

Outline of Lifestyle Medicine Competencies Curriculum

American College of Preventive Medicine and
American College of Lifestyle Medicine

(Note: The number of slides per subtopic varies; i.e. the number of subtopics listed does not correlate with length of the section.)

Basic Curriculum

Introduction

- A. Overview and learning objectives
- B. LM definitions and unique role of LM
- C. Compare and contrast LM to related terms and fields
- D. History/background behind LMCs

The Fifteen Lifestyle Medicine Competencies--LMCs (6.0 CMEs)—Liana Lianov and Ingrid Edshteyn

LMC 1:

- A. Importance of LM
- B. Burden of chronic disease
- C. Behavioral/lifestyle determinants of disease
- D. Scientific evidence of LM (summary): key published studies
- E. Practice tools to support LMC 1
- F. Structure your practice for LMC 1

LMC 2:

- A. Physician personal health behaviors
- B. Physician personal behaviors and counseling
- C. Personal action plans
- D. Advocacy and community leadership in LM
- E. Practice tools to support LMC 2
- F. Structure your practice for LMC 2

LMC 3:

- A. LM is based on scientific evidence principles
- B. Scientific evidence for lifestyle interventions
- C. Nutrition scientific evidence (other topics covered in modalities)
- D. Gaps in scientific literature
- E. Approaches to gap areas
- F. Practice tools to support LMC 3
- G. Structure your practice for LMC 3

LMC 4:

- A. Physician counseling
- B. USPSTF recommendations for provider counseling
- C. Examples of impact of physician counseling
- D. Physician responsibilities and role in LM

- E. Practice tools to support LMC 4
- Structure your practice for LMC 4

LMC 5:

- A. Determinants of health
- B. Example: impact of adverse childhood events
- C. Health literacy
- D. Health risk assessment
- E. Practice tools to support LMC 5
- F. Structure your practice for LMC 5

LMC 6:

- A. Major health behavior change theories
- B. Stage of change/readiness to change theory
- C. Tools to support LMC 6
- D. Structure your practice for LMC 6

LMC 7:

- A. History and physical exam
- B. Lifestyle focused history (with practice tools)
- C. Lifestyle focused physical
- D. Screening/diagnostic blood assays
- E. Lifestyle vital signs
- F. Case study
- G. Structure your practice to support LMC 7

LMC 8:

- A. National guidelines summaries
- B. Tobacco use guidelines
- C. Physical activity guidelines
- D. Nutrition guidelines
- E. Guidelines for assessment and management of cardiovascular disease
- F. Diabetes guidelines
- G. Practice tools to support LMC
- H. Structure your practice to support LMC 8

LMC 9:

- A. Patient-provider relationship and role in behavior change
- B. Coach mindset
- C. 5 A's
- D. Motivational interviewing with case study
- E. Cognitive behavioral approaches with case study
- F. Positive psychology approaches with case study
- G. Social support systems and clinical follow-up
- H. Practice tools to support LMC 9
- I. Structure your practice to support LMC 9

LMC 10:

- A. Action planning
- B. Prescriptions versus action plans
- C. Subsequent visits/follow-up plan
- D. Practice tools to support LMC 10
- E. Structure your practice to support LMC 10

LMC 11:

- A. Maintenance strategies
- B. Lapse versus relapse
- C. Self-management strategies
- D. Relapse prevention plan
- E. Practice tools to support LMC 11
- F. Structure your practice for LMC 11

LMC 12:

- A. Care model elements
- B. Collaborative care
- C. Team roles in model programs
- D. Improved outcomes with team approach
- E. Practice tools to support LMC 12
- F. Structure your practice to support LMC 12

LMC 13:

- A. Guidelines to implement the care model
- B. Information systems
- C. Effective practice models: value of group visits
- D. Group visits: benefits to doctors, benefits to patients, benefits to clinics
- E. Operation of group visits
- F. Evidence based intervention programs: Prescription for Health
- G. Practice tools to support LMC 13
- H. Structure your practice to support LMC 13

LMC 14:

- A. Rapid cycle improvement
- B. PDSA cycles
- C. Root cause analysis, process mapping, cause and effect diagrams
- D. External supports
- E. Practice case example
- F. Practice tools to support LMC 14
- G. Structure your practice to support LMC 14

LMC 15:

- A. Role of community and worksite programs
- B. Preparing your practice to use community referral resources
- C. Clinic flow and community referrals
- D. Practice tools to support LMC 15
- E. Structure your practice to support LMC 15

