CCQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>In person/during visit</td>
<td>Acceptable</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Via mail</td>
<td>Acceptable</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Via telephone</td>
<td>Acceptable</td>
<td>Acceptable^</td>
</tr>
<tr>
<td>Electronic administration*</td>
<td>Acceptable with permission of developer</td>
<td>Acceptable with permission of MAPI Research Trust</td>
</tr>
</tbody>
</table>

*When administering electronically, the tool must be kept intact including content, order and scoring. Electronic examples: Email, patient portal, iPad/tablet, patient kiosk.

^ Telephone administration is acceptable provided that the questions are read exactly as stated and no help is offered in interpretation of the question to the patient.

<table>
<thead>
<tr>
<th>Other Activities</th>
<th>CAT</th>
<th>CCQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Store results in EMR</td>
<td>Acceptable</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Must seek approval for other uses</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
COPD Assessment Test (CAT)

MNCM has secured permission for use of the CAT from GlaxoSmithKline for providers participating in quality measurement reporting to MNCM. A PDF copy of the tool is available on the MLab Resources tab of the MNCM Data Portal.

Additionally, the CAT is publicly available at http://www.catestonline.org/english/indexEN.htm. The website includes an online tool where a patient can complete the assessment and receive their score. The assessment result is dated and can be printed and brought with the patient to their next clinic appointment.

Permissions for use include the following:

- The use of the instrument is limited to the specified project only and you shall not use, reproduce, distribute or otherwise refer to the instrument for any other purpose.
- Except for limited reformatting, the instrument cannot be modified or combined with other instruments without prior written approval.
- All eight questions of the CAT must appear verbatim, in order and displayed on one page (not divided).
- All trademark and copyright information must be maintained as they appear on the bottom of the COPD Assessment Tool (CAT) as stated below in italics:

  “The COPD Assessment Test was developed by a multi-disciplinary group of international experts in COPD supported by GSK. GSK activities with respect to the COPD Assessment Test are overseen by a governance board that includes independent external experts, one of whom chairs the board. CAT, COPD Assessment Test, and the CAT logo are trademarks of the GSK group of companies. ©2009 GSK. All rights reserved.”

- The CAT tool may be used electronically within an electronic medical record system, but approval of screen shots by the tool developer is required when the patient completes the CAT directly into the EMR/ iPad/ patient kiosk. Contact support@mncm.org for developer contact information to seek this permission.
- When the CAT is completed on paper or through the online website (patient prints a copy of completed tool) and the information is transcribed/ stored in the EMR, no additional permission is required.

The tool consists of eight questions and has a scoring range of zero to 40. The score of the tool is calculated by summing the scores of all eight questions. A difference in the score of 2 or more suggests a clinically significant change in health status.

Tests must be administered according to the PRO tool developer’s instructions. Tools that are not completed in their entirety (all eight questions answered) are invalid. If a patient selects multiple responses for a single question use the worst (highest) response provided for that question. Do not submit scores from incomplete or invalid tools.

## Interpretation of Scores (CAT User Guide)

<table>
<thead>
<tr>
<th>CAT Score</th>
<th>Impact Level</th>
<th>Broad Clinical Picture of Impact of COPD</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 30</td>
<td>Very High</td>
<td>Their condition stops them doing everything they want to do and they never have any good days. If they can manage to take a bath or shower, it takes them a long time. They cannot go out of the house for shopping or recreation, or do their housework. Often, they cannot go far from their bed or chair. They feel as if they have become an invalid.</td>
</tr>
<tr>
<td>&gt; 20</td>
<td>High</td>
<td>COPD stops them doing most things that they want to do. They are breathless walking around the home and when getting washed or dressed. They may be breathless when they talk. Their cough makes them tired and their chest symptoms disturb their sleep on most nights. They feel that exercise is not safe for them and everything they do seems too much effort. They are afraid and panic and do not feel in control of their chest problem.</td>
</tr>
<tr>
<td>10 - 20</td>
<td>Medium</td>
<td>COPD is one of the most important problems that they have. They have a few good days a week, but cough up sputum on most days and have one or two exacerbations a year. They are breathless on most days and usually wake up with chest tightness or wheeze. They get breathless on bending over and can only walk up a flight of stairs slowly. They either do their housework slowly or have to stop for rests.</td>
</tr>
<tr>
<td>&lt; 10</td>
<td>Low</td>
<td>Most days are good, but COPD causes a few problems and stops people doing one or two things that they would like to do. They usually cough several days a week and get breathless when playing sports and games and when carrying heavy loads. They have to slow down or stop when walking up hills or if they hurry when walking on level ground. They get exhausted easily.</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Upper limit of normal in healthy non-smokers</td>
</tr>
</tbody>
</table>
COPD Clinical Questionnaire (CCQ)

The CCQ tool is available by contacting MAPI Trust who holds the copyright of the tool. Sources for obtaining the tool indicate free use for individual clinical practice; however an account is required for the eProvide database system in order to request a copy of the tool and submit a user agreement. MAPI Trust Inc via eProvide database at https://eprovide.mapi-trust.org/instruments/clinical-copd-questionnaire/online-distribution

Permissions for use include the following:

- Refer to the user agreement established with MAPI Trust when obtaining a copy of the CCQ from MAPI Trust or https://eprovide.mapi-trust.org/instruments/clinical-copd-questionnaire#contact_and_conditions_of_use

The tool consists of 10 questions and the score of each question is based on a zero to six Likert scale. The tool is scored by summing the scores of all 10 questions (summary score range of 0 to 60) and then finding the mean (divide summary score by 10). The mean is the score of the tool and the value that should be submitted. Example: The summary score of all 10 questions is 16 and the mean is 1.6; therefore, the score of the tool is 1.6.

The CCQ tool’s scoring range is zero to six, with a lower score indicating better health status. The score of the tool is expressed with decimal points. A difference in the score of 0.4 or more suggests a clinically significant change in health status (MCID).

Tools that are not completed in their entirety (all 10 questions answered) are considered invalid. Tools with multiple responses for a single question are considered incomplete and therefore invalid. Do not submit scores from incomplete or invalid tools.

There is an online tool for patients to complete and receive their score at http://ccq.nl/; however, the score generated from the online tool can only be submitted when all ten questions are completed by the patient.