Presentation Notes for:

The American College of Sports Medicine's Exercise is Medicine®: The Principles

For "Exercise is Medicine: An International View"
First World Congress on Exercise is Medicine®,
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I. Educational Objectives: At the end of this session (hopefully) you will be able to:

A. Define the "Exercise Prescription" and how it differs from prescriptions for pharmaceuticals or surgery. (See Table IV.)

B. Describe three central elements of the EiM® program, such as the FITT concept and the motivation mobilization process.

C. Discuss how the EiM® program can be useful in clinical practice.

D. Elaborate on 3-5 central concepts of becoming and being a regular exerciser.

II. Some Central Elements of Exercise is Medicine(R)

(You will find the Table of Contents of the textbook for the Program, ACSM's Exercise is Medicine®: A Clinician's Guide to Exercise Prescription, by myself and Edward Phillips, MD of Harvard University, in Table I.)

A. Physical activity level as a vital sign.

B. The use of the exercise prescription on a regular basis.

C. The primary focus is on becoming a regular exerciser, as part of a healthy lifestyle.

D. The Program also deals with the use of regular exercise in treating and managing illness.

E. What is different about this Rx from most others:

1. Within the parameters of the Exercise Rx the patient/client will design their own program. Thus *the power is in the hands of the patient, not the caregiver.*

2. Then, the patient/client is the implementer of his/her own program, for themselves. Thus the patient must take control of the process.

3. This prescription has no expiration date. Note on the cover of the book that Refills are "forever." This is perhaps the biggest obstacle to successfully making this behavior change. *Thus the exercise Rx is forever, and takes time forever.*

4. Regular exercise/physical activity is the "health pill," that, *when done properly for the person*, has no significant side-effects.

5. For providers, the comfort level may well be lower than it is for conventional prescribing.

6. Most providers have had little teaching/learning experience with regular exercise.

7. The lack of patient/client adherence is likely greater than with conventional prescribing.

8. The side effect profile is of course significantly different than it is for pharmaceuticals --- for one thing it is more manageable.

F. Therefore the Rx needs to be provided differently.

1. *The collaborative relationship.*

2. Handing over power.

3. *Acting more as a teacher/coach than the more traditional "me doctor/you patient" model.*

4. Being a role model is not essential, but it helps.

G. Building the patient-tailored program around being FITT: frequency, intensity, time and type. For US Physical Activity Guidelines, see Table II.

H. *The hard part of regular exercise is the regular, not the exercise.* Thus with patients we recommend that you *Focus First on the Regular, not the Exercise*. Suggest that to begin, the patient/client should walk around the block for ten minutes three times a week at a scheduled time, for two weeks; then 20 minutes three times a week at a scheduled time, for two weeks. If your patient is still doing it at the end of four weeks, they are Beginning to deal with the "regular." Then he/she can begin to think about PaceWalkingTM (our name for exercise walking with a strong armswing). For a beginning PaceWalkingTM program schedule, see Table III.

III. A Central Focus of the Book: Mobilizing Motivation

A. Why this book, and what's different about its recommendations? In our society there is a huge amount of information on exercise and weight management, pumped out every day through the Internet, magazines, newspapers, TV, DVD's, and what have you. It's almost all about what to do (diets, exercise routines, and etc.) and why to do it in terms of health and looks. If that's all that were required for people to exercise regularly and lose weight and keep it off, we would have one of the slimmest, fittest populations in the world. Instead we have a monster obesity epidemic and an increasing proportion of couch potatoes. We are tentatively labeling the latter condition Exercise Deficit Disorder. Physical Activity Status as a vital sign. Something is obviously missing beyond the what and the why. That is the HOW. Just how do you get from A to B, from where you are now to where you would like to be? In addition to knowing the what and why, you need to do one thing, summarized in three words: You need to "Mobilize your Motivation."

