Online Supplement

Feasibility Trial of a Comprehensive, Highly Patient-Centered COPD Self-Management Support Program

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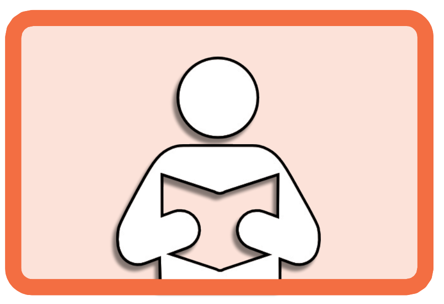
COPD 1-2-3

SAMBA
Supporting self-Management
Behaviors in Adults - COPD

GUIDE OVERVIEW

Managing your COPD is easy as 1-2-3!

Where would you like to start?



About COPD

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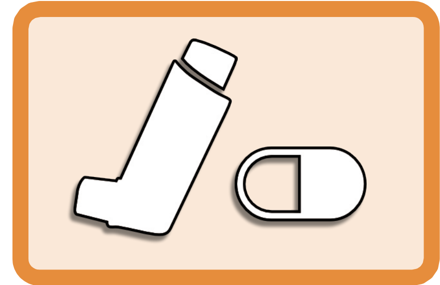

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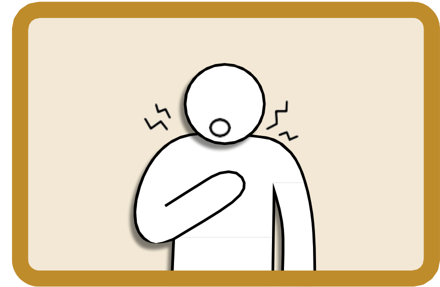

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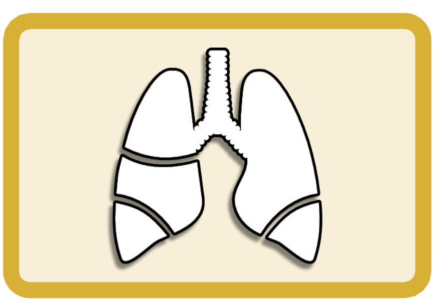

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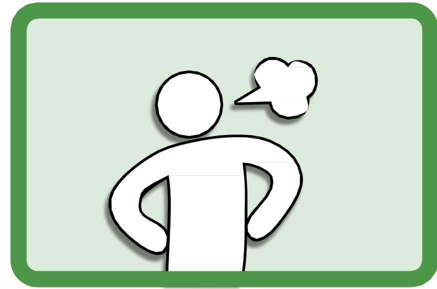

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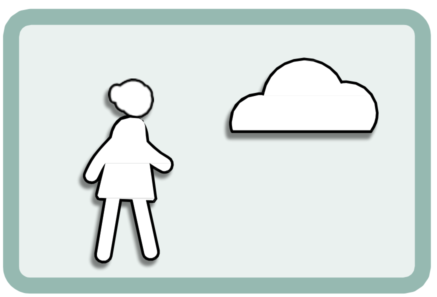

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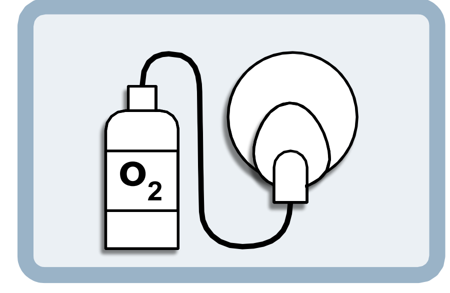

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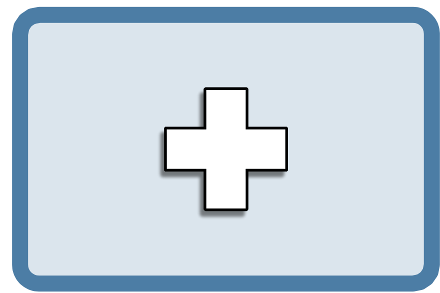

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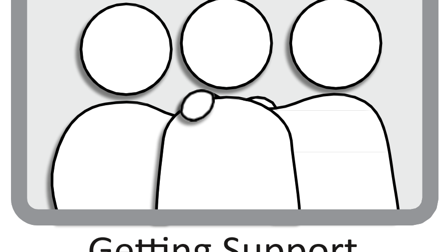
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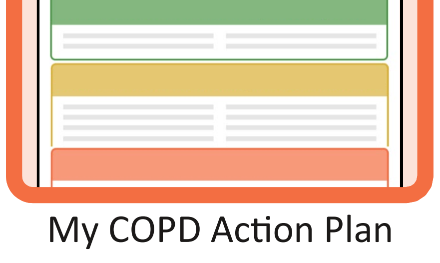
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ABOUT COPD

What is COPD?

COPD stands for Chronic Obstructive Pulmonary Disease

Chronic means can be treated but not cured.
Obstructive means blocked or narrowed.
Pulmonary means in the lungs.
Disease means it's an illness.

What are the symptoms of COPD?

COPD makes it harder to get air in and out of your lungs.

Some symptoms you may feel are:

- Coughing a lot
- Coughing up phlegm
- (mucus) Feeling short of breath
- Like it's hard to catch your breath when doing activities
- Wheezing
- Chest feeling tight

What causes COPD?

Most people who have COPD got it from smoking cigarettes. Some people get COPD from living with someone who smokes cigarettes, working in factories with dirty air, or living in a home that burns fuel for cooking and heat and does not have good ventilation.

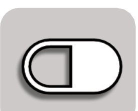
There are two main types of COPD.

- Chronic bronchitis (bron-KAI-tis) means there is inflammation of the air tubes inside your lungs.
- Emphysema (em-fah-ZEE-mah) means some of the small air sacs in your lungs are damaged.

What can I do to stop my COPD from getting worse?

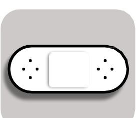
Quit smoking. If you don't smoke, don't start. (see page 13)

Take your controller medication every day. (see page 3)



Take care of any other health problems you have, like high blood pressure, heart problems, or diabetes.

Stay active every day. (see page 11)



Get all the vaccines your doctor recommends, including a flu shot every year. Getting sick makes COPD get worse. (see page 16)

MEDICINES FOR COPD

COPD medicines can help you manage and prevent COPD symptoms. Taking your medications will also help prevent your COPD from getting worse.

There are many different types of COPD medicines. The most common medicines are:

- **Controller medicines**
- **Rescue medicines**
- **Antibiotics**
- **Steroid pills**

Controller Medicines

Your controller medicine should be used **EVERY DAY,** no matter how you feel.

Controller medicine acts like a shield. It helps protect you from getting worse. If you do not take it every day, your shield cannot protect you as well.

Controller medicines do not give you quick relief from COPD symptoms. They do not work in the same way as rescue medicines, so cannot be used as a substitute for your rescue medicine.

My Controller Medicine(s):

____

Some common controller medicine names are: Spiriva® (tiotropium)

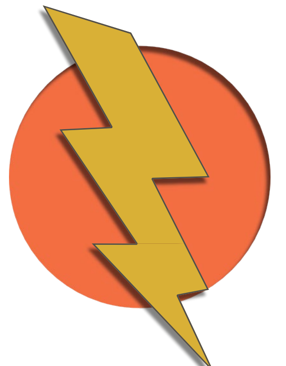
Incruse Ellipta® (umeclidinium)
Anoro Ellipta® (umeclidinium/vilanterol) Stiolto Respimat® (tiotropium/olodaterol)
Bevespi Aerosphere® (glycopyrrolate/formoterol) Symbicort® (budesonide/formoterol)
Advair® (fluticasone/salmeterol) Breo Ellipta® (fluticasone/vilanterol)
Trelegy Ellipta® (fluticasone/umeclidinium/vilanterol)

Rescue Medicines

Your rescue medicine should be used when your breathing **GETS WORSE**.

Rescue medicines work lightning fast to make it easier for you to breathe. They help open your airways when you are having sudden trouble breathing.

Use your rescue medicine when you feel short of breath to feel better fast.



My Rescue Medicine(s): ________________________________

Some common rescue medicine names are:

Ventolin®, Proventil®, and ProAir® (albuterol)
Combivent® (albuterol/ipratropium)
Atrovent® (ipratropium)

IMPORTANT TIPS

Take your controller medicine every day, even if you feel fine.

Keep your controller medicines where you will always remember to take them, like next to your toothbrush.

Get your medicine refilled on time so you never go without it.

Keep your rescue inhaler with you at all times. If you need to use your rescue inhaler more than usual, call your doctor. (see page 10 on how to create a COPD action plan.)

How do I use an inhaler?

There are a few different kinds of inhalers. The most common types of inhalers are mist inhalers and powder inhalers.

Your doctor or nurse can help make sure you are taking your medicine correctly.

- General steps for using a mist inhaler are on pages 5 and 6.
- General steps for using a powder inhaler are on page 7.

What is a spacer?

Mist inhaler's can be used with a device called a "spacer."

A spacer is a plastic tube that goes over the mouthpiece of your inhaler. When you take your medicine, you put your mouth on the spacer instead of directly on the inhaler. The spacer makes sure the medicine gets in your lungs.

How to use a mist inhaler - with a spacer

READY: prepare your inhaler

- Shake your inhaler 5 or 6 times.
- Remove the caps from your inhaler and spacer.
- Put the open end of your inhaler into the spacer.
- Make sure your inhaler and spacer fit together snugly.

SET: your mouth to use your inhaler

- Breathe out slowly through your mouth.
- Close your lips around the mouthpiece of the spacer; make sure no air can escape.
- Keep your tongue and teeth out of the way.

GO: breathe in your medicine

- Press down on the top of your inhaler.
- Breathe in slowly and deeply through your mouth.
- Hold your breath for 10 seconds. Then, breathe out.

Take 1 puff at a time. If you need a second puff, wait 1 minute before taking it.

Rinse your mouth out with water after you are finished. Spit the water out. Do not swallow the water.

Clean your spacer at least once a week with soap and water or put it in the dishwasher.

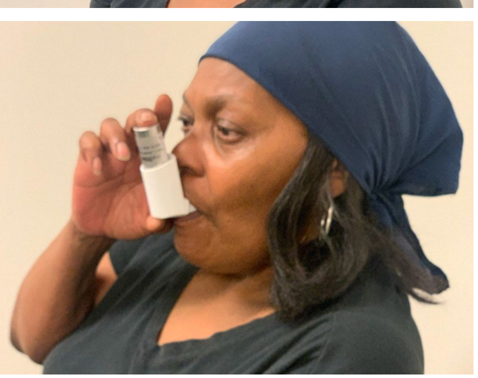
How to use a mist inhaler - without a spacer

READY: prepare your inhaler

- Shake your inhaler 5 or 6 times.
- Remove the cap from your inhaler.

SET: your mouth to use your inhaler

- Breathe out slowly through your mouth.
- Close your lips around the mouthpiece of the inhaler; make sure no air can escape.
- Keep your tongue and teeth out of the way.



GO: breathe in your medicine

- Press down on the top of your inhaler.
- Breathe in slowly and deeply through your mouth.
- Hold your breath for 10 seconds.
  Then, breathe out.

Take 1 puff at a time. If you need a second puff, wait 1 minute before taking it.

Rinse your mouth out with water after you are finished. Spit the water out. Do not swallow the water.

TIP: If you do not have a spacer, ask your doctor for one. A spacer helps the medicine get to your lungs, instead of staying in your mouth.

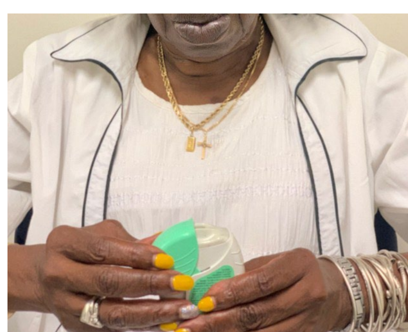
How to use a powder inhaler

Powder inhalers cannot be used with a spacer. When you put your mouth on the mouthpiece and breathe in, the force of your breath makes the medicine come out of the device and go into your lungs.

There are many different types of powder inhalers. Here are some general steps to using any powder inhaler. Ask your doctor or nurse to show you how to use your specific inhaler.

READY: prepare your inhaler

- Follow the instructions to activate your inhaler.
- Usually there will be a part of the inhaler that slides or twists.
- You will hear a click when the inhaler is activated.



SET: your mouth to use your inhaler

- Breathe out slowly. Hold the inhaler away from your mouth. Never breathe into the inhaler.
- Close your lips around the mouthpiece of the inhaler; make sure no air can escape.
- Keep your tongue and teeth out of the way.

GO: breathe in your medicine

- Breathe in quickly and deeply through your mouth.
- Your breath will pull the medicine into your lungs.
- Remove the inhaler from your mouth.

  Hold your breath for 10 seconds. Then, breathe out.

When you are done, close the inhaler.

Rinse your mouth out with water after you are finished. Spit the water out. Do not swallow the water.

Nebulizers

You may also have your controller or rescue medicines in a nebulizer (NEB-you-lie-zer).

A nebulizer is a machine you keep at home and use with a face mask or breathing tube.

The nebulizer turns your medicine into a mist so you can breathe it in. Some people call this a breathing treatment.

Your doctor might want you to use a nebulizer if you are taking certain medicines or if you have a hard time using inhalers.

Your health coach, nurse, doctor, or pharmacist can show you how to use your nebulizer.

How do I use a nebulizer?

READY: prepare your nebulizer

- Plug the tubing into the machine.
- Fill up the cup with your medicine and close the lid.
- Plug the other end of the tubing into the medicine cup.

SET: your mouth to use your nebulizer

- Turn on the machine.
- Put the mouthpiece in your mouth or put the mask on.

GO: breathe in your medicine

- Breathe in and out through your mouth until all the medicine in the cup is gone.
- It will take about 10-15 minutes to complete a
- dose. Turn the machine off.

IMPORTANT TIP

You need to clean your nebulizer with soap and water after every use. To clean it, follow the instructions that come with your nebulizer.

Antibiotics

People with COPD can get lung infections more easily than other people. Lung infections make your COPD worse and can be very serious.

Your doctor may prescribe antibiotics to prevent or treat an infection. If your doctor prescribes antibiotics for you, make sure you keep taking the medicine as long as you are supposed to, even if you feel better.

Steroid Pills

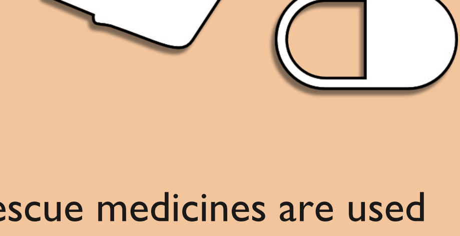
Sometimes COPD can suddenly get worse. Steroid pills can help you feel better faster when this happens.

Because of side effects, your doctor will usually give you steroid pills for only 4-7 days. You can talk about these side effects with your doctor.

Sometimes, doctors prescribe antibiotics and steroids for you to keep at home in case you have a COPD exacerbation. (see page 10) This is called an "emergency pack." Ask your doctor if you should have an emergency pack at home.

REVIEW of Medicines for COPD

The four most common medicines for COPD are:



- Controller
- Medicines Rescue
- Medicines
- Antibiotics

Steroid Pills

Controller medicines are used every day. Rescue medicines are used when you are feeling short of breath. You will probably need to take antibiotic and steroid pills from time to time.

Your doctor will tell you which medications you should be taking and for how long.

COPD EXACERBATION

A COPD exacerbation (ex-AS-er-bay-shun) is when your breathing gets worse over a few days. Some people call this a "flare up." An exacerbation will usually make you have more shortness of breath, cough more and have more phlegm (mucus). When you have a COPD exacerbation, you will need to follow an action plan to get through it safely.

What is a COPD Action Plan?

A COPD Action Plan is something that you make with your doctor. The Action Plan helps you, and the people you live with, remember what to do when your breathing gets worse.

You and your doctor should talk about the Action Plan on page 20 together. Your doctor can fill in special instructions so that you know what to do when your breathing gets worse. Your action plan can change sometimes, so you should discuss it with your doctor at every visit.

When should I use my COPD Action Plan?

You can look at your COPD Action Plan any time to see how your breathing is doing. When your breathing changes, you should use your plan to help you decide what to do.

