



Mild: FEV1 $\geq 80\%$ predicted	Consider referring to a respirologist if not responding to treatment as outlined below
Moderate: FEV1 50-80% predicted	Consider referring to a respirologist if symptomatic or FEV1<70%, document GOC discussion
Severe: FEV1 30-49% predicted	Patient should be seen by a respirologist, document GOC discussion
Very Severe: FEV1<30%	Patient should be seen by a respirologist, document GOC discussion

Assessing symptoms – Consider:
[COPD Assessment Test \(CAT\)](#)
[MRC grade](#)

Refer your patient:
[Pulmonary Function Laboratory at KHSC – HDH site](#)

Initiating treatment for COPD

Preventative measures for all COPD patients

Vaccinations: Pneumococcal vaccine, **yearly** influenza vaccine, **yearly** covid vaccine, Herpes Zoster vaccine

Smoking cessation: Counselling, nicotine replacement (STOP program), Bupropion, Varenicline ([Resources](#))

Advanced care planning: Discuss and document goals of care and wishes in the event of an exacerbation

COPD action plan:

- For increased dyspnea, cough: **prednisone 40mg po daily x 5 days and**
- If fever or green/brown sputum: **add antibiotics** ex: Amox-Clav 875mg BiD x 5-7 days, Levofloxacin 750mg po daily x 5-7 days; Moxifloxacin 400mg po daily x 5-7 days.
- [COPD action plan template](#)

Pharmacological treatment for COPD

Stable COPD management

- 1) *If FEV1 ≥ 80% predicted, few symptoms and no previous AECOPD:*

Prescribe either **LABA (formoterol, salmeterol)** or **LAMA (tiotropium, aclidinium, umeclidinium, glycopyrronium).**

- 2) *If FEV1 <80% predicted and stable COPD without exacerbations but patient has significant symptom burden:*

Prescribe both **LABA AND LAMA** or a **combination product with both ingredients.**

If FEV1 <80% predicted and stable COPD without exacerbations but patient has significant symptom burden despite taking LAMA & LABA:

Add inhaled steroid by switching to a LAMA/LABA/ICS combination puffer. In addition to triple inhaled therapy consider **referring to pulmonary rehabilitation**, which can improve symptoms considerably.

*If FEV1 < 80% and the patient is taking LAMA/LABA/ICS and has had either **2 AECOPD** within the last year or **1 AECOPD that sent them to the ER or to hospital admission:***

Add azithromycin 250mg OD (consider risk of hearing impairment and QT prolongation with arrhythmias).

Inhaler examples

LABA examples: Salmeterol 50mcg 1 puff BiD (LU 391) or Oxeze (formoterol) 6mcg inhaled Bid or 12 mcg inhaled BiD

LAMA examples: Spiriva Respimat (tiotropium) 2.5 mcg 2 puffs OD or Tudorza (aclidinium) 400mcg BiD or Incruse (umeclidinium) 62.5 mcg 1 puff OD

Combination LAMA & LABA examples:

Duaklir (aclidinium 400mcg and formoterol 12mcg) 1 puff BiD (LU 459) or Inspiroto (olodaterol 2.5mcg and tiotropium 2.5mcg) 2 puffs OD or Anoro (umeclidinium 62.5mcg and vilanterol 25mcg) 1 puff OD or Ultibro (glycopyrronium 50mcg and indacaterol 110mcg) 1 puff OD (all LU 459).

Combination LABA/LAMA/ICS examples:

Trelegy (fluticasone 100mcg/umeclidinium 62.5 mcg/vilanterol 25 mcg) 1 puff OD (LU 567) or Breztri (budesonide 160mcg/glycopyrronium 9mcg/formoterol 4.8 mcg) 2 puffs BiD (LU 638).

Advanced therapies

Home Oxygen Therapy

Mortality benefit in patients with chronic hypoxia

Option 1

Oxygen for maintenance
use ≥ 15 hours/day

(i) $\text{PaO}_2 \leq 55\text{mmHg}$ or
(ii) $\text{PaO}_2 56\text{-}59\text{ mmHg}$ but the patient has **pulmonary hypertension** or **raised hematocrit**.

Option 2

Oxygen for exercise capacity
Find [Vendors](#) here

Significant **improvement in exercise tolerance** with the addition of oxygen, in a patient whose **SpO2 falls to $<85\%$ with exercise**.

Often, there is no improvement with added oxygen because dyspnea relates to the respiratory mechanics and not to low oxygen saturation.

Pulmonary Rehabilitation

Patients with **FEV1 $< 80\%$** who are **symptomatic despite inhaled treatment** should be referred to pulmonary rehabilitation.

Teaches breathing techniques, nutrition, self-management, behavioral interventions, psychological support and improves exercise capacity. Find local programs [here](#).

Recent hospitalization for AECOPD?

The patient should be seen **in person by PCP within 7 days of discharge**

Referral to **pulmonary rehabilitation should be considered**

If referred, pulmonary rehabilitation should commence within one month of hospital discharge.

Palliative approaches to care for patients with COPD

It is important to have and document a detailed GOC discussion w/ the patient, including:

- patient wishes in the event of deterioration in respiratory status – medical management + symptom relief vs. symptom relief only
- consideration of hospitalization vs. management in the community
- patient wishes for resuscitative measures including non-invasive ventilation, intubation and ventilation, and CPR (in the event of cardiorespiratory arrest)

Consider low dose oral opioids for refractory dyspnea – e.g. kadian 10 mg PO daily, or morphine 2.5 mg TID-QID

Resources

Spirometry sites in Kingston and surrounding area

Click on the link to find information and referral form

- [Pulmonary Function Laboratory at KHSC – HDH site](#)
- [Kingston Respiratory Services](#)
- [Lennox and Addington County General Hospital](#) (Outpatient Services)

Smoking Cessation

[STOP Programming](#) is available at Kingston Community Health Centres sites, and **accepts self-referrals**. Patients can call the following numbers for programming at each site:

Barrack Site: (613) 549 1440

Weller Site: (613) 542 2949

Midtown Kingston Health Home site: (613) 542 6793

[Stop on the Net](#) is an online program for smoking cessation available to anyone over 18 with an email address.

Home oxygen vendors

- [InspiAIR](#)
- [VitalAire](#)
- [ProResp](#)
- [Medigas](#)
- [Kingston Oxygen Home Healthcare Centre](#)

Pulmonary Rehabilitation

[LACGH Cardio-Respiratory Rehab](#) (virtual and in person options available)

[Providence Care Respiratory Rehab](#)

Regional Lung Health Program

Kingston Community Health Centres runs comprehensive programming for those with COPD who are unattached, and may connect attached patients to their programs if unavailable at their rostered clinic. Programs offered: Respiratory Rehabilitation, Smoking Cessation, COPD education, Spirometry.

Refer through [Ocean](#) or [fax](#).

Substance Use Support

KCHC's Street Health Program accepts [referrals](#) for substance use disorder support and treatment.

Still looking for services? The FLA OHT has created a [Find Services](#) tool to help connect people to local resources.