

Adult Asthma

Spirometry

Description

The percentage of patients 19 years of age and older who were identified as having asthma, regardless of severity, 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 one year prior. (numerator divided by denominator).

Definitions

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

Codes Identify Spirometry Testing:

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

Eligible Population

- Ages** Patients ages 19 years 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 asthma in the measurement year or the year prior (see Asthma Population Specification).

Codes to Identify Diagnosis of Asthma:

Condition Name	ICD-10 Code(s)
Mild intermittent asthma	J45.2
Mild intermittent asthma, uncomplicated	J45.20
Mild intermittent asthma with (acute) exacerbation	J45.21
Mild intermittent asthma with status asthmaticus	J45.22
Mild persistent asthma	J45.3
Mild persistent asthma, uncomplicated	J45.30
Mild persistent asthma with (acute) exacerbation	J45.31

Mild persistent asthma with status asthmaticus	J45.32
Moderate persistent asthma	J45.0
Moderate persistent asthma, uncomplicated	J45.40
Moderate persistent asthma with (acute) exacerbation	J45.41
Moderate persistent asthma with status asthmaticus	J45.42
Severe persistent asthma	J45.5
Severe persistent asthma, uncomplicated	J45.50
Severe persistent asthma with (acute) exacerbation	J45.51
Severe persistent asthma with status asthmaticus	J45.52
Unspecified asthma with (acute) exacerbation	J45.901
Unspecified asthma with status asthmaticus	J45.902
Unspecified asthma, uncomplicated	J45.909
Exercise induced bronchospasm	J45.990
Cough variant asthma	J45.991
Other asthma	J45.998
Eosinophilic asthma	J82.83

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

Adult asthma patients with prior 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:

Condition Name	Exclusions for Asthma	ICD-10 Code(s)
Cystic Fibrosis		E84.0, E84.1, E84.8, E84.9
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, I227.20, I27.23, I27.24, I27.29
Sarcoidosis		D86.0, D86.9
Other Chronic Lung Disease: Patients with other chronic lung diseases that are not asthma or asthma/COPD overlap		J98.4, J98.9
Lung Transplant		Z94.2, Z94.3
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, 815,817,818,819,820,821,822,823,824,825,827,8 28,829

	Place of service: 34 CPT: G0182,G9473,G9474,G9475, G9476,G9477,G9478,G9479,Q5003,Q5004,Q500 5,Q5006,Q5007,Q5008,Q5010,S9126,T2042,T20 43,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
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Notes

- Levels of analysis: PO, practice

References

- Global Initiative for Asthma (GINA) 2021 Reports: <https://ginasthma.org/gina-reports/>
- American Thoracic Society:
 - Standardization of Spirometry 2019 Update. An Official ATS and ERS Technical Statement: <https://www.atsjournals.org/doi/full/10.1164/rccm.201908-1590ST>
- Choosing Wisely: Spirometry for Asthma: <https://www.choosingwisely.org/patient-resources/spirometry-for-asthma/>