RHIP COPD Program

Presented by PEL/VIP, LTD

Objectives

- Discuss general COPD statistics
- Discuss COPD management tools
- Review RHIP COPD scoring tool
- Discuss RHIP COPD education
- Discuss RHIP COPD workflow process

COPD in the United States

- COPD is the now (2010) the *third leading cause of death* in the US behind heart disease and cancer.**(CDC report Dec 2010)
- In 2010, the cost to the nation for COPD was approximately $49.9 billion, including healthcare expenditures of $29.5 billion in direct health care expenditures, $8.0 billion in indirect morbidity costs and $12.4 billion in indirect mortality costs.***

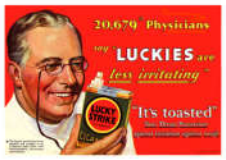
- **Yourlunghealth.org, www.aarc.org , accessed Jan 25, 2011
- ***ALA, COPD Fact Sheet, 2010, accessed on Jan 25, 2011

COPD in the United States

- In 2011, 12.7 million U.S. adults (aged 18 and over) were estimated to have COPD.[2]However, close to 24 million U.S. adults have evidence of impaired lung function, indicating an under diagnosis of COPD.[3]
- In 2011, an estimated 10.1 million Americans reported a physician diagnosis of chronic bronchitis. Chronic bronchitis affects people of all ages, although people aged 65 years or more have the highest rate at 64.2 per 1,000 persons.[4]
- Of the estimated 4.7 million Americans ever diagnosed with emphysema, 92 percent are 45 or older.[5]

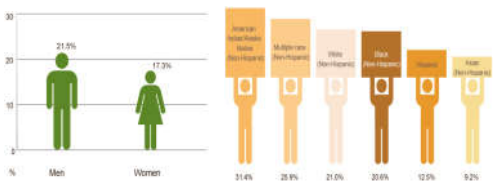
2. Centers for Disease Control and Prevention. National Center for Health Statistics. National Health Interview Survey Raw Data, 2011. Analysis performed by the American Lung Association Research and Health Education Division using SPSS and SUDAAN software.
3. Centers for Disease Control and Prevention. Chronic Obstructive Pulmonary Disease Surveillance – United States, 1971-2000. *Morbidity and Mortality Weekly Report*. August 2, 2002; 51(SS06):1-16.
4. Centers for Disease Control and Prevention. National Center for Health Statistics. National Health Interview Survey Raw Data, 2011. Analysis performed by the American Lung Association Research and Health Education Division using SPSS and SUDAAN software.
5. Ibid.

Smoking is the highest risk factor for developing COPD…why was this popular?



- **Advertising was a big reason!!!**
  - Many ads included MD's saying that they smoked a certain brand
  - This ad talks about how many MD's say Luckies are less irritating and the fact that it is toasted to help coat your throat
- **Advertising was not only print but also in movies**

Who's at Risk??

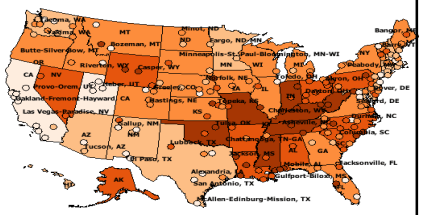


Source: CDC September 2011

Adult Smoking Prevalence by State

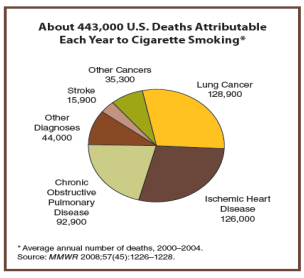
Source: Behavioral Risk Factor Surveillance System, 2010

BRFSS Map 2009



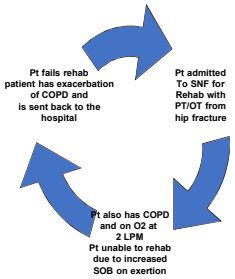
- Illinois has decreased down to ~19% of adults >18yrs are smokers
  - Slight decrease since Smoke Free IL 2008 and increase in move towards smoking cessation

The Outcomes of Smoking



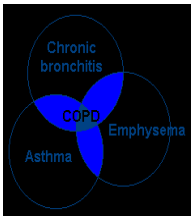
CDC SAMMEC MMWR 2008;57(45):1226-1228

What's happening to our patients?
(How can we stop this cycle?)



COPD Disease Management Tools

- Assessment of COPD
  - Assess the following separately
    - Symptoms
    - Degree of airflow limitation (Spirometry)
    - Risk of exacerbations
    - Co-morbidities



COPD Disease Management Tools

- COPD action plan
  - Take daily medications
  - Continue regular exercise and diet plan
  - Steer clear of pollutants and cigarette smoke
  - Always wear oxygen as prescribed
  - Get plenty of rest
  - Use of Pursed-lip breathing technique

COPD Rehospitalization Risk Tool

COPD Scoring Factors

- Scoring factors
  - HR
  - RR
  - Age
  - Breath sounds
  - SOB at rest and activity (mild, moderate or severe)
  - Cough and Sputum Production (within last week)
- Risk of Rehospitalization
  - Score of 0-2 is a low risk
  - Score of 3 or greater is a high risk

PEL RHIP COPD Scoring Tool

- Low risk-patient will be followed up 1X/wk
- High risk-patient will be followed up 2X/wk
- ***RT is preferred to complete scoring tool***
- This scoring tool is filled out for any patient who has a dx of COPD/Restrictive disease
- We already know they have COPD, it's just a matter of looking at their risk for going back-

COPD In-depth Assessment Screen

- >1 ER visit and/or hospitalization within last year for COPD
- Current smoker **(add smoking cessation education to plan of care)**
- NIPPV use within last year
- OSA
- Hx CABG and/or MI
- Current Home O2 user (day or nighttime)
- Lack of physical activity
- Systemic Corticosteroid use past 6 mo
- Chronic Renal failure
- Hx intubations for Resp Distress/COPD
- Recent abnormal CXR (pulm congestion, cardiomegaly, PNA
- >1 day recent length of stay at hosp
- Occupational exposures (dusts, fumes)

Questions to ask….

