Healthcare Providers’ Action Guide
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How to Use the Healthcare Providers’ Action Guide

The Exercise is Medicine® Healthcare Providers’ Action Guide provides physicians and other healthcare professionals with a simple, fast, and effective tool for integrating physical activity into their daily practice. By promoting the right “dosage” of physical activity, you are prescribing a highly effective “drug” to your patients for the prevention, treatment, and management of more than 40 of the most common chronic health conditions encountered in primary practice.

This Guide acknowledges and respects that today’s modern healthcare provider may have only a brief window of time for physical activity counseling (at times no more than 20-30 seconds) during a normal office visit. Given this short time period, this Guide seeks to empower you to:

1. Assess the physical activity level of your patients;
2. Write a prescription for physical activity, depending on the health, fitness level, and preferences of your patients, and
3. Refer your patients to certified exercise professionals, who specialize in physical activity counseling and will oversee your patients’ exercise program.

Here’s how you can get started:

1. Review this Action Guide. The Physical Activity Assessment, Prescription and Referral Process documents are the core of the guide and will explain how you can quickly assess physical activity levels, provide exercise prescriptions, and refer patients to certified exercise professionals.
2. Print out and display copies of the Office Flyers in your waiting room and throughout your clinic.
3. Regularly assess and record the physical activity levels of your patients at every clinic visit using the Physical Activity Vital Sign (PAVS).
4. Provide your patients with a basic prescription using the EIM Prescription Pad to get them started on their physical activity program.
5. For patients with chronic health conditions, the Your Prescription for Health series will provide them with more specialized guidance on how to safely exercise with their condition.
6. Once you are comfortable with the prescription process, begin referring your patients to local exercise professionals who will help supervise them as they “fill” their physical activity prescriptions!

These steps are all described in greater detail throughout the rest of this Action Guide. Keep reading to find how you can make a difference in getting your patients to be more physically active!
Promoting Physical Activity in Your Clinic Setting

Physical activity is a key component in achieving a healthy lifestyle and disease prevention. In contrast, physical inactivity accounts for a significant proportion of premature deaths worldwide. As a healthcare professional, you are in a unique position to provide such expertise to your patients and employees in helping them develop healthy lifestyles by actively counseling them on being physically active.

1. The first step you can take within your healthcare setting is to ensure that you “walk the talk” yourself. Data suggests that the physical activity habits of physicians influence their counselling practices in the clinic\(^1\). To be a role model for your healthcare team and to gain the trust of your patients, an important first step is setting an example and showing that being physically active is important to you!

2. Next, we encourage you to focus on the well-being of your healthcare team and implement steps that will increase their physical activity levels and healthy lifestyle choices. Some of these steps may include:
   - Implementing wellness challenges and programs
   - Offering physical activity classes (i.e., yoga) and educational sessions
   - Transforming your stairwells into a welcoming environment and use promotional materials to encourage employees and visitors to use the stairs
   - Implementing activity breaks for meetings that are longer than one hour, and
   - Providing discounts for memberships at the local gym.

3. Finally, we strongly encourage you to promote physical activity in your clinic setting. You may not always have time to engage your patient in conversations about their physical activity levels, but there are simple steps that you can take to make sure they realize its importance in their personal health. By calling attention to and promoting small, simple things that they can do, it will add up to a much more active, healthier patient. The content of effective physical activity messages needs to be simple and clear.

To help you get started, Exercise is Medicine® has developed a series of **Office Flyers** that can be downloaded from our website and printed for use in your clinic (see **Appendix A**). We encourage you to post the flyers in your patient waiting and examination rooms. Copies of the flyers can be left on display on tables for patients to take with them after they have left your office. Together, they will create an immediate, first impression on your patients before they even begin their visit!

Please feel free to share these materials with all of your colleagues!

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Assessing the Physical Activity Levels of Your Patients

One of the most important decisions your patients will make regarding their overall health is to incorporate physical activity into their lifestyle. Your discussion of their current physical activity levels may be the greatest influence on their decision. The assessment of their physical activity levels initiates this discussion, highlights the importance of physical activity for disease prevention and management, and enables your healthcare team to monitor changes over subsequent medical visits.

