

Advancing an Evidence-Based Population-Level Physical Activity Program for the Exercise is Medicine[®] Initiative

Matthew P. Buman, PhD¹, David E. Goodrich, PhD², Caroline R. Richardson, MD, PhD^{2,3}, Barbara E. Ainsworth¹, PhD, Abby C. King, PhD⁴

¹School of Nutrition and Health Promotion, Arizona State University; ²VA Center for Clinical Management Research; ³Department of Family Medicine, University of Michigan; ⁴Stanford University School of Medicine



“What if there was
one prescription
that could
prevent and treat
dozens of diseases,
such as diabetes,
hypertension
and obesity?”



-Robert E. Sallis, M.D., M.P.H., FACSM,
Exercise is Medicine® Task Force Chairman



- Multi-organizational global initiative launched in November 2007, coordinated by the American College of Sports Medicine (ACSM).
- Developed to encourage health care providers to include exercise when designing treatment plans for patients. Calls on all health care providers to prescribe exercise to their patients.
- Committed to the belief that exercise and physical activity are integral in the prevention and treatment of diseases, and should be assessed as part of medical care and integrated into every primary care office visit.



Vision

To make physical activity and exercise a standard part of a disease prevention and treatment medical paradigm in the United States.

Guiding Principles

- Exercise and physical activity are important to health and the prevention and treatment of many chronic diseases.
- More should be done to address physical activity and exercise in health care settings.
- Multi-organizational efforts to bring a greater focus on physical activity and exercise in health care settings are to be encouraged.

Program Goals

Exercise Is Medicine® will be a sustainable national initiative that:

1. Creates broad awareness that exercise is indeed medicine.
2. Makes "level of physical activity" a standard vital sign question in each patient visit.
3. Helps physicians and other health care providers to become consistently effective in counseling and referring patients as to their physical activity needs.
4. Leads to policy changes in public and private sectors that support physical activity counseling and referrals in clinical settings.
5. Produces an expectation among the public and patients that their health care providers should and will ask about and prescribe exercise.
6. Appropriately encourages physicians and other health care providers to be physically active themselves.

Current Practices and Attitudes

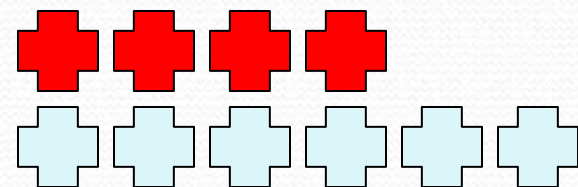
- Patients look to their doctor first for advice on exercise and physical activity (25%).
- Patients turn next to fitness and health web sites (24%).



65%

- Nearly two-thirds of patients (65%) would be more interested in exercising to stay healthy if advised by their doctor and given additional resources.

- Four out of 10 physicians (41%) talk to their patients about the importance of exercise, but don't always offer suggestions on the best ways to be physically active.