- Does the patient have a documented Spirometry result within the last year?
- Does the patient have the ability to walk across the room?
- Does patient take SABA therapy more frequently that Q4 Hours?
- Does patient understand how to correctly use their Respiratory medications?
- Does patient use LABAs?
- Is the patient familiar with PLB? And can they perform a return demonstration?

How can we help?

- Recommended Exacerbation Prevention Strategies
  - COPD action plan
- Recommended Education Topics for Exacerbation Prevention
  - disease management and s/s of exacerbation
  - medications and airway clearance
  - energy conservation and breathing exercises
  - nutrition and prevention of infection
  - smoking cessation, oxygen therapy/safety, and sleep apnea

PEL RHIP COPD-EDUCATION

- Education sessions should not be lengthy (10-15) minute sessions
- Mandatory Topics
  - Topic 1: disease management and s/s of exacerbation
  - Topic 2: medications and airway clearance
  - Topic 3: energy conservation and breathing exercises
  - Topic 4: nutrition and prevention of infection
- These topics can be taught in any order-determine when interviewing your patient, what topics would be most useful for them to learn first
- Add in topics- (All are if applicable) smoking cessation, oxygen therapy/safety, sleep apnea
- Krames books can be used to educate patients

Low Risk Workflow Process

- Dietary to assess patient with attention to caloric intake.
- Nursing to provide continual general assessment and the following: daily vitals, education on medication skills and missed preventive opportunities
- PT/OT to assess patient with attention to mobility concerns and functional abilities.
- Social Worker- Support during admission to facility and discharge home. Support with emotional health and stress management.
- RT will perform RT Screening Assessment with attention to O2 saturation, O2 requirements (if O2 is being utilized), breath sounds and signs of cough, strength and effectiveness of cough effort, sputum production (if applicable). RT will initiate any therapeutic modalities that may be required for the patient. RT will educate on mandatory topics
  - Topic 1: disease management and s/s of exacerbation
  - Topic 2: medications and airway clearance
  - Topic 3: energy conservation and breathing exercises
  - Topic 4: nutrition and prevention of infection

Low Risk Workflow Process

- RT can also educate on "OPTIONAL TOPICS" as it pertains to that particular patient. Topics: All are if applicable- *smoking cessation, oxygen therapy/safety, sleep apnea.* RT will monitor these patients once/week and record visits per facility documentation protocol
- PEL will have a RT that will specifically handle the Outcomes for these patients.
- Basic outcomes we are looking at: whether or not the patient goes back to the hospital for readmission for COPD. (Facility is looking at numbers of hospital admissions for COPD from same time last year vs. this year as an outcome).
- PELVIP will track how many Low Risk/High Risk patients are in the COPD program each month and how long each patient is in the program.
- PELVIP will track what types of treatment modalities are being performed

High Risk Work Flow Process

- Nursing to provide continual general assessment. Nursing will also monitor vital signs every day and assess for early signs of decompensation, shortness of breath or lethargy. O2 saturations to be performed Q Shift.
- Nursing will notify Physician immediately with acute signs and symptoms.
- PT/OT to assess patient with attention to mobility concerns and functional abilities.
- Social Worker- Support during admission to facility and discharge home. Support with emotional health and stress management.

High Risk Work Flow Process

- Dietary to assess patient with attention to nutritional status and calorie intake.
- RT will perform RT Screening Assessment with attention to vital signs including O2 saturation, O2 requirements (if O2 is being utilized), breath sounds, signs of cough, strength and effectiveness of cough effort, sputum production (if applicable). RT will initiate any therapeutic modalities that may be required for the patient. RT will educate on mandatory topics:
  - Topic 1: disease management and s/s of exacerbation
  - Topic 2: medications and airway clearance
  - Topic 3: energy conservation and breathing exercises
  - Topic 4: nutrition and prevention of infection
- RT can also educate on "OPTIONAL TOPICS" as it pertains to that particular patient. Topics: All are if applicable- *smoking cessation, oxygen therapy/safety, sleep apnea*
- RT will obtain Physician order for Spirometry if the patient does not have a documented Spirometry result within the last year and will perform FVC maneuver on patient when order is obtained and document results per facility documentation protocol

High Risk Work Flow Process

- RT will monitor these patients twice/week and record visits per facility documentation protocol.
- PEL will have a RT that will specifically handle the Outcomes for these patients.
- Basic outcomes we are looking at: whether or not the patient goes back to the hospital for readmission for COPD. (Facility is looking at numbers of hospital admissions for COPD from same time last year vs. this year as an outcome).
- PELVIP will track how many Low Risk/High Risk patients are in the COPD program each month and how long each patient is in the program.
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Any Questions??