Program Overview

Introduction-
Individuals living with chronic lung disease such as COPD (Emphysema, Chronic Bronchitis) and restrictive disease (Pulmonary Fibrosis) are often unable to fully participate in their own lives and the lives of their family and friends. Treatment is often confusing and frustrating for patients and those that care for them at home. TCMC's Pulmonary Rehabilitation Program offers a comprehensive outpatient program to serve the needs of the chronic lung disease patients in our community. Our goal is to improve the comfort, function and understanding for our patient's that struggle with this challenging disease. Both quality of life and functional ability can be improved through attendance in the pulmonary rehabilitation program. The family is also encouraged to attend the sessions to receive training, education and support in caring for their loved ones by the rehab staff and guest speakers.

“Tomorrow’s goals can only be attained by what we have accomplished today.”

Program Outline:
The Pulmonary rehabilitation program at TCMC is designed for patients with chronic respiratory disease (COPD, Emphysema, Asthma, Chronic bronchitis, Interstitial Lung Disease, Pulmonary Fibrosis and other conditions). The program combines education and group support with therapeutic exercise into a comprehensive 8 week program. Our goal is the help patient's understand and cope with the disease and function more comfortably at home.

Preadmission Evaluation: Upon a doctor's referral, the coordinator will provide and respiratory evaluation and explanation of your upcoming program. You will then be seen by a physical therapist and the medical director of the program. The healthcare professionals will evaluate your current level of functioning and design an individualized exercise program to meet your needs. Your pre-rehab testing may include full pulmonary function studies, laboratory tests and chest x-ray. The rehab team is available to answer any questions or concerns you may have before initiating your program.

Program Summary: 8 week program: During your first session, you will begin an orientation to your program. This includes demonstration of stretches, aerobic machines, lower and upper extremity exercise. Thereafter, a progressive exercise program will occur at each session. Your exercise program is based on your initial evaluation by the respiratory therapist, physical therapist and medical director. Some activities will take place individually and other in a group format with your other class members, all dealing with similar breathing problems. You will come to the program 3 days a week on Tuesday, Thursday and Friday. Your exercise session will be preceded by either an education or training session designed to help you achieve your goals and address your limitations. The rehab staff will also prescribe a home exercise program to initiate 1-2 additional times a week once you are stringer and feel comfortable with exercise. Your exercise rehab program will start slowly and progress toward your goal each week. It will consist of aerobic conditioning activities such as walking laps, treadmill, exercise bicycle,
Nustep, and upper arm ergometer followed by other exercises to improve your strength and endurance. Attention will be given to both upper and lower body muscle groups with use of light weights or theraband 2 days a week and on Cybex strengthening equipment once a week.

Educational lectures and activities will cover a wide range of topics designed to help you fully understand your disease and give you the information you need to improve function and feel better. During each session, you will have the opportunity to share your questions and concerns with others dealing with similar challenges as well as the staff. Your progress will be continually monitored and adjustments made to your program based on your reaction to the exercise at each session.

Our goal is to provide you with the skills and knowledge you will need to live better with chronic lung disease.

**A Customized Program for Every Patient**
The pulmonary rehabilitation program is individualized for each participant. The team will discuss your needs after evaluations are completed and determine an initial plan of care and exercise prescription for you to start the program.

A workbook will be given to you along with questionnaires, the rehab phone number and dates and times for your rehab program upon your initial evaluation with the coordinator.

Educations sessions are 1 hour long and include discussion, videos, and written handouts and, of course, time to answer your questions. We encourage you to ask questions! We can help you better that way!

*The education sessions include:*
- respiratory physiology
- disease management
- breathing retraining
- exercise
- energy conservation
- respiratory medications
- managing secretions
- oxygen use
- relaxation
- inhaler use
- anxiety and depression
- warning signs
- avoiding irritants

*Exercise sessions are:*
- Tuesday/Thursday for 1 1/2 hours and include warm up, stretching, aerobic conditioning, strengthening and cool down. Friday for 1 hour and include warm up, Cybex strengthening machines and cool down. During each session you will
work at your own speed and tolerance at workloads prescribed by the Pulmonary rehabilitation team. You endurance will improve as you become conditioned in a safe and supervised environment.