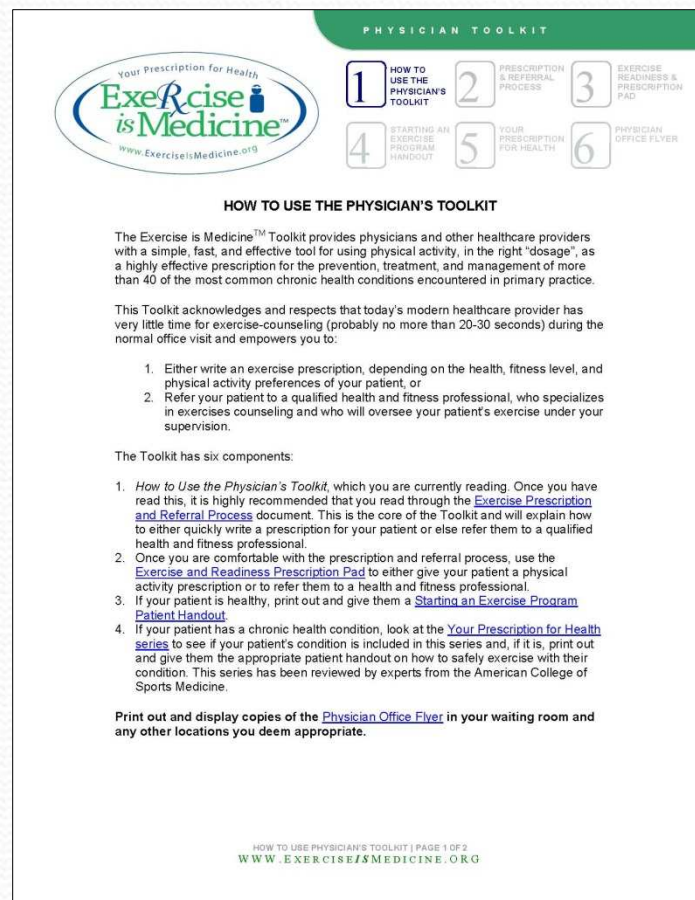
Survey conducted by ACSM

Health Care Provider's Toolkit

The Health Care Provider's Toolkit provides physicians and other health care providers with a simple, fast, and effective tool for using physical activity, in the right "dosage", as a highly effective prescription for the prevention, treatment, and management of more than 40 of the most common chronic health conditions encountered in primary practice.

Toolkit Highlights

- Exercise Prescription and Referral Process document
- Exercise Readiness and Prescription Pad
- Starting an Exercise Program patient handout
- Your Prescription for Health series
- Physician office flier



Steps for Health Care Providers

1. Determine patient's current level of activity and willingness to exercise.
2. Determine if patient is fit to exercise independently and what type of fitness professional would be best for referral.
3. Depending on patient's stage of change, take appropriate action by referring patient to educational material, writing exercise prescription, and/or referring patient to fitness professional.
4. Refer patient to www.ExerciselsMedicine.org for videos, fliers and resources.

EXERCISE READINESS & PRESCRIPTION



Patient's name: _____ DOB: _____ Date: _____

Physician's Signature _____

CURRENTLY EXERCISING: Yes ☐ No ☐

Type/s of Activity _____

How Hard _____
(Light, moderate, intense)

How Long _____
(Minutes/session)

How Often _____
(Times/week)

PATIENT'S STAGE OF CHANGE

Precontemplation ☐
(Patient not ready to exercise)

Contemplation ☐
(Patient interested in/beginning to exercise)

Preparation ☐
(Patient's exercise inconsistent/less than optimal)

Action and Maintenance ☐
(Patient exercising recommended amount)

PHYSICIAN'S RECOMMENDATIONS

Aerobic Exercise _____

Strength Exercise _____

Flexibility Exercise _____

Sports Exercise _____

Referral to Exercise/Sports Professional _____

Referral

- Time and expertise are factors in the prescription and referral process.
- Studies show a patient will continue an exercise program longer if working with a fitness professional
- Fitness professional can provide feedback to the health care provider.

EXERCISE PRESCRIPTION & REFERRAL FORM



PATIENT'S NAME: _____ DOB: _____ DATE: _____

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: _____

EXERCISE PRESCRIPTION & REFERRAL FORM



PATIENT'S NAME: _____ DOB: _____ DATE: _____

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: _____

Referrals to Fitness Professionals

How should I work with fitness professionals?

- ACSM ProFinder; online at www.acsm.org
- NCCA-accredited associations; www.noca.org



The image shows a screenshot of the ACSM ProFinder search interface. At the top is the ACSM ProFinder logo, which includes the text "ACSM ProFinder" and "For Certification and Registry programs of the American College of Sports Medicine". Below the logo is a welcome message: "Welcome to the ACSM ProFinder™ service where you can search for professionals who have achieved the 'Gold Standard' in credentialing. You may search below by certification/registry level, last name, first name, city, state, zip code, or country. [Information on ACSM Certifications.](#)"

Below the welcome message is a section for already certified professionals: "Already certified? [Sign up for the ProFinder.](#) ACSM professionals must give permission to be included in this service. The ProFinder only lists individuals who maintain active ACSM certification or registry status (the required continuing education credits have been earned; professionals whose certification or registry has expired or those in the grace year period are not listed)."