MY COPD ACTION PLAN

Zone 1 GREEN *I feel the way I usually feel.*

Zone 2 YELLOW *I am feeling worse than usual.*

Zone 3 RED *I am feeling bad.*

PULMONARY REHABILITATION

"Pulmonary" means lungs. Pulmonary rehabilitation (also called rehab) is the name of an exercise and education program for people with COPD.

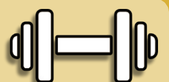
Pulmonary rehab teaches 2 kinds of exercise:

Endurance Exercise

Endurance exercise helps you to do activities longer before getting short of breath.

In pulmonary rehab, you will do exercises like walking or using an exercise bike.

Strength Exercise



Strength exercise helps you do activities more easily, getting less short of breath.

In pulmonary rehab, you will do exercises like lifting light weights and stretching with exercise bands.

Your doctor can connect you with a pulmonary rehab center in your area.

EXERCISE GUIDELINES

Some people with COPD worry about exercising because it can make them feel more short of breath. But it is safe when you follow your doctors advice.

Staying active is an important part of being healthy! Even walking regularly will help you breathe and feel better.

It's important to start slow and be safe. Talk to your doctor about what kind of exercise you can start out with. Pulmonary rehab is a good place to learn about safe exercises.

BREATHING TECHNIQUES

When you're out of breath, breathing techniques can help you feel better and calmer. There are many muscles you use to breathe. Doing these techniques can make those muscles stronger and help you breathe better all the time.

It is good to practice these techniques a couple times a day to make your breathing muscles stronger.

The two most common breathing techniques are:

Pursed-Lip Breathing

1. Slowly breathe in through your nose as you count to two in your head...

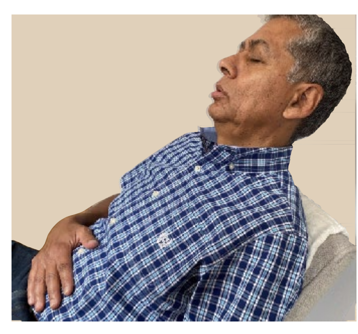
   "One... Two...."

2. Purse your lips (like you are going to blow bubbles). Slowly breathe out through your mouth as you count to four in your head...

   "One... Two... Three... Four..."

3. Continue breathing in through your nose... *"One... Two..."*
   and out through your pursed lips...
   "One... Two... Three... Four..."
   until you start to feel better.

Belly Breathing



1. Lie on your back or sit comfortably.
2. Put one hand on your belly and close your eyes.
3. Relax your body and focus on your breathing.
4. Breathe in slowly through your nose, taking a deep breath.Your hand should feel your belly getting bigger as it fills with air.
5. Breathe out slowly through your mouth. Your hand should feel your belly getting smaller as the air leaves your body.
6. Repeat the deep breaths, in and out, until your body and mind feel calm.

QUIT SMOKING

If you are reading this section, you are ready to take an important step toward quitting smoking. You may have tried to stop smoking before. For most people, it takes many tries to stop smoking. Great job for taking this first step!

Quitting smoking is the most important treatment for COPD. We can work with you to complete this Action Plan to help you cut back or quit. As with many things, the most important thing in quitting smoking is to start! Think positive. Use the tools and we'll be there to help.

Medication to help with quitting

Work with your doctor to find the right medication for you. You can start taking it before you even try to quit or cut down, to help you get started.

Varenicline (Chantix)

Varenicline (Chantix) is the most effective medicine for many people to quit smoking. It is a pill that helps you re-train your brain so you do not get the same pleasure from smoking.

While you use this medicine it is helpful to develop new habits to replace smoking.

Nicotine Replacement

Nicotine is the chemical in cigarettes that causes addiction. Nicotine is what you crave when you are trying to quit. Many people use a nicotine patch or gum to help with the cravings.These medications provide just enough nicotine to block the really bad feelings or the withdrawal that happens when you are trying to quit.That way you can continue with your day.

The nicotine patch give a slow, low level of nicotine to prevent cravings.

Nicotine gum gives a quick burst of medication and starts working in minutes to help you first thing in the morning or when you need quick relief for a craving.

Nicotine gum has a misleading name. Do not chew the gum! Bite it once or twice and pack the gum in your cheek. The nicotine will slowly be absorbed through your cheek lining.

Identify Smoking Triggers and Replacements

Smoking triggers are situations and moods that tell your brain that it is time to smoke. A lot of the time, they cause cravings.

Many times people want to smoke when they are:

- Feeling stressed or bored
- Around others who smoke
- Drinking coffee or alcohol
- During or after meals
- Taking a break at work
- Talking on the phone

If you cannot stay away from the things that make you want to smoke, try to change the way you do them.

What are your smoking triggers?

Write down your triggers and a plan to deal with each of them. It may help to think about activities you used to enjoy as a kid!

Trigger	**Replacement**

Setting a Quit Date

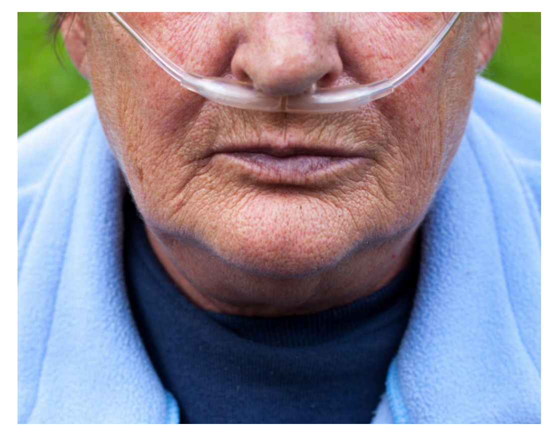
Some people like to pick a "quit date" to stop smoking.

My quit date: ______________________________

Tell your friends and family your quit date. Make plans to spend time with people who do not smoke.

If you are not ready to set a quit date, you might be ready to cut back. Any action you take to reduce your smoking will help. Great job and we believe in you!

OXYGEN



Some people with COPD cannot get enough oxygen on their own.

If you cannot get enough oxygen, your doctor will prescribe oxygen therapy for you. This means you will have a tank that is full of oxygen with a tube attached that goes under your nose.

Some people need this extra oxygen all the time. Other people only need the extra oxygen when they are walking around or when they are sleeping.

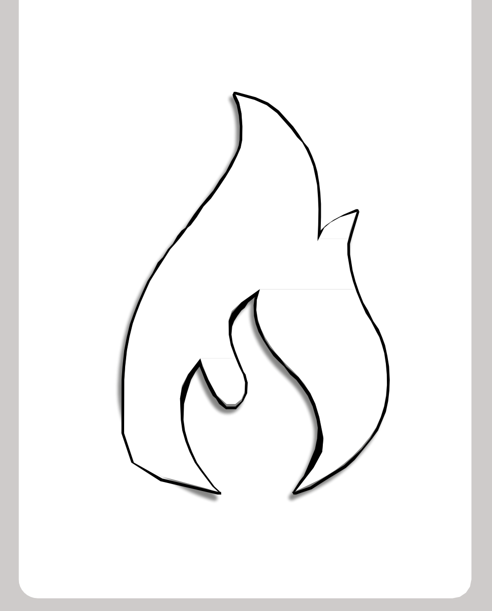
If you need oxygen, using it will help you breathe easier.

IMPORTANT!

Oxygen catches on fire very easily.

When you are using oxygen:

- Do not smoke
- Do not let anyone else smoke around you or your oxygen tank
- Do not use your oxygen near a working stove or fireplace
- Keep a fire extinguisher near your oxygen tank in case of emergency



VACCINES

Getting sick when you have COPD can be very serious.

Having a cold or the flu can make your breathing worse. It can lead to lung infections or an exacerbation. People with COPD get lung infections more easily than other people and often have to stay in the hospital until they get better.

You can protect yourself from getting sick by getting your flu vaccine every year in the Fall. The flu vaccine reduces the chances of exacerbation and pneumonia in people with COPD.

The flu vaccine is like a car seat belt — you never know when you might get into a car accident, but if you do, you hope you are wearing a seat belt. When you have COPD, you never know when you might get exposed to the flu, but if you are, we hope you're protected with the flu vaccine.

Common concerns about the flu shot:

Can I get the flu from the flu shot?

No, the flu shot cannot give you the flu because it does not contain a live virus.

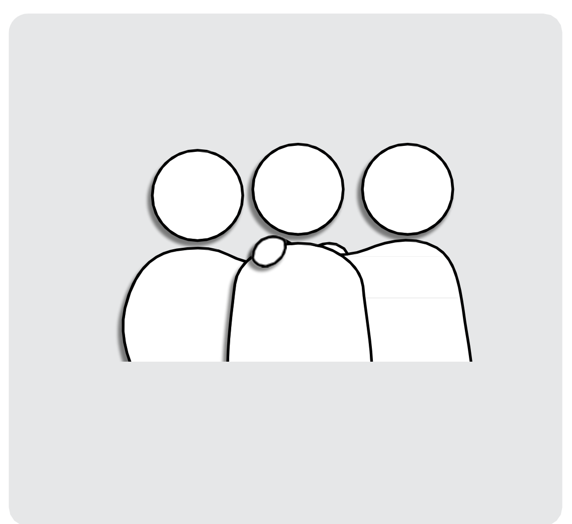
I got the flu shot before, and it made me feel sick.

The flu shot is not always effective, and sometimes you may become sick with another infection that seems like the flu. Some people get mild side effects such as an arm ache. Even less people have body aches and low grade fever.

COPD exacerbations and pneumonia caused by the flu are much, much worse than any side effect you might get from the flu vaccine.

GETTING SUPPORT

Having COPD can feel overwhelming.
Some people with COPD may feel:



- Afraid
- Frustrated
- Tired
- Confused
- Embarrassed
- Sad or Depressed
- Angry

All of these feelings are understandable and can be a normal part of coping with your illness. It can help to talk with people who might understand how you feel. Think about who you can talk to about your feelings.

You may want to talk with:

- Your doctors, nurses,and healthcare team
- Your friends and family
- People at pulmonary rehab (see page 11)
- A support group (see below)

You might also want to find support online.

- The COPD Foundation: www.copdfoundation.org/
- The American Lung Association: www.lung.org/better-breathers

Rescue Medicines

Ventolin®

Proventil®

ProAir®

(albuterol)

Xopenex®

(levalbuterol)

Combivent®

(albuterol & ipratropium)

Controller Medicines

Advair®

Wixela®

(fluticasone & salmeterol)

Symbicort®

(budesonide & formoterol)

Breo Ellipta®

(fluticasone & vilanterol)

Trelegy Ellipta®

(fluticasone & umeclidinium & vilanterol)

Flovent®

(fluticasone propionate)

Arnuity Ellipta®

(fluticasone furoate)

Qvar®

(beclomethasone)

Pulmicort®

(budesonide)

Serevent®

(salmeterol)

Arcapta®

(indacaterol)

Brovana®

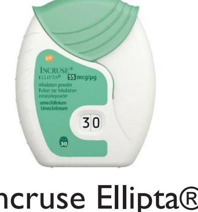
(arformoterol)

Bevespi Aerosphere®

(glycopyrrolate & formoterol)

Foradil®

(formoterol)



Incruse Ellipta®

(umeclidinium)

Anoro Ellipta®

(umeclidinium & vilanterol)

Stiolto Respimat®

(tiotropium & olodaterol)

Spiriva®

(tiotropium)

MY IMPORTANT PHONE NUMBERS

My coach: ____

Phone number: __________________________

Primary care doctor: ____________________________________

Phone number: __________________________

COPD doctor: ________________________

Phone number: ____________

Pharmacy: ____________

Phone number: __________

My Controller Medicine(s):

____

My Rescue Medicine(s):

____

For medical emergencies, call: **911**

For other, non-emergency needs, call: **311**

MY COPD ACTION PLAN

Zone 1 GREEN *I feel the way I usually feel.*

I am... coughing my usual amount
- sleeping well
- able to do my usual activities

I should... avoid smoke & smoking
- take my usual daily medications
- do my usual activities and exercises

Zone 2 YELLOW *I am feeling worse than usual.*

I am... coughing/wheezing more
- getting more short of breath doing my usual activities and exercises
- making more phlegm (mucus)
- using my rescue medicine more than usual

I should... avoid smoke & smoking
- take my usual daily medications
- get plenty of rest
- try breathing exercises (see Page 12)
- ❑ use my rescue medicine every_____hours
- ❑ start emergency pack:
  - ❑ steroid pills ______________________ [name/dose/duration]
  - ❑ antibiotics ______________________ [name/dose/duration]
- call my doctor if I don't feel better

______________________________ [doctor's phone #]

Zone 3 RED *I am feeling bad.*

I am... having difficulty breathing, even when I am sitting still
- not able to sleep because I cannot catch my breath
- having a fever or shaking chills
- feeling drowsy & confused
- having chest pain or tightness
- coughing up blood

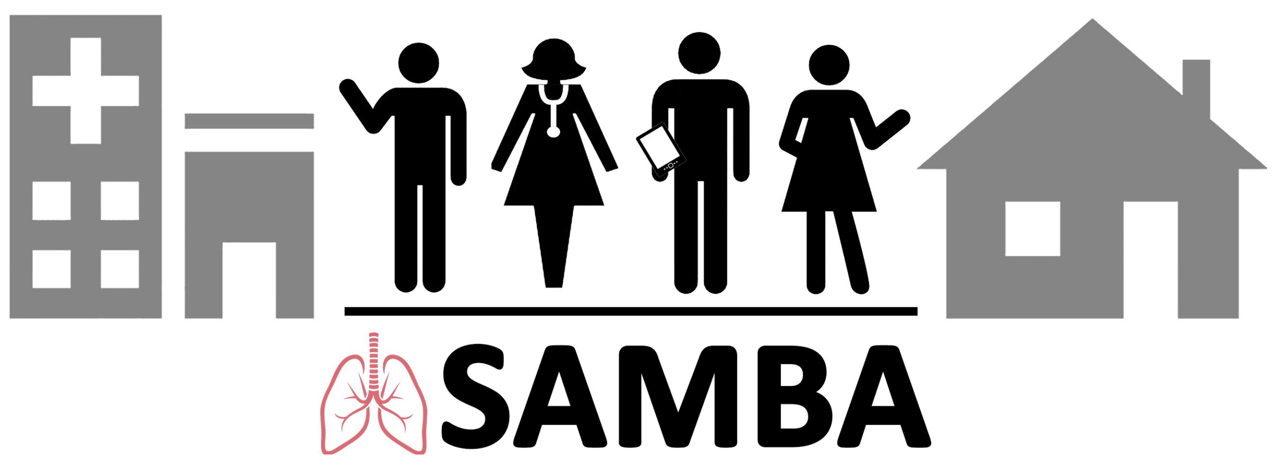
I should...
- call 911 right away
- ❑ after I call 911, while I am waiting for the ambulance, I will...

____

In partnership with:

Funding provided by:

SAMBA-COPD WORKBOOK



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SAMBA Sessions Overview

Visit Schedule Modifications for COVID-19

1) **Reduced in-person encounters**
   Schedule of encounters when in-person encounters are feasible.

   In-person encounters: the coach will strive to conduct a minimum of 2 in-person encounters for all patients (1-2 at home, 0-1 at PCP office) and for patients undergoing home-based pulmonary rehabilitation, a minimum of 3 in-person encounters (1-2 at home, 0-1 at PCP office, 1 at home post-PR evaluation). Additional in-person visits are encouraged, as deemed beneficial by the coach.

   Telephone or video encounters: a minimum of 1 weekly telephone or video call during the weeks when the patient is not seen in-person for 8 weeks, followed by a minimum of one call monthly for months 3-6. Additional calls are encouraged, as deemed beneficial by the coach.

2) **Virtual encounters (telephone, video) only**
   Schedule of encounters when in-person encounters are not feasible.

   Telephone or video encounters: a minimum of 1 weekly telephone or video call for 8 weeks, followed by a minimum of one call monthly for months 3-6. Additional calls are encouraged, as deemed beneficial by the coach.