- A physical therapist monitors your tolerance to exercise and makes adjustments as necessary. A respiratory therapist monitors your oxygen level, level of breathlessness and vital signs. All team members help you keep your breathing under control!
- We expect you to notify us of any troubling signs or questions you have, so we can adjust your exercise appropriately for that session.
- The rehab staff will help you monitor your heart rate and "ratings of perceived Dyspnea" during your exercise session to help you develop self-management techniques for use at home and after your program.

**Treatment Plan and Program Evaluation:**

- The medical director and rehab coordinator are in close contact throughout your program, and will ensure a safe and positive experience for you. Please feel free to ask questions at anytime. We encourage your family to attend these sessions if they want to be involved.
- We encourage you to voice your opinion of the rehab program at anytime. We find the participants have the best ideas and make the program better for upcoming classes.
- Your regular physician will receive several progress reports on you as well as a discharge summary. If the medical director feels a change is needed in your regular medications, she will contact your physician personally for you.
Cycle of Debilitation from Respiratory Disease

- You first feel short of breath from moderate exertion.
- You then avoid such activities to control shortness of breath. But lack of activity causes muscles to weaken and weak muscles use more oxygen than strong ones.
- You soon feel short of breath from mild exercise such as walking, and may make the mistake of further avoiding exercise.
- As the body further weakens, you can become short of breath when bathing, dressing and even at rest.

* Break this downward cycle!!! Exercise and stay active!!! *

How to monitor your pulse:
During your program, the staff will train you to take your own pulse. Checking your pulse during exercise helps you know if you are working within your "target heart rate range" and is one measure used to determine how hard you are working. If you are unable to find your pulse, let the rehab staff know, and we will practice these techniques with you or make other suggestions.

To check your pulse, you may choose either the "carotid" pulse or the "radial" pulse.

To use the radial pulse:
1. Place palm up.
2. Use index and middle fingers.
3. Locate the long bone on the thumb side.
4. Slide index and middle finger into groove pressing lightly.
5. Count the number of beats. They correspond to the beats of the heart.

To use the carotid pulse:
1. Place fingertips gently on one side of your neck below the jawbone and halfway between your neck muscles and windpipe.
2. Count the number of beats. They correspond exactly to the beats of the heart. Do not count pulse in both sides of the neck at once because you may cut off the circulation.

*For either pulse: count your heart beat for 15 seconds, then multiply the number by 4; this gives you the pulse for one minute. *

Ratings of perceived dyspnea (RPD)
The RPD scale is a self-assessment scale used by you to determine how short of breath you are when exercising or being active. This scale can be used with any activity and can help you determine if you should rest or continue with that activity.

During your program, you will be shown the RPD scale to assess how short of breath you are with each exercise. Your goal is to use this scale to help you understand when you should continue, do more or stop and rest during exercise or activities.
Ratings of Perceived Dyspnea Scale
0-nothing at all
0.5-very, very slight
1-very slight
2-slight
3-moderate
4-somewhat severe
5-severe
6
7-very severe
8
9
10-very, very severe
**Home Exercise Program**

Your exercise program is an important aspect of your rehab program. These exercises are completed in addition to the exercise during our regular exercise program at the hospital. Establishing an exercise routine in your home will help you continue to strengthen your body and keep you healthy. You can document your exercise on your home exercise log.

The following is a guide for home exercises. Your specific home exercise routine will be discussed with you during the program and may differ from this guide.

Each person should work within his/her target heart rate range (if you can take your pulse), or you can use the RPD scale.

**Frequency:**
- week 2: theraband given to each patient with cues to use at home 2 times a week.
- week 3-4: theraband 3 times a week +1 additional day of exercise.
- week 5-6: theraband or LE exercise on non rehab days +2 additional days of exercise.
- week 7-8: theraband or LE exercise +3 additional days of exercise.

**Graduation:** continue with home exercise per your discharge prescription and attend the maintenance program.

**Duration:** 5-40 minutes of continuous exercise as tolerated by you. Decrease intensity if needed for tough breathing days. Plus: 5 minutes of warm-up/cool down before and after exercise plus your stretches.

**Mode:** choose what you like! (walk, bike, swim, treadmill).

**Walking guidelines for home exercise program:** walking is a very important part of your exercise program.

**Why is walking helpful?**
- By daily progressive walking you may use many of the muscles in your body, including your heart.
- With gradual exercise, the muscle fibers grow shorter, becoming more efficient and needing less oxygen.
- Walking increases circulation and helps blood return to the heart and lungs to pick up more oxygen.
- Walking uses your whole body and helps improve your overall conditioning and endurance level. This allows you to better tolerate other daily and recreational activities.