Modalities

Nutrition Introduction (0.5 CME)—Rosanne Rust

- A. Nutrition assessment: clinical, anthropometric, biometric
- B. Diet assessment
- C. Nutrition prescription (introduction)
- D. Nutrition counseling
- E. Working with a dietician, role of dietician and role of physician
- F. Medical nutrition therapy
- G. Tools and resources
- H. Expected practice change outcomes

Nutrition: Nutrients (1.0 CME)—Michael Greger

- A. The 2010 Dietary Guidelines for Americans
- B. Food components to be limited and those to be increased
- C. Translating recommendations into actual food
 - 1. Sources of added sugar
 - 2. Sources of extra calories
 - 3. Sources of cholesterol
 - 4. Sources of saturated fat
 - 5. Sources of sodium
 - 6. Sources of trans-fat
 - 7. Sources of calcium
 - 8. Sources of fiber
 - 9. Sources of magnesium
 - 10. Sources of potassium
 - 11. Sources of vitamin A, C, E, K
- D. Putting it all together
- E. Nutrient density
- F. Foods ranked
- G. Summary of foods to emphasize and de-emphasize
- H. Center diet on whole plant foods
- I. Resources and tools
- J. Practice processes to improve outcomes

Physical Activity: Introduction, prescriptions, counseling (1.0 CME)—Rani Polak, Eddie Phillips

- A. Physical inactivity and all-cause mortality
- B. Definitions of physical activity and exercise
- C. Components of exercise: aerobic, strengthening, flexibility, balance
- D. Physical activity guidelines
- E. Physician role in physical activity counseling
 - 1. Efficacy of strategies to decrease disability

- 2. Physician barriers to counseling
- 3. Exercise is Medicine campaign
- F. Physical activity vital signs and appropriate physician responses
- G. Exercise prescription
 - 1. Frequency
 - 2. Intensity
 - 3. Type
 - 4. Time
- H. Impact of physician personal practice
- I. Resources
 - 1. Specific exercises and video clips
 - 2. Exercise for elderly
 - 3. Exercise of children

Physical activity: Science of physical activity, Part 2 (1.0 CME)—Rani Polak, Eddie Phillips

- A. MET
- B. Definition of fitness
- C. Low fitness and mortality
- D. Exercise versus weight
- E. Amount of physical activity for health
 - 1. Minimum physical activity, including patients with CAD
 - 2. Maximum physical activity
 - 3. How much is enough?
 - 4. Dose response of physical activity
- F. Sitting
 - 1. Mortality associated with sitting
 - 2. Breaking up prolonged sitting periods
 - 3. Physiology of physical inactivity
- G. Science of different types of physical activity: strength training, flexibility, balance
- H. Physical activity assessment tools

Sleep Introduction (1.0 CME)—Virginia Gurley

- A. Contemporary sleep behavior
- B. Sleep physiology
- C. Sleep and metabolic disorders, CVD, mood, and cancer
- D. Mini sleep assessment
- E. Sleep disorders
- F. Lifestyle interventions for sleep: dietary, stress management, environment
- G. Tips for facilitating sleep
- H. Case study
- I. Resources
- J. Processes to improve practice outcomes

Tobacco Part 1 (0.5 CME)—Stephen Michael

- A. Health effects and costs of tobacco use
- B. Tobacco cessation treatments

- C. USPHS guideline: 10 recommendations for health providers
- D. 5 A's and tobacco cessation

Tobacco Part 2 (1.0 CME)—Michael Stephen

- A. Facilitating cessation for patients willing to quit
- B. Pharmacotherapy for patients willing to quit
- C. Additional considerations for patients willing to quit
- D. Facilitating cessation for patients not willing to quit
- E. Motivational interviewing, counseling for tobacco cessation
- F. Insurance coverage for cessation
- G. Case study
- H. Resources and additional training
- I. Practice processes to improve outcomes

Alcohol Basic (0.5 CME)—Mark Willenbring

- A. Cost and prevalence of alcohol drinking
- B. Low risk drinking guidelines
- C. Alcohol use disorder versus alcohol misuse
- D. Diagnostic criteria for alcohol use disorder
- E. Screening for alcohol use

Emotional Wellness Part 1 (0.5 CME)—Liana Lianov

- A. Stress and unhealthy lifestyles
- B. Stress assessment
- C. Screening for depression and anxiety
- D. Diagnostic criteria for depression and anxiety
- E. Social support
- F. Nonpharmacological treatments, self-management and coping skills
- G. Referral to mental health providers
- H. Resources for providers

