

Reference guide for individual patient education

Integrating physical activity and/or an exercise program into your daily life

Educational topics:

1. Promotion of physical activity
 - Level of physical activity, motivation, benefits and general recommendations
 - Choice of physical activities
 - Practice of physical activities
 - Long-term maintenance
2. Pulmonary Rehabilitation
 - The importance of exercise
 - When, where and how to exercise
 - Knowing your limits
 - Components of a personalised exercise program, adapted to the person living with COPD
 - The importance of maintaining your personalised exercise program

PROMOTION OF PHYSICAL ACTIVITY

General objective

This section aims to help patients and their family increase their level of physical activity and the long-term integration of physical activity in their daily life.

Specific objectives focused on patient / family

1. Motivate patient to increase current level of autonomy and physical activity, to choose interesting physical activities and to commit practice them regularly, in the long-term.
 - In collaboration with patient, identify current level of autonomy & physical activity, and functional limitations.
 - Evaluate clinical barriers that could deter patient from practicing physical activities.
 - Ensure that patient engages in the regular, long-term practice of physical activities.
 - Ensure proper use of the pursed-lip breathing technique, the scale of perceived exertion, and the pedometer.

Specific objectives focused on the healthcare professional

- Encourage educational interventions to promote physical activity and pulmonary rehabilitation
- Set precise markers to facilitate patient / family interventions
- Enhance feeling of safety as it relates to physical activity

Resources « Living Well with COPD »

- Reference guide for individual patient education « Integrating physical activity and/or an exercise program into your life », Section *Promotion of physical activity*
- Brochure for patients and their family: Get moving... Breathe easy!

Content	Interventions**	Expected results	Suggested questions§
Level of autonomy, of physical activity and functional limitations	<ol style="list-style-type: none"> 1. In collaboration with patient, identify current level of physical activity. [1] 2. Discuss with patient/family how the progressing illness affects functional ability. 3. Refer patient to a pulmonary rehabilitation program if he experiences important limitations and needs supervision and monitoring. [9] 	<ul style="list-style-type: none"> • Is able to describe his* daily physical activities (type, duration, breakdown). • Describes functional limitations caused by his illness. • Accepts to be referred to a pulmonary rehabilitation or a physical fitness centre 	<ul style="list-style-type: none"> • Amongst your daily activities, which ones do you consider physical activities? • How much time per day do you spend practicing physical activities? Describe. • How does your illness affect you every day life? • How does your breathlessness affect your ability to accomplish your daily activities?

*For simplicity, the masculine form is used throughout this reference guide and is meant to include both genders.

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Clinical barriers to the practice of physical activities	<p>1. Evaluate clinical barriers that could prevent patient from practicing physical activities: unstable cardiovascular condition, osteoporosis or severe osteoarthritis, severe mental disorder.</p> <p>a. Proceed to the evaluation of patient's general condition: physical examination, vital signs, complete review of medications, signs and symptoms of depression (if possible, complete with patient a scale evaluating the risk of depression such as the scale of geriatric depression)</p> <p>b. Refer patient to appropriate resources, as needed (family physician, physiotherapist or occupational therapist, social worker, nutritionist, education centre, etc.</p>	<ul style="list-style-type: none"> • Participates in the evaluation of clinical barriers that could deter him from practicing physical activities. • Accepts referral when needed. 	<ul style="list-style-type: none"> • Do you have cardiovascular problems? If so, which ones? Do you experience chest pains? Please describe. How do you control your angina? • Do you have problems with your balance? Is it difficult for you to walk? To move? Do you experience joint pains? What do you do to relieve joint pains? What do you do to be able to walk? • Please show me all your medications. • How is your morale?
Self-efficacy Evaluation	<p>1. Determine patient's level of self-efficacy in regards to the regular practice of physical activity in the long run, and in terms of the benefits of physical activity on his symptoms, functional capacity and general health. [1,2, 3, 6]</p> <p>2. Identify perceived barriers according to patient's self-evaluation. Find solutions together. [3, 5]</p>	<ul style="list-style-type: none"> • Expresses ambivalence regarding the need to be more active when living with COPD, and regarding risks related to physical activity. • Recognises possible health benefits of physical activity. • Identifies his level of trust in his own abilities and in the potential benefits of physical activity. • Identifies components which could keep him from practicing physical activity on a regular, long-term basis. In collaboration with the health professional, develops a strategy to overcome these barriers. 	<ul style="list-style-type: none"> • What do you think of physical activity? Tell me what being active can do for you? • Do you believe that physical activity can be beneficial to you? If so, in what way? If not, why? • How can physical activity improve your health? • On a scale of 1 to 10 (1 – not at all confident, 10 – very confident): • Do you believe you could be more physically active regularly (at least 3 days/week) over a one month period? Over a one year period? • Do you believe that increasing you level of physical activity helps you control your breathlessness and improve your quality of life? For what reason? • What could keep you from being physically active regularly? • What could help you maintain your physical activity? • How could we develop a plan to help you maintain your physical activity in the long run?