Typical Encounter Schedule

Home Encounter Schedule (minimum of 4)

The program is 6 months in duration. Most in-home encounters (minimum of 4) are concentrated in the first half to facilitate engagement and build rapport, and to enable rapid progress. If the patient engages in home-based pulmonary rehabilitation (HBPR), at least two home visits must occur within the 4 weeks that follow the patient's HBPR evaluation to ensure that the patient is performing the exercises correctly and is properly encouraged. These visits may contribute to the minimum of 4 in-person encounters.

Other Encounters (minimum of 2)

For patients undergoing HBPR, the coach must join the patient when they are evaluated by the respiratory therapist at a clinic site.

During the first 3 months, the coach should attend a primary care or pulmonary specialty visit with the patient.

Telephone or Video Calls (minimum of 4)

Telephone or video calls (minimum of 4) should be used as needed to follow up with patients to build rapport, reinforce learning, provide encouragement, and ensure their wellbeing. The coach may choose to concentrate many calls in the early weeks of the patient's participation to ensure the patient is on track. Other calls may occur approximately monthly and interspersed between in-person visits to support engagement.

Coaches and patients can alter this schedule to optimize engagement. The coaches, however, must meet the minimum number of in-person and telephone encounters.

For In-Person and Telephone Encounters—Suggested Schedule

	Week												
	1	**2**	**4**	**6**	**8**	**10**	**12**	**14**	**16**	**18**	**20**	**22**	**24**
In-home*	✓		✓		✓ **				✓**				✓**
HBPR evaluation			✓										
Primary care or specialty visit			✓										
Phone or video call		✓	✓	✓	✓		✓		✓		✓		✓

*May also occur at other site if preferred by patient (e.g., clinic).

For Telephone Encounters Only—Suggested Schedule

	Month					
	1	**2**	**3**	**4**	**5**	**6**
Phone or video call	1 per week		1-2 per month			

*May also occur at other site if preferred by patient (e.g., clinic).

Information the Coach Will Receive About the Patient before the First Encounter

David Strefling will provide you with the following information about the patient:

- Name, age
- Telephone number
- Video chat capability (yes/no)
- Clinical information:
  - Name of primary care physician, name of pulmonologist (if applicable), site(s) of clinical care
  - Chronic medical problems, including depression/anxiety
  - Current list of medications
  - Vaccination information (last flu; pneumovax 13, 23)

Session Content

The list of activities by session, below, are recommended but may be modified as needed.

Session #	Session Focus
Session 1	**Objective: Establish rapport, explain program, assess COPD impact** • Introduction/Program Overview • Assess COPD symptoms and control (Administer CAT) • Initial identification of patient goals • Identify current COPD medications and how used • Complete intake form
Session 2	**Objective: Identify barriers, set goals** • Assess inhaler technique • Administer Screener • Summarize visit, agree on goals and action steps, arrange next visit • Communicate with care team
Sessions 3~6	**Objective: Work toward achieving goals** • Execute Core Actions (X) 1. Review goals, action steps, progress 2. Assess COPD control • Check COPD control with the abbreviated CAT at each encounter • Introduction to COPD action plan o Reinforce use of action plan and emergency pack medications • Introduction to pulmonary rehabilitation o Support home exercise activities • Reconcile other medications
Sessions 7~10	**Objective: Work toward achieving and sustaining goals** • Continue Core Actions (X) • Regularly check COPD control • Periodically check inhaler technique and medication adherence • Reinforce use of action plan and emergency pack meds • Support home exercise activities • New barrier screening as time permits

Session 1: Phone Introduction and Intake

From the beginning of the conversation, goal-centered dialogue should be used to communicate how this program will help the patient manage their COPD in a way that suits their lifestyle and values.

Aim to make the session brief, approximately 15 minutes.

Approach

1. Introduce self
2. Briefly describe program
3. Assess COPD symptoms with the CAT
4. Identify a goal to help engage the patient
5. Describe program logistics
6. [For in-person visits] Describe COVID-19 safety precautions
7. Set a date, time and location for the first session
8. Ask about their COPD medications (if time permits)

Key Points to Convey	Suggested Script
• **Program Objective**: better control of COPD and feel better • **How it works**: 1) identify barriers to COPD control; 2) set goals for addressing the barriers, improving COPD and addressing patient priorities; 3) create plan; 4) work on the plan; • **Logistics**: 1) <u>duration</u>, 6 months; 2) <u>meetings</u>, in-person and or by phone; 3) <u>meeting location (if in-person)</u>, home, doctors office, patient preference; 4) <u>meeting frequency</u>, flexible; 5) <u>payment</u>, no payment is provided	**Introduction and program objective** *Hello, my name is [Health Coach Name] from City Health Works. We're working with doctors at Mount Sinai Hospital to help people with COPD get better control of their COPD and feel better. Can I tell you more about the program?* **How it works** *Our program is called SAMBA-COPD. SAMBA stands for* Supporting self-Management Behaviors in Adults. *We help people get their COPD under better control, feel better, and breathe easier. Whatever you want with your health, we try to help you achieve it. For example, some people with COPD want to feel well enough to spend more time with friends and family, take part in activities they enjoy, like walking, have more strength, or take better care of their health.*

COPD Assessment Test (CAT)

Can I ask how COPD affects you?

I'll ask about a few ways COPD might affect you. For each one, tell me how bad it is for you, on a scale of 0 to 5, where 0 is best and 5 is worst. Ready?

		0	1	2	3	4	5		Score
How often do you cough?	I never cough							I cough all the time	
How much phlegm or mucus do you have in your chest?	None at all							My chest is full of phlegm (mucus)	
How tight does your chest feel?	Does not feel tight at all							Feels very tight	
How out of breath do you feel when you walk up a hill or a flight of stairs?	Not out of breath at all							I am completely out of breath	
How limited are you doing activities at home?	Not at all limited							I am completely limited	
How confident do you feel leaving your home despite my lung condition?	Completely confident							I am not confident leaving my home at all because of my lung condition	
How much does your lung condition affect your sleep?	I sleep soundly							I do not sleep soundly because of my lung condition	
How much energy do you have?	I have lots of energy							I have no energy at all	

TOTAL SCORE: __________

Summarize symptoms *So it seems like COPD most affects you…[summarize their major symptoms].*

Interpreting CAT Scores

CAT Score	Impact Level	Description
>30	Very High	Symptoms stop patient from doing everything they want to do; they never have “good” days; often cannot go far from bed or chair.
>20	High	COPD stops patient from doing most things they want to do. Breathless when walking around home.
10-20	Medium	COPD is one of the most important problems they have but they have a few good days a week. Breathless when bending over and walking up stairs, even when walking slowly.
<10	Low	Most days are good but COPD causes a few problems and stops them from doing one or two things they want to do. Many have to slow down when walking up hills or hurrying on flat ground.
5		Upper limit of normal

Discussing CAT Scores over time with Clients

- Score is getting better:
    - Score improvement means they are having fewer symptoms than before
    - Provide positive reinforcement for the individual’s progress
    - Ask why they are doing better, reinforce what’s working, and link their progress to their SAMBA goals and activities, if possible
- Score is staying the same:
    - They are not improving; it could be they are already at their best (no room more room for improvement) or they are not making progress with SAMBA
    - Ask why their symptoms are not getting better
    - Assess their progress with their SAMBA activities and goals
    - If you believe there is room for improvement, consider changing strategies
    - Continue to invoke their goals, and engage them in exploring new strategies to improve COPD self-management and reduce their symptoms
- Score is getting worse:
    - Ask why their symptoms are worsening
    - Assess their progress with their SAMBA activities and goals
    - Consider re-administering the SAMBA screener to identify new barriers that should be addressed

Identify a goal

What would you like to be able to do that your COPD makes it hard for you to do now?

I can help you with that! Together, we'll figure out what stands in the way of…[their goal], and find ways to help you get there.

[DOCUMENT THEIR GOAL]

Describe program logistics—For In-Person + Telephone

The program lasts 6 months. During this time, we'll meet in-person and by phone [or by video call] to talk about [GOAL PATIENT IDENTIFIED]. Where we meet is up to you. We think it's best to meet in your home, but we can also meet at your doctor's office, or you can suggest another place. We'll schedule our meetings to be convenient for you. We'll try to meet and or speak by phone/video about once a week for the first 2 months, then a little less often. But we can adjust the schedule for what works best for you.

<u>COVID-19 safety</u>

Our most important concern is your safety and comfort. We understand that many people are afraid to have visitors in their home because of coronavirus. Please let me tell you about the precautions we are taking to make sure that visits with you are safe. You can ask questions and decide whether you're comfortable with visits in person or prefer to have them just by phone.

<u>Rationale</u>. *First of all, let me tell you why we'd like to have a few meetings in person. In general, meeting in person helps the program work better. By meeting with you in person, we get to know each other better, I can make sure you're using your inhalers correctly, go over the education materials with you more easily, and help you with exercises that will make your breathing easier.*

All of the precautions we take to make sure you and I are safe are those that are recommended by the Department of Health and Mount Sinai Hospital.

<u>Precautions for You</u>. *First of all, we won't have too many visits in person, 1-3 over 6 months. To protect you, I will not visit you if I or another person in my home is not feeling well, has COVID, or is in contact with someone who recently had COVID. I'll also check my temperature before visiting you. If it's high, we'll reschedule. When visiting you, I'll always wear a mask, clean my hands often, and stand or sit at least 6 away from you.*

<u>Precautions for Me</u>. *I'll do a few things to make sure that I am safe as well. First, I'll call you the morning of our visit to see if you or anyone in your home has symptoms of COVID. If you or they do, we'll reschedule. When I arrive at your home, I'll check your temperature to double check that you're well [Can describe UV forehead thermometer if asked]. When visiting with you, to be extra careful, I'll ask that you have only one other person in the room with us during our meeting. I'll check that person's temperature, too. I'll also ask you and your family member to wear masks during the entire visit. I can give you a mask if you need one. Finally, I'll use a sanitizing spray and wipes to clean the table where we work, both before we start and when we finish.*

Describe program logistics—For Telephone/Video Only

During this time, we'll speak by phone or by video call to talk about [GOAL PATIENT IDENTIFIED]. We try to speak about once a week for the first 2 months, then a little less often. But we can adjust the schedule for what works best for you.

Schedule appointment

Shall we schedule a meeting?

Date:
Time:
Location (if in-person)
Telephone:
Video:

Preferred language: ______________________

Contact Information
Home phone: _______
Cell phone: ________
E-mail: ____________

What is the best way for us to contact you? (circle one): Home Phone Cell Phone Email

Confirm Address:____

It is often helpful to have a family member or friend join these meetings. That way, they can help you remember what you learn here and help support you as you work to better control your COPD. Is there anyone you'd like to join us in these meetings? They can join some or all meetings, it's up to you. Would it be okay for me to contact them?

Name	Relationship	Phone
____________________________	_________________________________	________________________

Just so I'm ready, what are the COPD medications you use?

Medication	*How often do you take it?*
1.____	1.____
2.____	2.____
3.____	3.____
4.____	4.____

Session 2: Inhaler Technique and Screening

Instructions and Checklist

Day Before Session 2

- ◻ Call patient to confirm date and time of appointment and location
- ◻ Confirm names of medicines
- ◻ Ask patient to have on hand:
    - o All medicines, including COPD inhalers
    - o Spacer
    - o Action Plan, if applicable

Materials Needed for Session 2:

- ◻ COPD 1-2-3 Booklet
- ◻ Placebo MDI and DPI devices
- ◻ Demonstration spacer
- ◻ Patient's medication list

Screener Introduction

<table>
<tr><th>Key Points to Convey</th><th>Script</th></tr>
<tr><td>Assess inhaler technique
Will ask questions to identify barriers to COPD control
Questions will take about 1 hour
Use answers to develop a plan
Ok to take a break if needed</td><td>So now I’m going to run through a number of questions with you. This will take about an hour, and we can take a break if you need to.

I’m asking you these questions so I can better understand how you think about and take care of your COPD.

It will also help me to identify things that we can talk about to help lessen your COPD symptoms.

What questions do you have?

Ok, let’s get started.</td></tr>
</table>

COPD Medication Identification and Knowledge of Use

Ok to skip if COPD medications were reviewed during the first meeting.

Let's begin by talking about your medications.

Ask: *Please take out your COPD medications*.

Say: *There are two types of COPD medicines: controller medicines and rescue medicines. Controller medicines prevent COPD attacks from starting. Rescue medicines help stop COPD attacks after they have started. They are intended to help your breathing right away*.

Point to each of the patient's medicines, say the name.

Ask: *Is this medicine a controller medicine or a rescue medicine?*
How do you take this medication? (Prompts: when, how often)

Information about the prescribed use of the COPD medications are found on the patient's medication information sheet provided when the patient was assigned to you.

	Correctly States Type		Correctly States How to Use	
COPD Medicine	**Yes**	**No**	**Yes**	**No**

After all COPD medications are assessed:

- If medication type or use is misidentified, clarify and correct
- Assess their understanding of how to use the medication(s) using teach-back

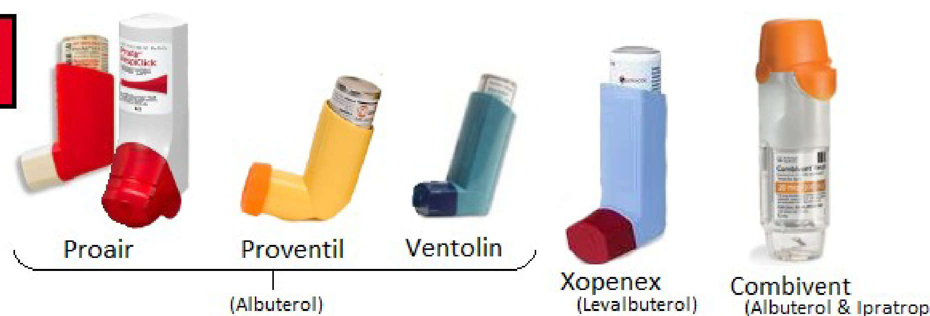
Say: *Tell me, what type of medication is this? When should you take it?* (Prompt: everyday vs. as needed)

When misidentified, prepare to review medication identification and use at all or most of the in-person follow-up encounters.

Incorrect understanding of how to take medicine	Yes	No
Barrier		

COPD Medication Images

RESCUER: Short Acting Bronchodilators



Proair — Proventil — Ventolin (Albuterol)

Xopenex (Levalbuterol)

Combivent (Albuterol & Ipratropium)

CONTROLLER: Combination Medicine

Advair — Wixela (Fluticasone - Salmeterol)

Symbicort (Budesonide - formoterol)

Breo (Fluticasone - Vilanterol)

Trelegy (Fluticasone - umeclidinium & vilanterol)

CONTROLLER: Inhaled Corticosteriod

Flovent (Fluticasone propionate)

Arnity (Fluticasone furoate)

Qvar (Beclomethasone)

Pulmicort (Budesonide)

CONTROLLER: Long Acting Bronchodilators

Serevent (Salmeterol)

Arcapta (Indacaterol)

Brovana (Arformoterol)

Bevespi (Glycopyrrolate / Formoterol)

Foradil (Formoterol)

CONTROLLER: Anticholinergic

Incruse (Umeclidinium)

Anoro (Umeclidinium or vilanterol)

Stiolto (Olodaterol -Tiotropium)

Spiriva (Tiotropium bromide)

Dose Inhaler (MDI) Technique, With or Without Spacer

Say: *Next, please show me how you use this inhaler.*

Patient should take a real puff of their inhaler; no more than 2 puffs. If they refuse, ask them to mimic use without activating a dose.

Demonstrate with spacer if applicable.

Check the steps performed correctly.

	Yes
1. Shakes inhaler (before attaching to spacer if they have one)	_____1
2. Breathes out	_____1
3. Closes lips around mouthpiece, making a tight seal	_____1
4. Presses down fully on canister, and only once	_____1
5. Breathes in slowly (no whistle if using a spacer)	_____1
6. Holds breath for 5-10 seconds	_____1
7. Removes from mouth before breathing normally	_____1
8. Breathes normally for 30-60 seconds	_____1
9. Repeats steps for their second puff	_____1
TOTAL:	____/9

Q1-9 TOTAL STEPS MISSED: __________

	MDI Technique
Any step missed	

Dry Powder Inhaler (DPI) and Respimat Technique

Say: *Next, I want to see how you use your dry powder device(s).*

Patient should take a real puff of the inhaler.
If they refuse, ask them to mimic use without activating a dose.