Coaching, Developing Growth Promoting Relationships (0.5 CME)— Margaret Moore

- A. Neuroplasticity and we need to change
- B. Definition of health and wellness coaching
- C. Expert approach versus coach approach
- D. Mindful listening
- E. Compassion, empathy
- F. Open ended questions
- G. Reflections
- H. Silence
- I. Presence
- J. Voice
- K. Rolling with resistance

Advanced Curriculum

Nutrition (2.0 CME)—Michael Greger

- A. Role of nutrition in preventing and treating chronic diseases
 - 1. Nutrition as a major cause of diseases in the western world
 - a. Examples of populations protected by plant-based diets
- B. Major nutrition studies: CAD
 - 1. Optimal cholesterol levels
 - a. Diet for optimal LDL: plant-based
 - b. Trans fats
 - c. Managing CAD with optimal LDL
 - 2. Framingham Study
 - 3. RCTs in support of plant-based diet
 - 1. Equivalent to therapeutic statin does
 - 2. CAD reversal
 - 3. Ornish and Esselstyn studies
- C. Major nutrition studies: Cancer
 - a. Cancer: prostate, breast
 - b. Anticancer effects of healthy lifestyle
- D. Nutrition studies: Diabetes
 - a. Diet (superior) vs. metformin
 - b. Adventist Health Study 2
 - c. Diet impact on weight, insulin resistance, blood sugar
 - d. Plant-based diet (superior) vs. ADA diet
- E. Nutrition studies: Hypertension
- F. Diet impact on cataracts, COPD, kidney failure, mood disorders, Crohn's, immune function, multiple sclerosis
- C. Reimbursement issues; Medicare coverage
- D. Practice processes to improve outcomes
- E. Resources and tools

Nutrition (2.0 CME)—Wayne Dysinger

- A. Nutrition prescriptions
 - 1. Comparison: medication and exercise prescriptions
 - 2. Aspects of a good prescription: simple/specific, measurable, accountable, realistic/forgiving, time connected
 - 3. Prescription guidelines, format and example
 - 4. Types of nutrition prescriptions
- B. Foundational nutrition advice: whole foods, variety
- C. Protein and example of protein prescription
- D. Fat:
 - 1. Types of fat
 - 2. Harmful fats, saturated fat in food types, lauric acid, stearic acid, palmitic acid
 - 3. Example of fat prescription
- E. Carbohydrates:

1. General approach
 2. Components
- F. Fiber and why we need it:
1. Fiber and physiology
 2. How much fiber do we need
 3. Sources of fiber
- G. Micronutrients prescriptions and value
- H. Inflammatory foods
- I. Anti-inflammatory foods
- J. Effect of food preparation on food value
- K. AGEs
1. Biochemistry
 2. Pathways
 3. Impact on vascular and nerve changes
 4. Impact with age and on kidney disease
 5. Mechanisms and effects
 6. Sources
 7. AGE nutrition prescription advice
- L. LM nutrition principles
- M. Hyperlipidemia:
1. Harmful foods and helpful foods
 2. Uncommon in vegans
 3. Diet as effective as medicines
- N. Hypertension
1. Harmful foods and helpful foods
 2. Uncommon in plant based diets
 3. Other considerations
- O. Diabetes
1. Prevalence and micronutrient intake
 2. Harmful foods and helpful foods
 3. Less prevalent in vegans
- P. Cancer
1. Nutrient goals
 2. Harmful foods and helpful foods
 3. Specific types of cancer and recommendations

Physical activity: Office based physical activity counseling (1.0 CME)—Rani Polak, Eddie Phillips

- A. Office based counseling: feasibility, efficacy, cost-effectiveness
- B. 5 A's, 5 stages of change
1. SMART-SE (self-directed, evidence-based) goal setting
 2. Social support
 3. Self-monitoring
 4. Relapse prevention

- B. Screening for exercise safety
- C. Resources for sustainable change
- D. “Healthy clinic,” practice interventions
- E. Working as a team
 - 1. Physical therapist
 - 2. Coaches
 - 3. Clinical exercise physiologist
 - 4. Trainers
- F. Resources
 - 1. Traditional resources
 - 2. Devices
 - 3. Web programs
 - 4. Gym
 - 5. Parks
- G. Physical activity counseling tips

Physical activity: Recommendations for various health conditions (1.0 CME)---Rani Polak, Eddie Phillips

- A. Healthy older adults
- B. Children and adolescents
- C. Obese individuals
- D. Pregnant and post-partum individuals
- E. Patients with ischemic heart disease, coronary artery disease
- F. Patients with diabetes
- G. Patients with cancer; colon cancer, breast cancer
- I. Patients with disabilities
- J. Website resources on physical activity for elderly adults and more health conditions

