Lifestyle Medicine: True Healthcare Reform

Unidas
17th Annual Congress
Rio de Janeiro, Brazil

Edward M. Phillips, M.D.
1 December 2014
Conflicts of Interest

Edward M. Phillips

Founder and Director, Institute of Lifestyle Medicine, Joslin Diabetes Center
Assistant Professor of Physical Medicine and Rehabilitation, Harvard Medical School
Chair, Exercise is Medicine™, Education Committee
Adjunct Scientist, USDA Human Nutrition Research Center on Aging at Tufts University, Nutrition, Exercise Physiology and Sarcopenia
A Call to Arms (and Legs)

• We know why the majority of the population will die prematurely.
• We know the root cause of two-thirds of all disease.
• We know where most of our health care dollars could be saved.
• Yet: we don’t teach this to doctors and our health care system continues to practice sickness based care.
Increased Mortality

The combined impact of lifestyle factors such as physical inactivity, obesity, poor diet, cigarette smoking, and excess alcohol consumption have a significant impact on morbidity and mortality from the resulting chronic disease\(^1\)

\[\begin{align*}
\uparrow55\% & \text{ all cause mortality}^2 \\
\uparrow44\% & \text{ cancer mortality}^2 \\
\uparrow72\% & \text{ cardiovascular mortality}^2
\end{align*}\]

Preventable Disease

70% of cardiovascular disease can be prevented or delayed with dietary choices and lifestyle modifications\(^1\)

According to the World Health Organization, by 2020, **two-thirds of all global disease will be lifestyle related**\(^2\)

\(^1\)Forman D, Bulwer BE. *Curr Treat Options Cardiovasc Med.* 2006;8:47-57;  
Assess Your Health Habits

• Smoking
• BMI ≥25kg/m²
• Eat < 5 servings of fruits and vegetables/day
• Alcohol > 1 drink/day
• Physical Activity/Exercise <150 minutes/week
Health Care Costs

In 2011, health care spending in the United States reached $2.92 trillion\textsuperscript{1}

78\% of health care expenditures are consumed by the management of chronic disease\textsuperscript{2}

A Call to Arms (and Legs)

An evolving model promoting health and wellness needs to be initiated immediately.

The new paradigm needs to appropriate train and incentivize clinicians to improve the behaviors and the health status of their patients.
Wellness Dividend: 2% Change

$4.48 trillion in 2019 (Annual US Health Care) \(^1\)
WHO estimate 66% resulting from Lifestyle = $3.0 trillion dollars annually (by 2020) \(^2\)
Make small change of 2% in weight, activity, smoking, etc. (e.g., walking an additional 500 steps or giving up the last cookie)
Result: annual $60 billion in cost savings

Learning Objectives

Explore the profound impact of lifestyle behaviors on the rates of **death, disease and health care costs.**

Define **Lifestyle Medicine** as the evolving strategy to effectively and efficiently address health behaviors.

Examine the efforts of **Self-Insured companies** to improve health of their workers.

Review global efforts to educate physicians and all health care professionals to help patients adopt and sustain healthier behaviors.
Physician Competencies for Prescribing Lifestyle Medicine

Liana Lianov, Mark Johnson

Lianov L, Johnson M. JAMA. 2010;304:202-203. Funded by Proctor & Gamble and Lifestyle Center of America
The Secret Sauce - Lifestyle Medicine

The evidence-based practice of assisting individuals and families to adopt and sustain behaviors that can improve health and quality of life

Lianov L, Johnson M. *JAMA.* 2010;304:202-203
Lifestyle Medicine

Modifiable lifestyle choices are root cause of disease, death and health care costs

Potency of physician counseling on lifestyle

Dearth of counseling by physicians on lifestyle choices

Lack of LM education at all levels of training

Physicians still control 80% of U.S. healthcare expenditures
Lifestyle Medicine Definition

• Lifestyle Medicine is a branch of evidence-based medicine in which comprehensive lifestyle changes (including nutrition, physical activity, stress management, social support and environmental exposures) are used to prevent, treat, and reverse the progression of chronic diseases by addressing their underlying causes.

• Int J Clin Pract, Nov 2014, 68:11, 1289-1292
True Healthcare Reform

• Forge linkages from Medical Care to Health and Wellness Industry

Physicians are distrustful and have no resources for prescribing safe and effective Health and Wellness services and products.

