



THE IMPERATIVE FOR LIFESTYLE MEDICINE

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Creating a Culture of Wellness in Health Care Settings



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Introduction

- Founder and Director, Institute of Lifestyle Medicine
- Assistant Professor of Physical Medicine and Rehabilitation, Harvard Medical School
- Adjunct Scientist, USDA-Jean Mayer, Human Nutrition Research Center on Aging at Tufts University

Faculty Disclosure

Member of the scientific advisory board of OnLife Health, Inc. (a subsidiary of Tennessee Blue Cross and Blue Shield)

Royalties: ACSM's Exercise is Medicine: A Clinician's Guide to Exercise Prescription, Wolters-Kluwer, 2009

A Call to Arms (and Legs)

- American Medicine's century long experiment of treating patients with episodic, procedure oriented, fee-for-service, sickness based care has failed.
- This clinical trial is causing death, disease and bankrupting the study subjects. It must be stopped.

A Call to Arms (and Legs)

- A new paradigm promoting health and wellness needs to be initiated immediately.
- The evolving paradigm needs to incentivize clinicians to improve the behaviors and the health status of their patients.

Learning Objectives

- Review 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.
- Survey the Changing Landscape

Lifestyle Medicine

- This critical transformation is motivated by significant research indicating that modifiable behaviors – especially physical inactivity and unhealthy eating – are the major drivers of **mortality, disease, and health care costs**

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 disease¹
- 55% increase of all cause mortality²
- 44% increase in cancer mortality²
- 72% increase of cardiovascular mortality²

¹Hu FB et al. *N Engl J Med.* 2001;345:790-797; ²van Dam RM et al. *BMJ.* 2008;337:a1440.

Preventable Disease

- 70% of cardiovascular disease can be prevented or delayed with dietary choices and lifestyle modifications¹
- According to the World Health Organization, by 2020, two-thirds of all disease will be lifestyle related²

¹Forman D, Bulwer BE. *Curr Treat Options Cardiovasc Med.* 2006;8:47-57; ²Chopra M et al. *Bull WHO.* 2002;80:953-958.

Health Care Costs

- Current health care spending in the United States reached \$2.92 trillion¹
- 78% of health care expenditures are consumed by the management of chronic disease²

¹Centers for Medicare and Medicaid Services. National Health Expenditure Data.

https://www.cms.gov/NationalHealthExpendData/25_NHE_Fact_Sheet.asp; ²Anderson G, Horvath J.

Public Health Report. 2004;119:263-270.

Wellness Dividend

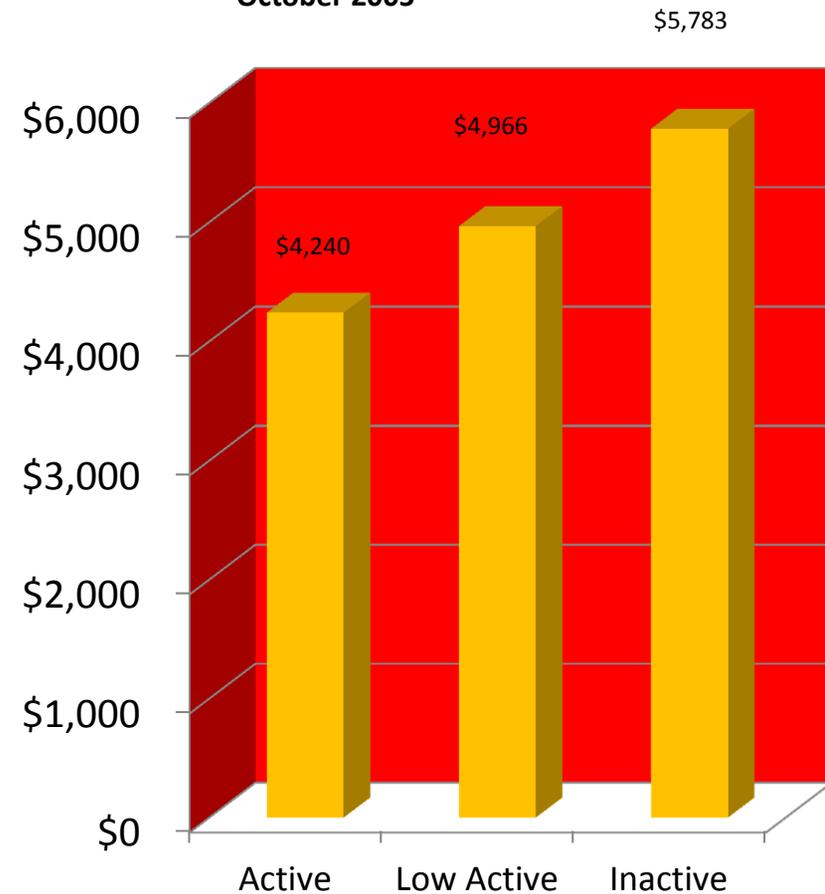
- Annual US health care expenditures:
 - \$4.48 trillion in 2019
 - WHO estimate 66% resulting from Lifestyle = \$3.0 trillion dollars annually (by 2020)
 - Make small change of 2% in weight, activity, smoking, etc (eg, walking an additional 500 steps or giving up the last cookie)
 - Result: annual \$60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

