Intervention Training

Effectiveness of a Pharmacist-Led Intervention in COPD (EPIC)

Intervention Overview

The intervention will consist of the following:

- Medication Review
  - Focusing on COPD medications
- Patient Education
  - Inhaler technique
  - Non-pharm COPD options
- COPD Action Plan
  - Developed with the patient and their primary HCP
- Patient Referral
  - Smoking cessation
  - Pulmonary rehabilitation
Detailed review of patient’s medications:

- **Efficacy**
  - Focusing on COPD medications
  - As reviewed in COPD therapy presentation

- **Safety**
  - Focusing on COPD medications and interactions with other medications
Bronchodilators are medications that relax the airways, allowing you to breathe easier.

“Rescue inhalers” – these are short-term bronchodilators that start to work in ten minutes or less.

There are also long-acting treatments, usually taken once or twice a day, that bronchodilate over the course of the day.

Inhaled corticosteroids are medications that reduce inflammation in the lungs, leading to better symptomatic control and reduced frequency of exacerbations.

Any corticosteroid inhalers – advise patient to wash out mouth after use.
Combination products:
There are different combo products available
ICS/LABA – most common, shouldn’t see ICS on its own for COPD as evidence is for combo
Literature says reduced frequency of exacerbation
LABA/LAMA – better symptomatic management
May see others

Other medications:
If patient is taking any other medications, make sure to go over those with the patient
What the medication does (in a nutshell)
What to expect – side effects, effect on disease
Can review disease information as needed:

- Normally when we breathe, air goes from our mouth or noses through the airways in our lungs into tiny air sacs, called alveoli.
- These alveoli exchange oxygen in the air we breathe for carbon dioxide in our body, which we exhale.

COPD usually results when an irritant, such as tobacco smoke, enters our lungs.

- The irritant can cause inflammation in our lungs, resulting in damage to the airways and alveoli.
- The airways can become thickened and scarred, limiting the way that air travels through them.
- The alveoli can become damaged so that the normal oxygen exchange is impaired.
The damage to the airways and alveoli results in common symptoms associated with COPD:
- Coughing
- Phlegm production
- Shortness of breath, especially with activity
- Fatigue

COPD is chronic, irreversible and progressive
- Medications help with symptoms, but the only thing that can affect lung function decline is quitting smoking
- COPD can lead to other diseases, like cardiovascular disease or osteoporosis
Exacerbations – make sure patient understands what these are and how to recognize them

A worsening of symptoms, which could include mucous production, shortness of breath, or cough, beyond what you would normally experience throughout the day.

Exacerbations can be caused by infection, air pollutants, or sometimes just spontaneously.
Exacerbations can make your symptoms significantly worse.
They can accelerate lung function decline.
Medications can prevent exacerbations.
Early recognition and treatment is essential.
Go over device specifics with patient
Encourage use of spacer devices
Prime, taking a dose, storage, cleaning
Get THEM to show YOU how to use the inhaler

Inhalation device technique – manufacturer’s website or Ontario Lung Association
https://www.on.lung.ca/inhalationdevicevideos
Smoking is one of the most important interventions in the progression of COPD. However, not everyone is ready to quit smoking. Nicotine replacement in any form (patch, gum, etc) increases smoking abstinence rates.

Other pharmacological therapy is also effective in helping patients quit smoking (champix, bupropion etc). Most effective – a combination of prescription medications and nicotine replacement therapies. Evidence shows the more supportive counselling you put into it, the more patients get out of it.
Non-pharmacological Recommendations – Smoking Cessation

The 5 A’s to help patients quit smoking:
ASK: Systematically identify all tobacco users at every visit
ADVISE: Strongly urge all tobacco users to quit
ASSESS: Determine willingness to make a quit attempt
ASSIST: Aid the patient in quitting
ARRANGE: Schedule follow-up contact

Non-pharmacological Recommendations – Vaccinations

- Influenza vaccine recommended for all patients
- Pneumococcal recommended for >65 years old or those with significant comorbidities
- Pharmacists in NL can administer both of these
- This makes it really easy to encourage their use to the patient as they can get it right at the pharmacy
Non-pharmacological Recommendations – Vaccinations

- Educate patient that getting vaccinated helps prevent viral and bacterial infections
- These infections lead to worsening symptoms and potential for exacerbation

Non-pharmacological Recommendations – Exercise

- Physical exercise is safe and encouraged for people with COPD
- Exercise tolerance can be improved by medications
- Make sure that patients are aware of this – can associate in patient’s mind improvement in quality of life with taking their medications properly
Non-pharmacological Recommendations – Exercise

- Exercise is an important component in pulmonary rehab
- It can help improve dyspnea and fatigue symptoms in patients with COPD
- Recommend individuals walk to a symptom-limited maximum, rest, and then continue walking until 20 minutes of exercise

COPD Action Plan
Develop and review the CTS Action Plan with the patient

This plan is focused on identifying exacerbations and making a plan for the patient in the event that an exacerbation does occur.
Patient Referral

Figure 2.3. Assessment Using Symptoms, Breathlessness, Spirometric Classification and Risk of Exacerbations

<table>
<thead>
<tr>
<th>Risk (Gold Classification of Airflow Limitation)</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAT &lt; 10</td>
<td>(A)</td>
<td>(B)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAT ≥ 10</td>
<td>(C)</td>
<td>(D)</td>
<td></td>
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</tr>
</tbody>
</table>

- (A) 0-1 symptoms, mMRC 0-1
- (B) 1 symptom, mMRC 0-1
- (C) 1 symptom, mMRC ≥ 2
- (D) ≥ 2 symptoms, mMRC ≥ 2

≥ 2 or ≥ 1 leading to hospital admission
1 (not leading to hospital admission)