While there are multiple advanced and comprehensive physical activity assessment tools available, time constraints often necessitate a simple and rapid tool. Assessing the current physical activity levels of your patients can be quickly achieved through the use of the Physical Activity Vital Sign (PAVS) - a tool designed to allow you, or members of your healthcare team, to assess and record the physical activity levels of your patients in less than a minute. Asking your patients about their PA levels requires a minimal time investment with a potentially high yield to their health.

The PAVS consists of two questions: “On average, how many days per week do you engage in moderate to strenuous exercise like a brisk walk?” and “On average, how many minutes do you engage in exercise at this level?” See Appendix B for a printable version of the PAVS that can be used in your office. These two screening questions will provide you with a snapshot of whether your patients are meeting the current PA guidelines of 150 minutes of moderate intensity physical activity each week. By repeating the assessment of the PAVS at every clinic visit, you will be able to track changes in their physical activity levels over time. The PAVS is highly associated with decreased levels of BMI and odds of obesity\(^2\) and has been tested for face and discriminant validity\(^3\).

The PAVS tool is optimally used in the clinic setting when it is integrated as a required response in your electronic medical records (EMR) system. The PAVS was first implemented in an EMR in clinical practice in 2010 by the Kaiser Permanente healthcare system in California\(^3\). Since that time, more than 2 million PAVS have been collected by physicians and their healthcare teams. More recently, use of the PAVS in clinical practice was linked to favorable changes in metabolic outcomes in a population of over one million adults in the Kaiser Permanente healthcare system in Northern California\(^4\).

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Prescribing Physical Activity to Your Patients

If there was one prescription that could prevent and treat dozens of diseases, such as diabetes, hypertension, and obesity shouldn’t we be prescribing it to all of our patients? Certainly! Providing your patient with a physical activity prescription is the next key step you can take in helping your patients become more active. Given the growing evidence that increasing PA provides greater benefits to multiple health factors than any single pill, we urge healthcare providers to consider using physical activity prescription as a first-line therapy. Your encouragement and guidance may be the greatest influence on this decision as patient behavior can be positively influenced by physician intervention.

The steps provided below will give you guidance in assessing your patients and their needs in becoming more active. At this point, you’ve already determined their current physical activity level (the Physical Activity Vital Sign). Next, you will determine if your patient is healthy enough for independent physical activity. Finally, you will be provided with an introduction to the Exercise Stages of Change model to help determine which strategies will best help your patient become physically active.

Step 1 - Safety Screening
Before engaging a patient in a conversation about a physical activity regimen, it is necessary to determine if they are healthy enough to exercise independently. The American College of Sports Medicine has recently released updated recommendations for exercise preparticipation screening. Previous recommendations may have presented unnecessary barriers for individuals seeking to become physically active by requiring excessive physician referrals and screening procedures, creating time and cost inefficiencies. To address these issues, new guidelines recommend considering:

1. Initial determination of current physical activity status of an individual. Habitual physical activity significantly decreases the risk of exercise-related cardiovascular events.
2. Desired intensity of physical activity. Most individuals now need no further screening if they wish to participate in low to moderate intensity activity. However, greater attention may need to be given to high risk individuals who wish to engage in vigorous physical activities.
3. Signs and symptoms of disease. Most exercise-related cardiovascular events are rare, do not occur suddenly, and are preceded by warnings and symptoms that can be identified beforehand.
4. Elimination of the cardiovascular risk factor stratification system. While healthcare providers are still recommended to assess cardiovascular disease risk factors, the stratification of individuals into low, moderate, or high risk categories is no longer a part of the new preparticipation guidelines.

For more information on the new ASCSM Preparticipation Screening Guidelines, please refer to Appendix C.

Step 2 - Determining Your Patient’s Readiness to Change

Individual behavior is a dynamic phenomenon. Individuals attempting to change their behaviors often go through a series of stages. Some patients may only be ready for encouragement, some will be prepared to take steps towards being more physically active, while others will be ready to receive a physical activity prescription and referral to certified exercise professionals. Therefore, prior to prescribing physical activity to your patients, it is important to determine their “Stage of Change”.