$2.9 Trillion USD Sick Care Industry

$500 Billion USD Wellness Industry
October 19-22, 2014 | San Diego, California

Supporting Partners
• Planning Spring Workshop: Paris, March 2015
• Planning Fall Conference
• International Journal of Lifestyle Medicine, Elsevier
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Self-Insured Companies: Case Studies

• Massachusetts General Hospital, Boston
  – Ambulatory Practice of the Future,
• U.S. Department of Defense
• Cummins, Inc., Columbus, Indiana
• Greenville Health System, South Carolina
Massachusetts General Hospital

- Ambulatory Practice of the Future
- Model System as “Patient Centered Medical Home”
- Exclusively for MGH Employees and Dependents.
- Nurses, exercise physiologists trained as Certified Health Coaches.
Cummins, Inc.

>40,000 employees, 100,000 insureds, ~$160M health care costs.

Dexter Shurney, MD, MPH, CMO-Global Wellness

ILM June 2014 Keynote Speaker announced requirement of employed physicians and community doctors training in Lifestyle Medicine

Invested $80-$100K to create certificate of completion in Lifestyle Medicine through American College of Preventive Medicine
Certificate of Completion in Lifestyle Medicine

• 30 hour online CME course for physicians, residents, medical students and all health professionals to learn rudiments of Lifestyle Medicine.

• Sponsored by American College of Preventive Medicine and American College of Lifestyle Medicine
Lot's to Lose: How America's Health and Obesity Crisis Threatens Our Economic Future, June 2012

“Nutritional and Physical Activity should be incorporated in all phases of medical education - medical schools, residency programs, credentialing processes and continuing education requirements.”
US Department of Defense

- 1.47 Million Active + 1 Million Reserve
- $50 Billion annually on healthcare expense
- 10% of annual budget
Teaching Nutrition and Physical Activity in Medical School: Training Doctors for Prevention-Oriented Care: Oct, 2013
Provider Physical Activity Documentation

• Ask the patient the two questions below to get the total number of minutes exercised weekly
• This is the patient’s PA Vital Sign
Choose **Outgoing Referral** in the **Treatment** section of the progress note to refer the patient for physical activity coaching.
Provider Referral Documentation

- Use the **Specialty** box drop down arrow to choose the location you wish to refer the patient
- **Browse** to find the **Reason** for the referral
Seven GHS/YMCA Designated Places with 25 EIM-Credentialed Professionals in Greenville
EIM Solution Flow Chart

Referrals Engagement

- GHS refer At-Risk Patients
- GHS refer At-Risk Employees
- GHS Outreach refer At-Risk underserved community Residents

GHS PA Intervention Advisor
- Engagement
- Enrollment
- Readiness
- Risk level
- Ability to Pay
- PA Intervention Program Select
  - Transition to an EIM Professional

Health Care Extension Trust

YMCA of Greenville Access
- EIM Professionals delivering PA Intervention Programs at designated EIM Places

Outcomes

PA Health IT
GHS PA Intervention Advisors

Engage individuals from at-risk population groups that have been referred for participation in a PA Intervention Program that is appropriate for their at-risk health status and to achieve their PA minutes per week.

The PA Intervention Advisors have the EIM educational prerequisites, credentialing and training for:

- Engaging to motivate participation
- Assessing readiness to participate
- Confirming level of risk for participation in PA
- Establishing ability to pay and eligibility options
- PA Intervention Program and EIM Place selection
- Transition to the appropriate EIM Professional
CREDENTIALED EIM Professionals

- Certified, experienced engagement professionals in the delivery of PA Intervention Program sessions for group and self-managed participation
- Trained to deliver PA Intervention Programs that include structured physical activity, health education/nutrition and lifestyle behavioral change strategies
- EIM credentialed for low, moderate or high risk participants to meet the quality standards required in healthcare by Providers, Payers and Outreach initiatives
QUALIFIED PA Intervention Programs

Structured physical activity, health education and behavioral change strategies delivered as “move and learn” sessions twice per week in a socially supported group that also promotes self-directed program participation.

The PA Intervention Programs follow the evidence-based guidelines provided in the third edition of the *Exercise Management for Persons With Chronic Diseases and Disabilities* copyright the American College of Sports Medicine® (ACSM).
### PA INTERVENTION PROGRAM Sessions for:

<table>
<thead>
<tr>
<th>Sedentary Lifestyles and Aging Populations</th>
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<tbody>
<tr>
<td>Overweight and Obesity Classes I, II and III</td>
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<td>Non-communicable Chronic Disease Clusters</td>
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<tr>
<td>Diabetes</td>
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<tr>
<td>Cardiovascular Disease</td>
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<tr>
<td>Fall Prevention</td>
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<td>Extended Care</td>
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<td>Therapeutic</td>
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<td>Rehabilitative</td>
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[Image: Exercise is Medicine logo]
Incorporating ‘Exercise is Medicine’ into the University of South Carolina School of Medicine Greenville and Greenville Health System