¹Centers for Medicare and Medicaid Services. National Health Expenditure Data. https://www.cms.gov/NationalHealthExpendData/25_NHE_Fact_Sheet.asp; ²Holman H. *JAMA*. 2004;292:1057-1059; ³Chopra M et al. *Bull World Health Organ*. 2002;80:953-958.

Activity Level and Health Claims

- Health claims increase as activity levels decrease
- Inactive persons cost \$1,543 more per year more than active ones
- >\$12/ hour of benefit for brisk walking

Chronic Disease and Prevention
October 2005



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Imperative for Lifestyle Medicine

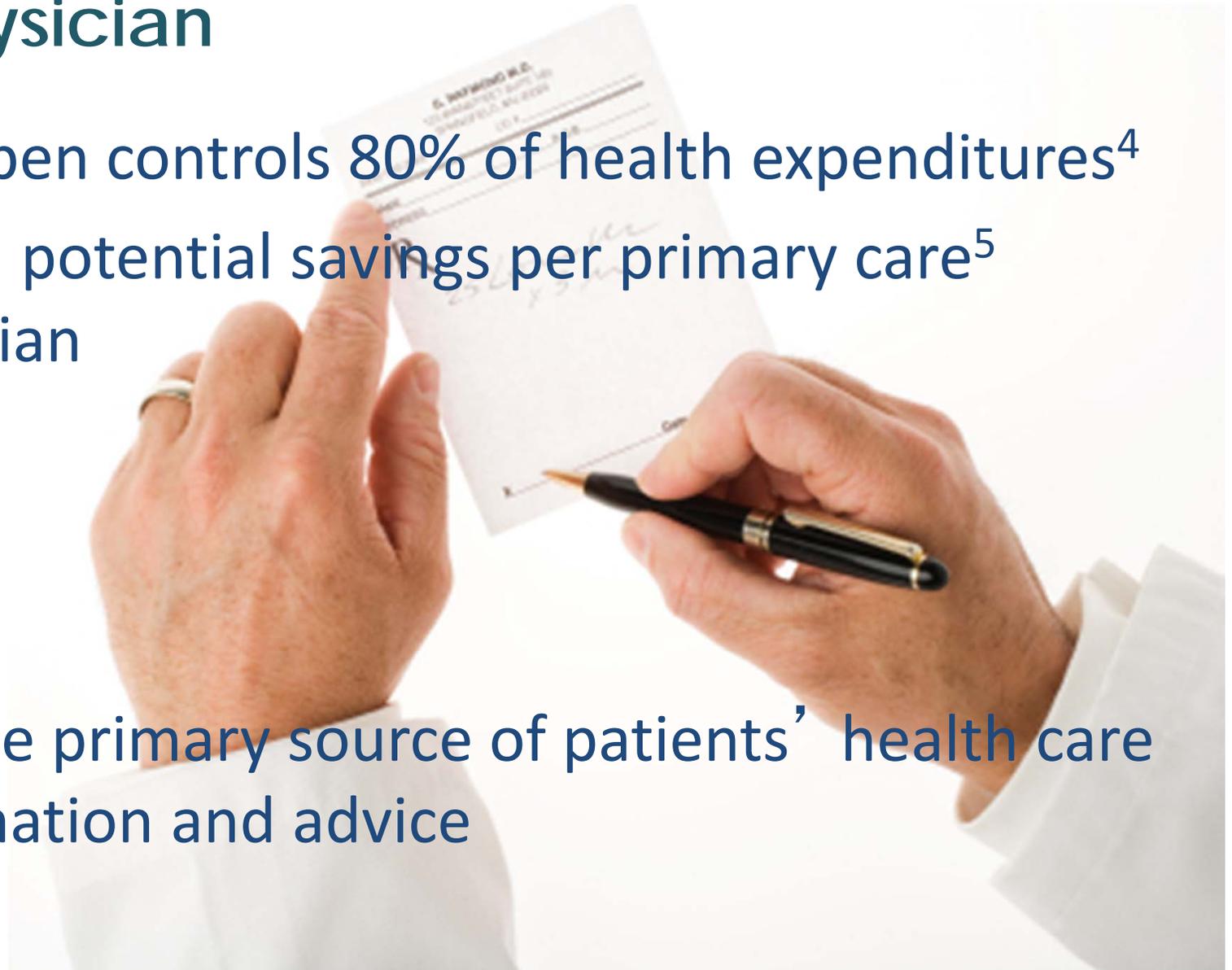
- Modifiable lifestyle choices are major cause of disease, death and health care costs
- Potency of physician counseling on lifestyle
- Dearth of counseling by physicians on lifestyle choices

Why Lifestyle Medicine?

- While the medical profession is generally aware of this, there has yet to be a systematic and comprehensive effort to incorporate lifestyle medicine into standard clinical practice. This is starting to change...

The Physician

- Their pen controls 80% of health expenditures⁴
- \$2.5M potential savings per primary care⁵ physician
- Still the primary source of patients' health care information and advice



Does Physician Prescription of Exercise Make a Difference?

