



Carolinus HealthCare System

# **Hospital to Physician Office to Home: A Respiratory Led Program Across the Continuum of Care**

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Clinical Respiratory Specialist- COPD Education

One

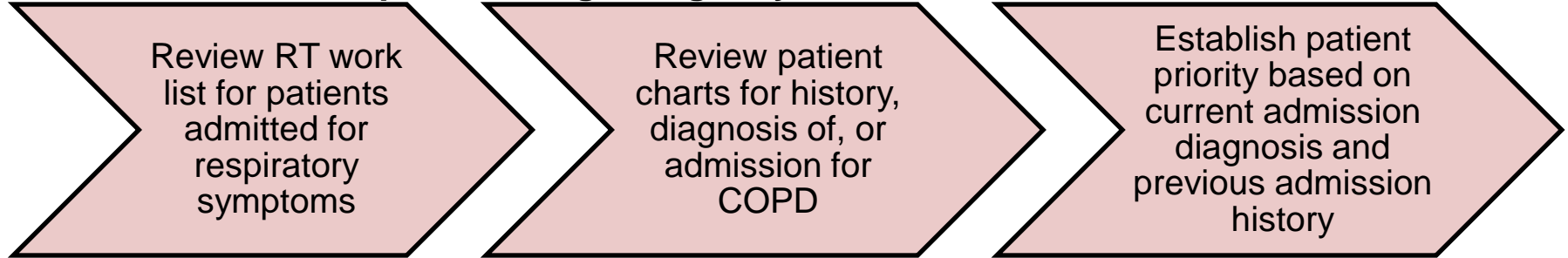
# Important Milestones

- July 2011- Respiratory department implementation of a Clinical Respiratory Specialist
- The Respiratory Care department placed a dedicated therapist in the ED
- CMC-NE kicked off the Beacon COPD Disease Management Program in January 2012
  - The goal was to develop a standardized disease management program that followed the patient throughout the continuum of care (ED-Inpatient-Medical Home)
- The outpatient RT Pilot Program began in the Medical Home the week of November 20, 2012

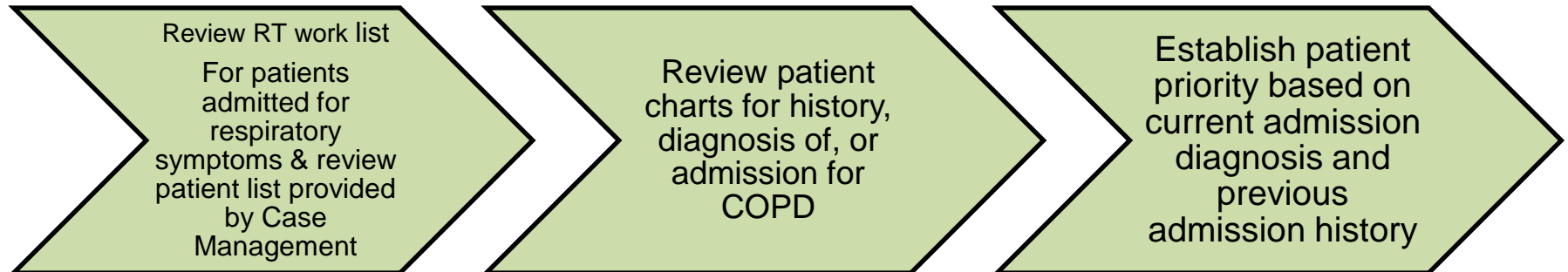
# Role of the Clinical Respiratory Specialist

- Identify patients with admissions for COPD Acute Exacerbation
- Meet one on one with patients to assess level of knowledge regarding COPD diagnosis and symptom management
- Educate patients on COPD and respiratory medications
- Refer patients to Clinical Case Management for home health services, financial concerns, etc.

## Patient identification process beginning July 2011



## Modified process in April 2012



- Educate patients on COPD and respiratory medications

- COPD disease process and symptom management
- Avoiding risk factors/respiratory triggers
- Rescue vs. maintenance inhalers
- Proper technique for individual inhaler devices
- Proper frequency for maintenance inhalers—why it is important to take them at the proper frequency
- Pursed-lip & diaphragmatic breathing techniques for dyspnea management
- Explain benefits of pulmonary rehab & and refer to program
- SMOKING CESSATION

## Pursed-lip Breathing

Use pursed-lip breathing to prevent shortness of breath, as do things such as exercising, climbing stairs, and bed sitting.

- Relax the muscles in your neck and shoulders
- Breathe in slowly through your nose for 2 to 3 seconds



- Pucker your lips as if you were going to whistle.
- Breathe out slowly and gently through the lips.