Most commonly, there are 5 stages of change: precontemplation, contemplation, preparation, action, and maintenance. By determining your patient’s stage of change, you can utilize the most appropriate steps and tailor your physical activity promotion strategy. The Exercise Stages of Change questionnaire (found in Appendix D) consists of 5 questions and can be completed in a matter of minutes when your patient first checks in at your office.

The following table provides a brief outline of each of the five stages of change and recommended steps for patients in each stage.

<table>
<thead>
<tr>
<th>Stage of Change</th>
<th>Action Step</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Precontemplation</strong></td>
<td>• Promote being more physically active by discussing its health benefits,</td>
</tr>
<tr>
<td>(Patient has no intention to be</td>
<td>emphasizing the pros of changing their behavior, and helping work</td>
</tr>
<tr>
<td>physically active)</td>
<td>through the cons of being more physically active.</td>
</tr>
<tr>
<td></td>
<td>• The individual is likely not ready to receive a physical activity</td>
</tr>
<tr>
<td></td>
<td>prescription at this point.</td>
</tr>
<tr>
<td><strong>Independent</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Supervision Necessary</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Contemplation</strong></td>
<td>Write prescription; refer to exercise professional.</td>
</tr>
<tr>
<td>(Patient is thinking about</td>
<td>Refer to clinical exercise professional.</td>
</tr>
<tr>
<td>becoming physically active)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Continue to emphasize the pros and reducing the cons of being more</td>
</tr>
<tr>
<td></td>
<td>physically active.</td>
</tr>
<tr>
<td></td>
<td>• The individual may be becoming receptive to receiving basic guidance</td>
</tr>
<tr>
<td></td>
<td>on becoming more physically active.</td>
</tr>
<tr>
<td><strong>Preparation</strong></td>
<td>Write prescription; refer to non-clinical exercise professionals.</td>
</tr>
<tr>
<td>(Patient is active and making</td>
<td>Refer to clinical exercise professionals.</td>
</tr>
<tr>
<td>small changes, but not meeting</td>
<td></td>
</tr>
<tr>
<td>PA guidelines*)</td>
<td></td>
</tr>
<tr>
<td><strong>Action</strong></td>
<td>Encourage continued exercise.</td>
</tr>
<tr>
<td>(Patient is meeting the</td>
<td>Encourage continued supervised exercise training.</td>
</tr>
<tr>
<td>physical activity guidelines</td>
<td>Strengthen their commitment to change and ability to fight urges to slip</td>
</tr>
<tr>
<td>but for less than 6 months)</td>
<td>back into unhealthy behaviors.</td>
</tr>
<tr>
<td><strong>Maintenance</strong></td>
<td>Encourage continued exercise.</td>
</tr>
<tr>
<td>(Patient is meeting the physical</td>
<td>Encourage continued supervised exercise.</td>
</tr>
<tr>
<td>activity guidelines for the last</td>
<td></td>
</tr>
<tr>
<td>6 months or more)</td>
<td>Encourage them to spend time with people with similar healthy behaviors;</td>
</tr>
<tr>
<td></td>
<td>continue to engage in healthy activities to cope with stress instead of</td>
</tr>
<tr>
<td></td>
<td>relying on unhealthy behavior.</td>
</tr>
</tbody>
</table>
Step 3 - Providing Your Patient with an Exercise Prescription

For patients who have been cleared for independent exercise and are in the Preparation, Action, or Maintenance stage (and maybe even some in Contemplation), the next step is to provide them with a physical activity prescription. The simplest prescription that you can provide your patient with is to participate in 150 minutes of moderate intensity physical activity each week as suggested in the 2008 Physical Activity Guidelines for Americans\(^6\). Using the basic EIM Physical Activity Prescription Pad (see Appendix E), you can also provide your patients with a basic, written physical activity prescription. Studies have shown that simply providing a written prescription is an effective means of motivating patients to be more physically active, sometimes by as much as one hour per week\(^7\).