Check the steps performed correctly.

	Yes
1. Properly holds the inhaler	___1
2. Properly activates the dose	___1
3. Breathes out slowly	___1
4. Closes lips around mouthpiece to make a tight seal	___1
5. Breathes in quickly and deeply through mouth	___1
6. Removes inhaler from mouth	___1
7. Holds breath for 5-10 seconds then breathes out	___1
8. Closes DPI by sliding thumb grip back until it clicks	___1
TOTAL:	_______/9

Q1-9TOTAL STEPS MISSED: __________

	DPI Technique
Any step missed	

Adherence to COPD Controller Medicines

If no controller medicine, skip to No Controller Medication (Q.X).

Say: *Next, I would like to ask some questions about how you take your [NAME CM].*

1. *How often do you take your* [CM]?
   Everyday 0
   Less than everyday 1

2. *Do you use your [CM]* ***ONLY when you're short of breath or wheezing****?*
   No 0
   Yes 1

3. *Do you ever use your [CM] as a* ***backup treatment*** *if your albuterol doesn't help your COPD symptoms?*
   No 0
   Yes 1

4. *How often do you* ***forget to take*** *your [CM]?*
   Rarely or Never 0
   Often or sometimes 1

5. *How often do you* ***stop taking*** *your [CM] for a while?*
   Rarely or Never 0
   Often or sometimes 1
   If 1, ask why________________________________

6. *Have more than 2 days passed between finishing one [CM] and starting a new [CM]?*
   No 0
   Yes 1

7. *How often do you* ***take fewer puffs*** *of your [CM] than the prescription says?*
   Rarely or Never 0
   Often or sometimes 1
   If 1, ask why________________________________

Medication Adherence Barrier	Yes	No
Any item = 1		

Reason	Yes	No
As needed use		
Back-up use		
Forget		
Stop taking		
Take less than prescribed		

Medication Costs

Skip if adherence questions = 0

Say: *People often have difficulty with medication costs.*

8. *Do you ever skip doses or not refill a prescription because of the cost of your COPD medications?*
   No 0
   Yes 1

9. *Because of medication costs, do you ever have to choose to get one medication instead of another?*

   Applies to COPD and non-COPD medications.
   No 0
   Yes 1

   [If Yes] *Which medication do you prioritize?* ________________

Medication Adherence Barrier	Yes	No
Any item = 1		

Medication Access

Skip if adherence questions = 0

Say: *Next, I would like to ask some questions about some problems you may have accessing your medications.*

10. *Do you have trouble getting [picking up] your medication from the pharmacy?*
    No 0
    Yes 1

11. *Do you have trouble getting your doctor to refill your medicines?*
    No 0
    Yes 1

New Prescription Access Barrier	Yes	No
Any item = 1		

COPD Medication Beliefs

Skip if adherence questions = 0

Say: *Next I'm going to ask you your views about your COPD medications*.

12. *How much does your health right now depend on your [CM]? Would you say…*
    A lot 0
    A little/not at all/don't know 1

13. *How much does your [CM] protect you from getting worse?*
    A lot 0
    A little/not at all/don't know 1

Medication beliefs	Yes	No
Any item = 1		

Side Effects

Skip if adherence questions = 0

14. *What side effects do you experience from your COPD medicines?*
    None 0
    [List side effects] .... ________________________

15. *Do side effects from [NAME MEDICATION] prevent you from using it?*
    No 0
    Yes 1

Side Effect Adherence Barrier	Yes	No
Barrier if Item 15 = 1		

Complementary and Alternative Medications (CAM)

16. *Sometimes people use home remedies (such as herbal medications, supplements, rubs) to PREVENT COPD symptoms. Do you ever use any remedies to PREVENT COPD symptoms?*
    No 0
    Yes 1

    a. *Do you ever use remedies instead of your prescribed medications when your COPD is acting up?*
       No 0
       Yes 1
    b. What do you use? ____

CAM Adherence Barrier	Yes	No
Barrier if Item 16a = 1		

Subject Does Not Have a Controller Medication

Skip if patient has a controller medication.

Hold up med poster and point to controllers.

17. *In the last year, did a doctor prescribe any of these medications for your COPD?*

No 0
Yes 1

If yes, name controller medication:____

17a. *When did you stop taking this medication?* ___________________________________

17b. *Why did you stop taking this medication?* ____________________________________

If reason for stopping medicine is other than physician instruction, address reason as a barrier.

Other reason for stopping controller medication	Yes	No
Is this an actual barrier?		

Prioritizing Illness & Managing Multiple Medications

Say: *Next, I am going to ask some questions about your health in general.*

18. *Aside from COPD, what other major health problems do you have?*
    1. ______________________________
    2. ______________________________
    3. ______________________________
    4. ______________________________
    5. ______________________________

19. *How do your other health problems make it hard for you to take care of your COPD?*

20. *Do you prioritize **other medications over** your COPD medications?*

No 0
Yes 1

Prioritize other medications over CM	Yes	No
Item = 1		

21. *Are you ever unsure whether your symptoms are from your COPD or one of your other medical problems?*

No 0
Yes 1

Confusion about source of symptoms	Yes	No
Item = 1		

Medication Organization

Say: *I will now ask about how you organize your COPD medications daily.*

22. *Where do you usually keep your COPD medications?*
    Controller ______________________________
    Rescue ______________________________

23. *For your [CM], is this where you also keep your medications for other health problems?*
    Same Place 0
    Different Place 1

24. *How do you remind yourself to take your [CM]?* ______________________________

Well defined medication routine [Yes=3]	**Yes**	**No**
Consistent time of day		
Consistent location		
Incorporation into existing, consistent daily routine		
Insufficient routine: Score <3		

Exacerbation History & Management

Say: *Now, I am going to ask you about your history with COPD exacerbations.*

25. *When did you last go to the emergency department because of your COPD or breathing problems?*
    < 30 days ago 3
    1-12 months ago 2
    > 12 months ago 1
    Never... 0

[If participant answered 1-12 months ago or < 30 days ago]
25a. When did you go to the emergency room? ___________________________________

26. *When was the last time you stayed for 2 or more days in the hospital because of your COPD?*
    < 30 days ago 3
    1-12 months ago 2
    > 12 months ago 1
    Never... 0

[If participant answered 1-12 months ago or < 30 days ago]
26a. When were you admitted into the hospital? ___________________________________

Recent hospitalization	Yes	No
Item = 2, 3 • May have had VNS and or PT in the home • High risk for readmission		

27. *How do you know when your COPD is getting worse or that you might need to go to the hospital?*

Say: *Next, I would like to ask you about a COPD action plan. An action plan is a set of written instructions for how to manage your COPD when it gets worse.*

28. *Do you have a COPD action plan?*

Yes 0
No 1
Don't know what it is 2

Exacerbation Management	Yes	No
Item = 1 Needs action plan		

29. *Do you have antibiotics and steroid pills at home to take in case your COPD gets worse? This is sometimes called a rescue or emergency pack.*

Yes 0
No 1

Pulmonary Rehabilitation

30. *Have you ever participated in an exercise program or classes that were designed to help your breathing? This is called pulmonary rehabilitation.*

Yes 0
No 1

Pulmonary Rehabilitation	Yes	No
Item = 1 Counsel about Pulm Rehab		

Say: *Now, I am going to ask you some lifestyle questions about tobacco, alcohol and drug use. As a reminder, your answers are confidential.*

Tobacco Use

31. *Do you smoke?*

Yes 1
No .... 0 → Go to next section.

32. *On a typical day, how many cigarettes do you smoke? [Note: 20 cigarettes in a pack]* ___________

How many years have you smoked? ___________

33. *Do you vape?*

Yes 1
No 0

Smokes or vapes	Yes	No
Item = 1 Smoking cessation support		

Alcohol Use

Say: *These next questions are about drinking alcohol, like wine, beer, and liquor.*

34. *How often do you drink alcohol?*

Never .... 0 → Go to next section
Monthly or less 1
2 to 4 times a month 2
2 to 3 times per week 3
4 or more times a week 4

35. *How many drinks do you have on a typical day?*

1 or 2 0
3 or 4 1
5 or 6 2
7 to 9 3
10 or more 4

36. *How often do you have 6 or more drinks on a single occasion?*

Never 0
Sometimes, but less than once a month 1
Monthly 2
Weekly 3
Daily or almost daily 4

Add scores across the 3 items.

Alcohol use barrier	Yes	No

Men: score ≥4 Women: score ≥3		

Drug Use

Say: *This next question is about drug use, which can make your COPD flare up or become more difficult to control.*

37. *Do you ever use illegal drugs or prescription medications to get high or for f?*

No 0
Yes 1

Drug use barrier	Yes	No
Any		

Fall Risk

Say: *Now, I am going to ask you some questions about falls.*

38. *Do you feel unsteady when standing or walking?*

No 0
Yes 1

39. *Do you worry about falling?*

No 0
Yes 1

40. *Have you fallen in the past year?*

No 0
Yes 1

39a. *When was your last fall?*___________

39b. *How did you fall?*

39c. *When did a nurse last visit your home?*________

39d. *When was the last time you have physical therapy?*________

Fall risk	Yes	No
Any item = 1		

Vaccinations

Say: *Next, I'll be asking questions about your vaccine history over the past year.*

41. If September-February, Ask: *Did you get the flu shot for this season?*
If March-August, Ask: *Did you get the flu shot in the past year?*
Yes 0
No 1

42. Why didn't you get your flu shot last time?

Do: Using the information provided by the patient for question 41, assess if the patient seems apprehensive to getting the flu shot.

41a. Does the patient have an aversion or concern about getting the flu shot?
Yes 0
No 1

Flu shot aversion or concern	Yes	No
Item = 1		

Functional Independence

***Say**: Now some questions about the help you may need with everyday activities.*

43. *Do you have a home attendant?*
    Yes 0
    No 1

44. *Do you live with anyone?*

45. *Do you need help with?*
    Preparing your meals 1
    Shopping 1
    Getting where you need to go 1
    Cleaning the house 1
    Doing your laundry 1
    Managing your money 1
    Managing your medications 1

46. *Are you getting enough help to get these things done?*
    Yes 0
    No 1

Does not have needed support for ADL	Yes	No
Item = 1		

47. *Do you have a personal help button that notifies a 24/7 response center if you are in need of assistance?*
    Yes .... 0→ Go to next section
    No 1

    If no:

    46a. Do you want a personal help button?
    Yes 1
    No 0

Needs PERS unit	Yes	No
Item = 1		

Advanced Directives

Say: *Now some questions about advanced health care planning. An advanced directive is a legal document, not a medical order. It identifies a legal representative (sometimes called a "surrogate" or "medical proxy") and also provides general guidance about what treatment a person would or would not want if they could not make a decision for themself.*

48. *Do you have an advanced directive or a living will?*
    - Yes .... 0→ Go to next section
    - No 1

49. *Are you interested in creating an advanced directive or a living will?*
    - Yes 1
    - No 0

Depression

Say: *Some people see a therapist, social worker or a psychiatrist to talk about their mood or feelings. This is often called mental health care.*

50. Are you receiving mental health care?
    - No 0
    - Yes 1

Do not administer the depression questionnaire, if patient is currently receiving mental health care.

Say: *Next, I'll ask you some questions about your mood. In the* ***last 2 weeks****, have you had…*

51. *Little interest or pleasure in doing things?*
    - *No* 0
    - Yes 1

52. *Have you felt down, depressed, or hopeless?*
    - No 0
    - Yes 1

If both items = 0, Go to **Anxiety**.

Depression brief screen	Yes	No
Either item = 1		

Say: *Over the* ***last 2 weeks****, how often have you been bothered by any of the following problems?*

53. *Little interest or pleasure in doing things. Would you say…*
    - Not at all 0
    - Several days 1
    - More than half the days 2
    - Nearly every day 3

54. *Feeling down, depressed, or hopeless.*
    - Not at all 0
    - Several days 1
    - More than half the days 2
    - Nearly every day 3

55. *Trouble falling or staying asleep, or sleeping too much.*
    - Not at all 0
    - Several days 1
    - More than half the days 2
    - Nearly every day 3

56. *Feeling tired or having little energy.*
    - Not at all 0
    - Several days 1
    - More than half the days 2

Nearly every day 3

57. *Poor appetite or overeating.*

Not at all.. 0
Several days 1
More than half the days... 2
Nearly every day 3

58. *Feeling bad about yourself –or that you are a failure or have let yourself or your family down.*

Not at all...........................0 Several days
.... 1
More than half the days... 2
Nearly every day 3

59. *Trouble concentrating on things, such as reading the newspaper or watching television.*

Not at all...........................0 Several days
.... 1
More than half the days... 2
Nearly every day 3

60. *Moving or speaking so slowly that other people could have noticed. Or the opposite –being so fidgety or restless that you have been moving around a lot more than usual.*

Not at all.. 0
Several days 1
More than half the days... 2
Nearly every day 3

PHQ-8 SCORE: __________

PHQ-8 score >=10	Yes	No
Depression present		

Anxiety

Do not administer if patient currently receiving mental health care.

*Over the **last 2 weeks**, have you …*

61. *Felt nervous, anxious or on edge?*
    No 0
    Yes 1

62. *Have you been unable to stop worrying or control your worrying?*
    No 0
    Yes 1

If both items = 0, Go to **Coping Strategies**.

Anxiety brief screen	Yes	No
Either item = 1		

*Over the **last 2 weeks**, how often have you been bothered by the following problems?*

63. *Feeling nervous, anxious or on edge.*
    Not at all 0
    Several days 1
    More than half the days 2
    Nearly every day 3

64. *Not being able to stop or control worrying.*
    Not at all 0
    Several days 1
    More than half the days 2
    Nearly every day 3

65. *Worrying too much about different things.*
    Not at all 0
    Several days 1
    More than half the days 2
    Nearly every day 3

66. *Trouble relaxing.*
    Not at all 0
    Several days 1
    More than half the days 2
    Nearly every day 3

67. *Being so restless that it is hard to sit still.*
    Not at all 0
    Several days 1

More than half the days... 2
Nearly every day 3

68. Becoming easily annoyed or irritable.

Not at all.. 0
Several days 1
More than half the days... 2
Nearly every day 3

69. Feeling afraid as if something awful might happen.

Not at all.. 0
Several days 1
More than half the days... 2
Nearly every day 3

GAD-7 SCORE: _________

GAD-7 score >=8	Yes	No
Anxiety present		

Coping Strategies

Say: *Next, I will be asking you questions about how you cope or deal with your COPD.*

70. *Sometimes people ignore their symptoms or avoid their treatments because they do not want to think of themselves as a person with limitations.*

    a. *How did you feel when you were first diagnosed with COPD?*

    b. *How do cope with COPD now?*

a.
b.

Indicate if these feelings were mentioned in participant's response:

Denial of problem 1
Ignoring problem 1
Minimization of problem 1

71. *Have you ever had any of the following thoughts or feelings?* Read each item

You avoid asking for help when you really need it because you don't want to be put people out of their way/incovneince on others 1
You avoid asking for help when you really need it because you prefer doing these things for yourself 1
I feel ashamed of asking for help 1
I don't want others to think of me as weak or in need of help............. 1
Guilty
Trouble

Insert other responses:

Coping Strategies	Yes	No
Negative coping		

Isolation

Say: *Next, I will be asking you questions about feelings you may have around feeling lonely or isolated from others.*

72. Do you ever feel lonely or isolated?

No 0
Yes 1

73. Exclusion from activities

72.a Do you ever avoid activities you'd like to participate in because of your illness?

No 0
Yes 1

72.b What activities do you avoid?

72.c Do you ever feel like others exclude you from activities because of your COPD?

No 0
Yes 1

72.d What activities do others exclude you from?

____

74. Would you like to have more company, such as opportunities to be with friends, family or support groups?

a. No.. 0
b. Yes.. 1

Evidence of social isolation	Yes	No
Any item = 1		

Social Determinants of Health

Say: *For these last set of questions, I will be asking you about some of your social needs, such as housing, food and transportation.*

Housing Instability

75. Do you have any concerns about being able to say in your current home?

No 0
Yes 1

76. Do you have problems with any of the following in your home?

Bug infestation 1
Rodents 1
Mold 1
Lead paint or pipes 1
Inadequate heat 1
Oven or stove not working 1
No or not working smoke detectors 1
Water leaks 1
Others (Specify): ______________________________

Food Insecurity

77. Do you have access to enough food each day?

Yes 0
No 1

Transportation

78. Do you have access to transportation to get where you need to go?

Yes 0
No 1
If no, what problems with transportation do you have?

