

Pediatric Asthma

Instruction in, and demonstration of, proper use of new respiratory medication delivery device

Description

Percentage of patients at least 2 years of age to less than 19 years of age who were identified as having asthma, regardless of severity, with at least one claim for inhaler education billing code CPT 94664 in the measurement year. A higher proportion indicates better performance as reflected by appropriate instruction and use.

Calculation

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

The percentage of eligible patients who have at least one claim for CPT 94664 in the measurement year (Instructed numerator divided by denominator).

Definitions

CPT 94664 Demonstration and/or evaluation of patient utilization of an aerosol generator, nebulizer, metered dose inhaler or Intermittent Positive Pressure Breathing device.

Eligible Population

Ages Patients ages 2 years to less than 19 years of age at the start of the measurement year.

Enrollment Continuous enrollment during the measurement year (no more than 30-day gap and must be enrolled in month 12).

Diagnosis Diagnosis of asthma in the measurement year or the year prior (see Asthma Population Specification).

Codes to Identify Diagnosis of Asthma

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 that have at least one claim for inhaler education billing code CPT 94664 in the measurement year.

Exclusions

Pediatric asthma patients with prior diagnoses listed in table below and those under hospice care or who died during the measurement year are excluded.

Codes to Identify Exclusions

Condition Name	Exclusions for Ped 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: Patient with other chronic lung disease that are not asthma or asthma/COPD overlap		J98.4, J98.9
Lung Transplant		Z94.2, Z94.3
Bronchiectasis		J47.0, J47.1, J47.9
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,Q5004,Q5005,Q 5006,Q5007,Q5008,Q5010,S9126,T2042,T2043,T20 44,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/>
- UpToDate: Patient education: Asthma inhaler techniques in children (Beyond the Basics): <https://www.uptodate.com/contents/asthma-inhaler-techniques-in-children-beyond-the-basics>