

Pulmonary Rehabilitation Within 90 Days of COPD Hospital Discharge

Description

The percentage of COPD-related hospitalizations in the first 9 months of the measurement year for patients ages 40 and older as of the first day of the measurement year identified as having COPD or Asthma-COPD overlap with at least one pulmonary rehab visit within 90 days of discharge from any qualifying hospitalization. A higher percentage of hospitalizations with at least one pulmonary rehab claim indicates better performance.

Calculation

This measure requires administrative data and is calculated as follows:

The percentage of COPD-related hospitalizations at least 90 days apart with at least one pulmonary rehab visit 90 days after hospital discharge (numerator divided by denominator).

Definitions

Pulmonary Rehabilitation

A medically supervised program that includes structured exercise, health/nutrition education, behavior modification, and breathing techniques. Research has shown that people who start pulmonary rehabilitation within three months of COPD-related hospitalization are at significantly lower risk of death after one year compared to those who start pulmonary rehabilitation later or those who do not take part in pulmonary rehabilitation.

Eligible Population

Ages	Adults ages 40 years or older on the first day of the measurement year.
Enrollment	Patients with asthma-COPD overlap or COPD with at least one COPD-related hospitalization discharge date in the measurement year from which the patient was discharged to home or home health on or before the last day of the 9th month of the measurement year (to allow for 90-day followup). Must be continuously enrolled in the measurement year with no more than 30-day gap and enrolled in month 12.
Event/Diagnosis	COPD-related hospitalizations identified using diagnosis codes below with at least one pulmonary rehab claim within 90 days of discharge

Codes to Identify Hospitalizations FACILITY BILLS ONLY

Description	CPT	Type of Bill + DRG + UBRev criteria	UB Revenue	POS
Inpatient Hospitalization	99221-99226, 99231-99233, 99234-99236, 99238-99239, 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99291	if TYPE_OF_BILL starts with 11 or 12' and DRG exists and is not in ('945', '946', '949', '950') and REVENUE_CODE not in ('0118', '0128', '0138', '0148', '0158')	0100, 011X, 0120-0124, 0126-0129, 0130-0134, 0136-0139, 0140-0144, 0146-0149, 0150-0154, 0156-0159, 0160, 0164, 0167, 0169, 0170-0174, 0179, 0190-0194, 0199	21

Codes to Identify Diagnosis of COPD-related hospitalizations

Primary DX of COPD	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
Primary dx respiratory failure with secondary dx COPD exacerbation (ICD-10 J44.0, J44.1)	ICD-10 Code(s)
Acute respiratory failure, unspecified whether with hypoxia or hypercapnia	J96.00
Acute respiratory failure with hypoxia	J96.01
Acute respiratory failure with hypercapnia	J96.02
Acute and chronic respiratory failure, unspecified whether with hypoxia or hypercapnia	J96.20
Acute and chronic respiratory failure with hypoxia	J96.21
Acute and chronic respiratory failure with hypercapnia	J96.22
Respiratory failure, unspecified, unspecified whether with hypoxia or hypercapnia	J96.90
Respiratory failure, unspecified with hypoxia	J96.91
Respiratory failure, unspecified with hypercapnia	J96.92
Acute respiratory distress	R06.03

Respiratory arrest	R09.2
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Codes to Identify Discharge Status = Home or Home Health

Discharge status	Description
1	Home or Self Care
6	Home Under Care of Organized Home Health Service Organization in Anticipation of Covered Skilled Care
7	Left Against Medical Advice or Discontinued Care

Codes to Identify Pulmonary Rehabilitation

Description	HCPCS/ CPT and UBREV Codes
Pulmonary rehabilitation, including exercise (includes monitoring), one hour, per session, up to two sessions per day (terminated Dec. 31 2021)	G0424
Therapeutic procedures to increase strength or endurance of respiratory muscles, face to face, one on one, each 15 minutes (includes monitoring)	G0237
Therapeutic procedures to improve respiratory function, other than described by g0237, one on one, face to face, per 15 minutes (includes monitoring)	G0238
Therapeutic procedures to improve respiratory function or increase strength or endurance of respiratory muscles, two or more individuals (includes monitoring)	G0239
MD or other qualified HCP services for outpatient PR; without continuous SpO2 (per session)	94625
MD or other qualified HCP services for outpatient PR; with continuous SpO2 (per session)	94626
Pulmonary rehabilitation program, non-physician provider, per diem	S9473
UB Revenue center code for Pulmonary rehabilitation	0948

Specification

Denominator Eligible COPD-related hospitalizations as defined above (minus patient exclusions below) discharged to home or home health in the measurement year. ***If a patient has more than one COPD-related hospitalization in the measurement period, only the first and any re-hospitalizations at least 90 days apart should be included.***

Numerator Eligible COPD-related hospitalizations included in the denominator for which a pulmonary rehab claim exists within 90 days of discharge.

Exclusions

- See Codes to Identify Exclusions (same as population identification exclusions)
- Also exclude COPD patients that had 24 or more pulmonary rehab visits in the past 3 years
- Any hospitalizations where the patient was not discharged to home or home health.

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, J98.9
Hospice/Palliative care or Discharge status=Expired	<p>ICD 10: Z51.5 (palliative care)</p> <p>UB rev: 0115,0125,0135,0145, 0155,0235,0650,0651,0652,0655,0656, 0657,0658,0659</p> <p>Type of Bill: 10,811,812,813,814, 815,817,818,819,820,821,822,823,824,825,827,828,829</p> <p>Place of service: 34</p> <p>CPT: 0182,G9473,G9474,G9475, G9476,G9477,G9478,G9479,Q5003,Q5004,Q5005,Q5006,Q5007,Q5008,Q5010,S9126,T2042,T2043,T2044,T2045,T2046,99377,99378</p> <p>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</p>

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