Utility Needs

79. Has the electric, gas, oil, or water company threatened to shut off services in your home?

No 0
Yes 1
Already shut off 1

Interpersonal Safety

80. Do you feel safe emotionally, financially, and physically? In other words, not currently being harmed or not concerned of being harmed in any way by someone in your life.)

Yes 0
No 1

SDH Barriers	Yes	No
Housing stability		
Food insecurity		
Transportation		
Utilities		
Safety		
Other		

Other

81. *What other basic unmet needs do you have?*

____

PAUSE TO SUMMARIZE

SAY: *So how was that? I just asked you a lot of questions. Thank you for taking the time to answer them. Now, do you have any questions for me?*

SAMBA Screener Summary

TOPIC [DON'T SAY TO PATIENT]	TO BE ADDRESSED?	SAMPLE SCRIPT TO INTRODUCE THE CHECKED TOPICS:	MODULE/ PAGE
COPD Overview Module [To be asked of all patients]		We can review what COPD is and what happens to you during an COPD attack. Would you like to discuss this?	Overview: 35
1. COPD Medications (pg. 15)		It seems like you may have some confusion about what medications to take, when to take them, and why they are important. It may help to talk a little about your medications in a little more detail.	COPD Meds: 36-37
a. MDI Technique (pg. 17)		You may not be getting as much of the medicine into your lungs as you should be. We should really work on this.	MDI: 38-39
b. DPI Technique (pg. 18)			DPI: 40-41
2. Medication Adherence (pg. 19)		It may be helpful to talk a little bit your COPD medications, what they do, and when you should take them. It seems like you may have some confusion about the illness COPD and what it is. It may help to talk a little about the basics of COPD.	COPD Meds: 36-37
a. Medication costs (pg. 20)		Cost of medication seems to be a problem for you. We can talk about how to address this problem.	
b. Medication access (pg. 20)		Access to medication seems to be a problem for you. We can talk about how to address this problem.	
c. Medication beliefs (pg. 21)		It seems like you may have some confusion about what some of the medications are for, how they work, and the side effects they can cause. It may help to talk a little about your medications in a little more detail.	COPD Meds: 36-37 Side Effects: 42
d. Side Effects (pg. 21)		It seems that you are concerned with the side effects of your COPD medication. Let's talk more about this.	
e. Complementary and alternative medication use (pg. 21)		You may be using some home remedies instead of medicines your doctor would like you to use. Often, you can take both a home remedy and your medications. We should discuss this.	COPD Meds: 36-37 Phys. Note
f. No Controller (pg. 22)		Using a controller medication may help you to better control your COPD. We can talk about what a controller is and perhaps talk to your doctor about getting one for you.	No Controller: 43 Phys. Note
3. Prioritizing Illness/Managing Multiple Meds (pg. 23)		Let's talk about how your other health problems may impact the way you care for your COPD, especially in managing your medications.	Organization & Routine: 45
a. Med. organization (pg. 24)		It's difficult to manage COPD on top of your other illnesses, including having to take so many medications like you do. We can talk about this and see if there are ways to help you organize your medications and set priorities to help you take care of your different health problems.	
4. Exacerbation History and Management (pg. 25)		It seems that you are having been having COPD exacerbations that may result in you being admitted to the hospital. You also responded that you currently do not have a COPD action plan. I'd like to discuss this more.	
5. Lifestyle Questions			
a. Smoking Use (pg. 26)		Smoking/Alcohol/drug use may be making your COPD harder to control. Would it be okay for us to talk more about this?	Smoking cessation
b. Alcohol Use (AUDIT) (pg. 27)			Alcohol Use: 49 Phys. Notec.

c. Drug Use (pg. 28)			Phys. Note
6. Fall Risk (pg. 29)		It seems as if you might be a high risk for falling. Let's talk about some additional resources we can provide.	Fall risk: 56
7. Vaccinations (pg. 30)		It seems like you are not up to date on your vaccinations. Let's talk about that a bit more.	Vaccines: 50
8. Functional Independence (pg. 31)		It seems like you may need some help with your activities of daily living. Getting help with these activities can make easier to manage your COPD.	
9. Advanced Directives (pg. 32)		You indicated you were interested in obtaining an advanced directive or living will. Let's talk through some options.	AD: 56
6. Emotional Triggers of COPD (pg. 33)		It seems like emotions may set off your COPD. We can talk about how to make emotions less of a trigger for your COPD.	Phys. Note
a. Depression (pg. 33)		It seems like your mood may be a little down, which sometimes gets in the way of taking good care of COPD and other health problems.	51
b. Anxiety (pg. 35-36)		It seems like may get a little anxious at times, which sometimes gets in the way of taking good care of COPD and other health problems.	51
c. Coping Strategies (pg. 37)		It seems like you may be having some trouble coping with COPD. I'd like to talk more about that.	
d. Isolation (pg. 39)		You indicated you would like more company. Let's see how we can work on that.	
7. Cognitive Impairment (pg. 38)		Do you forget sometimes? Even small problems with memory can sometimes make it hard for people to remember to take their medications and do other things they need to manage their health.	52
8. Social Determinants of Health (pg. 40)		It seems you may need some assistance with a social need. We can talk about some resources that may help you.	

Say: *Ok, based on all of your answers, here's a list of the things I think we could talk about to help make your COPD better:*

Say: *Which of these topics do you want to talk about? Or if there is something else you prefer to talk about, we can do that, too. Whatever we don't get to today, we'll talk about at future meetings.*

Topics In Subsequent Sessions—Patient Engagement

You may need to use more guided counseling to identify patients goals to enhance their engagement. Use the following instructions if your earlier discussions with the patient have not elicited clear, actionable goals.

PROMOTING PATIENT ENGAGEMENT

Objective: Set the stage for engaging and retaining patients in the program, and tailoring your approach, by identifying their goals.

This section will guide you through having a discussion with the patient about their health and healthcare goals. The plan of care you establish with the patient will revolve around their healthcare values and needs (e.g., enjoying treasured or valued activities without COPD symptoms interfering). The questions you ask in this Section and during screening will enable you to identify the patient's values and needs.

Strategies to Help You Engage and Retain the Patient

- Discuss their health goals and show them that you're always working with them to achieve their goals
- Understand the patient's motivation for joining
- Be aware of their hesitations about joining, and address their concerns
- Be clear about the time you expect to spend with them but also allow for flexibility
- Recognize that the patient may have competing priorities, and be flexible
- Do not exhaust the patient with too much information—use teach-to-goal to stay focused
- Create SMART goals
- Goals might need to be adjusted over time
- Achieving small goals quickly and readily will help build trust

Engagement Conversation

Introduction

Key Points to Convey	**Script**
• Identify patient's health goals to tailor the program to the patient	*As I mentioned, this program is about helping you get better control of your COPD and achieve your health goals. To help me better understand how I can make this program valuable for you, first tell me how COPD affects your life these days/currently…*

Get them thinking about how COPD impacts their daily life

ASK: *How does COPD affect your life currently?*
[Prompts: connecting with people, enjoying life, functioning, managing health]

Identify what matters most

ASK: *Among the different ways that COPD affects your life, which ones are most important to you now?* [Prompts: connecting with people, enjoying life, functioning, managing health; e.g., What pleasurable activity would you most like to be able to do again?]

Summarize and confirm what matters most

SAY: *So the most important ways that COPD affects your life these days are [SUMMARIZE THEM]. These are things you'd like to change, is that right? [ALLOW PATIENT TO CLARIFY IF NEEDED]*

Set health and healthcare goals

SAY: *We've talked about what is most important to you with respect to your COPD. So let's set some goals. What are your COPD and other health goals?*

Set specific (details) and realistic health goals.

- Make sure to identify both small and large goals
- Small goal examples: take medications everyday
- Large goal examples: quit smoking

Topics In Subsequent Sessions—Medication Reconciliation

When time permits, reconcile the patients other (non-COPD) medications.

Coach compares the medications the patient has at home with the medications on their current medication list provided to them from the study team.

- **ASK:** *I want to make sure the medications you're taking at home are the same as those in your medical record. If you have your medications with you, please take them out*.

  If they do not have medication bottles available and cannot recall the names of their medications, make a plan to review them at the next visit.

- *What are the medications you take?*

Medication Name	Matches Med List		Indicate Discrepancy (e.g., absent, different dose)
	Yes	No	

Action Modules

COPD Overview

FOCUS ON THE SPECIFIC PROBLEMS THAT WERE IDENTIFIED IN THE SCREENER.

USE TEACH-BACK TO REINFORCE LEARNING

PROBLEM: Poor overall understanding of COPD; patient requests a general overview of COPD

- Assess their understanding of COPD
  - **Ask:** *Tell me what you know about COPD. I mean, how it works and what causes it.*
- Identify the symptoms they attribute to COPD
  - **Ask:** *What symptoms do you get from your COPD?*
- Use the information you just got from them to help focus your review of COPD with the COPD 1-2-3 materials [Open to page 1 of COPD 1-2-3]
- Summarize the main points of the learning, especially where the patient had poor understanding
- Provide patient with the reviewed COPD 1-2-3 materials, with key areas highlighted
- Reassess their understanding

For any section, if erroneous beliefs remain, review material again, emphasizing areas of deficiency.

GOAL SETTING

- Complete the SAMBA Goal sheet with patient if chooses this topic as goal
- Sample Goals: "I will put my COPD medication sheet on the refrigerator door to remember which are my controller and rescue medicines."

COMMUNICATE WITH PCP

1. Identify the specific problem that was addressed
2. Ask PCP to reinforce the key learning points (e.g., distinguishing controller and rescue inhalers)
3. If needed: Notify PCP if patient is using CAM, ask PCP to review dosing schedule with patient (when to take medicines)

RESOURCES (for more information, see appendices of Care Coach Manual):

- http://www.cdc.gov/COPD/default.htm
- http://www.lung.org/lung-disease/COPD/
- http://www.noattacks.org/
- https://www.health.ny.gov/diseases/COPD/
- http://www.nyc.gov/html/doh/html/living/COPD-homepage.shtml
- http://www.COPD.ca/adults

COPD Medications

FOCUS ON THE SPECIFIC PROBLEMS THAT WERE IDENTIFIED IN THE SCREENER.

TEACH-BACK TO REINFORCE LEARNING

PROBLEM: Patient cannot identify or name their COPD medications

- Review COPD medications; emphasize the color as a marker of the medicine
- Write names of medicines in the COPD 1-2-3 workbook, page 4
- Confirm understanding, repeat as needed

PROBLEM: Patient doesn't know difference between controller and rescue medicines

- With the patient's controller and rescue medicines in hand, speak about the difference between them
- Emphasize that controller is for everyday use, whether they feel good or bad; rescue medicine is only when they have trouble breathing.
  Say: *There are two basic types of COPD medicines: controller medicines and rescue medicines*.

- Use COPD 123 page 3, to help guide discussion, use shield and lightening images
- Apply stickers to indicate controller and rescue medicines
- Write names of medicines in the COPD 1-2-3 workbook (page 4) identifying controller and rescue medications

PROBLEM: Patient doesn't know when to take COPD medicines

- Review the prescription label to emphasize when and how the patient should take the medicine
- Write instructions in COPD 1-2-3 workbook
- Follow the procedures above for distinguishing controller and rescue medicines
- Link controller medication use with daily routine, e.g., taking with other daily medications

PROBLEM: Patient substitutes CAM for COPD medications

- Ask patient why they use CAM instead of prescribed medicines
  - Ask them how the CAM affects their symptoms
  - If CAT indicates ongoing COPD symptoms, use this information to show how CAM does not completely treat their COPD, and why controller medicine still important

- Elicit their concerns about their COPD controller medicine
  - Address medicine concerns as described in Side Effects

- Clarify that CAM can often be used along with the COPD medications, but first must check with their PCP to make sure it is safe to use both
- Provide COPD 1-2-3 page 3 to reinforce the learning
- Ask patient's permission to notify the doctor that patient is using CAM; Say "it's important for your doctor to know about all of the medicines you are taking. Would it be alright for me to let him/her know that you're using {NAME CAM}"

GOAL SETTING

- Complete the SAMBA Goal sheet with patient

- Sample Goals
    1. *I will put my COPD medication sheet on the refrigerator door to remember which are my controller and rescue medicines*

COMMUNICATE WITH PCP

1. Identify the specific problem that was addressed
2. Ask PCP to reinforce the key learning points (e.g., distinguishing controller and rescue inhalers)
3. If needed: Notify PCP if patient is using CAM, ask PCP to review dosing schedule with patient (when to take medicines)

MDI Technique

FOCUS ON THE SPECIFIC PROBLEMS THAT WERE IDENTIFIED IN THE SCREENER.

TEACH-BACK TO REINFORCE LEARNING

PROBLEM: Poor Inhaler Technique

- If available, introduce and demonstrate with a spacer
  - **If no spacer, say**: *A spacer can help get all the medicine to your lungs. Without one, the medicine could wind up on your tongue or in the back of your throat. Ask your doctor about getting a spacer.*

- Review the steps that were done incorrectly
  - **Say**: *You did a nice job, but there are a few extra things you can do to make sure that you get all of the medicine into your lungs. Even people who've been using inhalers for many years may not get all of the medicine into their lungs. Let me show you.*

- Demonstrate correct technique, emphasizing the steps that need attention

- Ask patient to demonstrate again
  - Have them demonstrate with their own inhaler, taking a real puff
  - Ok for them to take up to 2 doses

- Review MDI technique from COPD 1-2-3 (Page 7), with special focus on problem steps

- Re-evaluate MDI technique at all future visits

GOAL SETTING

- Complete the SAMBA Goal sheet with patient if chooses this topic as goal
- Sample Goals
  1. I will exhale before taking my Flovent each time every day.
  2. I will wait 30 seconds before taking my 2nd puff of Flovent every day.
  3. I will ask my doctor to prescribe a spacer for me.

COMMUNICATE WITH PCP

1. Point out specific inhaler technique problems, suggest the PCP review with patient
2. Suggest prescription for a spacer if patient doesn't have one
3. If patient cannot correctly perform technique after training during several visits with you, explain this to PCP and ask PCP to consider nebulized medication (Rescue: albuterol; Controller: budesonide)

MDI TECHNIQUE CHECKLIST

	Attempt 1		Attempt 2		Attempt 3	
	Yes	No	Yes	No	Yes	No
Shakes inhaler (before attaching to spacer if they have one)	___0	___1	___0	___1	___0	___1
Breathes out	___0	___1	___0	___1	___0	___1
Closes lips around mouthpiece, making a tight seal	___0	___1	___0	___1	___0	___1
Presses down fully on canister, and only once	___0	___1	___0	___1	___0	___1
Breathes in slowly (no whistle if using a spacer)	___0	___1	___0	___1	___0	___1
Holds breath for 5-10 seconds	___0	___1	___0	___1	___0	___1
Removes from mouth before breathing normally	___0	___1	___0	___1	___0	___1
Breathes normally for 30-60 seconds	___0	___1	___0	___1	___0	___1
Repeats steps for their second puff	___0	___1	___0	___1	___0	___1
TOTAL:	__/9	__/9	__/9	__/9	__/9	__/9

REFERRAL RESOURCES (for more information, see appendices of Care Coach Manual):

- Aerochamber Spacer Devices:
  - (800)-678-1605
    http://www.aerochambervhc.com/

DPI Technique

FOCUS ON THE SPECIFIC PROBLEMS THAT WERE IDENTIFIED IN THE SCREENER.

