

The Aims and Measures section is intended to provide protocol users with a menu of measures for multiple purposes that may include the following:

- population health improvement measures,
- quality improvement measures for delivery systems,
- measures from regulatory organizations such as Joint Commission,
- measures that are currently required for public reporting,
- measures that are part of Center for Medicare Services Clinician Quality Reporting initiative, and
- other measures from local and national organizations aimed at measuring population health and improvement of care delivery.

This section provides resources, strategies and measurement for use in closing the gap between current clinical practice and the recommendations set forth in the guideline.

The subdivisions of this section are:

- Aims and Measures

Aims and Measures

1. Decrease the percentage of COPD patients who have exacerbation requiring emergency department evaluation or hospital admission.

Measures for accomplishing this aim:

- a. Percentage of COPD patients seen in emergency department for COPD-related exacerbations in one month.
- b. Percentage of COPD patients who require hospital admission/readmission for COPD-related exacerbations in one month.
- c. Percentage of COPD patients with two or more hospitalizations over a 12-month period.

2. Increase the use of spirometry testing in the diagnosis of patients with COPD.

Measure for accomplishing this aim:

- a. Percentage of patients with a diagnosis of COPD who had spirometry testing to establish COPD diagnosis.

3. Increase the percentage of COPD patients who receive information on the tobacco cessation options and information on the risks of continued smoking.

Measures for accomplishing this aim:

- a. Percentage of patients with COPD who are asked about smoking and smoking exposure at every visit with clinician.
- b. Percentage of patients with COPD who are smokers who have assessment of readiness to attempt smoking cessation.
- c. Percentage of patients with COPD who are smokers who receive a smoking cessation intervention.
- d. Percentage of patients with COPD and smokers who quit smoking (100% quit-rate goal).

4. Increase the percentage of patients with COPD who have appropriate therapy prescribed.

Measure for accomplishing this aim:

- a. Percentage of patients with COPD who are prescribed appropriate therapy, including:
 - appropriate vaccinations per CDC schedule
 - long-term oxygen assessment and prescription for long-term home oxygen for those who are hypoxic and meet criteria
 - short-acting bronchodilator (when needed)
 - long-acting bronchodilator (when needed)
 - corticosteroids (when needed)

5. Increase the percentage of patients who have education and management skills with COPD.

Measure for accomplishing this aim:

- a. Percentage of patients with moderate or severe COPD who have been referred to a pulmonary rehabilitation or exercise program.

Aims and Measures

6. Increase the percentage of patients with moderate or severe COPD who have health directives in place.

Measure for accomplishing this aim:

- a. Percentage of patients with moderate or severe COPD who have health care directives in place.

Aims and Measures

Measurement Specifications

Measure #1a

Percentage of COPD patients seen in emergency room for COPD-related exacerbations in one month.

Population Definition

Patients 18 years and older with COPD diagnosis.

Data of Interest

$$\frac{\text{\# of patients seen in emergency room for COPD-related exacerbations}}{\text{\# of patients with COPD}}$$

Numerator/Denominator Definitions

Numerator: Number of patients with COPD who are seen in emergency room for COPD-related exacerbations in one month.

Denominator: Number of patients with COPD diagnosis.

Method/Source of Data Collection

Review electronic medical records for all patients with COPD. Review records to determine whether they were seen in the emergency room for COPD-related exacerbations.

Time Frame Pertaining to Data Collection

Monthly.

Notes

This is an outcome measure, and improvement is noted as a decrease in the rate.

Aims and Measures

Measure #1b

Percentage of COPD patients who require hospital admission/readmission for COPD-related exacerbations in one month.

Population Definition

Patients 18 years and older with COPD diagnosis.

Data of Interest

$$\frac{\text{\# of patients who were hospitalized for COPD-related exacerbations}}{\text{\# of patients with COPD}}$$

Numerator/Denominator Definitions

Numerator: Number of patients with COPD who were hospitalized for COPD-related exacerbations in one month.

Denominator: Number of patients with COPD diagnosis.