PROMOTION OF PHYSICAL ACTIVITY

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Engagement to the regular, long-term practice of physical activity	<p>1. Verify patient/family commitment to initiate and maintain physical activities in the long-term and their need for support. [1,2,5]</p> <p>a. Identify which recreational and daily living activities are of interest to patient/family. [1,2]</p> <p>b. Determine if patient would prefer to integrate physical activity to his daily activities or to join a supervised exercise programme.</p> <p>c. Identify which physical activities patient/family could engage in regularly or every day (recreational and daily living). [1,2,5,7]</p> <p>d. Establish with patient, moments of the day or week during which to practice chosen physical activities, as well as frequency and duration of each activity. [2, 5]</p> <p>e. Establish with patient the location where chosen activities should be practiced. [2, 5]</p>	<ul style="list-style-type: none"> • Describes leisure activities and activities of daily living that are of interest. • Accepts to be referred to a pulmonary rehabilitation specialist or to a physical fitness centre. • Chooses activities of leisure and daily living that he is willing to practice regularly. • Describes moments of the day and week when he will practice each of the chosen activities and their duration. • Describes the location where he will be practicing chosen activities. 	<ul style="list-style-type: none"> • What leisure activities do you enjoy? • Which of your daily activities allow you to be physically active and are interesting to you? • How would you like to keep fit? Would you like to integrate physical activity to your daily activities or take part in a structured, supervised programme? • Taking into consideration the needs you have expressed, I recommend that you be followed by professionals in pulmonary rehabilitation or in physical fitness. What do you think? • Identify at least one leisure activity that you would be willing to engage in regularly. • Identify at least two activities of daily living that you would be willing to engage in regularly. • At what time of day do you have the most energy? • At what time of day, how often and for how long will you practice the following activity: _____? • Where will you be practicing _____? Why did you choose this location?

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Engagement to the regular, long-term practice of physical activity	<p>f. Review, with patient/family, clothing and shoes appropriate for physical activity, as well as aggravating factors to avoid. [2,5]</p> <p>g. Suggest that patient commits by signing the learning contract Get moving... Breathe easy! [5]</p> <p>h. Discuss, with patient/family, the importance of resuming physical activity progressively after a COPD exacerbation, as soon as symptoms improve. [2,3]</p> <p>i. Establish, with patient, a follow-up plan of his progress in practicing physical activity. [5] During subsequent visits, make a point of congratulating and encouraging patient when following-up on his physical activity. [7]</p>	<ul style="list-style-type: none"> • Describes clothing and shoes appropriate for physical activity and the importance of avoiding potentially aggravating environmental factors. • Signs a contract committing to practice at least one leisure activity. • Expresses ambivalence regarding the need to progressively resume physical activities following an exacerbation and recognises possible health benefits • Is comfortable with the idea of resuming a light physical activity as soon as symptoms improve. • Writes date of next follow-up appointment on his learning contract. 	<ul style="list-style-type: none"> • What type of clothing and shoes must you wear during physical activity? • Which environmental factors should you avoid when exercising because they could potentially worsen your symptoms? • Are you willing to commit to practicing these activities by signing this contract? • Do you think it is important to progressively resume your physical activities following an exacerbation? Why? • Do you think it is possible? • What are your worries or preoccupations? • How about making a follow-up appointment in ____ weeks or ____ months to see how you are doing in terms of physical activity? <p>Subsequent visit :</p> <ul style="list-style-type: none"> • Which physical activities did you practice? • For each physical activity: How many times per week? For what length of time? • Were there events that prevented you from practicing your physical activities? Please describe. • Did you experience an aggravation of your symptoms? If so, were you able to resume your physical activities quickly following the exacerbation? If not, why not? • Are you satisfied with your practice of physical activities? Let patient expand on his reasons.