Mindfulness based stress reduction (1.5 CME)—Steve Flowers

- A. Stress effects
- B. How we create our suffering
- C. Definition of mindfulness
- D. Attitudes of mindfulness; mindfulness as a solution to stress
- E. Definition of mindfulness based stressed reduction (MBSR)
- F. Structure of MBSR training
- G. Research results on outcomes of MBSR
- H. Neorogenesis and neuroplasticity
- I. Self-care and compassion
- J. The role of the physician
- K. Interpersonal mindfulness
- L. Compassion fatigue and burn out of providers
- M. MBSR reduces loneliness with positive effects
- N. MBSR reduces inflammation
- O. What to do to apply mindfulness
- P. Two case studies

Q. References, resources and tools

Sleep (1.0 CME)—Virginia Gurley

- A. Circadian physiology and sleep
 - 1. Core temperature
 - 2. Light
 - 3. Fluid status
 - 4. Carbohydrates
- B. Hypnotic use and mortality
- C. Difficulty sleep initiation
- D. Sleep fragmentation
- E. Sleep deficiency
- F. Sleep health study
- G. References/resources

Alcohol Use (1.0 CME)—Mark Willenbring

- A. At risk drinkers
- B. Behavioral interventions
- C. Mild to moderate alcohol use disorder
- D. Severe recurrent alcohol use disorder
- E. Treatment
- F. Tracking outcomes
- G. Anti-relapse medications
- H. Identification and management of heavy drinking
 - a. Assess readiness to change
 - b. Negotiate treatment plan
 - c. What to do
 - d. What to avoid
 - e. Resources
- I. Two case studies
- J. Practice processes to improve outcomes
- K. Resources
- L. Additional information on anti-relapse information (optional)
- I. Resources for patients

Emotional Wellness Part 2 (1.0 CME)—Liana Lianov

- A. Depression as a comorbidity
 - 1. Diabetes and emotional health
 - 2. CAD and emotional health
- B. Management of mental illness as a comorbidity
 - 1. Treatment of depression in CAD
 - 2. Spectrum of options for treating depression
 - 3. Acute episode depression treatment; post-acute follow-up
 - 4. Lifestyle depression interventions for patients with chronic diseases
 - a. Exercise and mental health
 - b. Diet and mental health

- c. Meditation and mental health
 - 5. Management of anxiety
- C. Self-management guidance
 - 1. Anxiety and depression self-management strategies
- D. Positive psychology for promoting well-being
 - 1. Adaptive mechanisms of mental health
 - 2. Factors affecting emotional well-being/mental health
 - 3. Strategies for promoting positivity and happiness
- E. Case study
- F. Practice processes to improve outcomes

Coaching Part 2, Science and Evidence (0.5 CME)—Margaret Moore

- A. Coaching mechanisms of action
- B. Coaching models across the spectrum
- C. Theories underpinning coaching psychology
- D. Coaching systemic review and research studies
- E. Telephone versus in-person coaching
- F. Integrative coaching
- G. Outcomes to measure
- H. Tools and resources
- I. Processes to improve practice outcomes

Coaching, Organize Your Mind for Coaching (0.5 CME)—Margaret Moore

- A.** Optimal brain state for the task
- B. Ten steps to organize the mind
 - A. Be agile and go deep
 - B. Upgrade brain energy
 - C. Tame negative emotions
 - D. Prepare a thinking brain state
 - E. Connect
 - F. Focus and sustain attention
 - a. Improve working memory
 - b. Imagine the outcome
 - c. Harness your drive, go into flow
 - G. Brake on distractions
 - H. Take brain breaks
 - I. Be creative
 - J. Be strategic
- C. Gratitude
- D. Tools and resources
- E. Processes for improving practice outcomes

Coaching, Self-Motivation and Self-Confidence (0.5 CME)—Margaret Moore

- A. Self- efficacy
- B. Motivation types

- C. Motivational interviewing
- D. Positive emotions
- E. Character strengths
- F. Coaching environment and other tips
- G. Coaching exercise
- H. Resources and tools
- I. Practice processes to improve outcomes

Coaching Process (0.5 CME)—Margaret Moore

- A. Changing for good
- B. Vision
- C. Self-determination, responsibility and self-discovery
- D. Coaching inquiry
- E. Strengths
- F. Values and purpose
- G. Body intelligence
- H. Decision balance
- I. Challenges and strategies
- J. Goals and plans
- K. Support
- L. Confidence
- M. Positivity
- N. Commitment
- O. Action level, behavioral steps
- P. Rewards
- Q. Problem solving
- R. Relapse prevention
- S. Best self
- T. Tools and resources
- U. Practice processes for improving outcomes