Method/Source of Data Collection

Review electronic medical records for all patients with COPD. Review records to determine whether they were hospitalized during the measurement period for COPD-related exacerbations.

Time Frame Pertaining to Data Collection

Measurement period could be weekly, monthly, quarterly or annual.

Notes

This is an outcome measure, and improvement is noted as a decrease in the rate.

Aims and Measures

Measure #1c

Percentage of COPD patients with two or more hospitalizations over a 12-month period.

Population Definition

Patients 18 years and older with COPD diagnosis.

Data of Interest

$$\frac{\text{\# of patients who were hospitalized two or more times}}{\text{\# of patients with COPD}}$$

Numerator/Denominator Definitions

Numerator: Number of patients with COPD who were hospitalized for COPD-related exacerbations two or more times over a 12-month period.

Denominator: Number of patients with COPD diagnosis.

Method/Source of Data Collection

Review electronic medical records for all patients with COPD diagnosis during a 12-month measurement period. Review records to determine whether they were hospitalized during this measurement period for COPD-related exacerbations two or more times.

Time Frame Pertaining to Data Collection

Annually.

Notes

This is an outcome measure, and improvement is noted as a decrease in the rate.

Aims and Measures

Measure #2a

Percentage of patients with a diagnosis of COPD who had spirometry testing to establish COPD diagnosis.

Population Definition

Patients 18 years and older with COPD diagnosis.

Data of Interest

$$\frac{\# \text{ of patients who had spirometry testing to establish COPD diagnosis}}{\# \text{ of patients with COPD}}$$

Numerator/Denominator Definitions

Numerator: Number of patients with COPD who had spirometry testing to establish COPD diagnosis.

Denominator: Number of patients with COPD diagnosis.

Method/Source of Data Collection

Review electronic medical records for all patients with COPD. Review records to determine whether spirometry testing was used to establish COPD diagnosis.

Time Frame Pertaining to Data Collection

Monthly.

Notes

This is a process measure, and improvement is noted as an increase in the rate. Check for quality of spirometry reading on a case-by-case basis.

Aims and Measures

Measure #3a

Percentage of patients with COPD who are asked about smoking and smoking exposure at every visit with clinician.

Population Definition

Patients age 18 years and older with COPD diagnosis.

Data of Interest

of patients with COPD who are asked about smoking and smoking exposure at every visit with clinician

of patients with COPD

Numerator/Denominator Definitions

Numerator: Number of patients with COPD who are asked about smoking and smoking exposure at every visit with clinician.

Denominator: Number of patients with COPD.

Method/Source of Data Collection

Review electronic medical records for all patients with COPD. Review records to determine whether patients were asked at every visit with clinician about smoking and smoking exposure.

Time Frame Pertaining to Data Collection

Monthly.

Notes

This is a process measure, and improvement is noted as an increase in the rate.

Aims and Measures

Measure #3b

Percentage of patients with COPD who are smokers who have assessment of readiness to attempt smoking cessation.

Population Definition

Patients 18 years and older with COPD diagnosis and smokers.

Data of Interest

$$\frac{\text{\# of patients who have assessment of readiness to attempt smoking cessation}}{\text{\# of patients with COPD and smokers}}$$

Numerator/Denominator Definitions

Numerator: Number of patients with COPD and smokers who have assessment of readiness to attempt smoking cessation.

Denominator: Number of patients with COPD diagnosis and smokers.

Method/Source of Data Collection

Review electronic medical records for all patients with COPD who also smoke. Review records to determine whether they had assessment of readiness to attempt smoking cessation at any time during measurement period.

Time Frame Pertaining to Data Collection

Monthly.

Notes

This is a process measure, and improvement is noted as an increase in the rate.

Aims and Measures

Measure #3c

Percentage of COPD patients who are smokers who receive a smoking cessation intervention.

Population Definition

Patients 18 years and older with COPD diagnosis and smokers.

Data of Interest

$$\frac{\text{\# of patients who receive a smoking cessation intervention}}{\text{\# of patients with COPD and smokers}}$$

Numerator/Denominator Definitions

Numerator: Number of patients with COPD and smokers who receive a smoking cessation intervention.