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Teaching or review of the pursed-lip breathing technique, the scale of perceived exertion, and the use of the pedometer.	<ol style="list-style-type: none"> 1. Teach or review, the pursed-lip breathing technique so that breathlessness can be better controlled during physical activity. [1,2,4,7] <ol style="list-style-type: none"> a. Verify if patient already uses the pursed-lip breathing technique and if he is familiar with its benefits with regards to physical activity. [1,2] b. Teach or review the pursed-lip breathing technique by demonstrating the different steps of the technique at rest, in effort, and during an attack of shortness of breath (make sure patient masters the technique at rest before moving on). Ask patient to demonstrate the technique. [4] c. Provide patient with constructive feedback and reinforcement on the performance and the use of the techniques learned [7]. Review the lesson and find solutions together. 2. Teach or review the use of the scale of perceived exertion (see brochure p. 6) to determine intensity of physical activity. [1,2, 7,8] <ol style="list-style-type: none"> a. Verify if patient is familiar with the scale and knows how to use it during physical activity. [1,2] b. Teach or review, with patient, how to use the scale in the context of a physical activity he will practice. Ask patient to explain, in his own words, how he will use the scale before and during physical activity [2,8] 	<ul style="list-style-type: none"> • Expresses whether or not he uses the pursed-lip breathing technique and his knowledge of its benefits during physical exercise. • Demonstrates the pursed-lip breathing technique appropriately • Expresses agreement with feedback and reinforcement and is willing to make necessary corrections and to use these techniques during physical activity. • Expresses whether or not he is familiar with the scale of perceived exertion and its use during physical activity. • Accurately describes how to use the scale before and during physical activity. 	<ul style="list-style-type: none"> • Are you already using the pursed-lip breathing technique? • What are the benefits of using the pursed-lip breathing technique during exercise? • Please show me how you use the pursed-lip breathing technique (at rest, while walking, going up stairs, carrying a parcel and during an attack of shortness of breath)? • How do you feel about using the pursed-lip breathing technique during physical activity? Are you willing to use it? If so, start right now. If not, why not? • Are you familiar with the scale of perceived exertion? Do you know how to use this scale to determine the intensity of your physical activities? If so, please explain. • <i>Before starting:</i> tell me which number from 0 to 10 on the perception scale best describes your level of breathlessness ... of fatigue ... • <i>While patient is engaged in physical activity, you can ask:</i> Please stop for a few minutes and consult the scale. Which number from 0 to 10 best describes your level of breathlessness ... of fatigue ... Is your level of effort too high or too low?

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Teaching or review of the scale of perceived exertion, and use of the pedometer.	<p>c. Provide patient with constructive feedback and reinforcement on the use of the scale of perceived exertion. [7]</p> <p>3. Teach or review the proper use of the pedometer. [1,2,4,5,7]</p> <p>a. Determine if patient is familiar with the use of a pedometer and if he is willing to use one. [1,2]</p> <p>b. Teach or review the proper use of the pedometer. Ask patient to explain, in his own words, how he plans to use the pedometer (goal in steps per day, progression). [2,8]</p> <p>c. Give constructive feedback and reinforcement on the use of the pedometer. Find solutions together.</p>	<ul style="list-style-type: none"> • Expresses agreement with feedback and reinforcement and is willing to make necessary corrections and to use the scale. • Expresses whether or not he is familiar with the use of a pedometer. Is willing and committed to using a pedometer every day. • Accurately describes how to use a pedometer. • Has a positive attitude towards comments on the use of the pedometer and is willing to use it every day. 	<ul style="list-style-type: none"> • Are you willing to use the scale of perceived exertion? If so, start immediately, following the directions you were taught. If not, why not? • Do you know how to use a pedometer? Please describe. Are you willing to use a pedometer every day? • Describe the 3 steps in the use of a pedometer? How will you set goals on the number of steps you will make daily? What will be your first goal in terms of additional daily steps? How long will you maintain this goal? What is your ultimate goal? • Are you willing to use a pedometer? If so, start right away, following directions you were taught. If not, why not?