EBM Exercise Prescription

Prescribing Exercise at Varied Levels of Intensity and Frequency

A Randomized Trial

Glen E. Duncan, PhD, RCEPSM; Stephen D. Anton, PhD; Sumner J. Sydemann, PhD; Robert L. Newton, Jr, PhD; Joyce A. Corsica, PhD; Patricia E. Durning, PhD; Timothy U. Ketterson, PhD; A. Daniel Martin, PhD, PT; Marian C. Limacher, MD; Michael G. Perri, PhD

- Exercise prescription for brisk walking resulted in statistically significant, long term improvements in cardiopulmonary fitness ($P < .01$)
- Study limitations:
 - absence of a “no treatment” control group
 - patients with abnormal lipid profiles were excluded
 - Comparison group intervention (physician advice) may not parallel the impact of advice from a patient’s personal physician

Efficacy of Exercise Prescription

- Two-year randomized, controlled trials
- Women given exercise prescription increased physical activity from
- 10% at baseline to
- 43% at 12 months, and
- 39% at 24 months ($P < 0.001$)
- Limitations: inability to blind participants to the intervention, ongoing interaction with nurse in the study group may have acted as an intervention, sample size not large enough to detect significant difference in clinical outcomes

Do Physicians Regularly Prescribe Exercise?