B. What is motivation?

1. The long definition: Motivation is not a thing. It is a *mental process* that links an emotion, feeling, desire, idea, or intellectual *understanding*, or a recognized psychological, physiological, or health *need*, to the taking of one or more actions.

2. The short definition: Motivation is a mental process that links a thought or a feeling to an action.

C. The "Stages of Change/Transtheoretical Model" Six Stages: Pre-contemplation, Contemplation, Planning, Action, Relapse, Permanent Maintenance.

D. The Six *Phases* of Behavior Change (the SJ modification of the SoC)

1. Not on the radar screen.

2. Thinking about it.

3. Going to get going.

4. On the Ordinary Mortals® Pathway to Mobilizing Your Motivation.

5. Getting going!

6. Making it part of your life

E. The Ordinary Mortals® Pathway to Mobilizing Your Motivation (in the book, the "Wellness Pathway") has Five Steps

1. Assessing yourself: What do I like? What do I dislike? What would I like to change?

2. Defining success, for yourself.

3. Setting goals that will work for you.

4. Establishing priorities among the various parts of your life.

5. Taking Control.

F. Details of the OM® Pathway

1. **Self-assessment** is asking yourself questions like: where am I now? How did I get here? What do I like about myself? What do I not like? What would I like to change? What is going on in my life that would facilitate behavior change? Inhibit it?

2. **Defining success** has to be done in the context of you as a person, what your measure of your innate skills and capabilities is. To work for you, "success" as you define it has to be something that is reasonable, realistic and conceivably achievable, for you, given who you are as a person and what else is going on your life (see also 4, below). It has to be such that you are not setting yourself up for failure. Defining success productively also includes giving yourself permission to fail, assuming that you really did try.

3. **Goal-setting** is accomplished by answering questions like: to where do I want to get? Why do I want to get there? For whom would I be making the change; others, or myself? What do I expect to get out of the change, should I achieve it? What do I think I can reasonably expect to do? What are the “give-ups,” and can I, do I want to, commit to them?

Arriving at satisfactory answers to these questions for yourself is absolutely key. For doing so, answering the questions "what do I really want to do and why do I want to do it," provides the focus and the concentration you must have in order to have the best chance of success in the chosen endeavour.

4. **Establishing Priorities** among your specific goals and between your new goals and the rest of your life is central to making the whole process work for you. If you have set more than one goal, what is their ranking? Which do you consider to be the most important to achieve? Which the least? In addition, what about priorities between your new goal(s) and other important things that are going on in your life, like family, friends, other leisure time activities, and your job? (See also 2, above.) If juggling needs to be done, it will be very helpful to do some thinking about that and yes, set your priorities.

5. **Taking Control** means putting yourself in charge of the whole process, adopting an "I can do this" attitude and perspective, given that the first four steps have been followed, of not depending upon anyone else but also not taking anyone else's direction (advice on both process and content is fine, direction in the sense of "you must do this" is not), of accepting responsibility for both success and failure.

G. The Eight Keys to Taking Control

1. Understanding that motivation is not a thing, but a process that links a thought or a feeling with an action.

2. Following the first four steps of the Ordinary Mortals® Pathway to Mobilizing Your Motivation, from the beginning.

3. Making sure to examine what you already do well: health-promoting behaviors that are part of your life.

4. Recognizing that gradual change leads to permanent changes.

5. Dealing with the fear both of failure and of success.

6. Being ready to explore your limits while recognizing your limitations.

7. Appreciating the process of psychological immediate gratification.

8. Understanding that we can never be perfect; we can always get better.

H. Promoting Regular Exercise/Physical Activity

1. Most regular exercisers do it because it makes them feel good, feel better, feel better about themselves; look better, look better to themselves and to others.

2. Regular exercise is easier, for many much easier, than weight loss.

3. It's the regular, not the exercise that is the hard part. We cannot repeat this too often.

4. Exercising regularly takes time, forever. Thus, start with the regular not the exercise; start small in time, start slow.