**Important considerations while walking:**
- Walk as often as possible while maintaining a controlled breathing pattern and using proper posture. Allow your arms to swing freely at your sides.
➢ Start small (5-10 minutes) and increase your time and distance gradually. Walk at a pace that keeps you within your target hear rate range or perceived breathlessness range as suggested by staff.
➢ Walk outside daily, preferably when the air is less polluted and crisp.
➢ If the weather is bad, walk in your home, a mall or store.
➢ Start walking on the level and as you become conditioned, add grades.
Relaxation techniques: General guidelines:

- For maximum benefit, the technique should be performed everyday for 10-20 minutes. Even 5 minutes twice a day would be helpful.
- It should not be done on a full stomach.
- It should be performed in a quiet, comfortable spot of your choosing. Free from outside stimulation.
- Check your time with a watch-don't use an alarm.
- If your mind wanders, turn your attention back to your breathing and keep repeating the chosen word or phrase, or listen to music or audiotape playing in the background.
- Don't worry if you're relaxing enough or getting the right response. If you're doing it, the response will occur and the physiological changes will take place.
- Afterwards, you should feel relaxed and calm. This effect may last for several hours.
- There are many techniques for relaxation and no one method is better than another. In fact, it may be more effective for you to combine pieces of several different methods.

DEEP BREATHING
The most basic. Sit in place, hands resting on lap, armrest or side. You can also place your hands on your stomach to feel the expansion and contraction or your lungs and diaphragm. Inhale slowly and deeply through your nose, letting your stomach expand as much as possible. Exhale slowly through pursed lips, which allows you to control how fast you exhale as it keeps your airways open longer. Feel the rhythm of it, in & out, emptying out, clearing and cleaning.

AUTOGENICS
Concentrate on a mental suggestion such as "my left arm feels heavy and warm." Concentrate intently on this suggestion; try to actually feel your arm getting heavier and warmer. Convince yourself it is true. The repeat the same process focusing on your right arm, right leg, etc. You can do this from head to toe, focusing on one limb at a time.

CLEARING THE MIND
Allow yourself to mentally focus on a single, peaceful thought or image. Reduce distractions. Focus only on that thought; repeat it over and over to yourself. Listen to the rhythm of it.

PROGRESSIVE MUSCLE RELAXATION
This is a 3 step technique. First, tense a muscle or muscle group and notice how it feels. Then release the tension and let it flow right out, pay attention to that feeling. Next, concentrate on the difference between those 2 sensations. This also works well head-toe or visa versa, for total body relaxation.
VISUALIZATION
This is a mental vacation. Allow your imagination to run free! Think of your most favorite place to be, and put yourself there in your mind. Try to imagine all of the details. Tune in all your senses. Are you lying on the beach? How does the sun feel on your skin? Do you hear the waves? Seagulls? What does the air smell like? Do you see sailboats?
Nutrition in COPD

COPD is the leading cause of disability among Americans. A person's nutritional status can influence the degree of severity of COPD, and COPD can create circumstances that make consuming an adequate diet difficult.

General Body types associated with COPD
Overweight-peripheral edema is common. (Water retention in feet and legs) poor skin tone resulting from a lack of oxygen distributed to the body tissues.
Underweight-prone to weight loss, poor appetite common and muscle wasting apparent. Chest, arms and legs look bony.

Maintaining or achieving a desirable body weight is essential. Being overweight increases the workload on your heart and lungs to supply oxygen to all areas of the body.

Secondly, excess fat in the abdominal area crowds the diaphragm, making it difficult to fully expand the lungs. By losing weight through proper diet and exercise, the body's muscle mass is increased. This makes breathing easier and the person will feel healthier and more energetic.

In the other hand, being underweight is a problem as well. Weight loss is a consequence of a combination of increased calorie needs inadequate diet. As a result of a poor diet, the body's muscle mass, including the respiratory muscles, becomes depleted, making breathing more difficult. The increased work of breathing creates a higher calorie need and a cycle of weight loss and muscle wasting is perpetuated.