## Caring for Your COPD



Manage symptoms early



Exercise and maintain a healthy weight



Get regular medical check-ups



Eat healthy food



Get enough rest



Control stress



Avoid triggers



Get pneumonia & flu vaccinations



Quit smoking and avoid second-hand smoke

For more information and support, contact these helpful resources:

800.485.4633  
www.copd.ca  
www.copd.org

## Ready to Quit Smoking?



Ask for support from family and friends



Be ready with ash trays



## COPD Self Management Plan

Name \_\_\_\_\_ Date \_\_\_\_\_  
My Doctor \_\_\_\_\_ Doctor Phone # \_\_\_\_\_

### GREEN ZONE (You doing well)

• No symptoms of COPD  
• Using inhaler as prescribed  
• No cough or sputum  
• No chest pain  
• No shortness of breath  
• No weight loss



#### What to do

Take your medications every day and maintain regular exercise and diet plans to maintain control of your COPD symptoms.

### YELLOW ZONE (You need help)

• Slight increase in cough or sputum  
• Using inhaler more often  
• Slightly shortness of breath  
• Slightly chest pain  
• Slightly weight loss  
• Slightly shortness of breath  
• Slightly weight loss



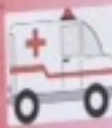
#### What to do

Continue to take your medications each day. Call your doctor & report the change in symptoms.

*Special instructions: Some drugs (drugs that make you feel better) may not work as well when you are in the Yellow Zone. Call your doctor to see if you need to change your medications.*

### RED ZONE (DANGER)

• Severe shortness of breath  
• Severe chest pain  
• Severe cough or sputum  
• Severe weight loss  
• Severe shortness of breath  
• Severe weight loss



#### What to do

Take your rescue medications and call 911!

Cleaning and disinfecting your nebulizer equipment is simple, yet very important. Cleaning should be done in a dust and smoke-free area away from open windows. Here is how to clean your equipment:



**Step 1:** After each treatment, take your nebulizer apart and rinse all the parts with warm water, shake off any excess water, and allow the parts to air dry.

**Step 2:** After the last treatment of the day, wash all the nebulizer parts in warm, soapy water using a mild detergent, rinse thoroughly with running water, and let air dry.

**Step 3:** At least once a week, disinfect your nebulizer parts by boiling them in a pot of water for 10 minutes or soaking in a mixture of 1 cup white vinegar and 3 cups warm water for 30 minutes. Be sure to rinse them well with warm water after soaking and allow them to air dry.

Store your nebulizer parts in a zip top bag when not in use.

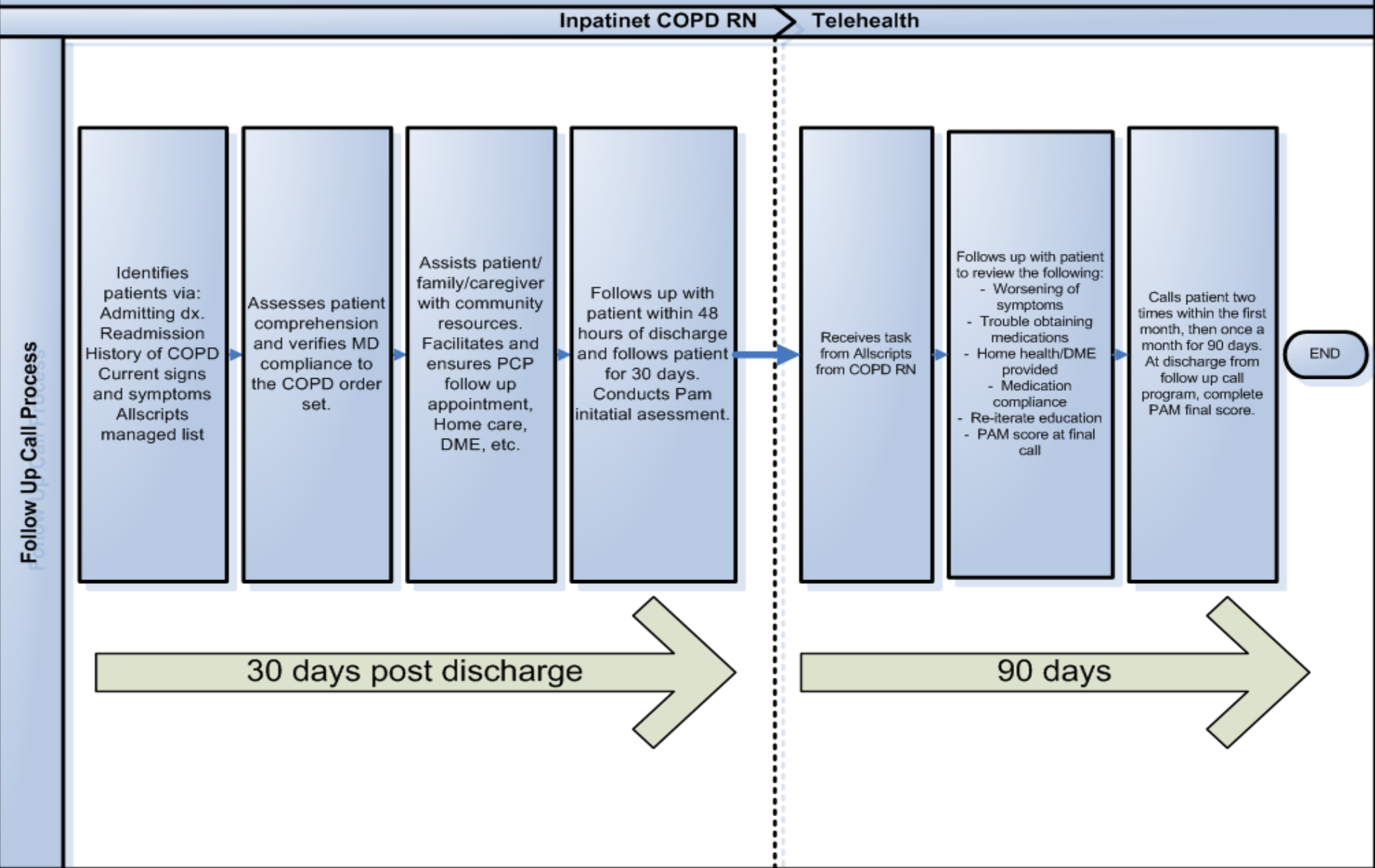
# What's in your med bag???