Step 4 - Providing Your Patient with a More Advanced Exercise Prescription

If you wish to provide your patients with a more comprehensive prescription, we encourage you to use the “Your Rx for Health Series” developed by EIM and leading experts from ACSM. The Your Rx for Health Series consists of numerous customized exercise prescriptions specifically developed for individuals with a variety of health conditions such as diabetes, cardiovascular disease, osteoarthritis, and lower back pain. Examples from the Your Rx for Health Series can be found in Appendix F. These exercise prescriptions can be downloaded from the EIM website (http://exerciseismedicine.org/support_page.php?p=367) for use with your patients. Your patients can then implement these prescriptions individually or take them to a certified exercise professional who can guide them in filling their customized exercise prescription.

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\(6\). The 2008 Physical Activity Guidelines for Americans (www.health.gov/paguidelines/guidelines) recommend a minimum of 150 minutes of moderate, or 75 minutes of vigorous, physical activity a week (for example, 30 minutes per day, five days a week) and muscle-strengthening activities on two or more days a week. Moderate physical activity means working hard enough to raise your heart rate and break a sweat, yet still being able to carry on a conversation. Examples include: brisk walking, ballroom dancing or general gardening.

\(7\). Elley et al. Effectiveness of counselling patients on physical activity in general practice: Cluster randomized controlled trial. \(BMJ\), 2003; 326.
Providing Your Patients with a Physical Activity Referral

The next important decision that your patients will make regarding their overall health is **HOW** to incorporate physical activity into their lifestyle. Your guidance in linking them to community resources and, more specifically to exercise professionals, is a key strategy. In fact, several studies have suggested that efforts made by healthcare systems to increase the physical activity habits of their patients are best accomplished by transforming their “patients” into “participants”. This is best done by providing your patients with information on local resources and support systems. When prescribing physical activity, it is necessary not just to counsel your patients, but to also provide them with information on how and where they can ‘fill’ their prescription.

The referral to an exercise professional can be an extremely useful tool for you as a healthcare provider. A qualified exercise professional can help your patient safely start and maintain an effective exercise program. They will understand the “fitness goals” you and your patient have discussed and work with them to create a plan of action to achieve them. They can help your patients adapt these goals to their individual situations, such as fitting physical activity into their busy schedule and addressing other barriers to exercise that they may face. An exercise professional can also be a great source of motivation and encouragement, as well as a resource for the latest objective health and fitness information. A referral to a qualified exercise professional can give your patient all the information and support they need to start and maintain an exercise program and save you time in the office.

**Consulting the American College of Sports Medicine**

The first step that you can take is to consult with the American College of Sports Medicine (www.acsm.org) about the appropriate qualifications for exercise professionals. While online you can use the ACSM’s ProFinder, an online database that displays ACSM certified exercise professionals. Once you have found one or a few individuals you believe may be a good match, it is important to ask questions about their background, certifications and client practices. For more details on what to look for in an exercise professional, please keep reading through the end of the document.

**Finding Qualified Exercise Professionals**

As with any specialist, it is important to find one or more exercise professionals to whom you are comfortable referring your patients. An exercise professional will understand the fitness goals you and your patient have discussed, help them refine those goals, and design a carefully structured plan to help your patient achieve them. A referral to a qualified exercise professional can give your patient all the information and support they need to start and maintain an exercise program and save you time in the office. Below we offer several suggestions on how you can develop a trusted exercise referral network as part of your clinic’s practice.
Questions to ask an Exercise Professional

As with a referral to any specialist, you should use your professional judgment and due diligence in choosing appropriately trained individuals to partner with in providing the best care possible for your patients. Questions that you could ask exercise professionals in helping you make this decision include:

- Do they hold a 4-year degree from an accredited university in Exercise Science, Kinesiology, Exercise Physiology, or a related health and fitness field?
- How long have they been a personal trainer? Do they have additional training and certification by a nationally-recognized organization?
- Is he or she certified in first aid and CPR?
- Do they have liability insurance?
- What types of clients and special populations do they have experience working with?
- Will they read the background information you send on your patients?
- Will they ask your patients specific questions before beginning an exercise program, about their medical conditions, medications currently being taken, previous injuries and surgeries, and aches and pains as they relate to being physically active?
- Do they conduct fitness assessments as part of their physical activity counseling?
- Are they willing to provide you feedback on your patient’s progress?