Denominator: Number of patients with COPD diagnosis and smokers.

Method/Source of Data Collection

Review electronic medical records for all patients with COPD and who are also smokers. Review records to determine whether they received a smoking cessation intervention during measurement period.

Time Frame Pertaining to Data Collection

Monthly.

Notes

This is a process measure, and improvement is noted as an increase in the rate.

Aims and Measures

Measure #3d

Percentage of patients with COPD and smokers who quit smoking (100% quit-rate goal).

Population Definition

Patients 18 years and older with COPD diagnosis and smokers.

Data of Interest

$$\frac{\text{\# of patients who quit smoking}}{\text{\# of patients with COPD and smokers}}$$

Numerator/Denominator Definitions

Numerator: Number of patients with COPD and smokers who quit smoking.

Denominator: Number of patients with COPD diagnosis and smokers.

Method/Source of Data Collection

Review electronic medical records for all patients with COPD and who are also smokers. Review records to determine whether they quit smoking at some point of their care.

Time Frame Pertaining to Data Collection

Annually.

Notes

This is an outcome measure, and improvement is noted as an increase in the rate. The target goal for quit rate is 100%.

Aims and Measures

Measure #4a

Percentage of patients with COPD who are prescribed appropriate therapy, including:

- appropriate vaccinations per CDC schedule
- long-term oxygen assessment and prescription for long-term home oxygen for those who are hypoxic and meet criteria
- short-acting bronchodilator (when needed)
- long-acting bronchodilator (when needed)
- corticosteroids (when needed)

Population Definition

Patients 18 years and older with COPD diagnosis.

Data of Interest

$$\frac{\text{\# of patients who are prescribed appropriate therapy}}{\text{\# of patients with COPD}}$$

Numerator/Denominator Definitions

Numerator: Number of patients with COPD who are prescribed appropriate therapy, including:

- appropriate vaccinations per CDC schedule
- long-term oxygen assessment and prescription for long-term home oxygen for those who are hypoxic and meet criteria
- short-acting bronchodilator (when needed)
- long-acting bronchodilator (when needed)
- corticosteroids (when needed)

Denominator: Number of patients with COPD diagnosis.

Method/Source of Data Collection

Review electronic medical records for all patients with COPD and determine if they were prescribed an appropriate therapy based on their need.

Time Frame Pertaining to Data Collection

Monthly.

Notes

This is a process measure, and improvement is noted as an increase in the rate.

Aims and Measures

Measure #5a

Percentage of patients with moderate or severe COPD who have been referred to a pulmonary rehabilitation or exercise program.

Population Definition

Patients 18 years and older with COPD diagnosis.

Data of Interest

$$\frac{\# \text{ of patients referred to a pulmonary rehabilitation or exercise program}}{\# \text{ of patients with COPD}}$$

Numerator/Denominator Definitions

Numerator: Number of patients with moderate or severe COPD referred to a pulmonary rehabilitation or exercise program.

Denominator: Number of patients with moderate or severe COPD.

Method/Source of Data Collection

Review electronic medical records for all patients with moderate or severe COPD diagnosis during measurement period. Determine whether patients were referred to a pulmonary rehabilitation or exercise program at any time.

Time Frame Pertaining to Data Collection

Monthly.

Notes

This is a process measure, and improvement is noted as an increase in the rate.

Aims and Measures

Measure #6a

Percentage of patients with moderate or severe COPD who have health care directives in place.

Population Definition

Patients 18 years and older with COPD diagnosis.

Data of Interest

$$\frac{\text{\# of patients who have health care directives in place}}{\text{\# of patients with moderate or severe COPD}}$$

Numerator/Denominator Definitions

Numerator: Number of patients with moderate or severe COPD who have health care directives in place.

Denominator: Number of patients with moderate or severe COPD.

Method/Source of Data Collection

Review electronic medical records for all patients with moderate or severe COPD. Determine whether patients have health care directives in place.

Time Frame Pertaining to Data Collection

Monthly.

Notes

This is a process measure, and improvement is noted as an increase in the rate.