TEACH-BACK TO REINFORCE LEARNING

PROBLEM: Poor DPI Technique

- Review the steps that were done incorrectly
  - **Say:** *You did a nice job, but there are a few extra things you can do to make sure that you get all of the medicine into your lungs that you're supposed to. Even people who've been using inhalers for many years may not get all of the medicine into their lungs. Let me show you.*

- Demonstrate correct technique, emphasizing the steps that need attention

- Ask patient to demonstrate again
  - Have them demonstrate with their own inhaler, taking a real puff
  - Ok for them to take up to 1 dose

- Provide and review the DPI technique sheet from COPD 1-2-3 (Page 7), again with special focus on problem steps

- Re-evaluate inhaler technique at all future visits

GOAL SETTING

- Complete the SAMBA Goal sheet with patient if chooses this topic as goal
- Sample Goals
  1. I will exhale before taking my Symbicort each time every day.
  2. I will wait 30 seconds before taking my 2nd puff of Symbicort every day.

COMMUNICATE WITH PCP

1. Point out specific inhaler technique problems, suggest the PCP review with patient
2. Suggest prescription for a spacer if patient doesn't have one
3. If patient cannot correctly perform technique after training during several visits with you, explain this to PCP and ask PCP to consider nebulized medication (Controller: budesonide)

DPI TECHNIQUE CHECKLIST

	Attempt 1		Attempt 2		Attempt 3	
	Yes	No	Yes	No	Yes	No
Holds the inhaler level and flat	___0	___1	___0	___1	___0	___1
Uses thumb to push it open	___0	___1	___0	___1	___0	___1
Pushes second lever until it clicks	___0	___1	___0	___1	___0	___1
Breathes out slowly	___0	___1	___0	___1	___0	___1
Closes lips around mouthpiece to make a tight seal	___0	___1	___0	___1	___0	___1
Breathes in quickly and deeply through mouth	___0	___1	___0	___1	___0	___1
Removes inhaler from mouth	___0	___1	___0	___1	___0	___1
Holds breath for 5-10 seconds then breathes out	___0	___1	___0	___1	___0	___1
Closes DPI by sliding thumb grip back until it clicks	___0	___1	___0	___1	___0	___1
TOTAL:	__/9	__/9	__/9	__/9	__/9	__/9

[If patient scores less than 9, review materials again and reassess. DO NOT repeat more than 3 times.]
[If patient scores 9, continue]

COPD Medication Side Effects

OBJECTIVES:

- Determine which side effects concerns the patient
- Address misconceptions
- Emphasize benefits

FOCUS ON THE SPECIFIC PROBLEMS THAT WERE IDENTIFIED IN THE SCREENER.

TEACH-BACK TO REINFORCE LEARNING

PROBLEM: Medication concerns

- Identify specific concerns about medications
    - **Ask:** *What worries do you have about your COPD medications?*
    - Word prompts: *worry, side effects, addicted*

- Identify reasons for the concerns
    - **Ask:** *Why do you have these concerns?*

- Review Page 4 “Side Effects” of COPD 1-2-3
    - Address their specific misconceptions about side effects

- Reassess beliefs
    - **Ask:** *How much has this information affected your concerns about your medicine?*
    - **Ask:** *How likely are you to use take your medicine every day?*

GOAL SETTING

- Complete the SAMBA Goal sheet with patient
- Sample Goals
    1. *I will take my Advair every day*.
    2. *I will speak with my doctor if I have concerns about the side effects of my Advair*

COMMUNICATE WITH PCP:

1. Inform the PCP about the patient’s specific concerns about medication side effects

No Controller Medication

OBJECTIVES:

- Determine reason patient has no controller medication
- Encourage patient to discuss a controller medication with PCP
- Increase patient activation to discuss with PCP
- Answer patient questions about a controller
- Some patients will not need a controller
    - This is determined by the PCP, their COPD control, etc.

FOCUS ON THE SPECIFIC PROBLEMS THAT WERE IDENTIFIED IN THE SCREENER.

TEACH-BACK TO REINFORCE LEARNING

PROBLEM: Patient has poor COPD control, but does not have a controller medication

- Discuss reason patient has no controller medication

- If applicable, suggest that the patient brings up this issue with their PCP
    - Role-play with patient to suggest ways of discussing this and to increase their level of patient activation.

- Assess understanding using teach-back; assess their interest in discussing with PCP

GOAL SETTING

- Complete the SAMBA Goal sheet with patient
- Sample Goals
    1. I will ask my doctor about whether or not using a controller medicine will help me better prevent my COPD symptoms

COMMUNICATE WITH PCP

1. Send the PCP the results of the COPD Control Test you just did
2. Ask PCP to consider prescribing a controller due to patient's low COPD control

Organization and Routine

Objectives:

- Promote medication adherence by optimizing medication taking routine

FOCUS ON THE SPECIFIC PROBLEMS THAT WERE IDENTIFIED IN THE SCREENER.

TEACH-BACK TO REINFORCE LEARNING

PROBLEM: Patient keeps controller medication in different place than their daily pills

- **Further define the problem**
  - **Ask** where patient keeps COPD medicines and other medicines
  - **Ask** why they keep their medications there, how it helps them remember to take their medications

- **Elicit their ideas**
  - **Ask:** *What ideas do you have to make it easier to remember to take your medications everyday?*

- **Build on the ideas they have**
  - Encourage them to keep their COPD controller medicines with the pills they take everyday (the bathroom is often a good place)
  - Discourage them from carrying their controller medication with them

- **Emphasize, say**: *Taking your controller medication every day is the best way to prevent a COPD attack {or meeting their COPD control goals}.*

- **Review and Reinforce**
  - Fitting COPD into Your Life and Creating a Routine (p. 11-12)

PROBLEM: Managing another health condition interferes with taking care of their COPD.
PROBLEM: Patient reports that taking their controller medicine disrupts life.

Script: It can be challenging to take so many medications, but it is important to use your medicines the way your doctor told you to. Otherwise, they will not help you so much. One way to remember when to take your medicines is to create a schedule. Can we create a schedule for taking your medicines?

- Fill in chart on page 12 – help consolidate number of times patient has to take medicine.
  - For each medicine, write the number of pills or puffs patient should take at that time.
- Emphasize: "Taking your controller medication every day is the best way to prevent an COPD attack {or meeting their COPD control goals}."

GOAL SETTING:

- Complete the SAMBA Goal sheet with patient
- Sample Goal
  1. I will check my peak flow before I brush my teeth every morning for a week.

COMMUNICATE WITH PCP

1. Send the PCP the results of the peak flow assessment you just did

Smoking Cessation

OBJECTIVES AND SUMMARY

- Promote tobacco use cessation

ACTION STEPS

Assess if individual is willing to talk about smoking

1. Ask open ended questions: [Follow the patient's lead with what they want to talk]
    a. Is it okay if we talk about your smoking?
    b. What do you think would happen if you quit?
    c. Have you ever thought about quitting?

Identify Triggers of Smoking and Create a Plan on How to Avoid or Handle them

- What are the situations where you feel like you have to smoke?
- How to create plan:
  1) Convince the smoker that they can succeed (be their cheerleader):
      a. Find the positive in them (you will know when you found it because the person will start smiling):
          i. "Tell me a little bit about yourself"
          ii. "Tell me about something you did that your proud of"
  2) Remove the guilt associated with smoking
      a. Normalize difficulty of nicotine addiction.
      b. Level of addiction is driven by your biology, not your character. It's about how your body handles nicotine
      c. If President Obama was a smoker and could not quit, then it must be a genetic predisposition and not about drive or will to quit!
  3) Recognize how tough it is for them to quit, and acknowledge that addiction is real
      a. Acknowledge how tough it is to quit when someone is very addicted and they are going through withdrawl. It is impossible to function and handle daily stress.
      b. Nicotine is more addicting than alcohol, cocaine or marijuana
      c. Nicotine provides pleasure, helps with stress and affects mood, almost immediately, which makes it so addicting
  4) Follow their Lead and identify what they are worried about and want to talk about.
      a. Ex. Costs, Daily Stress, Don't' want kids to smoke
  5) Emphasize – the big thing is to start, there's nothing to loose. Acknowledge that they're trying and moving forward!
      a. Can start small, with just taking the medication, and not cutting back
      b. Could consider cutting down

When person is ready to make a plan:

1) Identify why person smokes, in order to find substitutions for these activities (these activities are often a 'cue' to start smoking).
    a. "Tell me about why you smoke?"
    b. Do they smoke for pleasure, anxiety, stress, depression, boredom, socializing tool, weight control?
2) Identify individual's personal triggers for smoking, and write down alternatives for that trigger. Examples:

Coffee	Tea or juice for AM coffee

Drinking with friends	Movies, concert, play with the children
Relaxing after a meal	Have a plan for the minute you finish a meal.
Smoke break with a friend who smokes	Favorite magazine for break time
Stressful family gathering	Don't go/Stay home
Boredom	Knit

3) Identify other hobbies or pleasures, and make a plan:
   "What did you do as a kid?"

Understand the severity of their addiction: (more addicted, will likely need medication assistance to quit)

- "How soon after you wake up, do you have your first cigarette?"
  - If within 5 minutes, the individual is very addicted and will need medication in order to block withdrawal symptoms
  - Individual won't be able to function in daily life if going through nicotine withdrawl
  - Cold turkey failure rate is 96%, especially for those who are very addicted
  - Should encourage individual that medication is likely the best strategy to quit smoking, so they aren't going through that really tough withdrawl all day
- Medications: Chantix (brand name), Veraenicline (generic name)
  - This will help them the most

Medications to help with smoking Cessation

- Nicotine Replacement Therapy (nicotine patch, gum, lozenge)
- Chantix (brand name), Varenicline (generic name)
- Wellbutrin (not as common)

Details about Medications:

1) Who Shouldn't use Chantix:
   a. If in renal failure, need reduced dose of Chantix
   b. If have seizure disorder – should avoid
   c. Mental illness: Previous worry about suicidal ideation with Chantix, and some large studies were conducted more recently, and showed it does not raise risk. If you are very depressed, and stop smoking, it may make your depression worse, but can monitor depression. But don't avoid Chantix because of this.
2) Side effects of Chantix
   a. Some get nausea, but this will likely go away after a week or two. However, if it continues, doctor can reduce to a half dose.
   b. Some have nightmares, doctor can reduce to half dose, and if nightmares continue, then can stop. (if taking does 2x a day, don't take it so close to bedtime, try to take it earlier in the day)
3) Chantix and Nicotine Patch/Gum does not interact with other medications
4) Pain that people experience from quitting smoking is from nicotine withdrawl, and could try gum to see if it will help with pain. Gum: bite it in the front, and then put it in your check so it will slowly release the nicotine. Don't chew, will release too much nicotine all at once.

Relapse Prevention

1) Addiction is permanent, and unfortunately can't have one cigarette here or there.
2) Should find alternatives for pleasure and seek to develop new lifetime skills for handling stress
   a. Keep busy
   b. Reward yourself regularly with different sources of pleasure

c. Exercise

- Set goals and complete the SAMBA Goal sheet with patient
    - Sample Goals
        - Set a quit date
        - Think about quitting
- Assess progress and reinforce commitment to goal during follow up visits and calls
    - Ensure this topic is on your to-do list for your follow-ups with the patient
- Communicate with PCP
    - If patient expresses interest in medication treatment, send a note to their PCP
    - Smoking Cessation Note template for PCP:
      "Dear Dr. X, I'm writing to make you aware that [PATIENT NAME] has decided to quit smoking. Her/his quit date is on [DATE]. She/he is interested in medication treatment to assist with smoking cessation. Please let me know how I can help you help this patient with this request."

Resources: Smokefree.gov

Alcohol Use

OBJECTIVES AND SUMMARY

- Determine whether alcohol use may be interfering with COPD self-management and control
- Provide assistance to reduce the threat of alcohol to management of COPD and other health issues

ACTION STEPS (for patients who screen positive for unhealthy drinking but negative AUD)

1. Probe to identify details of the barrier to focus discussion
    - **Ask:** *Would it be okay to take a few minutes to talk about your drinking?*
    - **Say:** *From what I understand, you are drinking [state the amount].*
    - **Ask:** *How does your drinking affect how you take care of your COPD, other health problems?*
    - **Say:** *We know that our reaction time decreases even with one or two drinks. Drinking at any level may impair our ability to react quickly.*
    - **Ask:** *On a scale from 1-10, with 1 being not at all ready and 10 being very ready, how ready are you to change any aspect of your drinking?*
    - **If two or more, ask:** *Why did you choose that number and not a lower one?*
    - **If one or unwilling to change, ask:** *What would make your drinking a problem for you? What would it take to make changing your drinking habits more important to you?*
2. Collaboratively develop action plan
    - **Ask:** *Has there been another time where you have successfully made a change?* (e.g. quit smoking, improved eating habits)
    - Provide options for the patient
        1. Cut back on how often they drink
        2. Cut back on how much they drink on days when they drink
        3. Never drink and drive
        4. Try a trial period of not drinking
        5. Stop drinking entirely
        6. Get help from a someone
3. Reassess learning and understanding of action plan
    - Use teach-back
    - **Ask:** *What's the next step?*
4. Set goals and complete the SAMBA Goal sheet with patient
    - Sample Goals
        1. I will cut back the number of drinks I have per week
        2. I will cut back the number of drinks I have per occasion
5. Assess progress/status and reinforce learning/commitment to goal during follow up visits and calls
    - Ensure this topic is on your to-do list for your follow-ups with the patient
6. Communicate with PCP
    - If patient gives permission to discuss with PCP, identify the problem and the actions taken
    - Alcohol Use Note template for PCP:
      "Dear Dr. X, I'm writing to make you aware that [PATIENT NAME] has decided to limit their alcohol intake. She/he reported that she/he drinks alcohol [INSERT AMOUNT] and has [NUMBER] of drinks on a typical day. She/he has decided to [INSERT GOAL]. Please let me know how I can help you help this patient."

ACTION STEPS (for patients who screen positive for AUD risk)

1. Refer to social worker for further assessment and possible treatment
   *insert SW referral steps

Medication Costs

Objectives:

- Identify sources of cost problems and solutions to address them

PROBLEM: Skips medications because of cost

- **Identify the medications that are avoided because of cost**
  - *a.* **Ask:** *Which of your medications are too expensive?*
  - *b.* **Ask:** *Which of your medications do you avoid taking because of the cost?*
- **Action:** notify social worker and physician
  - a. Physician may switch the patient to lower cost medications
  - b. Social worker may help them with their insurance coverage
  - c. Other strategies: use a discount pharmacy, like Target or Walmart ($4 copayments on many drugs)

PROBLEM: Change of medication formulary/their medications are no longer covered by their insurance

- **Identify the medications that are affected by insurance coverage issues**
  - a. **Ask:** *Which of your medications is no longer covered by your insurance?*
- **Action:** notify social worker and physician
  - a. Physician may switch the patient to different medications
  - b. Social worker may help them with their insurance coverage

GOAL SETTING:

[Complete the SAMBA Goal sheet with patient if chooses this topic as goal]

Sample Goal

1. Follow up with physician or social worker about the medication cost issues

COMMUNICATE WITH PCP

1. Report to the physician that the patient is not taking medication because of cost or coverage problems
2. Suggest social work referral if indicated

REFERRAL RESOURCES (for more information, see appendices of Care Coach Manual):

- Center for Health Care Strategies: Achieving Better Care for COPD Toolkit (Designed for health insurance plans): www.chcs.org/usr_doc/AchievingBetterCareForCOPDToolkit.pdf

Depression and Anxiety

Objectives: Identify possible depression or anxiety and make appropriate referral

PROBLEM: Positive depression (PHQ-2) or anxiety (GAD-2) screening

- **Say:** *Your responses to these questions (PHQ-2 or GAD-2) suggest that your mood or emotions may be preventing you from taking the best possible care of your COPD. Would it be alright if I spoke to your doctor about it? He/she may have some ways of helping.*

COMMUNICATE WITH PCP

1. Report findings to the physician (Patient scored positive on the PHQ-2 or GAD-2)
2. Say that depression or anxiety may be contributing to poor COPD control for this patient
3. Suggest a full assessment of the patient for anxiety and/or depression
4. Ask if physician would like you to aid the patient in scheduling an additional appointment to address this.