These questions should help you begin to gauge if an exercise professional would be a good addition to your referral network.

EIM Credentialed Exercise Professionals

To ensure that the exercise professionals in your network are trustworthy, EIM has developed a credential program that will provide exercise professionals with an additional skill set that will allow them to work closely with the medical community (such as your clinic) and receive patient referrals. Through their training for the EIM Credential, exercise professionals are:

- Certified as EIM Exercise Professionals who are eligible to work as a trusted referral source with your patients.
- Trained to work with a wide variety of individuals from those who are apparently healthy to those with more serious health-related conditions.
- Trained in behavior change theories to empower their clients to make sustainable lifestyle modifications.
- Trained how to work with healthcare providers and work as a part of an integrated healthcare team.

For more on the EIM Credential program, please visit the following website: http://certification.acsm.org/exercise-is-medicine-credential
Identifying Local Community Programs

Another helpful step in developing a referral network is finding trusted local programs and facilities to which you can refer your patients. Our communities often offer a wealth of untapped programs that are largely unknown to the general public. To identify these available programs, begin by contacting health clubs or fitness facilities in your community, YMCAs, and local community centers. Furthermore, many of these facilities will also have in-house exercise professionals that qualify for your network. By including qualified programs in your community, you will be ensuring that your patients have convenient access to the support and guidance that they need.

Developing an Exercise Referral Network

As you begin identifying local professionals, programs, and facilities, it will be helpful to formally develop a referral network to have this information readily available for your patients when they are in the clinic. We understand that you are likely too busy to develop an extensive referral network yourself. However, most offices have interns and volunteers (i.e., local students) who might be able to take on this project for your office.

Additionally, to help healthcare providers develop and grow their referral network, EIM is developing a national database of credentialed exercise professionals and qualified physical activity programs. This database will include professionals and facilities that are familiar with the EIM model and have been trained to accept referrals from healthcare providers. These professionals and facilities will have a special recognition to show they are familiar with and have completed EIM training modules, and have met EIM standards of practice.

- It is highly recommended that you refer your patients only to exercise professionals who have been certified through an NCCA-accredited association (click on “Accredited Certification Programs” at www.noca.org) such as the American Council on Exercise (ACE), the American College of Sports Medicine (ACSM), the Cooper Clinic, the National Academy of Sports Medicine (NASM), the National Strength and Conditioning Association (NSCA), or one of the seven other accredited fitness associations (Academy of Applied Personal Training Education, International Fitness Professionals Association, National Athletic Trainer’s Association Board of Certification, National Council on Strength and Fitness, National Exercise and Sports Trainers Association, National Exercise Trainers Association, National Federation of Professional Trainers).
Being a Champion in Your Health System

As a supporter of Exercise is Medicine®, we need your assistance in promoting the benefits of physical activity in your healthcare system and community. In becoming an EIM Champion, you will be faced with the task of navigating through a rapidly changing environment. While this may seem imposing, the rapid changes in our health system also bring with them great opportunity. In the future, healthcare leaders, such as yourself, will be on the forefront of identifying new opportunities for the adoption and integration of the EIM “Solution” within new healthcare models and systems. The EIM Solution is a system that supports the patients, providers, and payers through a Population Health Management care model that will assist healthcare providers in assessing and prescribing physical activity, stratifying eligible patients, employees, and underserved community residents into risk categories and connecting them with local physical activity resources.

The first step that you can take in being an EIM Champion is to gain the support of colleagues and healthcare professionals at your institution. Educating them on the benefits of prescribing physical activity for their patients is an essential first step that you can take. This can be done through seminars or work lunches, for which we can provide you with EIM slide presentations. The next step is to approach and gain the support of your healthcare administrative team. Again, we are happy to support your efforts through joint conference calls or directly communicating with your leadership.

Once you have gained the support of your colleagues and administration, one of the next steps includes integrating the Physical Activity Vital Sign (see the “Assessing Physical Activity” section of this guide) in your healthcare system’s electronic medical records. Other steps, such as developing a physical activity order set, which will lead to your patients receiving a customized physical activity prescription, and stratifying them into at-risk population groups for tailored guidance, will further “hard-wire” the EIM Solution into the workflow of your healthcare system. These are examples of just some of the initial steps that can be taken in making physical activity a standard part of your disease prevention and treatment paradigm!