Jennifer L Trilk,¹ Edward M Phillips²

INTRODUCTION
Evaluating medical students and other health professionals in training on the importance of healthy lifestyles for prevention and treatment of disease is essential to transforming healthcare. At the University of South Carolina School of Medicine Greenville (USC SOM) education regarding the benefits of exercise is vital for transforming healthcare. Exercise counseling as part of healthcare delivery would have numerous evidence-based benefits for prevention and treatment of multiple non-communicable chronic diseases (NCDs) including type 2 diabetes, hypertension, cardiovascular disease and confidence to counsel patients on exercise after they graduate from medical school.

THE CALL FOR REFORM OF MEDICAL EDUCATION
The impetus for reforming medical education by training physicians to effectively and efficiently address the preventable causes of chronic disease is bolstered by several significant initiatives, including the planned 2015 revision of the Medical College Admissions Test to include ‘Psychological, Social and Biological Foundations of Behavior,’ as one of the four core sections¹² and the call for medical education reform in the June 2012 report from the Bipartisan Policy Center (BPC) in Washington, DC: ‘Lots to Lose: How America’s Health and Obesity.’
Learning Objectives

Explore the profound impact of lifestyle behaviors on the rates of death, disease and health care costs.

Define Lifestyle Medicine as the evolving strategy to effectively and efficiently address health behaviors.

Examine the efforts of Self-Insured companies to improve health of their workers.

Review global efforts to educate physicians and all health care professionals to help patients adopt and sustain healthier behaviors.
Harvard Medical School
Department of Physical Medicine and Rehabilitation
Joslin Diabetes Center
Boston, Massachusetts
www.instituteoflifestylemedicine.org
Institute of Lifestyle Medicine (ILM) Vision

- The Institute of Lifestyle Medicine is a non-profit educational, research and advocacy organization dedicated to reducing the prevalence of lifestyle-related disease and mortality in our society through clinician directed interventions with patients.
- Accomplished through a broad-based collaborative effort to transform the practice of medicine.
ILM Mission

• Knowledge
• Skills
• Tools
• Self-care
• Audience: All Healthcare Professionals at All Levels of Training
First Harvard CME Lifestyle Medicine Course in India

March 2006
Delhi
Kolkata
Chennai
Mumbai

Course Director:
Edward M. Phillips, MD

Presented in Association with
Apollo Hospital/WellnessRx
Surgeon General Regina Benjamin
2011 PRESIDENT'S COUNCIL ON FITNESS, SPORTS & NUTRITION

Community Leadership Award

Presented to
Institute of Lifestyle Medicine at Spaulding Rehabilitation and Harvard Medical School

For exemplary service and dedication to improving the lives of others by promoting and fostering opportunities for participation in fitness, sports or nutrition programs.

Drew Brees
Co-Chair
President's Council on Fitness, Sports & Nutrition

Dominique Dawes
Co-Chair
President's Council on Fitness, Sports & Nutrition

Shellie Y. Pfohl
Executive Director
President's Council on Fitness, Sports & Nutrition
Lifestyle Medicine Educational Spectrum

- Residency
- Fellowship
- Continuing Medical Education
  - Online Certificate of Completion
  - Live
  - Webinars
- Undergraduate
- Medical School
Physicians
Nurses
Other Health Professionals
Stress
Nutrition
Exercise
Physicians
Nurses
Other Health Professionals
Stress

Nutrition

Exercise

CME

GME

UME

Physicians

Nurses

Other Health Professionals
Lifestyle Medicine Training Grant
Yale Preventive Medicine Residents

• Didactics on site (or by web conferencing)
• Online Curriculum
• Institute of Lifestyle Medicine Courses in Boston
• Two-week rotation in Boston (PGY-4)
VO2 Max
...and the bitter truth...
Rani Polak, MD, MBA
Research Fellow in Lifestyle Medicine
2013-15
Rachele Pojednic, PhD
Research Fellow in Lifestyle Medicine
2014-

• Medical School Advocacy
• Systems Integration of Physical Activity
• Harvard Extension School
  – Lifestyle Medicine, Fall 2014
  – Exercise, Spring 2015
Active Doctors, Active Patients

Exercise Classes at
The Sports Club/LA
Continuing Medical Education (CME)

- Boston Based Live Seminars:
  - Active Lives:
    Transforming Ourselves and Our Patients,
    December 5-6, 2014
  - Lifestyle Medicine 2015
    June 26-27, 2015
Lucas Medeiros, MD
Dacey M, Arnstein F, Kennedy MA, Phillips EM. The Impact of Lifestyle Medicine Continuing Education on Provider Knowledge, Attitudes and Counseling Behaviors, Medical Teacher

Barriers that were targeted during the programs, i.e. lack of knowledge/skills, lack of materials, and perceived poor patient compliance showed highly significant improvement. Participants also reported significant changes in knowledge, confidence, and counseling behaviors in the areas of exercise and stress management. Some improvements occurred in areas that the CME programs did not target as much, i.e. nutrition, smoking, and weight management. The greatest predictor of change was the baseline level of scores. Those participants who could most benefit from change did show the largest improvements.