Negative Coping Strategies

OBJECTIVES AND SUMMARY

- Explore reasons they deny/ignore/minimize symptoms or treatment
- Explore reasons why do not want to ask others for assistance managing their COPD.
- Normalize emotional reactions (people often feel this way)
- Identify potentially positive constructive reactions to these feelings, and link to concrete self-management actions

ACTION STEPS

1. Probe to identify details of the barrier to focus discussion
    - **Ask:** *Earlier you mentioned that you ignore/minimize the symptoms you experience from COPD. Could you tell me a little more about why you do this?*

2. Identify reasons for the concerns
3. Collaboratively develop action plan
4. Reassess learning and/or understanding of action plan
5. Set goals and complete the SAMBA Goal sheet with patient
6. Assess progress/status and reinforce learning/commitment to goal during follow up visits and calls
7. Share information about barrier, action, and progress with PCP, if indicated
    - CHW or CHW and patient together can determine whether issue warrants bringing to PCP's attention

Exacerbation Management

OBJECTIVES AND SUMMARY

- Ensure understanding of signs/symptoms of exacerbation
- Promote use of action plan
- Promote use of medication rescue pack

ACTION STEPS

1. Review the signs and symptoms they get when their COPD gets worse
    - Signs and symptoms are listed on the action plan

2. For patients with no action plan
    - Provide and review action plan, add contact numbers

3. For patients with no medication rescue pack
    - Assess knowledge of purpose of rescue pack

    - Assess past experience
        - Never had rescue pack
        - Had rescue pack, but no longer has one

    - If never had
        - Educate about purpose
        - Suggest referral to pharmacist to review use of rescue pack and get a prescription
        - Physician will send Rx to pharmacy after patient meets with pharmacist

    - If had but no longer has one
        - Assess why no longer has → if patient raises concerns, suggest pharmacist referral
        - Suggest referral to pharmacist to review use of rescue pack and get a prescription
        - Physician will send Rx to pharmacy after patient meets with pharmacist

4. For patients who do have a medication rescue pack
    - Ask to see the medications, and review their expiration dates
    - Suggest referral to pharmacist for a refresher on how to use rescue pack medications

5. Re-review action plan and create a plan for its use
    - Ask patient where they will keep it (prominent location, e.g., refrigerator)

CHW Check list

- Make pharmacist referral if indicated
- At follow-ups
    - Ask if they still have action plan and where they posted it

Falls

OBJECTIVES AND SUMMARY

- Identify fall risk and notify PCP

ACTION STEPS

1. Determine which actions have been taken to reduce fall risk
    - Physical therapy in past 3 months

2. If physical therapy >3 months ago, notify PCP of identified fall risk
    - Information to include in message
        - "[Patient Name] says she/he is afraid of falling."
        - or "[Patient Name] had a fall around [Approximate Date]."
        - "[Patient Name] may benefit from a home nurse visit for evaluation of fall risk."

CHW CHECK LIST

- Email physician to notify of fall risk
- At follow-ups
    - Document whether patient has had a visiting nurse service visit or physical therapy
    - Assess for falls
    - Notify PCP if falls occur

Functional Independence

OBJECTIVES AND SUMMARY

- Identify needed supports for activities of daily living
- Make appropriate referrals to meet needs

ACTION STEPS

1. Identify the areas of support that are lacking for them
    - Meals
    - Dressing, bathing, using bathroom
    - Help for taking medications, managing health issues
    - Companionship

   Probe carefully to determine how much support is needed.
    - What are the specific problems they are experiencing?
    - How many hours of home attendant care do they have? How many do they need?
    - How many hours are they alone each day?

CHW CHECK LIST

- Email social work about need for additional support
    - Provide details of the patient's circumstances

- At follow-ups
    - Document whether patient has had an increase in home attendant hours
    - Reassess for unmet needs

Vaccination

OBJECTIVES AND SUMMARY

- Encourage patient to get flu and pneumonia vaccinations to prevent COPD exacerbations

ACTION STEPS

1. Probe to identify details of the barrier to focus discussion
   - **Ask:** *Are you interested in getting a [flu/pneumonia] shot?*
   - **Ask:** *Why don't you want to get a [flu/pneumonia]shot?* Probe for their concerns.
   - Address their specific concerns
     1. Flu shot gave me the flu
        - Flu shot can't cause flu because it isn't a live virus
        - Patient may have had a cold from a different virus around the same time
        - Flu shot can cause mild symptoms, usually arm ache; less commonly, body aches and low grade fever
     2. Allergic to flu shot
        - Allergic reactions to flu vaccine are rare
        - Some patients describe ache or fever from flu shot as allergy; these symptoms by themselves are not indications of allergy
        - Patients with allergy to eggs must avoid the flu shot; however, they can safely receive flu vaccination by nasal spray
     3. Flu shot doesn't help ("I got the flu shot and got the flu anyway")
        - Flu shot is not always effective
        - Often, people think they had the flu but may have a different virus; can only confirm flu infection by testing
        - Flu shot only works against *influenza A*
2. Discuss reasons for getting flu vaccination (September through March)
   - Flu is a major cause of exacerbation, hospitalization, and death of people with COPD
   - Flu vaccine greatly reduces chances of exacerbation and pneumonia in people with COPD
   - Think of flu vaccine like a car seat belt—you never know when you might get into a car accident, but if you do, you hope to be waring a seat belt. For COPD, you never know when you might get exposed to influenza, but if you are, we hope you're protected with the flu vaccine
   - COPD exacerbation and pneumonia caused by flu are much, much worse than any side effects you might get from the flu vaccine
3. Reassess learning
   - Review "Vaccines" in COPD 1-2-3
   - **Ask:** *How likely are you to get a X shot?*
4. Set goals and complete the SAMBA Goal sheet with patient
   - Sample Goal
     1. I will get the flu shot at my next doctor's appointment
5. Assess status and reinforce commitment to goal during follow up visits and calls
   - During follow-ups, ask the patient if they received their X shot
6. Communicate with PCP
   - Assist the patient in making their next appointment
   - Report findings to the physician
   - Vaccination Note template for PCP:
     "Dear Dr. X, I'm writing to make you aware that [PATIENT NAME] has decided to get their [flu/pneumonia] shot. She/he is planning to receive the shot during her/his next scheduled appointment on [DATE]."

Social Isolation and Determinants of Health

Problem: Socially Isolated/Needs additional assistance

- **Say:** *Your responses suggest that you may need some additional support to help you best take care of your COPD. Would it be alright if I connected you with a social worker and provided some additional resources in your neighborhood?*

COMMUNICATE WITH SOCIAL WORKER

1. Identify social workers affiliated with individual's primary care.
2. Say that patient is socially isolated or needs additional social support to take care of their health.
3. Suggest a full assessment
4. Ask if social worker would like you to aid the patient in scheduling an additional appointment to address this.

Problem: Housing Instability, Lack of or unreliable transportation, Utility Needs, Interpersonal Safety

- **Say:** *You mentioned that [barrier identified]. This may make it difficult to take care of your health. Would it be alright if I connected you with a social worker and provided some additional resources in your neighborhood?*

COMMUNICATE WITH SOCIAL WORKER

1. Identify social workers affiliated with individual's primary care.
2. State the patients identified barriers.
3. Suggest a full assessment
4. Ask if social worker would like you to aid the patient in scheduling an additional appointment to address this.

Problem: Food Insecurity

- **Say:** *You mentioned that [barrier identified]. This may make it difficult to take care of your health. Would it be alright if I connected you with a social worker and provided some additional resources in your neighborhood?*
- Link to food stamps and food banks

COMMUNICATE WITH SOCIAL WORKER

1. Identify social workers affiliated with individual's primary care.
2. State the patients identified barriers.
3. Suggest a full assessment
4. Ask if social worker would like you to aid the patient in scheduling an additional appointment to address this.

SAMBA Session Summary

Session Date:_______________ Session Time: _______________

My COPD Coach:_________________________ COPD Coach Phone Number: __________________

My SAMBA Goal for the week of____/____/____:

What is your goal for this week (what will you do)?

Where will you do it?

When will you do it?

Who can help you make your plan a success?

What might get in the way of your plan?

What can you do to make sure your plan works if something gets in your way?

How can I (your coach) support you?

On a scale of 1 - 10....

- How ready are you to work on this goal? _____
- How important is this goal to you? _____
- How sure are you that you will reach this goal? _____

My Next Appointment:

Next Session Date: ___________________________

Next Session Time: ___________________________

Next Session Location: _______________________

Next time we meet, please bring:

All Your Medications
Spacer
Peak Flow Meter
COPD Action Plan
COPD 1-2-3

Encounter Wrap Up

Schedule Next Encounter

- Schedule next visit

*Next Session Date:*______________ *Next Session Time:* ______________

****Remember to discuss location with patient.***

If ACC, appointment WILL be in clinic. If CHW, appointment WILL be in patients home.

If meeting in the clinic, explain what patient should bring to first meeting. (*Bring all that applies to participant*)

- All medicines, including COPD inhalers and pills
- Spacer
- Peak Flow Meter
- COPD Action Plan

The COPD Action Plan and Emergency Medication Pack

Overview

The Action Plan

- The action plan describes how the patient should manage their COPD, depending on their symptoms
- *Review the action plan in COPD 123*

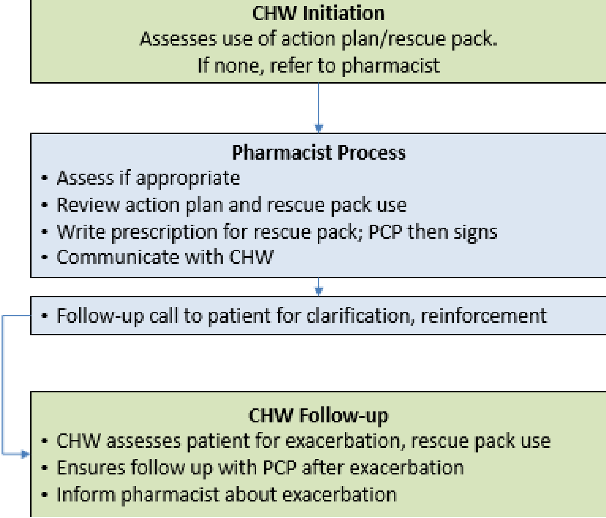
The Emergency Medication Pack

- Steroid pills and antibiotics when taken early in the course of a COPD exacerbation can prevent it from becoming worse, and possibly avoid a visit to the hospital
- The steroid is usually prednisone; the antibiotic is usually azithromycin or doxycycline; they are usually taken for 5-14 days
- Some doctors prescribe COPD patients an emergency pack of steroids and antibiotics to have on hand in case they develop a COPD exacerbation

How the Emergency Medication Pack Will Be Used in the Program

- For eligible patients, the CHW will offer to refer the patient to a Mount Sinai pharmacist to discuss the COPD action plan and emergency medication pack
- If the patient agrees, they will meet the pharmacist who will teach them how and when to use the emergency pack medicines
- Both the CHW and pharmacist will follow up with the patient to make sure they continue to understand how to use the medications

Figure. Emergency rescue pack workflow



Detailed Description of the Process

A. Which patients can get the emergency pack?

Patients will only get the emergency pack if their doctor gives permission and the patient then agrees to meet with the pharmacist. We will let you know if the doctor has given permission.

B. CHW reviews the action plan with all patients

1. When: The action plan will be reviewed after screening for barriers and setting goals; this will usually be during the 3rd or 4th meeting

2. Action plan reviewing procedures
    a. Discuss purpose of the action plan:
    "*This is a COPD action plan. This action plan is to help you know what to do when your COPD acts up. The action plan has 2 parts, the list of people you can call when you need help with your COPD and their telephone numbers, and a description of the 3 stages of COPD control and how to manage your COPD for each stage."*

    b. Review contact numbers:
    "*The top part of the COPD action plan shows the telephone numbers you can call when you need help.*"
    [Review each name and contact number]

    c. Review each stage of COPD control, and actions for each stage:
    "*We can think about your COPD as having 3 zones of control: the green zone, the yellow zone, and the red zone. For each zone, there are actions for you to take control of your COPD as much as possible.*"
    [Review stages and actions as outlined on the AP]

    d. Discuss strategies to keep action plan in mind and easy to reference:
    "*How will you remember to follow the instructions on the action plan?*"
    [Encourage SP to come up with strategies that will work best for them; suggestions: attach to refrigerator door, front door, bathroom mirror, keep with medications]

C. CHW refers the patient to the pharmacist

1. When: after reviewing the action plan
2. Who: Patients whose physician gave permission for a emergency pack prescription
3. Procedure
    a. Discuss purpose of the emergency pack
    "*An emergency pack is a set of medications you keep in your house to take in case your COPD acts up and gets you in the Yellow Zone. Using an emergency pack helps people feel better quicker and sometimes keeps them from having to go to the hospital. Have you ever had or used an emergency pack for COPD?"*

    "Would you be interested in having an emergency pack?"

    [IF NO, DISCUSS IT AGAIN AT THE NEXT VISIT]

b. Discuss the referral process
   [IF YES] "To get an emergency pack, you have to first meet with a pharmacist at Mount Sinai, who will teach you about using it. Your doctor wants you to meet with the pharmacist before prescribing the emergency pack."

   "You will meet with the pharmacist at your clinic. We'll schedule a time that is convenient for you."

c. Make the referral
   1) Email your supervisor: say the patient has agreed to see the pharmacist
   2) Your supervisor will email the pharmacist to schedule the in-person visit
   3) The CHW will contact the patient to provide them with the appointment details
   4) Remind the patient to bring their action plan to their appointment with pharmacist

D. Patient meets with pharmacist

1. Pharmacist reviews the action plan and discusses the emergency pack
   a. Their purpose, when and how to take them
   b. Potential side effects
   c. What to do if symptoms stay the same or worsen

2. Pharmacist provides follow-up instructions
   a. Patient must contact the pharmacist and or their doctor, and the CHW, if they take the medicines

3. Pharmacist will ask the doctor to prescribe the medicines

E. Pharmacist follow up activities

1. The pharmacist will call the patient within 7 days to make sure they picked up the prescription
2. Pharmacist will notify the CHW that the patient has a rescue pack

F. CHW follow up activities

1. The CHW will arrange to meet in-person with the patient about 10 days after they got the emergency pack medicines to:
   a. Review when and how to use them
   b. Review plan to contact CHW and PCP if the patient uses them
   c. Affix a sticker to emergency pack meds to remind the patient to call the CHW, pharmacist and or doctor if they use them
   d. Review again the action plan during later visits

Home-based Pulmonary Rehabilitation

What is pulmonary rehabilitation?

- Pulmonary rehabilitation (PR) is a program of exercises to improve strength and stamina
- PR has been proven to help COPD patients breathe and feel better, be more physically active, and improve quality of life; it may also reduce the need for emergency department visits
- Unfortunately, few patients with COPD get PR because it is infrequently offered by hospitals or clinics and when it is, COPD patients may have trouble getting to their PR appointments because of their disability
- PR typically involves cardiovascular exercises like walking or using a stationary bicycle, and arm strengthening excises using light weights or resistance bands
- The exercises are usually done for 5 to 30 minutes a day, 3-5 days a week and for a few months; this is followed by "maintenance" exercises about 3 times a week
- PR is personalized for each patient based on an initial evaluation by a respiratory therapist

Reference:

COPD 1-2-3

"Pulmonary Rehab"

Home-based Pulmonary Rehabilitation (HBPR)

- In the SAMBA program, COPD patients will be doing pulmonary rehabilitation at home
- Past research has shown that HBPR is safe and effective
- The CHW will assist the patient by helping them identify safe locations in the home for their exercises, ensuring they do their exercises correctly, and encouraging them to stick with the program

Core Strategies of Home-based Pulmonary Rehabilitation

- Patient undergoes evaluation for home-based pulmonary rehabilitation by a respiratory therapist
- CHW supervises patient conducting the HBPR to ensure safety and encourage adherence
- There are many details to the HBPR; we will support the CHW throughout and make sure you feel comfortable helping the patient with their exercises

Abbreviations

6MWT, 6-minute walk test
CHW, community health worker
ERP, exercise respiratory physiologist
HBPR, home-based pulmonary rehabilitation
PCP, primary care provider (physician or nurse practitioner)

List of Materials for the Patient

1. Exercise plan (template), with monthly graduated intensity and duration
2. Figure depicting exercises, exercise routine, and exercise schedule
3. Breathing technique handout
4. Borg scale handout
5. Diary to document daily exercise effort
6. Pedometer (or cell phone step counter)
7. Resistance bands
8. If indicated, ergo cycle

A. Summary of the CHW Role

1. PR evaluation and prescription
    a. Schedule the patient's evaluation at Mount Sinai with the respiratory therapist (RT)
    Contact information: TBD
    Tel: XXXXXXXX
    b. Join the patient and respiratory therapist during the evaluation

2. HBPR-specific schedule:
    a. Meet with patient on first day of HBPR
    b. Telephone follow up call next day
    c. Repeat home visit within 5 working days
    d. In-person follow-up thereafter to be decided by CHW based on appearance of patient safety, patient mastery of activities, request of patient
    e. Weekly brief telephone calls for a minimum of 4 weeks

3. Determine optimal location in home for exercises
4. Guide patient to establish safe and proper technique
5. Ensure safety of activities and that area designated for exercise is free of hazards
6. Provide ongoing encouragement and support motivation
7. Remind patient to document exercise activities
    a. CHW may video record patient for use in their case discussions with RT if needed (e.g., questions about technique, safety, etc.)
8. Transition to weekly then monthly calls when deemed appropriate to problem solve, reinforce learning, encourage ongoing participation
9. Use diary/pedometer data to promote encouragement
10. Discuss cases with RT weekly

B. CHW Introduces Patient to Concept of HBPR

1. During second or third in-person visit with patient, CHW will
    a. Introduce concept of HBPR
    "*Exercise is important for people with COPD. It can improve your breathing and make it easier for you to take part in everyday activities*."