- Refer patients to Clinical Case Management for home health services, financial concerns, etc.

- Transportation issues
- Palliative Care Consults
- Medication affordability
- Rehab facilities placement
- Home Health Services
- DME services

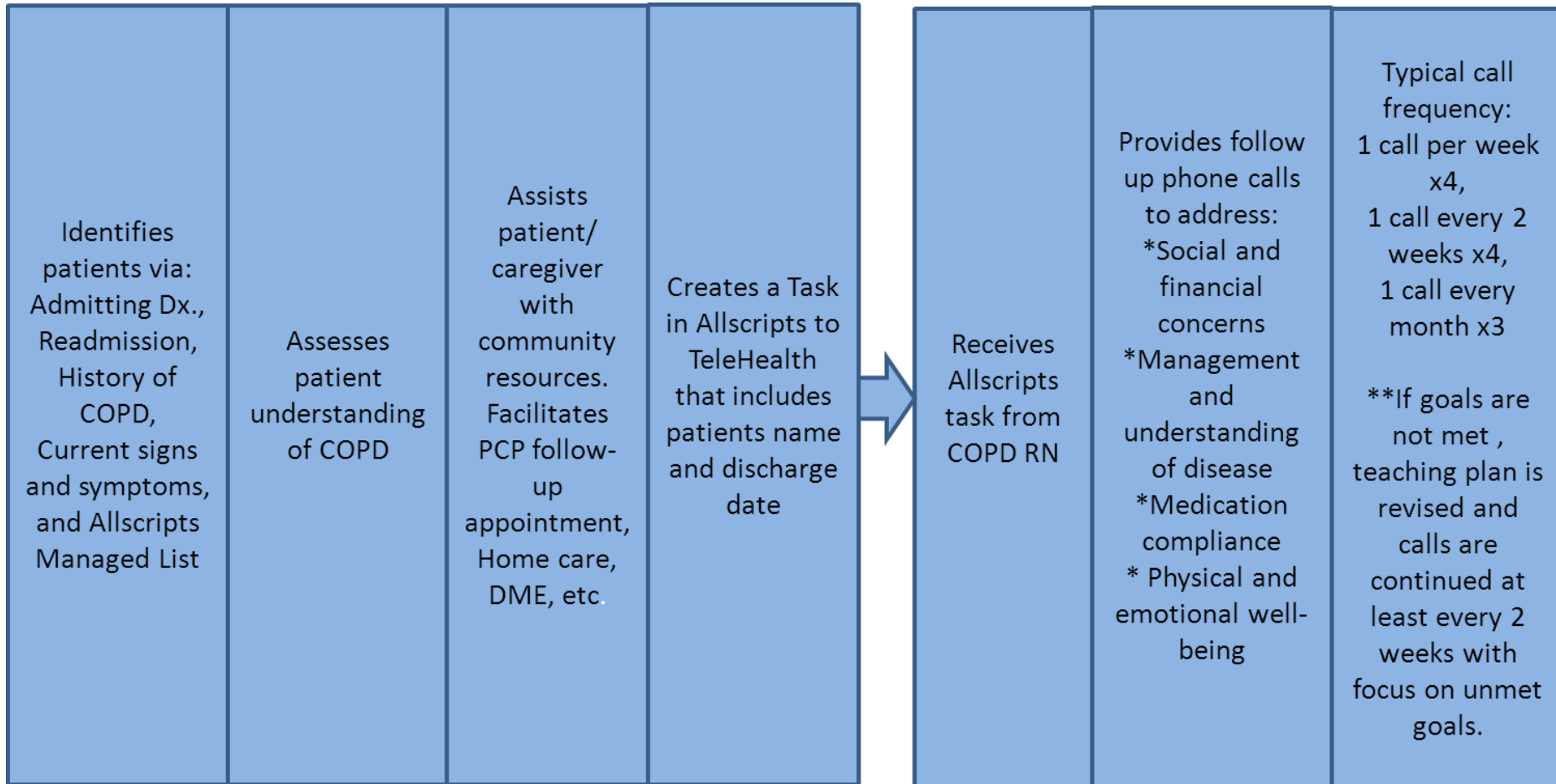




# Current COPD TeleHealth Process

## Inpatient COPD RN

## TeleHealth





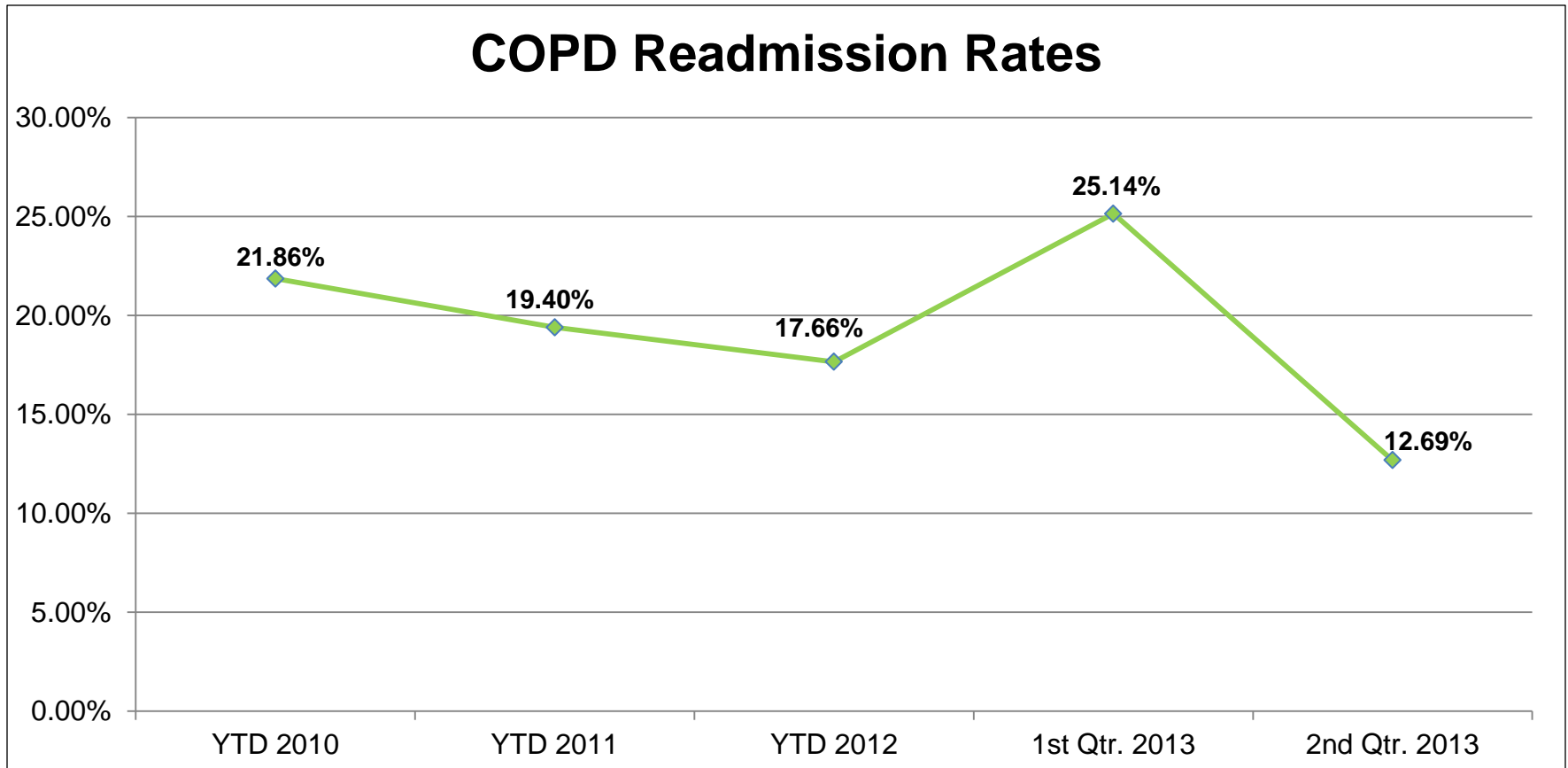
Ms. K

- ❖ Readmission for COPD exacerbation in <24 hours of discharge
- ❖ 70 year old Female
- ❖ History of COPD, HTN
- ❖ Diagnosed with COPD 15 years ago
- ❖ Former smoker- 1-2 packs/day since age 20
- ❖ **NEVER** hospitalized for COPD exacerbation
- ❖ Lives alone in a retirement community
- ❖ AMAZING family/friend support

# COPD READMISSIONS (YTD-June)

MS-DRG: 190: Chronic obstructive pulm disease w/MCC, 191: Chronic obstructive pulm disease w/CC, 192: Chronic obstructive pulm disease w/oCC/MCC

