

## Suspected COPD

Patients with chronic respiratory symptoms and risk factors and > 40 years of age.

Order spirometry pre and post.

If post bronchodilator FEV1/FVC ratio < 0.7, utilize **Confirmed COPD** protocol.

## Confirmed COPD

Patients with two or more exacerbations in the last 12 months, or one hospital admission for COPD are considered **High Risk**. Otherwise, proceed to **Low Risk** protocol.

### Low Risk

If mMrc dyspnea score is < 2, proceed to **Group A** protocol

If mMrc dyspnea score is ≥ 2, proceed to **Group B** protocol

#### Group A - Low Risk

##### Lifestyle Recommendations

Smoking cessation counseling at every visit

##### Preventive Care

Annual flu vaccine

Pneumonia vaccine

##### Medication Management

**Short-acting bronchodilator**

Do not use inhaled corticosteroid alone for any patients with COPD

##### Follow-up Intervals

Every 3-6 months for chronic disease management

##### Care Team Interventions

Utilize clinical pharmacist for chronic disease management

Consider referral to care manager, BHC, or Community Resource coordinator based on patient's needs.

#### Group B - Low Risk

All **Group A** standards plus

##### Medication Management

Long-acting bronchodilator

LABA, LABA/ICS, or LAMA

If still symptomatic, escalate treatment to LAMA/LABA or LAMA/LABA/ICS

##### Referrals

Referral to Pulmonary Rehab

### High Risk

If mMrc dyspnea score is < 2, proceed to **Group C** protocol

If mMrc dyspnea score is ≥ 2, proceed to **Group D** protocol

#### Group C - High Risk

All **Group A** standards plus

##### Medication Management

Initiate LAMA

If still experiencing exacerbations or symptomatic, consider LAMA/ICS or LAMA/LABA. If this fails, consider LAMA/LABA/ICS.

If peripheral eos > 200, consider using an inhaled steroid containing regimen.

##### Exacerbating Diseases

If peripheral eos > 200, suspect comorbid asthma

##### Referrals

Referral to Pulmonary Rehab

Consider referral to Pulmonology

#### Group D - High Risk

All **Group A** standards plus

##### Medication Management

Initiate LAMA/LABA/ICS

If not responding to ICS, discontinue.

If peripheral eos > 200, consider using an inhaled steroid containing regimen.

##### Exacerbating Diseases

If peripheral eos > 200, suspect comorbid asthma

##### Referrals

Referral to Pulmonology for advanced therapy

**Note to Providers** This pathway can be used as a treatment guide for patients with suspected COPD. For the patients with confirmed COPD, use this guide to determine next treatment steps, and if a referral to Pulmonology is appropriate.

## COPD Medications

### Short-Acting Bronchodilators

#### Inhalers

albuterol (PROAIR)  
 levalbuterol (XOPENEX)  
 ipratropium-albuterol (COMBIVENT RESPIMAT)

#### Nebulizers

ipratropium-albuterol (DUO-NEB)  
 albuterol

### LABA

salmeterol (SEREVENT DISKUS)  
 olodaterol (STRIVERDI RESPIMAT)  
 indacaterol (ARCAPTA NEOHALER)

### LABA/ICS

fluticasone propion-salmeterol (ADVAIR DISKUS or ADVAIR HFA)  
 fluticasone furoate-vilanterol (BREQ ELLIPTA)  
 mometasone-formoterol (DULERA)  
 budesonide-formoterol (SYMBICORT)

### LAMA

glycopyrrolate (SEEBRI NEOHALER)  
 umeclidinium (INCRUSE ELLIPTA)  
 tiotropium bromide (SPIRIVA RESPIMAT)  
 tiotropium (SPIRIVA WITH HANDIHALER)  
 aclidinium bromide (TUDORZA PRESSAIR)  
 ipratropium (ATROVENT)

### LAMA/LABA

umeclidinium-vilanterol (ANORO ELLIPTA)  
 glycopyrrolate-formoterol (BEVESPI AEROSPHERE)  
 tiotropium-olodaterol (STIOLTO RESPIMAT)  
 indacaterol-glycopyrrolate (UTIBRON NEOHALER)

### LAMA/LABA/ICS

fluticasone-umeclidinium-vilanterol (TRELEGY ELLIPTA)

## mMrc (Modified Medical Research Council) Dyspnea Scale

*Stratifies severity of dyspnea in respiratory diseases, particularly COPD.*

Symptom severity	
0	Dyspnea only with strenuous exercise
+1	Dyspnea when hurrying or walking up a slight hill
+2	Walks slower than people of the same age because of dyspnea or has to stop for breath when walking at own pace
+3	Stops for breath after walking 100 yards (91 m) or after a few minutes
+4	Too dyspneic to leave house or breathless when dressing.