

**COPD**  
**Spirometry**

**Description**

The percentage of adults aged 40 years and older who were identified as having COPD with at least one spirometry test in the measurement year or the year prior. A higher proportion indicates better performance as reflected by appropriate guideline-based care.

**Calculation**

This measure requires administrative claims data and is calculated as follows:

The percentage of eligible patients with at least one spirometry test claim in the measurement year or the year prior. (numerator divided by denominator).

**Definitions**

**Spirometry Testing**     Pulmonary function tests that are used to diagnose and monitor lung disease.

**Codes to Identify Spirometry Testing:**

Description	CPT
Spirometry	94010, 94011, 94012, 94060, 94070, 94150, 94200, 94375, 94726, 94727

**Eligible Population**

- Ages**                             Patients age 40 and older at the start of the measurement year.
- Enrollment**                    Continuous enrollment during both the measurement year and the year prior (no more than 30-day gap and must be enrolled in last month of measurement year)
- Diagnosis**                        Diagnosis of COPD in the measurement year or the year prior (see COPD Population Specification).

**Codes to Identify Diagnosis of COPD:**

Condition Name	ICD-10 Code(s)
Simple chronic bronchitis	J41.0
Mucopurulent chronic bronchitis	J41.1
Mixed simple and mucopurulent chronic bronchitis	J41.8
Unspecified chronic bronchitis	J42
Unilateral pulmonary emphysema [MacLeod's syndrome]	J43.0
Panlobular emphysema	J43.1
Centrilobular emphysema	J43.2
Other emphysema	J43.8

Emphysema, unspecified	J43.9
Chronic obstructive pulmonary disease with (acute) lower respiratory infection	J44.0
Chronic obstructive pulmonary disease with (acute) exacerbation	J44.1
Chronic obstructive pulmonary disease, unspecified	J44.9

## Specification

**Denominator** Eligible Population defined above, excluding conditions specified below.

**Numerator** Patients in the denominator with at least one code for spirometry within the measurement year or the year prior.

## Exclusions

COPD Patients with any of the diagnoses listed below in the measurement year or year prior and those under hospice care or who died during the measurement year are excluded.

### Codes to Identify Exclusions:

Exclusions for COPD	
Condition Name	ICD-10 Code(s)
Lung transplant	Z94.2, Z94.3
Cystic Fibrosis	E84.0, E84.1, E84.8, E84.9
Sarcoidosis	D86.0, D86.9
Interstitial Lung Disease	J84, J84.0, J84.01, J84.02, J84.03, J84.09, J84.1, J84.10, J84.11, J84.111, J84.112, J84.113, J84.114, J84.115, J84.116, J84.117, J84.17, J84.170, J84.178, J84.2, J84.8, J84.81, J84.82, J84.83, J84.84, J84.841, J84.842, J84.843, J84.848, J84.89, J84.9
Primary Pulmonary Hypertension	I27.0, I27.20, I27.23, I27.24, I27.29
Other Chronic Lung Disease	J98.4, J89.9
Asthma	J45.2, J45.20, J45.21, J45.22, J45.3, J45.30, J45.31, J45.32, J45.0, J45.40, J45.41, J45.42, J45.5, J45.50, J45.51, J45.52, J45.901, J45.902, J45.909, J45.990, J45.991, J45.998, J82.83
Hospice/Palliative care or Discharge status=Expired	ICD 10: Z51.5 (palliative care)  UB rev: 0115,0125,0135,0145, 0155,0235,0650,0651,0652,0655,0656, 0657,0658,0659  Type of Bill: 810,811,812,813,814, 815,817,818,819,820,821,822,823,824, 825,827,828,829  Place of service: 34  CPT: G0182,G9473,G9474,G9475, G9476,G9477,G9478,G9479,Q5003,Q 5004,Q5005,Q5006,Q5007,Q5008,Q50 10,S9126,T2042,T2043,T2044,T2045, T2046,99377,99378

	Discharge status: 50 Hospice - Home; 51 Hospice - Medical Facility (Certified); 20- Expired, 40- Expired at Home, 41- Expired in a Medical facility, 42- Expired - Place Unknown
--	--

### **Notes**

---

- Levels of analysis: PO, practice

### **References**

---

- Global Initiative for Chronic Obstructive Lung Disease (GOLD) 2022 GOLD Reports: <https://goldcopd.org/2022-gold-reports-2/>
- American Thoracic Society (ATS):
  - Standardization of Spirometry 2019 Update. An Official ATS and ERS Technical Statement: <https://www.atsjournals.org/doi/full/10.1164/rccm.201908-1590ST>
- UpToDate: Overview of Pulmonary Function Testing in Adults: <https://www.uptodate.com/contents/overview-of-pulmonary-function-testing-in-adults>