## COPD Readmission Rates





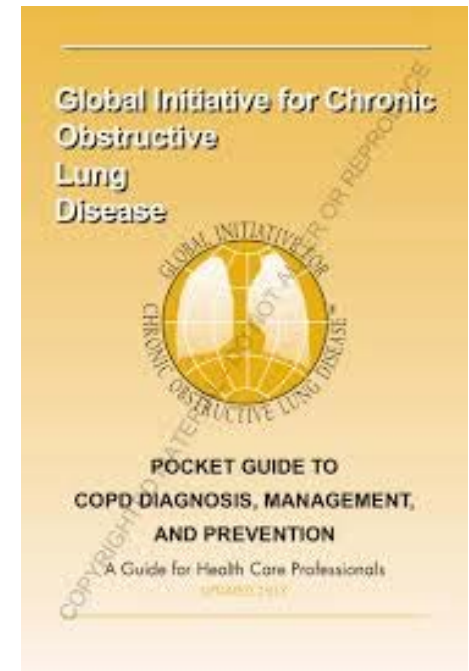
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# ***Beacon COPD Project***

**The Medical Home  
Respiratory Therapist  
Program**

One

- The Medical Home RT Pilot Program began the week of November 20, 2012.
- An outpatient COPD algorithm was created based on GOLD guideline criteria to ensure standardization of treatment between outpatient providers.
- The PCP Pilot sites were:
  - Kannapolis Internal Medicine
  - Carolina Internal Medicine
  - Ardsley Internal Medicine-Concord
  - Cabarrus Family Medicine- Mt. Pleasant
  - Cabarrus Family Medicine- Harrisburg



# COPD Population Screener

A validated questionnaire that can help identify people age  $\geq 35$  who are at risk for COPD through the identification of symptoms and risk.

The tool may lead to increased awareness of COPD, earlier symptom recognition and use of spirometry for accurate diagnosis.

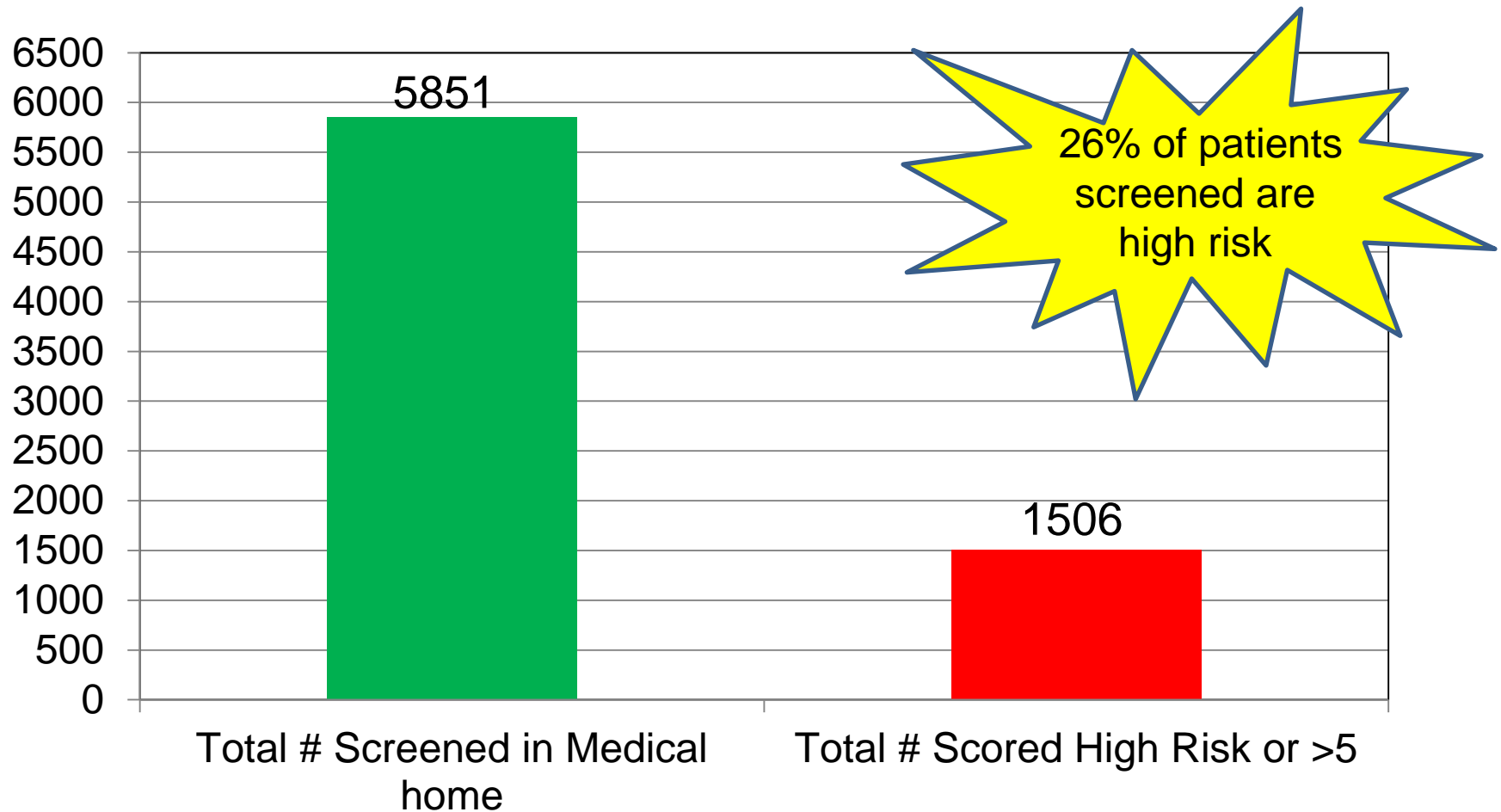
[COPD POPULATION Screener™ - DRIVE4COPD](#)

1. During the patient 4 weeks, how much of the time did you feel short of breath?
2. Do you ever cough up any “stuff”, such as mucous or phlegm?
3. Please select the answer that best describes you in the past 12 months: I do less than I used to because of my breathing problems.
4. Have you smoked at least 100 cigarettes in you entire life?
5. How old are you?