    "*We have a special exercise program, called home-based pulmonary rehabilitation. It involves doing exercises in your own home. Can I tell you more about it?*"

    "*This is how it works. First, you and I go together to a clinic at Mount Sinai. At the clinic, an exercise specialist for people with COPD, called a respiratory therapist, does an evaluation to make sure that it's safe for you to exercise, determine what kind of exercise you should do, and how much exercise to do. Then, she makes an exercise plan for you, and I help you do it at home. Your doctor said that it's ok for you to participate in this exercise program. Does this interest you? What questions do you have?*"

    b. If patient agrees to HBPR evaluation

1) City Health Works schedules appointment for HBPR evaluation via secure, HIPAA compliant email to the study ERP

c. If patient refuses evaluation for HBPR
    1) CHW reintroduces HBPR concept at next in-person visit

C. Evaluation Procedures for HBPR

1. Logistics for the evaluation
   CHW will provide transportation or compensation for the patient to travel to the appointment and attends the appointment

2. Initial Evaluation
   a. Conducted in a clinical exam room
   b. ERP conducts initial evaluation including:
      1) Baseline (resting) vital sign assessment
      2) Fall risk assessment (~2 minutes)
      3) Endurance assessment – 6MWT (~10 minutes)
   c. Resistance band assessment (~10 minutes)
   d. Cool down period (~10 minutes), then post-exercise assessment (~3 minutes)

3. Post-exercise assessment (~3 minutes)
   a. Document: 0_2 saturation, blood pressure, respiratory and heart rates

4. Create and review the HBPR exercise plan (~10 minutes)

5. Follow-up with the patient
   a. CHW should ask these questions every time you talk to a patient about PR
      1) How's it going with the PR?
      2) How many days a week do you complete the PR?
      3) About long do you do the exercises?
      4) What makes it difficult for you to do your PR exercises?
      5) What makes it easier for you to do your PR exercises?
      6) How can I provide more support?

D. Details of the HBPR Routine

1. Patient does not start HBPR until CHW is in the home to observe

2. Schedule of Exercise
   a. Intensive period, months 1-3
      1) Aerobic: 4 days/week
      2) Resistance: 3 days/week
   b. Maintenance period, months 4-6 and thereafter
      1) Aerobic: 3 days/week
      2) Resistance: 2 days/week
   c. Same exercise regimen as for intensive period

3. Aerobic exercises [walk or cycle] (5 to 30 minutes)

4. Strength exercises training using resistance bands (5-15 minutes)

5. When to interrupt activities
    a. Excessive fatigue (Borg ≥6)
        1) Rest ~5 minutes then resume activity
        2) If on home 0_2 increase 0_2 flow rate
    b. Stop activity for the day
        1) Breathlessness, fatigue, or weakness beyond normal levels that does not improve with rest or usual management (e.g., increased 0_2, rescue inhaler or nebulizer)
    c. Stop activity and notify PCP or CHW
        1) If feeling sick or having progressively greater difficulty with physical activity over hours to days
        2) Discomfort and other symptoms don't resolve after 5 minutes of rest
        3) Chest pain or tightness, dizziness, light headedness
        4) Muscle pain that does not improve within a day

6. Patient documents effort and how they feel using diary
    a. Document steps captured on pedometer

Supplement 3. Exercise Protocol

Overview
- Patient undergoes evaluation for home exercises by a clinician at health care facility
- Coach provides patient with support and guidance by telephone to ensure safety and encourage adherence

Abbreviations
6MWT, 6-minute walk test
ERP, exercise respiratory physiologist
PCP, primary care provider (physician or nurse practitioner)
RC, research coordinator
SP, study participant

List of Materials

For Patient	For Exercise Physiologist
1. Exercise plan (template), with monthly graduated intensity and duration 2. Figure depicting exercises, exercise routine, and exercise schedule 3. Breathing technique handout 4. Borg scale handout 5. Diary to document daily exercise effort 6. Pedometer (or cell phone step counter) 7. Resistance bands 8. If indicated, ergo cycle	1. Borg scale chart 2. Exercise plan template 3. Ergocycle (discuss with Roger Perry) 4. Manometer 5. Tablet to document assessments 6. Oxygen prescription recommendation for RT to send via email to PCP 7. Resistance bands

A. Obtain PCP Consent

RC obtains consent from PCP during research consent process (see study protocol for operational details and PCP consent form).

1. The consent document provides PCP with the following options
   a. Allow recruitment of SP for study participation and potential to receive
      1) All intervention components (self-management support, emergency pack medicines, HOME EXERCISE) (default), or
      2) Self-management support alone, or
      3) Self-management support + emergency pack medicines, or
      4) Self-management support + HOME EXERCISE

   b. Refuse recruitment of SP

B. COACH Introduces SP to Concept of HOME EXERCISE

For patients who consent to study participation, are randomized to the intervention arm, and for whom HOME EXERCISE is approved by the PCP.

1. During second or third in-person visit with SP, COACH will

a. Introduce concept of HOME EXERCISE
   "*Exercise is important for people with COPD. It can improve your breathing and make it easier for you to take part in everyday activities*."

   "*We have a special home exercise program. It involves doing exercises in your own home. Can I tell you more about it?*"

   "*This is how it works. First, you go to Mount Sinai where a clinician will do an evaluation of you to see how much walking and exercise you can do. He or she will then use that information to make an exercise plan for you, and I help you do it at home. Your doctor said that it's ok for you to participate in this exercise program. Does this interest you? What questions do you have?*"

b. If SP agrees to HOME EXERCISE evaluation
   1) City Health Works schedules appointment for HOME EXERCISE evaluation via secure, HIPAA compliant email to the study ERP

c. If SP refuses evaluation for HOME EXERCISE
   1) COACH reintroduces HOME EXERCISE concept at next in-person visit

c. **Evaluation Procedures for HOME EXERCISE**[1,2]

1. Logistics
   a. Location: IMA, 17 East 102nd Street, 6th floor, West Side
   b. Estimated duration of visit: 60 minutes
   c. Navigation:
      1) Usual access-a-ride or compensation for travel, coordinated by COACH
      2) Clinician meets patient at 17 East 102nd Street lobby or other location and escorts to testing location

2. Documentation
   a. All observations are documented in a HIPAA compliant, password protected tablet computer
   b. Observations are not entered into the patient's electronic health record

3. Introduction (~ 5 minutes)
   a. Conducted in a clinical exam room
   b. Clinician greets and explains process of the evaluation to SP/family
   c. Discuss safety
   d. Clinician explains the Borg Self-perceived Effort scale (with visual aid), to enable SP to subjectively quantify effort during physical activity
   e. Review pursed lip breathing

4. Baseline (resting) vital sign assessment
   a. Pulse oximetry, blood pressure, respiratory rate, heart rate, estimated max HR

5. Fall risk assessment (~2 minutes)

a. Timed up and go test (Lusardi et al) > 11 seconds indicates high fall risk[3] and requirement for ergocycle use

6. For SP using portable oxygen
   a. Clinician selects oxygen flow rate to maintain 0_2 saturation ≥88% for all activities

7. Endurance assessment (~10 minutes)
   a. 6MWT is performed in hallway behind exam area
      1) Walking aids: allowed if typically used by SP
      2) Portable O_2: allowed if typically used by SP[4]
   b. Monitoring during activity: pulse oximetry, heart rate, appearance of discomfort
   c. Guidelines for halting the assessment
      1) 0_2 desaturation <88% or heart rate or patient complains of discomfort or asks to stop
      2) Clinician will exclude SP from HOME EXERCISE if MRC dyspnea score >=5[2]
   d. End-exercise monitoring
      1) blood pressure, respiratory and heart rates
   e. Post- activity documentation
      1) maximum 0_2 desaturation during exercise
      2) end-exercise blood pressure, respiratory and heart rates
   f. For 0_2 desaturation <88%
      1) Clinician sends secure email via EHR to notify PCP about desaturation
      2) Recommends referral to PFT lab for formal cardiopulmonary exercise assessment
      3) This will enable formal clinical documentation of exercise performance and allow for home 0_2 prescription (for exercise and or resting) if warranted

8. Resistance band assessment (~10 minutes)
   a. Conducted in exam room
   b. Exercise list
      1) Same set of exercises that will be performed at home
   c. Assessment procedure:
      1) Using the lightest (yellow) band, SP performs 8-12 repetitions of each of the 10 resistance exercises
      2) After 1 minute of rest, SP performs same exercise with next band in order of increasing resistance
   d. Vital sign monitoring
      1) At completion of the 10 resistance exercises, document pulse oximetry, HR, and BP
      2) For 0_2 desaturation <88%, manage as for desaturation during 6MWT

9. Cool down period (~10 minutes)
   a. Perform the 5 cool down exercises

10. Review the HOME EXERCISE prescription
    a. The Clinician reviews the exercises with the SP

1) Review safety
2) Select days on which SP will do aerobic (5 days/week) and resistance exercises (3 days/week with >=1 day of rest between exercise days)
3) Three months, then reduce to aerobic 3 days/week and resistance 2 days/week

b. Use teach-back to ensure understanding of plan
c. Provide and review take home materials:
   1) exercise bands
   2) educational materials
   3) pedometer
   4) diary
   5) ergocycle, if indicated

D. Details of HOME EXERCISE Routine

1. If 0_2 desaturation <88% with exercise
   a. HOME EXERCISE will be delayed until SP has home oxygen
   b. Clinician notifies PCP, suggestion for referral to PFT lab for formal cardiopulmonary exercise assessment (see communication instructions, below)

2. Location of HOME EXERCISE
   a. Indoors or outdoors, weather and personal preference dependent
   b. COACH to work with SP to identify safe locations for activity, free of fall risk hazards (clutter, throw/area rugs, oxygen tubing)

3. Target effort on exercises
   a. Borg self-perceived effort level 5-6[5]

4. Schedule[1,4,6-8]
   a. Intensive period, months 1-3
      1) Aerobic: 4 days/week
      2) Resistance: 3 days/week
   b. Maintenance period, months 4-6 and thereafter
      1) Aerobic: 3 days/week
      2) Resistance: 2 days/week

5. Aerobic exercises [walk[7-10] or cycle[4,7,8]] (5 to 30 minutes)
   a. Warm up
   b. Main activity set: walk/cycle 5-30 minutes, maintaining Borg effort 5-6
   c. Duration and intensity increases as tolerated by week[9,10] (*see Horton et al supplement for protocols*)[10]
      1) Usually 2-3 min added to main set each week until SP tolerates 30 minutes. First two weeks is typically most difficult.
   d. Cool down

6. Strength exercises training using resistance bands (5-15 minutes)
   a. Warm up

   b. Activity sets, 10 exercises
   c. Cool down
   d. Allow for >= 1 rest day between resistance training days

7. When to interrupt activities
   a. Excessive fatigue (Borg ≥6)
      1) Rest ~5 minutes then resume activity
      2) If on home 0_2 increase 0_2 flow rate

   b. Stop activity for the day[4,11]
      1) Breathlessness, fatigue, or weakness beyond normal levels that does not improve with rest or usual management (e.g., increased 0_2, rescue inhaler or nebulizer)

   c. Stop activity and notify PCP or COACH
      1) If feeling sick or having progressively greater difficulty with physical activity over hours to days
      2) Discomfort and other symptoms don't resolve after 5 minutes of rest
      3) Chest pain or tightness, dizziness, light headedness
      4) Muscle pain that does not improve within a day

8. Exercise logging
   a. Patient documents effort and how they feel using diary
   b. Document steps captured on pedometer

E. COACH Role

1. HOME EXERCISE-specific schedule:
   a. Telephone or video call to SP on first day of HOME EXERCISE
   b. Telephone or video call follow up next day and 5-days later
   c. Thereafter, weekly brief telephone or video calls for a minimum of 4 weeks

2. Help SP determine optimal location in home for exercises
3. Reinforce safe and proper technique
4. Ensure safety of activities and that area designated for exercise is free of hazards
5. Provide ongoing encouragement and support motivation
6. Remind SP to document exercise activities
7. Transition to weekly then monthly calls when deemed appropriate to problem solve, reinforce learning, encourage ongoing participation
8. Use diary/pedometer data to promote encouragement[12]
9. Discuss cases with RT and clinician bimonthly

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Home Exercise Prescription

Important Telephone Numbers

Your Doctor	
Your Coach	

What you'll need for exercise

1. Your exercise stretch bands
2. A chair
3. Comfortable, stable shoes
4. Your exercise guide
5. A timer for your walking

Safety—When to stop the exercise

Symptom	**What to do**
You feel very tired (RPE is greater than 6).	Rest for 5 minutes, then continue the exercise.
Your breathlessness, fatigue or weakness is worse than usual after activity.	Stop the activity for the day.
• You feel sick or have discomfort that don't go away after 5 minutes of rest; • You have chest pain or tightness, dizziness, or light headedness; • You have muscle pain that does not improve within a day.	Stop the activity for the day and notify your primary care doctor right away.

Schedule—*When to do your exercises*

	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
Cycling/Walking							
Resistance bands							

Step 1: Warm up

Always start your activity with these warm up exercises.

1. March in place—*1 minute*
2. Overhead stretch—*3 repetitions*
3. Shoulder rolls—*3 repetitions*
4. Tricep arm stretch—*3 repetitions*
5. Waist rotation—*3 repetitions*
6. Calf stretch—*3 repetitions*
7. Hamstring stretch—*3 repetitions*
8. Ankle rolls—*3 repetitions*

Step 2: Walking exercise or resistance band exercise

Cycling/Walking: for____________minutes.

Resistance Bands Exercises

Exercise	Band Color	Repetitions
1. Chest press	□ Yellow □ Red □ Green	
2. Shoulder external rotation	□ Yellow □ Red □ Green	
3. Front pull apart	□ Yellow □ Red □ Green	
4. Arm raise	□ Yellow □ Red □ Green	
5. Triceps press	□ Yellow □ Red □ Green	
6. Seated rows	□ Yellow □ Red □ Green	
7. Bicep curl	□ Yellow □ Red □ Green	
8. Knee press	□ Yellow □ Red □ Green	
9. Ankle flexion	□ Yellow □ Red □ Green	
10. Hip abduction	□ Yellow □ Red □ Green	

Step 3: Cool down

Always finish your activity with these cool down exercises.

1. Overhead stretch—*3 repetitions*
2. Shoulder rolls—*3 repetitions*
3. Tricep arm stretch—*3 repetitions*
4. Waist rotation—*3 repetitions*
5. Calf stretch—*3 repetitions*
6. Hamstring stretch—*3 repetitions*
7. Ankle rolls—*3 repetitions*

Rate of Perceived Exertion

RPE SCALE	EMOJI	INTENSITY LEVEL...
9 - 10		MAXIMUM INTENSITY
7 - 8		VIGOROUS INTENSITY
5 - 6		MODERATE INTENSITY
3 - 4		LIGHT INTENSITY
1 - 2		VERY LIGHT INTENSITY