The impact of nutrition on immunity
A diet deficient in calories, protein and vitamins and minerals has a negative effect on immune function. The body's cells that fight infection are made of proteins. Poor diet makes it difficult for the body to build new immune factors to fight infection and to repair damaged tissues. decreased appetite and increased caloric needs may then start another debilitating cycle. For this reason and the ones above, the COPD patient must achieve a balance of good nutrition and exercise to stay as healthy as possible.

Nutritional needs
- Fluid-hydrating fluids mean caffeine free products. Fluid keeps mucus thin and keeps body hydrated. Also, oxygen use can be drying to the mucus membranes. Some medications can add to this drying effect.
- Protein- for repairing and building cells. The amount you need depends on your nutritional status and should be determined by a dietician during your rehab program.
- Calcium-especially important for women and for individuals who are on steroid medications. Calcium strengthens bones and helps regulate blood pressure. Calcium is mostly obtained from dairy products and supplements.
- Adequate calories- important even if you are trying to lose weight. See a dietician for that assessment.
- Potassium-potassium need and levels should be determined by lab tests and discussed with your physician. Important for blood pressure control, muscle contraction and nerve impulse transmission. Potassium is susceptible to depletion as a result of certain diuretic medications. It is found in fruits, vegetables, dairy and meats.
- Caffeine- limit beverages containing caffeine. It causes the body to lose water and it increases the diuretic effect of some medications such as Theophylline.

**Tips to eating well**

- Eat foods from each of the basic food groups: fruits and vegetables, dairy products, cereal and grains and proteins.
- Limit your salt intake. Too much sodium can cause you to retain fluids that may interfere with breathing.
- Limit your intake of caffeinated drinks. Caffeine may interfere with some of your medications and also make you feel nervous.
- Avoid foods that produce gas and make you feel bloated. The best process to use in eliminating foods from your diet is trial and error.
- Try to eat your main meal early. This way, you will have more energy to carry yourself through the day.
- Choose foods that are easy to prepare. Buy pre-washed, pre-cut fruits and vegetables.
- Avoid foods that supply little or NO nutritional value. Examples: coffee, tea, soda.
- try eating six small meals a day instead of three large ones.
- If preparing foods requires too much energy, check local agencies that provide meals on wheels. Rest before eating your meal.
- Eat the bigger meal earlier in the day
- Keep fruit juice and water readily available in the refrigerator.
Activities of Daily Living
By using pacing, energy conservation techniques and pursed lip breathing, you will be able to complete more of your daily routine with less fatigue.

Pacing
Any activity that you do can be broken up into sections. Do one small part to the activity or task, take a short break, focus on your breathing, and then do the next section. It may take a few minutes longer to get the job done, but you will not be so fatigued at the end, and you will not need to spend so much time recovering from the strain.

If an activity or task makes you very tired or causes you to become short of breath that lasts more than 1-2 minutes, then it was either too much for you or you neglected to pace it out properly.

If you lose your relaxed, controlled breathing pattern, then you are probably working too fast, and must slow down. You can use the breathing pattern to slow yourself down by taking extra breaths between movements.

Consider learning anew method for getting the job done. Sit whenever possible, use long-handled equipment, power tools and laborsaving devices as much as possible. Alternate heavy jobs with light ones.

*The key to successful activity pacing is to learn your limitations for an activity and try to work within them.*

General Considerations
Think about when is the best time of day for you. Is morning difficult until you have your medications and a slow start? Do you feel like you have more energy in the later afternoon or early evening? Perhaps you are a night owl, and prefer to sleep until 11 am. Does the freshness of early morning give a good start?

Do your most energy-consuming activities at YOUR best time of day! Use slow, flowing movements. Rushing will only increase your discomfort.

Organize your activities and try to do them the same way each time. A routine of the same methods make you more proficient and you will save time and energy.

Set up your work, play, and living area for convenience and less energy expenditure. Eliminate unnecessary details of work. Make work easier with correct heights and reaching distances. Wait until an hour or so after eating to tackle a task. Digestion draws blood, with its oxygen away from muscles, leaving them less capable of coping with extra demands.
Don't permit yourself to be overburdened either by possessions or old habits. You will be amazed when you learn how many energy wasters you can eliminate with no noticeable loss.

*Remember that your capabilities and limitations will fluctuate from day to day, even from hour to hour. The important thing is to listen to what your body is telling you, and trust your own feelings.*
Medications and You

Knowing which medication NOT TO TAKE is often as important as knowing which TO TAKE when you have chronic lung disease.