Coaching Case Studies (0.5 CME)—Margaret Moore

- A. Case study of a 30 year old overweight woman, pre-pregnancy
- B. Case study of a 40 year old woman with diabetes
- C. Case study of a 66 year old man with colon cancer
- D. Case study of a 73 year old woman with heart disease
- E. Tools and resources
- F. Practice processes for improving outcomes

Nutrition “elective” options (2.0 CME):

Option 1: Forks Over Knives DVD, 90 minutes (T. Colin Campbell) plus one article group

Option 2: Weight management slides, both parts

Option 3: Weight management slides (one part) plus one article group

Option 4: Four article groups

Article Group A

de Lorgeril, et al. Mediterranean diet, traditional risk factors, and the rate of cardiovascular complications after myocardial infarction: final report of the Lyon Diet Heart Study. *Circulation* 1999 Feb;99(6):779-85.

de Loregril M. Mediterranean diet and cardiovascular disease: historical perspective and latest evidence. *Curr Atheroscler Rep.* 2013 Dec; 15(12):370.

Article Group B

Ornish, Dean et al. "Intensive lifestyle changes for reversal of coronary heart disease." *JAMA* 280.23 (1998): 2001-2007.

Ornish, Dean et al. "Can lifestyle changes reverse coronary heart disease? The Lifestyle Heart Trial." *The Lancet* 336.8708 (1990): 129-133.

Article Group C

Dysinger WS, Carls CL. Lifestyle Medicine: An Overview. *Primary Care Reports* 2010; 16(5): 1-12.

Lianov L, Johnson M. Lifestyle Medicine Competencies. *JAMA* 2010

Article Group D

Schwinshackl L, Hoffman G. Long-term effects of low-fat diets either low or high in protein on cardiovascular and metabolic risk factors: a systematic review and meta-analysis. *Nutr J.* 2013 Apr 15; 12:48.

Wadden TA et al. Efficacy of Lifestyle Medicine for Long-Term Weight Control, *Obesity Research Dec. 2004, Supplement 12:151S-162S.*

Weight Management Basic (1.0 CME)—Ingrid Edshteyn

- A. Epidemiology of overweight and obesity and associated costs
 - 1. Overweight and obesity prevalence among adults
 - 2. Medical risks of obesity: cardiovascular, metabolic, gastrointestinal orthopedic, central nervous system, malignant, reproductive, obstetric, extremities
 - 3. Obesity costs
 - 4. Obesity etiology
- B. Weight management guidelines
 - 1. USPSTF recommendations
 - 2. 2013 clinical practice guidelines by AHA, ACC, Obesity Society, NHLBI
- C. Obesity management practice strategies
 - 1. Obesity evaluation/assessment

2. Obesity counseling/interventions and outcomes
 - a. Nutrition
 - b. Physical activity
 - c. Behavioral strategies
 - d. Psychosocial needs
3. Weight maintenance
4. Obesity management options
 - a. Referrals
 - b. Computerized programs
 - c. Commercial programs

Weight Management Advanced (1.0 CME)—Ingrid Edshteyn

- A. Obesity etiology
- B. Obesity and mortality
- C. Obesity and morbidity
 - a. Diabetes
 - b. Cancer
 - c. Metabolic syndrome
- D. Obesity and energy homeostasis
- E. Obesity and weight loss outcomes
 - a. Average weight loss
 - b. Plateau phenomenon
- F. Obesity and lifestyle interventions
 - a. Clinical practice guidelines
- G. Obesity and behavioral management
 - a. Preliminaries for office practice
 - b. Session attendance
 - c. Weight loss attendance
 - d. Motivational interviewing
 - e. Key skills
 - f. Discipline
- H. Obesity and physical activity
 - a. Exercise prescription
 - b. Diet
 - c. Energy deficit
- I. Obesity and nutrition
 - a. Eating frequency and patterns
 - b. Meal replacements
- J. Obesity and psychosocial needs
 - a. Stress and eating social support
- K. Obesity and weight loss medications
 - a. Rationale for use
 - b. 2013 clinical update
 - c. Approved medications
 - d. FDA and weight loss supplements
- L. Insurance Reimbursement
- M. Obesity and bariatric surgery
 - a. Post bariatric surgery

- b. Strategies for success
- c. Physical activity