****Educational Methods and other actions:** ¹ Learning needs assessment, ² Interactive lecturing, ³ Building of ambivalence (motivational interview technique), ⁴ Demonstration and practice, ⁵ Learning contract, ⁶ On a scale of 1 to 10, ask the patient to determine his/her level of confidence, 1 = not confident at all and 10 = very confident, ⁷ Constructive feedback and reinforcement, ⁸ Summarizing information, ⁹ Reference to other health care professionals, ¹⁰ Give pertinent written information, ¹¹ Case scenarios.

§ Suggested Questions: Questions to evaluate patient's needs, comprehension of information, and outcomes. If you find negative results readdress issues in order to reach the specific objectives.

PULMONARY REHABILITATION

General Objective

This section aims to help patients and their family to start and maintain an exercise program within their daily life.

Specific Objectives focused on patients / family*

2. Define the importance of exercise
 - Recognize the benefits of exercise
 - Determine level of motivation to start an exercise program.
3. Know when, where and how to exercise
4. Learn to recognize your limits
5. Identify components of an exercise program adapted to people living with COPD
 - Describe warm-up exercises
 - Describe cardiovascular exercises
 - Describe muscular strengthening exercises
 - Describe flexibility and balance exercises
5. Define the importance of maintaining a personalised exercise program
 - Recognize that exercise must be a long-term, integral part of daily routine
 - Identify factors that help or impair the pursuit of a personalized exercise program.
 - Identify possible solutions to barriers that limit the pursuit of a personalized exercise program.
 - Determine level of motivation to maintain a personalized exercise program in the short and long-term.
 - Re-evaluate initial objectives, if necessary.
6. Establish a maintenance plan to maintain personalized exercise program

* Specific long-term objectives are identified by a number; specific short term objectives are identified by a bullet.

Resources « Living Well with COPD »

- Reference guide for individual patient education « Integrating physical activity and/or an exercise program into your life », Section *Pulmonary rehabilitation*
- Learning module for patients and their family: Integrating an exercise program into your life.

Content	Interventions**	Patient/Family	Suggested questions§
The importance of exercise	a. Evaluate patient/family knowledge of exercise benefits. [1] b. Discuss with patient/family the benefits of exercise for a person living with COPD. 2. Determine with patient/family if he is motivated to start a personalized exercise program. [1] 3. Explore with patient his objectives regarding the exercise program, as well as perceived barriers. [2]	<ul style="list-style-type: none"> • Describes what he knows on the benefits of exercise • Describes benefits expected from exercise • Recognises if he is able or not to start an exercise program • Expresses objectives and perceived barriers regarding the exercise program. 	<ul style="list-style-type: none"> • What do you know about the benefits of exercise? • How do you think a regular exercise program can help improve your health? • How would you describe an exercise program? • Are you ready to start? • What are your goals and expectations regarding your exercise program? • Do you have fears, hesitations?