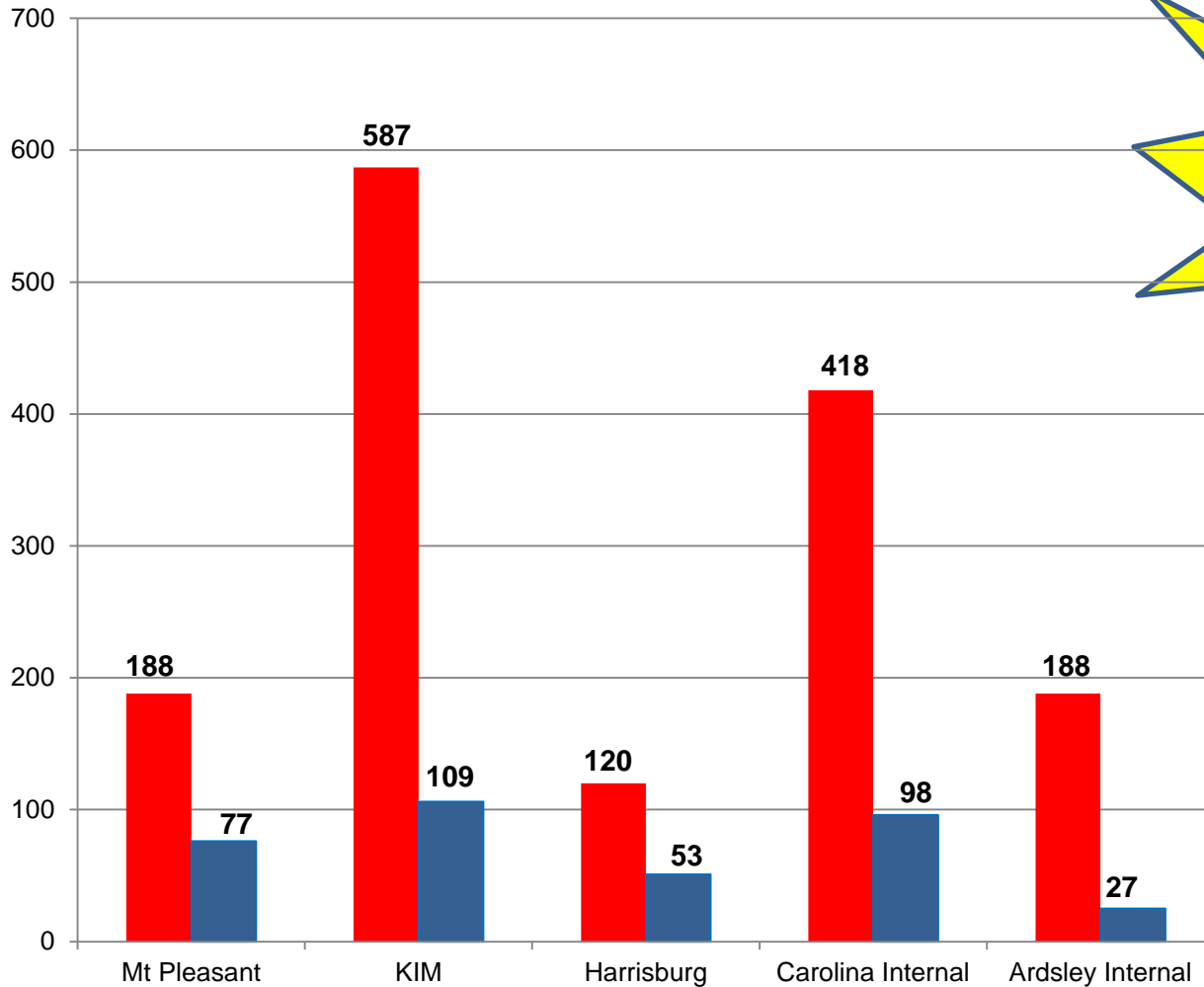


# Medical Home: Embedded Respiratory Therapist Program Total Patient Screened and % High Risk

Note: Pilot program data from November 20, 2012 thru August 30, 2013



# Pilot Site Specific Screening Data



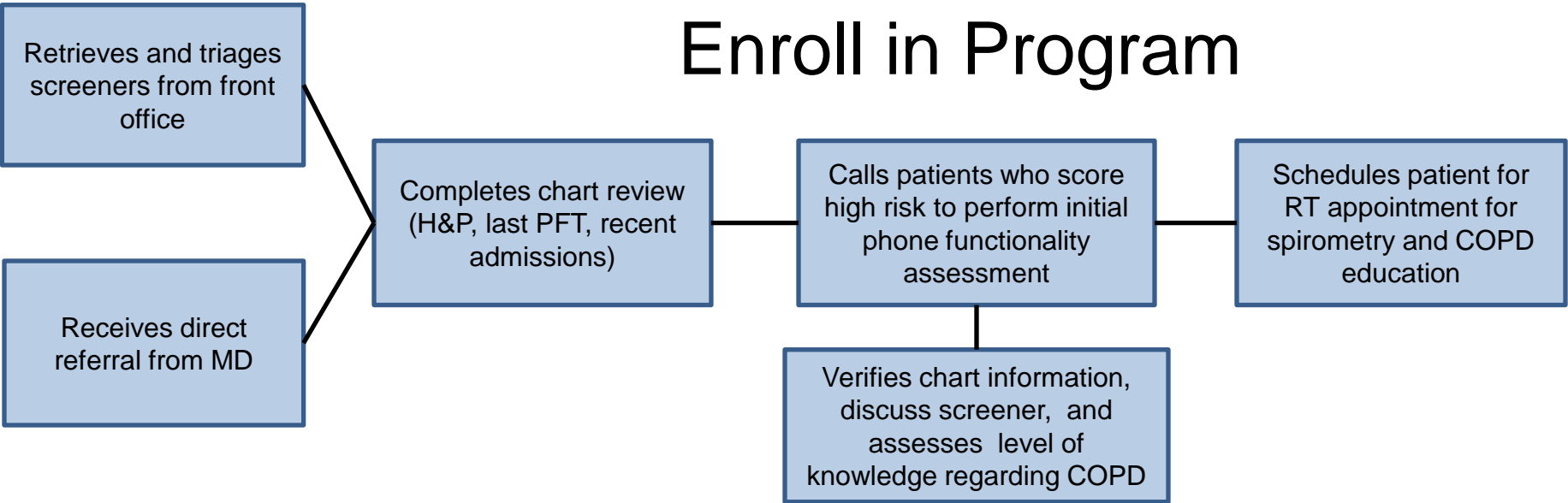
There are more opportunities for our RT's in the outpatient settings as our high risk pool is significant