5. There are many choices for regular exercise within the two major groups, Lifestyle and Scheduled Leisure-time, which themselves may be mixed and matched.

6. The most important thing that the provider does after the initial assessment of readiness to change, is to guide the patient/help the patient to mobilize their motivation.

7. There are minimal side effects and complications of regular exercise, just as long as the patient engages in activities that are reasonable and rational for them and within their physical capabilities at the time they are engaging in them: "explore your limits; recognize your limitations."

8. Developing the positive addiction.

9. There are two approaches to regular exercise, "lifestyle" and "scheduled leisure time." You can use one or the other exclusively or the two can be mixed and matched. BUT, they can both work equally well to provide the benefits of regular exercise.

10. The exercise that is RIGHT for you is the exercise that is right for YOU.

11. The variation of routines over the course of the year works for many.

IV. Considerations for the Practitioner Considering Incorporating Exercise is Medicine(R) into His/Her Practice

A. Is exercise promotion important in my practice, and why? For which patients/clients?

B. For any endeavor in this area, what should the goals be, for my patients/clients, for myself, for the practice?

C. If I think that there is some new material to learn here, how much time do I want to invest in doing so, if any? And if not I, then who?

D. Who should do the counseling? I? Members of my staff? Somebody new whom I might bring in part-time, like a physical therapist, a sports trainer, or a health educator?

E. Whoever does it, how is this function going to be paid for? Do I charge patients/clients for this service? If so, how and how much?

F. Do I want to try using patient groups for exercise promotion?

G. What about making use of community resources?

H. How much time am I willing to invest in developing an exercise promotion component in my practice?

I. Is role-modeling important for patients/clients? If so, by whom? Do I want to invest my personal time in this?

J. In terms of the specifics, how should I go about learning them, incorporating them into my own base of knowledge and skills?

K. In mobilizing my own motivation, might I follow the Ordinary Mortals Pathway to Mobilizing Motivation for myself:

1. Self-assessment.
2. Defining success for myself.
3. Goal-setting.
4. Establishing Priorities
5. Taking Control.

V. Making Exercise Fun

A. Making Exercise Fun: The Mental Aspects

1. Let it be fun.
2. Set appropriate goals.
3. Don't do too much, too soon.
4. Focus first on the regular, then on the exercise.
5. Understand that gradual change leads to permanent changes.

6. Recognize that the exercise chosen can become fun itself.

7. Recognize that the results can be fun, if given time.

8. Use the training sessions for thinking, when the activity chosen permits.

9. Anticipate rewards for performance.

B. Settings, Surroundings, and Companions, for Leisure-Time and Scheduled Exercise: The Practical Aspects

1. Set non-exercise related goals.

2. Set Leisure Time Scheduled Exercise training programs in minutes, not miles: TSTEP: The Scheduled Exercise Training Program

3. Learn and use different routes.

4. Exercise with a companion (can be a dog).

5. Listen to music, the news, talk radio, and/or audio courses.

6. Take care for safety.

Table I: ACSM's EiM®: Table of Contents

ACSM's Exercise is Medicine®:
A Clinician's Guide to Exercise Prescription

By Steven Jonas, M.D., M.P.H., M.S. and Edward Phillips, M.D.
(Philadelphia, PA: Lippincott, Williams and Wilkins, 2009)

Table of Contents:

Foreword. Introduction to the Program: "Exercise is Medicine ®"

Preface. What EiM ® is: Certain technical/definitional issues; Acknowledgements

Introduction. What this Book is About.

Chapter 1. On Clinician Engagement and Counseling: A. The Essentials of Exercise Counseling; B. The Role of the Clinician; and C. Thinking About It, As a Clinician

Chapter 2. Organizing the Practice: Covers the conscious organization of the practice; the "Five A's" framework, (**A**ssess, **A**dvise, **A**gree, **A**ssist, **A**rrange follow-up; Setting up the Team; Reminders and Record Keeping; How to reduce all of this material to a package that can be successfully used in clinical practice.