At the end of the day, implementing the EIM Solution in your healthcare system is not a one-person job. The EIM team is willing and available to support and advance your efforts. We encourage you to utilize our online resources, such as this guide and our EIM presentation slides, which will allow you to effectively gain support and educate others in your effort to be an EIM Champion in your healthcare system. Most importantly, we encourage you and the administrators in your healthcare system to contact us for further information and assistance in adapting the EIM Solution for your needs!
Contact Us

eim@acsm.org
American College of Sports Medicine
401 West Michigan Street
Indianapolis, IN 46202-3233
(317) 637-9200 (phone)
(317) 634-7817 (fax)
Appendix A – Office Flyers

These are examples of some of the promotional material freely available through our website for download and usage in your healthcare setting.

Your Prescription for Health...

Exercise prevents or treats many diseases, including diabetes, hypertension, heart disease and obesity. Make physical activity part of your health.

Ask your healthcare professional how you can benefit from an exercise prescription.

www.exerciseismedicine.org

Support for the Exercise is Medicine® Global Initiative is Provided By:
A Whole New Prescription
It’s Time for You to Take Control

The Best Medicine

What if there was one medicine so powerful in maintaining and improving health that it could prevent or treat dozens of diseases, such as diabetes, hypertension, heart disease and obesity?

There is!

Ask your healthcare professional how you can benefit from an exercise prescription.

www.exerciseismedicine.org

Support for the Exercise is Medicine® Global Initiative is Provided By:
APPENDIX B - Physical Activity Vital Sign (PAVS)

The Physical Activity Vital Sign

1. On average, how many days per week do you engage in moderate to strenuous exercise (like a brisk walk)?
   _____ days

2. On average, how many minutes do you engage in exercise at this level?
   _____ minutes

3. Total minutes per week (multiple #1 by #2)
   _____ minutes per week

Using the Physical Activity Vital Sign – Aerobic Exercise

- Current national guidelines recommend 150 minutes a week of moderate intensity activity. Moderate intensity activity is usually done at an intensity where an individual can talk, but would be unable to "sing". Example of moderate intensity activities include: brisk walking, slow biking, general gardening, and ballroom dancing.

- In place of moderate intensity activity, an individual can also complete 75 minutes of vigorous physical activity. Vigorous intensity physical activity is done at a pace where individuals can no longer talk and are somewhat out of breath. Examples of vigorous intensity activities include: swimming laps, playing tennis, and fast bicycling.

- Individuals can also complete a combination of 150 minutes of moderate and vigorous intensity activity, where vigorous activity is equal to 2 minutes of moderate intensity activity.

- Individuals are encouraged to perform their activity in “bouts” that are at least 10 minutes in length.

- If you patient is NOT achieving 150 minutes a week of activity, consider advising them to slowly increase their “dose” of activity, little by little each week until eventually are capable of safely achieving the national recommendations.

Using the Physical Activity Vital Sign – Other Considerations

- A comprehensive assessment of physical activity should include promotion of active living throughout the day to reduce sedentary time, as well as muscle strengthening as recommended by the Physical Activity Guidelines for Americans.
APPENDIX C - Exercise Preparticipation Health Screening Logic Model for Aerobic Exercise

§ - Exercise participation, performing planned, structured physical activity at least 30 min at moderate intensity on at least 3 days/wk for at least the last 3 months.

*Light-intensity exercise, 30-60% HRR or VO2R, ≥ 6 METs, ≥ 14 RPE, an intensity that causes substantial increases in HR and breathing.

++CVD, cardiac, peripheral vascular, or cerebrovascular disease.

++++Metabolic disease, type 1 and 2 diabetes mellitus.

+++++++Signs and symptoms, at rest or during activity; includes pain, discomfort in the chest, neck, jaw, arms, or other areas that may result from ischemia; shortness of breath at rest or with mild exertion; dizziness or syncope; orthopnea or paroxysmal nocturnal dyspnea; ankle edema; palpitations or tachycardia; intermittent claudication; known heart murmur; or unusual fatigue or shortness of breath with usual activities.