Dearth of Physician Counseling

- National prevalence of lifestyle counseling or referral among African-Americans and whites with diabetes
- A recent study showed that diabetic patients received counseling/referral for nutrition only 36% of the time, and for exercise only 18% of the time
- Limitations:
 - rates of counseling may not accurately assess actual practice
 - inability to detect racial differences in counseling quality
 - findings may not be generalizable to the most vulnerable African-American patients

Efficacy of Physician Counseling

- Recent study of hypertensive patients, only a third received counseling to engage in physical activity as a way to manage their hypertension
- However, 71% of the patients who were counseled followed the recommendations to exercise and reduced their blood pressure
- Limitations: Study data may be old, self-reported data may be limited

Gaining Traction

- Cost of healthcare has focused attention on issue of wellness and prevention
- Wellness and prevention are components of Health Care Reform Law “ObamaCare”
- PCPs are dissatisfied and stressed but still dedicated to treating patients

Need for Physician Counseling

- The USPSTF encourages health care providers to counsel on lifestyle modifications for patients (with known risk factors).
- Many providers do not know how or where to begin.
- Physicians are limited by time constraints and lack of training on how to effectively counsel patients in nutrition, exercise, and/or weight management to encourage positive lifestyle changes.
 - Barclay, 2008
 - Hu, NEJM 2001

JAMA[®]

Physician Competencies for Prescribing Lifestyle Medicine

Liana Lianov, Mark Johnson

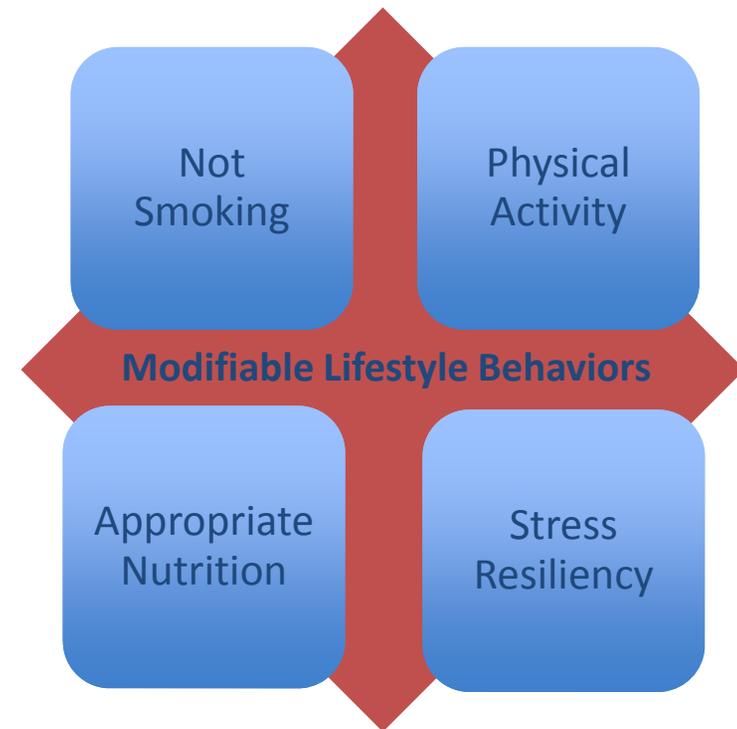
Participating Organizations:

American Academy of Family Physicians
American Academy of Pediatrics
American College of Physicians
American College of Lifestyle Medicine
American College of Sports Medicine

American Medical Association
American Osteopathic Association
Rippe Lifestyle Institute
Loma Linda University

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



Leadership and Knowledge

Leadership

1. Promote healthy behaviors as **foundational** to medical care, disease prevention, and health promotion
2. Seek to practice healthy behaviors and create school, work and home **environments** that support healthy behaviors

Knowledge

3. Demonstrate knowledge of the **evidence** that specific lifestyle changes can have a positive effect on patients' health outcomes
4. Describe ways that **physician engagement** with patients and families can have a positive effect on patients' health behaviors