PULMONARY REHABILITATION

Content	Interventions**	Patient/Family	Suggested questions§
When, where and how to exercise?	<ol style="list-style-type: none"> 1. When: Determine with patient/family periods of the day that are most convenient to exercise [1, 2] 2. Where: Determine with patient/family places/activities that are convenient. [1, 2] 3. How: a. Give general advice to help succeed with the exercise program. [1, 2, 4, 7]. b. Teach patient/family how to use scale of perceived exertion. [1, 2, 4, 7] 	<ul style="list-style-type: none"> • Identifies periods of the day most convenient to exercise. • Identifies convenient places and activities of interest. • Identifies activities that he likes and would like to do. • Recognises that it is better to wear comfortable clothes and appropriate shoes to exercise. • Recognises that he must take medications as prescribed. • Knows and successfully demonstrates the pursed lip breathing technique. • Understands how to use the scale of perceived exertion when exercising. 	<ul style="list-style-type: none"> • Which moments of the day/week could you make exercising your priority? • Give examples of places and activities that are convenient: <ul style="list-style-type: none"> ○ In the spring ○ In summer ○ In the fall ○ In winter • Which exercise do you already practice? • Which exercise would you like to do and feel able to do? • Do you have comfortable clothes in which to exercise? Do you have appropriate shoes? • Which medication do you take and how do you take it? • Are you in the habit of using your emergency medication (bronchodilator) before making an effort? • Are you familiar with the pursed lip technique? If so, show me how you use the pursed lip breathing technique? <i>If not, teach and demonstrate the technique.</i> • Have you already been taught the scale of perceived exertion? Explain how you were taught to use the scale of perceived exertion.
Recognising your limits	<ol style="list-style-type: none"> 1. Identify normal and abnormal symptoms that can be present when exercising [1, 2] 2. Identify with patient/family comorbidities related to his illness and reassure him regarding exercise. [2, 3] 	<ul style="list-style-type: none"> • Lists normal symptoms that can be present while exercising. • Lists abnormal symptoms that can be present while exercising. • Describes his other health issues. • Recognises that he can exercise despite his COPD and other health issues. 	<ul style="list-style-type: none"> • What normal symptoms can be present while you exercise? • What abnormal symptoms can be present while you exercise? • What would you do if you experienced these abnormal symptoms? • Can you list your health problems, other than COPD? • Do you believe we can suggest exercises adapted to your health condition?

PULMONARY REHABILITATION

Content	Interventions**	Patient/Family	Suggested questions§
Components of a personalized exercise program for a person living with COPD	1. Present patient with various components of an exercise program for a person living with COPD. [1]	<ul style="list-style-type: none"> Lists the various components of an exercise program. 	<ul style="list-style-type: none"> Can you list the various components of an exercise program?
	2. a. Explain to the patient/family the warm-up exercises integrated into an exercise program for a person living with COPD and their effects. [2] b. Teach the patient/family the warm-up exercises integrated into the exercise program. [4, 7]	<ul style="list-style-type: none"> Lists the warm-up exercises that may be integrated into an exercise program adapted to his COPD. Describes the effects of the warm-up exercises. Successfully demonstrates the warm-up exercises integrated into his exercise program. 	<ul style="list-style-type: none"> What warm-up exercises may be integrated into an exercise program adapted to your COPD? Why do you think it is important to do warm-up exercises before starting the more intense exercise? Give some examples of warm-up exercises you could do. Show me how you do your warm-up exercises.
	3. a. Explain to the patient/family the anticipated benefits of the cardiovascular exercises and the basic rules to follow. [2] b. Explain to the patient/family the types of cardiovascular exercises that may be integrated into an exercise program for a person living with COPD, and the advantages of each one. Help the patient/family to select one of the suggested cardiovascular exercises to use in the exercise program. [5] c. Teach the patient/family the cardiovascular exercise he has decided to integrate into his exercise program. [4, 7]	<ul style="list-style-type: none"> Describes the benefits of the cardiovascular exercises. Lists the basic rules to follow. Lists the types of cardiovascular exercises that may be integrated into an exercise program adapted to his COPD. Describes the advantages of each of the suggested cardiovascular exercises. Selects a cardiovascular exercise that he will do on a regular basis. Successfully demonstrates the cardiovascular exercise he has decided to integrate into his exercise program. If appropriate, uses his pedometer properly. 	<ul style="list-style-type: none"> What are the benefits of the cardiovascular exercises? What are the basic rules to follow when doing your cardiovascular exercises? What types of cardiovascular exercises may be integrated into an exercise program adapted for you? What are the advantages of using the stationary bike? walking? climbing stairs? Which cardiovascular exercise are you prepared to do on a regular basis: stationary bike? the treadmill? walking? stairs? etc. Can you get a stationary bike? a treadmill? Do you have enough room at home for a stationary bike? a treadmill? Do you have accessible stairs at home? Show me how you work out on the stationary bike, the treadmill, walking. Show me how you climb stairs. Do you use a pedometer? If so, tell me how you plan to use it.