Chapter 3. Risk Assessment and Exercise Screening

Chapter 4. Mobilizing Motivation: Basic Concepts: Mobilizing motivation as the central issue for patients/clients and caregivers; The Stages of Change

Chapter 5. Mobilizing Motivation: The Wellness Pathway: Covers the Jonas "Five Step Model"

Chapter 6. Mobilizing Motivation: The Phillips Model: the "Behavior Change Pyramid."

Chapter 7. Getting Started as a Regular Exerciser – Basic Principles

Chapter 8. The Exercise Prescription: From Sedentary to the ACSM/AHA/HHS Guidelines – General principles and parameters to enable the clinician to effectively prescribe regular exercise for patients.

Chapter 9. The Exercise Prescription: Staying Active.

Chapter 10. The Exercise Prescription: TSTEP (The Scheduled Training Exercise Program): Training Programs by the Minute.

Chapter 11. Choosing the Activities, Sport, or Sports: The choice of sports is extensive; very important: different strokes for different folks: "The **best** exercise for you is the exercise that's best for **you**;" aerobic and non-aerobic exercise; the "Lifestyle Exercise" (LE) approach and the "Scheduled Leisure Time Exercise" (SLTE) approach, using TSTEP.

Chapter 12. Technique and Equipment. A rudimentary intro., except on Pace Walking TM.

Chapter 13. Special Conditions: Regular Exercise for Illness Management.

Chapter 14. Exercise in Children: "Exercise is a Family Affair."

Chapter 15. Finding the Fun in Regular Exercise.

Table II: the HHS/ACSM/AHA 2008 Physical Activity Guidelines

http://www.health.gov/paguidelines

Key Guidelines

Substantial health benefits are gained by doing physical activity according to the Guidelines presented below for different groups.

Children and Adolescents (aged 6–17)

- Children and adolescents should do 1 hour (60 minutes) or more of physical activity every day.
- Most of the 1 hour or more a day should be either moderate- or vigorous-intensity aerobic physical activity.
- As part of their daily physical activity, children and adolescents should do vigorous-intensity activity on at least 3 days per week. They also should do muscle-strengthening and bone-strengthening activity on at least 3 days per week.

Adults (aged 18–64)

- Adults should do 2 hours and 30 minutes a week of moderate-intensity, or 1 hour and 15 minutes (75 minutes) a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic physical activity. Aerobic activity should be performed in episodes of at least 10 minutes, preferably spread throughout the week.
- Additional health benefits are provided by increasing to 5 hours (300 minutes) a week of moderate-intensity aerobic physical activity, or 2 hours and 30 minutes a week of vigorous-intensity physical activity, or an equivalent combination of both.
- Adults should also do muscle-strengthening activities that involve all major muscle groups performed on 2 or more days per week.

Older Adults (aged 65 and older)

- Older adults should follow the adult guidelines. If this is not possible due to limiting chronic conditions, older adults should be as physically active as their abilities allow. They should avoid inactivity. Older adults should do exercises that maintain or improve balance if they are at risk of falling.

For all individuals, some activity is better than none. Physical activity is safe for almost everyone, and the health benefits of physical activity far outweigh the risks. People without diagnosed chronic conditions (such as diabetes, heart disease, or osteoarthritis) and who do not have symptoms (e.g., chest pain or pressure, dizziness, or joint pain) do not need to consult with a health care provider about physical activity.

Adults With Disabilities

Follow the adult guidelines. If this is not possible, these persons should be as physically active as their abilities allow. They should avoid inactivity.

Children and Adolescents With Disabilities

Work with the child's health care provider to identify the types and amounts of physical activity appropriate for them. When possible, these children should meet the guidelines for children and adolescents—or as much activity as their condition allows. Children and adolescents should avoid being inactive.