Assessment Skills

5. Assess the **social, psychological and biological predispositions** of patients' behaviors and the resulting health outcomes
6. Assess patient and family **readiness, willingness, and ability** to make health behavior changes
7. Perform a history and physical examination specific to lifestyle-related health status, including **lifestyle 'vital signs'** such as tobacco use, alcohol consumption, diet, physical activity, body mass index, stress level, sleep and emotional well-being, and then order and interpret appropriate tests to screen, diagnose and monitor lifestyle-related diseases

Management Skills

8. Use nationally **recognized practice guidelines** (such as those for hypertension and smoking cessation) to assist patients in self-managing their health behaviors and lifestyles
9. Establish effective relationships with patients and their families to affect and sustain behavioral change using **evidence-based counseling methods** and tools and follow up
10. Collaborate with patients and their families to develop evidence-based, achievable, specific, written action plans such as **lifestyle prescriptions**
11. Help patients manage and sustain healthy lifestyle practices, and **refer patients to other health care professionals** as needed for lifestyle-related conditions

Use of Office and Community Support

12. Have the ability to practice in an **interdisciplinary team** of health care providers and support a team approach
13. Develop and apply office systems and practices to support lifestyle medical care including **decision support technology**
14. **Measure processes and outcomes** to improve quality of lifestyle interventions in individuals and groups of patients
15. Use appropriate **community referral resources** that support the implementation of healthy lifestyles

Obligation of Physician

- The physician is obligated to broach critical lifestyle areas
- The physician has an important opportunity to promote behavior change and be supportive of the change process
- Need to assess physical activity levels and to prescribe exercise

Obligation (cont'd)

- The physician can personalize the known threats of inactivity
- The physician also can help patients commit to modest behavioral steps which will at minimum modestly increase daily physical activity and other health behaviors.

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Market Transformation - A New Normal Emerging

Sick Care to Health Care

- Affordable Care Act
 - National Prevention Council
 - Annual Wellness Visits
 - First Dollar Coverage for Preventive Services
 - Testing Innovative Delivery Models
 - Accountable Care Organization and Patient Centered Medical Home
- Employers/Insurers investing in wellness

Doctors: Cowboys to Coaches

- Keep people well
- Team approach to care
- Evidence-based standards
- Decision support through technology
- Payment for outcomes, cost savings, satisfaction

Affordable Care Act

COMPILATION OF PATIENT PROTECTION AND AFFORDABLE CARE ACT

[As Amended Through May 1, 2010]

INCLUDING

PATIENT PROTECTION AND AFFORDABLE CARE ACT
HEALTH-RELATED PORTIONS OF THE HEALTH CARE AND
EDUCATION RECONCILIATION ACT OF 2010