PRACTICING LIFESTYLE MEDICINE: TOOLS FOR HEALTHY CHANGE

Friday, June 20 – Saturday, June 21, 2014
The Simches Auditorium at Massachusetts General Hospital
Boston, Massachusetts
ACTIVE LIVES
Transforming Ourselves and Our Patients One Step at a Time

December 5th and 6th, 2014
Joseph B. Martin Conference Center
Harvard Medical School
77 Avenue Louis Pasteur
Boston, Massachusetts

EXERCISE
SELF CARE
LIFE BALANCE
HEALTHY FOOD
WEIGHT CONTROL

behavior change
communication

Sponsored by
Joslin Diabetes Center
Harvard Medical School
The Institute of Lifestyle Medicine
ILM currently offers seven Online Harvard Lifestyle Medicine CME courses
> 8,500 clinicians globally

- The Exercise Prescription
- Weight Management
- Stress Management
- Metabolic Syndrome
- Osteoporosis
- Back Pain
- LM Competencies
Lifestyle Medicine Education: Certification

- Lifestyle Medicine CME: **Certificate of Completion**
- Lifestyle Medicine CME: **Certificate of Competency**
- Lifestyle Medicine: **Board Certification**
- Lifestyle Medicine CME: **State Licensing Requirements**
- Lifestyle Medicine: **Medical School**
Harvard University Extension School

• Live/ Online Credit bearing course in Lifestyle Medicine

Elizabeth Pegg Frates, MD
ILM Assistant Director of Medical Education
Harvard University Extension School

• The Science of Physical Activity Applied to Health and Well Being

• One semester credit bearing course for graduate or undergraduate credit.

• Available on campus, live or online from anywhere.

• January- May 2015
Lifestyle Medicine Educational Spectrum

• Residency
• Fellowship
• Continuing Medical Education
  – Online Certificate of Completion
  – Live
  – Webinars
• Undergraduate
• Medical School
HMS Lifestyle Medicine Interest Group

• Since 2009, Lunch and Learn at HMS
• Supported by ILM and HMS Student Government Funds
• Parallel Curriculum
Stanford Medical School
Lifestyle Medicine

• Obesity, eating behavior, physical activity, sleep, mindfulness and positive psychology, acupuncture, CAM, etc.
• Seminar series; 10 lectures with healthy lunches from 12-1 PM every Thursday
• 1 unit course credit
• 2013 speakers included Walter Bortz, Len Saputo, Marcus Elliot, Bob Sallis, and Eddie Phillips
• 70+ registered participants
  – 3/4 preclinical med students
  – 1/4 business students, engineers, and undergraduates
• Rave reviews!
Levels of Curricular Integration

• Parallel Curriculum: “Lunch and Learn”
  – Harvard Medical School, Beth Frates

• Elective Curriculum:
  – Weill Cornell Medical School, Keith Lascala, Michael Dell
  – Stanford Medical School, Mike Fredericson

• Required Curriculum
  – COMP Lebanon Oregon
  – University of Wisconsin, Pat McBride
  – University of Alabama, Marcas Bamman
  – University of South Carolina- Greenville, Jennifer Trilk
Conclusion

The existing model of medical care is no longer viable.

The rapidly evolving health care landscape provides new opportunities for Lifestyle Medicine to become a standard of care. Lifestyle Medicine is our best hope to redirect the health care system.
Lifestyle Medicine: Your Role

Help Self-Insured Companies improve the health of employees

Train Physicians, Nurses and other health care professionals in Lifestyle Medicine.

Join the Lifestyle Medicine movement for a healthier Brazil.

Start with a 2% change in your life, your work, your environment.
Follow Up: Institute of Lifestyle Medicine

Email: Edward.Phillips@joslin.harvard.edu
www.instituteoflifestylemedicine.org
www.harvardlifestylemedicine.org
Linked In: www.linkedin.com/groups/Institute-Lifestyle-Medicine-4598141
Twitter: @ILMLifestyleMed
Facebook: www.facebook.com/InstituteofLifestyleMedicine