Pregnant and Postpartum Women

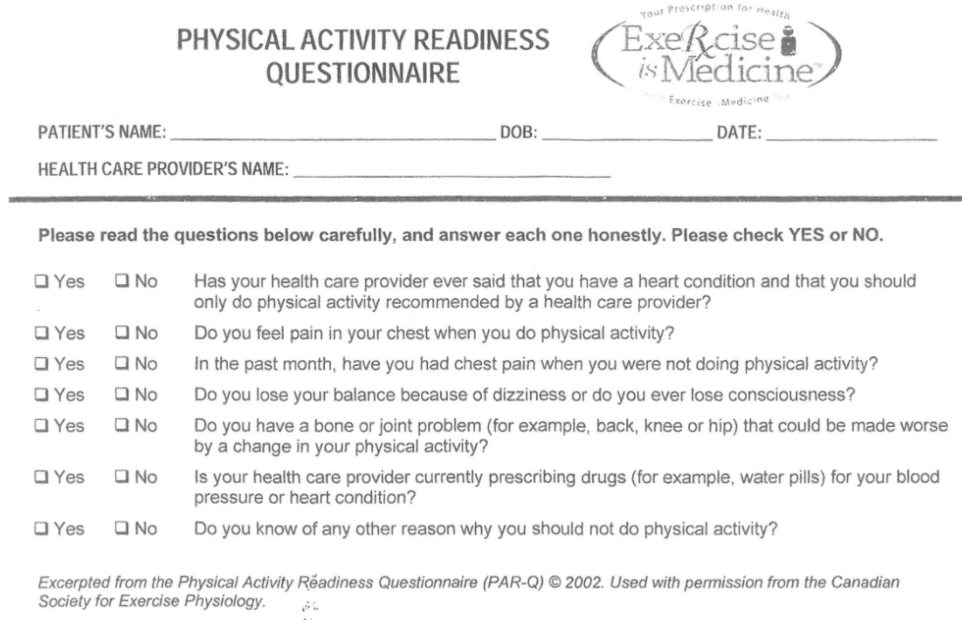
Healthy women who are not already doing vigorous-intensity physical activity should get at least 2 hours and 30 minutes (150 minutes) of moderate-intensity aerobic activity a week. Preferably, this activity should be spread throughout the week. Women who regularly engage in vigorous-intensity aerobic activity or high amounts of activity can continue their activity provided that their condition remains unchanged and they talk to their health care provider about their activity level throughout their pregnancy.

Table III: The Scheduled Training Exercise Program: Getting Started

(Times, in Minutes)

Week / Day	M	T	W	Th	F	S	S	Total	Comments
1	Off	10	Off	10	Off	Off	10	30	Ordinary
2	Off	10	Off	10	Off	Off	10	30	walking
3	Off	20	Off	20	Off	Off	20	60	Ordinary
4	Off	20	Off	20	Off	Off	20	60	walking
5	Off	20	Off	20	Off	Off	20	60	Fast
6	Off	20	Off	20	Off	Off	20	60	walking
7	Off	20	Off	20	Off	Off	30	70	Fast
8	Off	20	Off	20	Off	Off	30	70	walking
9	Off	20	Off	20	Off	Off	20	60	PaceWalkingTM
10	Off	20	Off	20	Off	Off	30	70	
11	Off	20	Off	30	Off	Off	30	80	PaceWalkingTM
12	Off	20	Off	30	Off	Off	30	80	
13	Off	30	Off	30	Off	Off	30	90	PaceWalkingTM