PULMONARY REHABILITATION

Content	Interventions**	Patient/Family	Suggested questions§
	<p>4. a. Explain to the patient/family the anticipated benefits of the muscle-strengthening exercises and the basic rules to follow. [2]</p> <p>b. Present to the patient/family the muscle-strengthening exercises that may be integrated into an exercise program for a person living with COPD. [2]</p> <p>c. Teach the patient/family the muscle-strengthening exercises integrated into his exercise program. [4, 7]</p> <p>d. Explain to the patient/family the signs of intolerance to muscular work.</p>	<ul style="list-style-type: none"> • Describes the benefits of the muscle-strengthening exercises. • Lists the basic rules to follow. • Lists the types of muscle-strengthening exercises that may be integrated into an exercise program for his COPD. • Successfully demonstrates the muscle-strengthening exercises integrated into his exercise program. • Lists the signs of inability to tolerate muscle work. 	<ul style="list-style-type: none"> • What are the benefits of the muscle-strengthening exercises? • What are the basic rules to follow when doing your muscle-strengthening exercises? • What types of muscle-strengthening exercises may be integrated into an exercise program adapted for you? • Show me how you do the muscle-strengthening exercises for your arms; your abdominal muscles; your thighs and legs. • What are the signs that tell you to temporarily stop your muscle-strengthening exercises?
	<p>5. a. Explain to the patient/family the anticipated benefits of flexibility and balance exercises and the basic rules to follow. [2]</p> <p>b. Present to the patient/family the flexibility and balance exercises that may be integrated into an exercise program for a person living with COPD. [2]</p> <p>c. Teach the patient/family the flexibility and balance exercises integrated into the exercise program. [4, 7]</p>	<ul style="list-style-type: none"> • Describes the benefits of the flexibility and balance exercises. • Lists the basic rules to follow. • Lists the flexibility and balance exercises that may be integrated into an exercise program for his COPD. • Successfully demonstrates the flexibility and balance exercises integrated into his exercise program. 	<ul style="list-style-type: none"> • What are the benefits of the flexibility and balance exercises? • What are the basic rules to follow when doing your flexibility and balance exercises? • What flexibility and balance exercises may be integrated into an exercise program adapted for you? • Show me how you do your flexibility and balance exercises.
	<p>6. Fill out the exercise prescription and physical activity schedule with the patient/family (pages 43 and 45 in the module). [5]</p>	<ul style="list-style-type: none"> • Provides a written summary of the components in his personalized exercise program, and demonstrates his commitment by signing the prescription. 	<ul style="list-style-type: none"> • Together, we are going to fill out the summary of your exercise program and physical activity schedule. Is that okay?

PULMONARY REHABILITATION

Content	Interventions**	Patient/Family	Suggested questions§
The importance of maintaining the personalized exercise program	1. Discuss with the patient/family the importance of maintaining this exercise program on a regular, long-term basis by reviewing the consequences of discontinuing and the benefits of continuing. [2, 8]	<ul style="list-style-type: none"> Recognizes the importance of maintaining the exercise program on a long-term basis. 	<ul style="list-style-type: none"> Is it important for you to maintain your exercise program on a long-term basis? What could happen if you discontinue your exercise program? What are the benefits if you maintain your exercise program?
	2. a. Identify with the patient/family the benefits experienced since beginning the exercise program. [1, 2] b. Identify with the patient/family the factors that could make it easier or harder to maintain the exercise program. [1, 2] c. Identify with the patient/family solutions to the obstacles that could prevent him from maintaining the exercise program. [1, 2]	<ul style="list-style-type: none"> Lists the benefits experienced since starting the exercise program. Lists the factors that could make it easier or harder to maintain the exercise program. Describes solutions to the obstacles to maintaining the exercise program. Identifies/suggests alternative exercises/facilities to change the day-to-day routine. 	<ul style="list-style-type: none"> Have you benefited from your exercise program? If yes, how? If no, why not? What factors help you to maintain your exercise program? Are there any factors that prevent you from continuing with your exercise program? If yes, what are they? Do you know of any methods or people who can help you overcome the obstacles that prevent you from maintaining your exercise program? If yes, what/who are they? How will you maintain your exercise program if your COPD symptoms get worse? when it is hot, humid, cold, windy? when you are on vacation? How will you get to the fitness or rehabilitation centre for your exercise program? How will you overcome emotionally painful times? What will you do if you lose interest in exercising or if you are on vacation?
	3. a. Draw up an exercise maintenance plan with the patient/family. [3, 5] b. Identify the equipment required to maintain the exercise program at home. [3, 5]	<ul style="list-style-type: none"> Describes the exercise maintenance plan for the coming month and for the year. Describes the equipment he should have at home for his aerobic and muscle-strengthening exercises. 	<ul style="list-style-type: none"> How do you plan to continue your exercise program in the coming month? for the rest of the year? when your symptoms get worse? List the equipment you need to do your aerobic and muscle-strengthening exercises at home. What equipment do you already have? How will you get the rest of the equipment?