The search form includes the following fields:

- Certification / Registry Level: A dropdown menu with the text "Choose One..." and a downward arrow.
- Last Name: A text input field.
- First Name: A text input field.
- City: A text input field.
- State: A dropdown menu with the text "Choose a state" and a downward arrow.

World Congress on Exercise is Medicine



EIM Sessions

Are High-Intensity Exercise Studies Relevant for Generating Public Health Guidelines?

Bridging the Gap: Linking Physicians and Exercise Professionals with Technology

Changing a Sedentary Lifestyle in Patients with Neurological Disorders

Clinical Lifestyle Intervention Programs for Patients with Chronic Disease

Current Research in Exercise and Metabolic Implications after Spinal Cord Injury

EIM Credential: Referral for Exercise, Who is Qualified?

EIM On Campus: So Easy, Even a Student Can Lead the Effort!

EIM: Ethical Considerations

Exercise as a Cognitive Enhancer: How to Walk the Walk

Exercise Deficit Disorder in Youth: Play now or Pay Later

Exercise is Medicine for Underserved Populations: Challenges and Opportunities

Exercise is Medicine: Stories from Practice-based Evidence

Exercise Physiology in 50 Minutes

Exercise Prescription for Depression: Empirical Evidence and Clinical Perspectives

Generating Lasting Motivation for Physical Activity: What You Need to Know

Implementing Exercise Is Medicine into the Care of Pregnant Women

Physical Activity Prescriptions—An International Perspective

Implementing the 5As of Physical Activity Counseling into Clinical Practice

Is EIM Good Business?

Meditative Movement as a Category of Exercise: Standards for Research and Practice

Modernizing Medical Education: A Call to Teach Exercise as Medicine

Motivational Interviewing to Promote Physical Activity

Novel Experimental Evidence for the Inactivity Physiology Paradigm

Physical Activity, Physical Fitness and Academic Performance

Protein Needs for Exercise and Medicine. 10 questions/10 experts: PINES Special Event

Role of Exercise Training in Severely Diseased Patients

Taiji and Qigong: Multi-Dimensional Exercise for Successful Aging

The Role of Allied Health Professions in Promoting Exercise is Medicine



Models to learn from

- VA MOVE! Program
- Insurance-sponsored programs
 - Blue Care Network's Healthy Blue Living
- Integrated Managed Care settings
 - Kaiser Permanente and EIM



Initial charge for ACSM-SBM

- To identify evidence-based interventions that are scalable at the population level and have the potential to cut across a wide range of healthcare delivery settings.
- To identify and/or develop the most effective types of referral systems to enact the link between the primary care office referral and program delivery source.

Short-term goals to gain momentum

- Identify evidence-based interventions via 2 different delivery channels
 - Web-based interventions
 - Telephone-base interventions
- Identify to ACSM scalability of programs
- Link programs to EIM website

Search

- PubMed: Physical activity, Weight management, Diabetes, Lifestyle behavior, Hypertension
- Industry, Tech companies, HMO's
- RePORTER
(<http://projectreporter.nih.gov/reporter.cfm>)



Evidence based criteria

- Target audience
- Delivery channel
- Primary and secondary outcomes
- # of RCT's showing efficacy
- Program length
- Follow-up period
- Training requirements
- Cost of intervention



Longer-term directions

- Referral system
 - Short videos of successful referrals for providers
 - Get all clinical staff involved
 - Integration into EMR
- Expand evidence-based intervention repository
 - Community-based interventions
 - Expert-based decision model implemented in primary care settings



*Thanks to the SBM-ACSM ad hoc
Behavioral Interventions Committee*

Outline

- What is Exercise is Medicine?
 - What is it?
 - Latest research
 - Implementation at KP
- SBM involvement
 - Goal
 - Current directions and short-term goals
- Review and identification of evidence-based programs
- Future directions