+++Medical clearance, approval from a health care professional to engage in exercise.

Appendix D - Exercise Stages of Change Questionnaire

Goal: To do physical activity or exercise regularly, such as accumulating:

- 150 minutes of moderate physical activity per week, or
- 75 minutes of vigorous physical activity per week, or
- a combination of moderate and vigorous physical activity each week, such as
  - 75 minutes of moderate and 40 minutes of vigorous physical activity, or 90 minutes of moderate and 25 minutes of vigorous physical activity

Examples of Moderate-Intensity Activity
- Brisk walking
- Biking<10 mph (16kph)
- Ballroom dancing
- General gardening, such as weeding
- Golfing (no cart)
- Any other physical activity where the exertion is similar to these

Examples of Vigorous-Intensity Activity
- Jogging, running
- Tennis
- Biking>10 mph (16kph)
- Aerobic dancing
- Heavy gardening, such as digging
- Any other physical activity where the exertion is similar to these

Regular physical activity means meeting or exceeding the physical activity goal described above.

For each statement, please mark yes or no.

1. I am currently physically active (at least 30 minutes per week). □ Yes □ No
2. I intend to become more physically active in the next 6 months. □ Yes □ No
3. I currently engage in regular physical activity. □ Yes □ No
4. I have been regularly physically active for the past 6 months. □ Yes □ No

Exercise Stages of Change - Scoring Key

- No to 1, 2, 3, and 4 = Pre-contemplation stage
- No to 1, 3, and 4, Yes to 2 = Contemplation stage
- Yes to 1 and 2, No to 3 and 4 = Preparation stage
- Yes to 1 and 3, Yes or No to 2, No to 4 = Action stage
- Yes to 1, 3, and 4, Yes or No to 2 = Maintenance stage
### Appendix E – EIM Physical Activity Prescription Pad

Name: ___________________________ Date: ______________

#### Aerobic Activity

<table>
<thead>
<tr>
<th>Type</th>
<th>Walk</th>
<th>Run</th>
<th>Swim</th>
<th>Bike</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency (days/week):</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Intensity:</td>
<td>Light (A Casual Walk)</td>
<td>Moderate (A Brisk Walk)</td>
<td>Vigorous (Jogging or Running)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (minutes/day):</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>60</td>
<td>More than 60</td>
</tr>
<tr>
<td>Steps/day:</td>
<td>2,500</td>
<td>5,000</td>
<td>7,500</td>
<td>10,000</td>
<td>More than 10,000</td>
</tr>
</tbody>
</table>

#### Strength Training

- Muscle strengthening should be done at least two days per week
- Exercise should be done to strengthen all major muscle groups: legs, hips, back, chest, abdomen, shoulder, arms
- For each exercise, 8-12 repetitions should be completed
- Examples include bodyweight exercises (e.g. push-ups, lunges), carrying heavy loads, and heavy gardening

Physician Signature: ___________________________
Appendix F – Disease-Specific Physical Activity Prescriptions

The following are examples of disease-specific exercise prescriptions freely available as part of the “Your Prescription for Health Series” available on the Exercise is Medicine® website.

Exercising with Type 2 Diabetes

About 24 million Americans have type 2 diabetes. Almost 79 million Americans are at risk of developing it! What is diabetes? Body tissues that use and store blood sugar for energy (muscles and fat cells) need insulin to allow the blood sugar to enter. When these tissues aren’t sensitive enough to the insulin, sugar stays in the blood. High levels of blood sugar when you have not eaten for a long time is a major characteristic of diabetes.

The key is to choose activities you enjoy. Then, you will want to continue so you can control your blood sugar levels. Evidence suggests both aerobic and muscle-strengthening exercise programs help. So try to do both. If you are just starting out, do more aerobic exercise. Over time, add resistance workouts. Doing both types will bring even more benefits for your blood sugar levels and overall health and fitness.