PULMONARY REHABILITATION

Content	Interventions**	Patient/Family	Suggested questions§
Self-efficacy evaluation	<p>1. Evaluate with the patient/family his self-efficacy in maintaining the exercise program. [6]</p> <p>2. a. <i>If the efficacy level is not very high</i>, re-assess with the patient/family whether there are still obstacles preventing him from continuing with his exercise program, and possible solutions. [2, 3, 7]</p> <p>b. Let the patient/family postpone the decision to start an exercise program. [3, 9]</p>	<ul style="list-style-type: none"> • Expresses his ability or failure to adhere to the exercise program on a regular basis in the medium and long-term. • Expresses his ability or failure to control his shortness of breath and increase his exertion tolerance. • Identifies whether there are still obstacles preventing him from continuing with his exercise program and fresh solutions for overcoming them. • Considers postponing his participation in an exercise program until he is more favourable to the idea. 	<p>On a scale of 1 to 10, 1 being not at all confident and 10 being very confident:</p> <ul style="list-style-type: none"> • Do you think you can adhere to your exercise program on a regular basis (at least 3 days/week) for one month? for one year? • Do you think that more exercise on a regular, long-term basis will help you to control your shortness of breath and increase your exertion tolerance? • Can we take another look at some of the factors preventing you from continuing with your exercise program? If so, what are they? • Can you think of other solutions to these obstacles? If so, what are they? <p><i>If not,</i></p> <ul style="list-style-type: none"> • Would you like to talk about this later? If so, when? • Would you like to meet with the physician in charge of the rehabilitation centre?

****Educational methods and other activities:** ¹ Evaluation of learning needs, ² Interactive method, ³ Fostering ambivalence (motivational interview technique), ⁴ Demonstration and practice, ⁵ Learning contract, ⁶ On a scale of 1 to 10, ask the patient to assess his own efficacy, 1 = not at all confident to 10 = very confident, ⁷ Constructive feedback and reinforcement, ⁸ Information summary, ⁹ Referral to other health care professionals, ¹⁰ Pertinent written Information, ¹¹ Case history.

§ Suggested Questions: Questions designed to assess the patient's needs, his comprehension of the information he has received and the expected outcomes. If the outcomes are negative, please review the content that is unclear in order to achieve the specific objectives.

Other References:

- 1) ACSM's Guidelines for exercise testing and prescription, 7th edition, Baltimore, Lippincott Williams and Wilkins, 2006, P.366. This is a reference for exercise prescription for clients with multiple health problems.
- 2) Ries AL, Bauldoff GS, Carlin BW et al. Pulmonary Rehabilitation: Joint ACCP/AACVPR Evidence-Based Clinical Practice Guidelines, CHEST 2007; 131(5):4S-42S. Pulmonary rehabilitation recommendations from the ACCP/AACVPR.
- 3) Nici L, Donner C, Wouters E et al. American Thoracic Society/European Respiratory Society Statement on Pulmonary Rehabilitation, Am J Respir Crit Care Med 2006; 173:1390-1413. ATS/ERS recommendations for pulmonary rehabilitation, including specific clinical components for exercise and setting up pulmonary rehabilitation programs.
- 4) Troosters T, Casaburi R, Gosselink R et al. Pulmonary Rehabilitation in Chronic Obstructive Pulmonary Disease. Am J Respir Crit Care Med 2005; 172:19-38. Literature review of the scientific basis for exercise in pulmonary rehabilitation and the setting up of pulmonary rehabilitation programs.