There are many different medications on the market today that help you breathe easier. Your doctor may already prescribe some of these for you. If so, the list of medications included may help you understand why you are taking them, how they work, and possible side effects.

You should always tell your doctor if you are taking other medications, especially those listed below that should be used in the direction of your doctor. This is particularly true of narcotics, sleeping pills and tranquilizers.

**Over the counter cold and sinus medications:**
Before you take the over the counter medications, you should discuss potential problems with your pharmacist or physician. Read the labels carefully. For example, products containing cough suppressants can be counter-productive to a respiratory patient since they prevent coughing which clear the lungs!

**Asthma:** Individuals with Asthma might find that aspirin causes shortness of breath and wheezing. If this occurs, discuss a substitute with your doctor.

**Flu and Pneumonia vaccines** Anyone with COPD is considered high risk. This includes those caring for patients with COPD.

**Flu vaccine:** given yearly

**Pneumonia Vaccine:** given every 5-6 years, depending on your age and symptoms.

**General medication guidelines:**
- Take medications as prescribed.
- Take those labeled "PRN" only when needed.
- Missed doses-never double dose.
- Storage: original container, away from heat, light, moisture and children.
- Don't use over the counter medications without consulting your pharmacist or physician.
- Keep a written record of your medications, including vitamins, herbal and over the counter.
- Don't take medication prescribed for someone else!
- Notify your physician if medications aren't working or you develop questionable side effects.

*If taking a variety of inhaled medications, always take quick acting one before the slow acting one. Albuterol remains the "rescue" drug with onset on action 1-5*
minutes after inhalation. A good rule of thumb is to take the bronchodilators first and steroids last. REMEMBER to rinse your mouth after all inhalers, especially steroids.

Pulmonary Medications

1. Theophylline- Theodor, Slo-bid, Theo-24
   **How they work**- Bronchodilator that opens narrowed airways to allow better airflow.
   **How to take**- by mouth in a pill, capsule or liquid form.
   **Possible side effects**- upset stomach, nausea, vomiting. Nervousness, restlessness, hyperactivity.
   *Take with food if upset stomach is a problem. Blood levels are required periodically.*

2. Inhaled bronchodilators(beta Agonists)- Albuterol, Proventil, Ventolin, Foradil, Serevent, Xopenex.
   **How they work**- Bronchodilators that open narrowed airways to allow better airflow. Specific time to bronchodilatation depends on the specific drug chosen.
   **How to take them**- inhaled directly into the airways by use of nebulizer, metered dose inhaler, or diskus.
   **Possible side effects**- Increased heart rate, nervousness, restlessness, dryness of mouth or throat.
   *Aerochamber (or proper delivery device) is used to enhance medication deposition in the airways and to decrease side effects.*

3. Inhaled bronchodilators (Anticholinergic)- Atrovent, Spiriva
   **How they work**- Dilates the airway by prevention of airway contraction and maintenance of open airways.
   **How to take them**- Atrovent is inhaled directly into the airways by a metered dose inhaler (use an aerochamber with inhaler) or nebulizer. Spiriva is used with handihaler device.
   **Possible side effects**- cough, hoarseness, sore mouth or throat

4. Oral steroids- Prednisone
   **How they work**- steroids help to reduce inflammation of airways.
   **How to take them**- may be taken in a pill or liquid form.
   **Possible side effects**- cough, hoarseness, sore mouth or throat, stomach upset.

5. Inhaled steroids- Azmacort, Aerobid, Flovent, Pulmicort
   **How they work**- steroids help to reduce inflammation in airways. They work slowly; preventative or maintenance drug.
   **How to take them**- inhaled directly into the airways via metered dose inhaler with aerochamber or appropriate delivery device.
   **Possible side effects**- cough, hoarseness, sore mouth or throat, lessened or prevented with proper delivery device.
6. Other inflammatory medication-Intal (Cromolyn), Tilade
   How they work-Used to prevent asthmatic attacks.
   How to take them-Inhaled directly into the airways via metered dose inhaler.
   (Intal Spinhaler, roto caps) May also be nebulized.
   Possible side effects-dry throat, bad taste, cough, nausea, nasal congestion,
   dizziness.