■ Score >5  
■ Number of RT visits in Medical Home



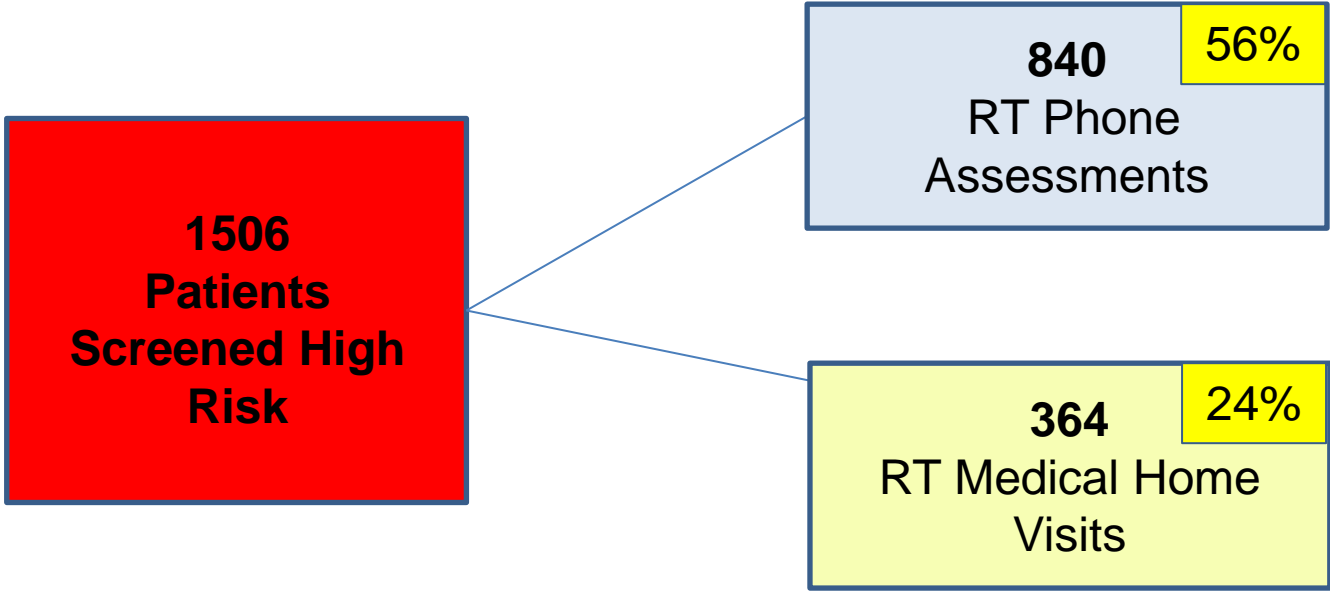
# Identify Patients

# Enroll in Program



# Respiratory Therapists: Establishing a Patient Panel

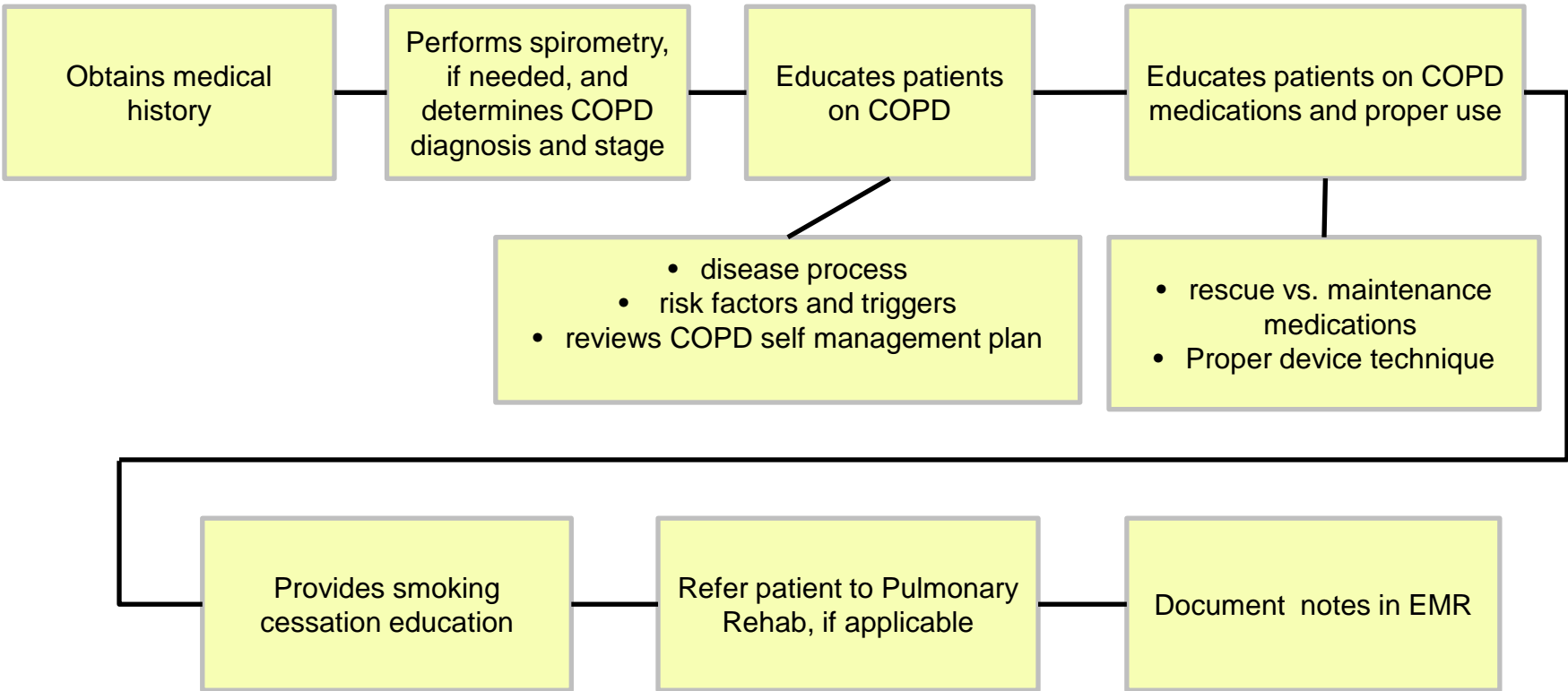
RT's also identify patients through direct MD referral of hard to manage COPD patients.



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# Visit Process

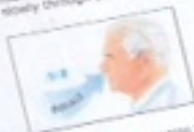


Each patient received **at least** 1 follow-up phone call 2-4 weeks post visit

## Pursed-lip Breathing

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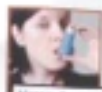
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**YELLOW ZONE (You need help)**

**What to do:**  
 Continue to take your medications each day. Call your doctor & report the change in symptoms.

**RED ZONE (DANGER)**

**What to do:**  
 Take your rescue medications and call 911!

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Store your nebulizer parts in a zip top bag when not in use.

# What's in your med bag???



# Respiratory Therapists: Patient Interventions Performed

364 office visits



61%

- 222 First Time Spirometry Performed

60%

- 217 Smoking Cessation, Referrals, Smoking Packets

46%

- 167 Patients Treated Compliant to the Gold Guidelines



## Ms. X



- ❖ 47 year old female
- ❖ Screener score of 7
- ❖ No diagnosis of COPD
- ❖ Current 1 pack/day smoker
- ❖ Phone interview conducted and appointment scheduled with RT
- ❖ Patient no call/no show times 2 and then cancels the 3<sup>rd</sup> appointment

4 months later.....

- ❖ Patient calls to schedule another appointment and shows up!!
- ❖ Mother had just died from COPD/Pneumonia
- ❖ Father just diagnosed with stage 4 lung cancer



One



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