PREPARED BY THE

Office of the Legislative Counsel

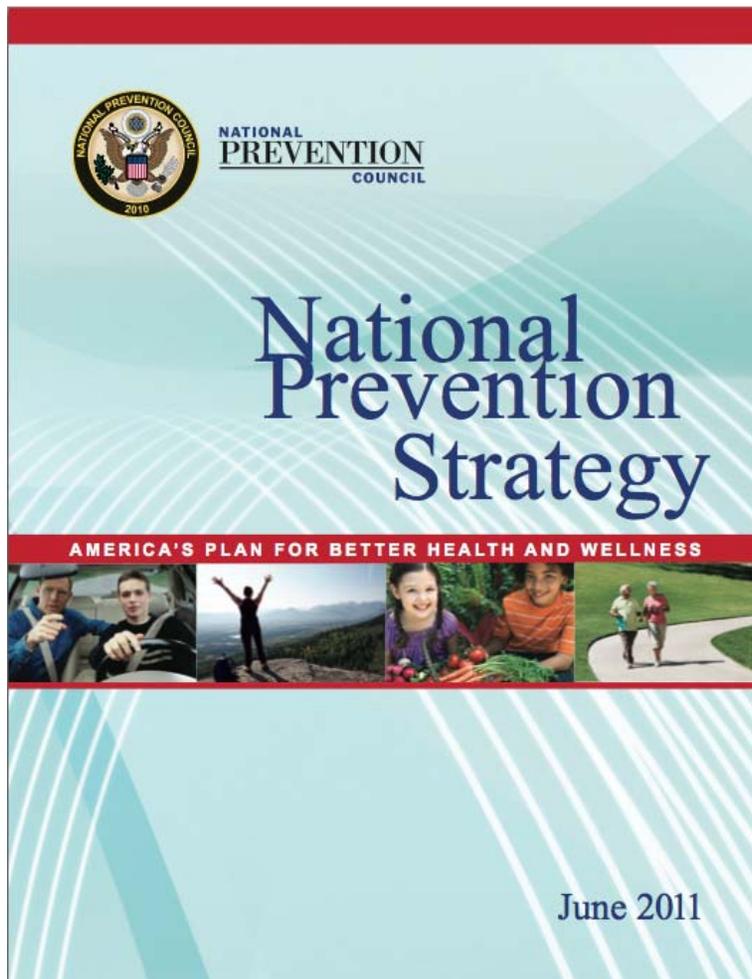
FOR THE USE OF THE

U.S. HOUSE OF REPRESENTATIVES



MAY 2010

National Prevention, Health Promotion and Public Health Council



Members

- Surgeon General Regina M. Benjamin, Council Chair
- Secretary Kathleen Sebelius, Department of Health and Human Services
- Secretary Tom Vilsack, Department of Agriculture
- Secretary Arne Duncan, Department of Education
- Chairman Jon Leibowitz, Federal Trade Commission
- Secretary Ray LaHood, Department of Transportation
- Secretary Hilda L. Solis, Department of Labor
- Secretary Janet A. Napolitano, Department of Homeland Security
- Administrator Lisa P. Jackson, Environmental Protection Agency
- Director R. Gil Kerlikowske, Office of National Drug Control Policy
- Director Melody Barnes, Domestic Policy Council
- Assistant Secretary-Indian Affairs Lamy Echo Hawk, Department of the Interior
- Acting Chief Executive Officer Robert Velasco II, Corporation for National and Community Service
- Secretary Robert M. Gates, Department of Defense
- Secretary Shaun Donovan, Department of Housing and Urban Development
- Attorney General Eric H. Holder, Jr., Department of Justice
- Secretary Eric K. Shinseki, Department of Veterans Affairs
- Director Jacob J. Lew, Office of Management and Budget

Medical Education Reform

- MCAT, 2015 to include section on “Psychological, Social and Biological Foundations of Behavior”
- “Flexner 2 Report” prompting medical education reform.
- MCAT 2015 Preview:
<https://www.aamc.org/students/download/266006/data/2015previewguide.pdf>
- Educating Physicians: A Call for Reform of Medical School and Residency by Molly Cooke, David Irby, and Bridget O' Brien, (Jossey-Bass, San Francisco, 2010).



Medical Education Reform

“Medical school curricula should emphasize homeostasis and health, rather than only disease and diagnosis, and provide training in the science and practice of cost-effective health promotion.”

- Farshad Fani Marvasti, M.D., M.P.H., and Randall S. Stafford, M.D., Ph.D.
- From Sick Care to Health Care — Reengineering Prevention into the U.S. System
- N engl j med 367;10 September 6, 2012

Take Away

- 🗨 The existing model of medical care is no longer viable.
- 🗨 The rapidly evolving health care landscape provides new opportunities for health systems, clinicians, hospitals, insurance companies, government agencies and you as an individual to adopt a culture and practice of wellness.

Follow Up

- **Connect with the Institute of Lifestyle Medicine (ILM)**
- **Website: www.instituteoflifestylemedicine.org/**
- **Facebook:**
<https://www.facebook.com/InstituteofLifestyleMedicine>
- **LinkedIn:**
<http://www.linkedin.com/groups/Institute-Lifestyle-Medicine-4598141>
- **Twitter: @ILMLifestyleMed**