7. Combination medications-combined medications from different drug classes.
   Combivent-Atrovent and Albuterol
   Duoneb-Atrovent and Albuterol
   Advair-Serevent and Flovent

8. Leukotriene Modifiers-Accolate, Singulair, Zyflo
   How they work-A new class of Asthma medications that work by
   preventing swelling in the airways. It also prevents constriction in the airways.
   How to take them-They can be taken in pill or liquid form. Accolate should be
   taken on an empty stomach.
   Possible side effects-headache, dizziness, nausea.

9. Diuretics-Lasix (Furosemide), Bumex, Lozol, HCTZ
   How they work-rid the body of excess fluid by increasing the flow of urine.
   This prevents excess fluid backing up into the lungs and making breathing difficult.
   How to take them-by mouth in pill form. May be given IV in the hospital.
   Possible side effects-frequent urination, excessive thirst, muscle weakness
   or cramps. CONSULT YOUR DOCTOR FIRST IF YOU HAVE SIDE
   EFFECTS-DON'T JUST STOP IT.

10. Potassium supplements-Kdur, Slo-K, KCL
    How they work-replace potassium lost with diuretics and corticosteroids.
    How to take them-Tablet, capsule, liquid, IV
    Possible side effects-upset stomach, nausea. With low levels-weakness, muscle
    cramps. With high levels-confusion, muscle tightness, cold, tingling.
CORRECT USE OF METERED DOSE INHALERS
Use of metered dose inhaler (MDI), is an easy and convenient way for someone with lung disease to take his/her own medications. By inhaling the medicine directly into your lungs, you decrease the side effects on the rest of your body. Anything inhaled into your lungs will "go to work" quicker, than if it is taken in pill form.

There are several important points to learn in order to use your inhaler correctly:

- The use of an aerochamber attached to a MDI is the best way to use your inhaled medication. An aerochamber holds the medication in the chamber for approximately 10-15 seconds; long enough for you to inhale it in a slow, deep breath.
- The aerochamber increase the amount of medication that goes directly to your lungs. Even with correct technique and inhalation, you CANNOT get as much medication into your lungs without the aerochamber. So, please use your aerochamber!
- An aerochamber comes in many forms, but their goal is the same-to allow you to get your medicine into your lungs where it can help your breathing! Ask your pharmacist or physician for help in obtaining your aerochamber and make sure you are given instructions on proper use of your device! (or pulmonary rehab respiratory therapist!)
- When using aerochamber with your MDI, you will probably not taste or feel the medicine going into your throat and lungs. That is a good thing-anything you taste will stay on your tongue to be exhaled out into the air or swallowed - not inhaled into your lungs! This is especially helpful with steroid inhalers because the aerochamber will help prevent yeast infections in your mouth.

How to use your aerochamber:
1. Attach the inhaler to the aerochamber.
2. Shake well. Exhale.
3. Press down on the MDI. This will put one puff into the holding chamber.
4. Inhale slowly and deeply.
5. Hold your breath for 5-10 seconds. (The longer the better)
7. Wait a full minute before your next puff. repeat steps 2-6.

How to know how much medicine is left in your inhaler:
- The best way for you to know how much medicine is in your inhaler is to COUNT your puffs! This is not as difficult or time consuming as you may think!
- If you are using your inhaler on a regular schedule, it is easy to keep track of your puffs. Each canister states how many actuations (puffs) there are in that particular inhaler. Example: Combivent has 200 actuations. Joan Smith takes 2 puffs 4 times a day. (8 total puffs). Divide 200 by 8 and you get 25-that means Joan's Combivent will last 25 days.
If you have an Albuterol inhaler as needed-just put a piece of tape around it and mark it every time you use a puff. This is the best way to ensure that when you need that rescue drug, you are getting medicine, not propellant!

The method of checking your inhaler in a bowl of water is inaccurate-unless the canister is full, it is all guesswork. Remember, the propellant and drug are both in your MDI-they both have a weight-they is one reason why this method is inaccurate.

Cleaning your aerochamber:
Each day you should remove the mouthpiece from your aerochamber and rinse it in warm running water. If your mouthpiece is attached, run it under water with the whole aerochamber. Once a week, wash your aerochamber in warm water with dishwashing liquid in it. Rinse well and air dry. Every 2 weeks, soak the aerochamber in a solution of 3 parts water and 1 part vinegar, Follow this with a good rinsing and let air-dry.

*Use if inhaled medications can help you control the symptoms of lung disease. But, if they aren't used correctly, with the proper delivery device, you decrease that control by decreeing the amount of medicine you get to your lungs!*