Getting Started

- Talk with your doctor before you start an exercise program.
- Ask about any changes to your medications or any concerns in becoming more active.
- Take all medicines prescribed by your doctor.
- Although exercise is important in managing your diabetes, you may need to make changes to your diet, too.
- Start by exercising on your own. Begin walking or another form of activity that you can integrate into your daily routine.
- Invite others to join you. Exercising together is more fun and increases the chance you will continue. Dogs also make great walking partners!
- Look for programs available in your community. Consider contacting an appropriately credentialed exercise professional to help you. All you really need, though, is a good pair of shoes to get started walking.
- Use a pedometer or another activity tracker to monitor your progress. Slowly work toward a goal, like maybe 10,000 steps per day.

Aerobic Exercise Programs

Exercise can improve blood sugar control and improve cardiovascular health. The American College of Sports Medicine and the Centers for Disease Control and Prevention recommend at least 150 minutes per week of moderate-intensity aerobic activity, 75 minutes of vigorous aerobic activity, or a combination of both for adults. They also suggest two to three days a week of muscle strengthening. Follow the FITT principle to design and implement a safe, effective, and enjoyable program: F = frequency, I = intensity, T = time, and T = type (Presatello et al., 2013).

Losing body fat makes fat cells more sensitive to insulin. Exercise also improves the sensitivity of muscle cells to insulin. Since 80 percent of people with type 2 diabetes are overweight or obese, losing weight and fat through diet and exercise are important treatments for controlling blood sugar levels. They also decrease the risk of developing cardiovascular diseases and help prevent type 2 diabetes.

If you have type 2 diabetes, regular physical activity will help you control your blood sugar levels and manage your weight. Exercise allows your body to respond better to insulin by helping your muscles and fat cells take sugar out of the blood. It could even reduce your need for medicine. The most important thing: no matter your weight or weight loss, regular exercise will improve your health.

How much exercise do you need? The most health benefit comes when inactive people become moderately active. Try to work up to 150 minutes of brisk walking a week. Making exercise a regular part of your life can have a major impact on your health.
Exercising with Heart Failure

Heart failure is the heart’s inability to adequately deliver blood and oxygen to the body. About six million Americans (one to two percent) have heart failure. It causes fatigue, shortness of breath, and low exercise tolerance.

For the most part, exercise programs are safe and effective for people with heart failure. Cardiac rehab programs work best for those patients who take their prescribed medications, have a low-sodium diet, and are physically active.

Evidence shows that regular exercise programs increase function and reduce symptoms. Overall, increased activity improves quality of life. However, the effects of training are lost within three weeks of inactivity. To have a major positive impact on your health, exercise must be a regular part of your life.

Being fit will help you better perform daily activities. Doing even low-level tasks can mean the difference between being actively engaged and becoming physically disabled. The key is to find and follow a program that meets your individual needs and concerns.

There is strong evidence that both aerobic and muscle-strengthening exercise programs help. So try to do both. If you are just starting out, do more aerobic exercise. Over time, add resistance workouts. Doing both types will bring even more benefits for your symptoms, functional capacity, and overall health and fitness.

Getting Started

- Talk with your doctor before you start an exercise program. Ask about any changes to your medications or any concerns in becoming more active.
- Take all medicines prescribed by your doctor.
- Follow any diet recommendations by your doctor.
- If you are overweight, your body requires more oxygen to do the same amount of exercise. A program of diet and exercise will help you lose weight. This will improve your symptoms and exercise tolerance.
- Keep your goals simple. Aim to improve mobility, make your daily activities easier, and increase your overall fitness.
- Choose low-impact activities such as walking, cycling, or water exercises. These involve large muscle groups and can be done continuously. Think low-intensity and longer duration over high-intensity workouts.
- Start with shorter sessions of 10 to 15 minutes. Gradually build up to 30 to 40 minutes, three or more days per week.
- Take as many breaks as you need. Use the Ratings of Perceived Exertion and Dyspnea scales rather than heart rate to measure your intensity.
- Add high-repetition, low-resistance circuit training two to three times per week. At the same time, add range-of-motion stretching exercises.
- Warm up at the beginning, and cool down at the end.
- Start by exercising on your own. Begin walking or another form of activity that you can integrate into your daily routine.
- Invite others to join you. Exercising together is more fun and increases the chance you will continue. Dogs also make great walking partners!
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