

## COPD Treatment

COPD Chronic Disease Collaborative

## Chronic Obstructive Pulmonary Disease (COPD)

- COPD is a common chronic disease in Primary Care Settings
- Providers need effective protocols to improve quality of care and outcomes
- Systematic Evaluation and Treatment of COPD provides quality proactive care

## Evaluation of COPD

- The Pulmonary Function Test (PFT) confirms a diagnosis of COPD
  - Reduction in the FEV1 demonstrates airway obstruction
- PFT results are used to classify the severity/predict risk of functional impairment

## Classification of Severity of COPD

Severity	FEV1/FVC	FEV1 %
At Risk	>0.7	≥80%
Mild COPD	≤0.7	≥ 80%
Mod COPD	≤ 0.7	50-80%
Severe COPD	≤ 0.7	30-49%
Very Severe COPD	≤ 0.7	<30%

Joint Statement from the American Thoracic Society (ATS) and the European Respiratory Society (ERS) position paper on COPD. Published by the ATS/ERS Task Force, Eur Respir J 2004; 23:932

## Tobacco Cessation

- Smoking is the most common cause of COPD (>80%) of all cases
- Continued smoking results in rapid progression of COPD and worsens the prognosis
- Tobacco Cessation can slow progression of COPD, improve functional status and prognosis

## Tobacco Cessation: The 5 A's

- **Ask:** Inquire at each visit if currently smoking; if continuing to smoke
- **Advise:** Strongly urge all users to quit in a clear, strong and personalized manner
- **Assess:** Determine if motivated to quit smoking
- **Assist :** Provide with information and/or treatment such as nicotine replacement et
- **Arrange:** Follow-up and referral to support to help remain smoke free

### Vaccinations for Influenza

- Influenza vaccination should be strongly encouraged each fall to all patients with COPD unless contraindications such as egg allergy
- In 3 managed care populations, vaccinated people had a significantly lower rate of death, and lower rates of hospitalization (NNT to prevent death between 95 and 118).

Nichol KL et al. N Engl J Med 2003;348(14):1322-32

### Pneumococcal Vaccine

- Pneumococcal Vaccine should be administered when COPD is diagnosed.
- Pneumococcal vaccine should be repeated at age 65 if it has been more than 5 years since the vaccine.
- The vaccine contributes to a significant reduction in pneumococcal bacteremia .

### Dyspnea Severity

- Dyspnea is a subjective sensation.
- Dyspnea severity often discordant with PFT, Oxygen saturation and ABG
- Worsening self-reported Dyspnea associated with decreased functional status and quality of life.
- Self reported Dyspnea is assessed and recorded at every visit

### Dyspnea Severity Assessment

- 0: Not troubled with breathlessness except with strenuous exercise
- 1: Troubled with shortness of breath walking up slight hill
- 2: Most Stop for breath when walking at normal pace on level
- 3: Stops for breath when walking 100 yards
- 4: Too short of breath to leave house or when changing clothes

### Further Assessment indicated

- If patients have dyspnea when walking at normal pace on a level surface-
- They need further evaluation and treatment
- If Symptom assessment level 2, 3, or 4 then check Oxygen Saturation
  - If Oxygen Sat is less than 90% check ABG
  - Refer patient for consideration for LTOT.
  - Patients benefit from Long Term Oxygen Treatment by symptom control and prevention of lung/heart injury from chronic hypoxia.

### Bronchodilator Therapy

- Should be guided by symptom assessment
- Bronchodilators with MDI are the standard treatment for Symptomatic COPD
- Evaluate adherence; if non-adherent, consider problems such as need for spacer, cost, unpleasant side-effects, etc.

### Guide to Treatment

- Functional Dyspnea Level 0 to 1
  - Albuterol Oral Inhalant 2 puffs q 4 hours PRN
- Functional Dyspnea Level 2
  - Albuterol/Ipratropium Inhalant 1puffs qid with rescue Albuterol 2 puffs q 4 hours PRN MDI

### Guide to Treatment

- Functional Dyspnea Level 3
  - Salmeterol/Tiotropium Inhalant 1 puff BID with rescue albuterol MDI q 4 hours PRN
- Functional Dyspnea Level 4
  - Fluticasone/Salmeterol Inhalant 1 puff BID and Tiotropium inhalant 1 puff BID with rescue albuterol MDI Q 4 Hours PRN

### Long Term Oxygen Therapy: Medicare Guidelines

- PA O2 less than or equal to 55 mm Hg
- Oxygen saturation is less than or equal to 88%.
- PA O2 is between 56 and 59 mm Hg or oxygen saturation is 89% or less and evidence of:  
Cor pulmonale, Heart failure, Erythrocytosis
- PA O2 is greater than 88% at rest but becomes less than or equal to 88% when exercising or sleeping.

### COPD Chronic Disease Management Algorithm

- Refer to posted treatment algorithm to help guide treatment initiation.
- Escalate treatment to maintain symptom control and functional status
- If evaluation, assessment and/or response to treatment is inadequate make a Pulmonary Consult

### Advance Care Planning

- Patient with COPD have risk of sudden illness and be unable to speak for themselves
- It is important to assess if patient has AD and to document it in the medical record
- Identify who the patient's preferred Surrogate Decision Maker would be
- Having an AD is not the same as a DNAR order; for most patient's some interventions and a trial of treatment is an appropriate Care Plan

### Advance Care Planning

- **Ask:** If patient has AD
  - **Advise:** Importance of having and AD
  - **Assess:** IF motivated to complete and AD
  - **Assist:** Provide with materials and information on importance of AD and how to complete
  - **Arrange:** Assistance from Social Work to complete AD and have it documented on chart
- Re-evaluate on regular basis as surrogate and choices for treatment change over time.