Table IV: The Physical Activity Readiness-Questionnaire and Exercise Rx Forms



PHYSICAL ACTIVITY READINESS QUESTIONNAIRE

Your Prescription for Health — Exercise is Medicine

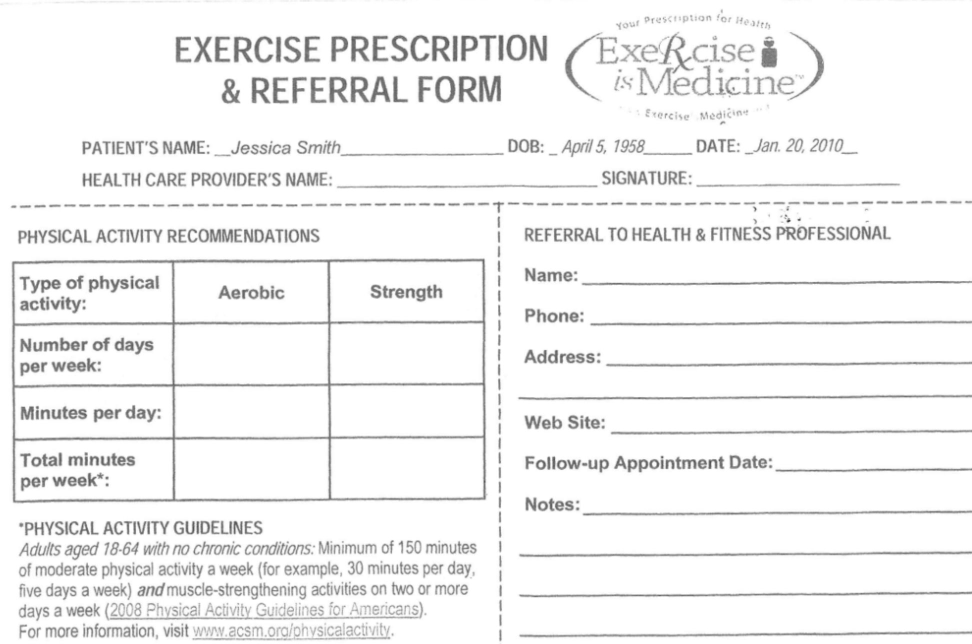
PATIENT'S NAME: ______________ DOB: __________ DATE: __________

HEALTH CARE PROVIDER'S NAME: ______________

Please read the questions below carefully, and answer each one honestly. Please check YES or NO.

- ❑ Yes ❑ No Has your health care provider ever said that you have a heart condition and that you should only do physical activity recommended by a health care provider?
- ❑ Yes ❑ No Do you feel pain in your chest when you do physical activity?
- ❑ Yes ❑ No In the past month, have you had chest pain when you were not doing physical activity?
- ❑ Yes ❑ No Do you lose your balance because of dizziness or do you ever lose consciousness?
- ❑ Yes ❑ No Do you have a bone or joint problem (for example, back, knee or hip) that could be made worse by a change in your physical activity?
- ❑ Yes ❑ No Is your health care provider currently prescribing drugs (for example, water pills) for your blood pressure or heart condition?
- ❑ Yes ❑ No Do you know of any other reason why you should not do physical activity?

Excerpted from the Physical Activity Readiness Questionnaire (PAR-Q) © 2002. Used with permission from the Canadian Society for Exercise Physiology.



EXERCISE PRESCRIPTION & REFERRAL FORM

Your Prescription for Health — Exercise is Medicine

PATIENT'S NAME: *Jessica Smith* DOB: *April 5, 1958* DATE: *Jan. 20, 2010*

HEALTH CARE PROVIDER'S NAME: ______________ SIGNATURE: ______________

PHYSICAL ACTIVITY RECOMMENDATIONS

Type of physical activity:	Aerobic	Strength
Number of days per week:		
Minutes per day:		
Total minutes per week*:		

*PHYSICAL ACTIVITY GUIDELINES

Adults aged 18-64 with no chronic conditions: Minimum of 150 minutes of moderate 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 (2008 Physical Activity Guidelines for Americans).
For more information, visit www.acsm.org/physicalactivity.

REFERRAL TO HEALTH & FITNESS PROFESSIONAL

Name: ______________

Phone: ______________

Address: ______________

Web Site: ______________

Follow-up Appointment Date: ______________

Notes: ______________