

Integrating Lifestyle Medicine Into Clinical Practice

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Learning Objectives

- Explore the evidence for the benefits of the 6 pillars of lifestyle medicine - physical activity, a whole food, nutrient-dense dietary pattern, restorative sleep, stress management, supportive social connection and avoidance of risky substances
- Examine the specific assessment tools and interventions that can be used in a personalized lifestyle medicine approach to patient care





**When the winds of change
blow,
Some people build walls and
others build windmills**
Chinese proverb



**Healthy citizens are the
greatest asset any country
can have.**

-Winston Churchill



Top Ten Causes of Mortality 2021

- **Heart Disease**
- **Cancer**
- **COVID 19**
- **Accidents**
- **Stroke**
- **Chronic lower respiratory dx**
- **Alzheimer's Dx**
- **Diabetes**
- **Chronic liver disease**
- **Kidney Disease**



Actual Causes of Death

Table 2. Actual Causes of Death in the United States in 1990 and 2000

Actual Cause	No. (%) in 1990*	No. (%) in 2000
Tobacco	400 000 (19)	435 000 (18.1)
Poor diet and physical inactivity	300 000 (14)	400 000 (16.6)
Alcohol consumption	100 000 (5)	85 000 (3.5)
Microbial agents	90 000 (4)	75 000 (3.1)
Toxic agents	60 000 (3)	55 000 (2.3)
Motor vehicle	25 000 (1)	43 000 (1.8)
Firearms	35 000 (2)	29 000 (1.2)
Sexual behavior	30 000 (1)	20 000 (0.8)
Illicit drug use	20 000 (<1)	17 000 (0.7)
Total	1 060 000 (50)	1 159 000 (48.2)

*Data are from McGinnis and Foege.¹ The percentages are for all deaths.

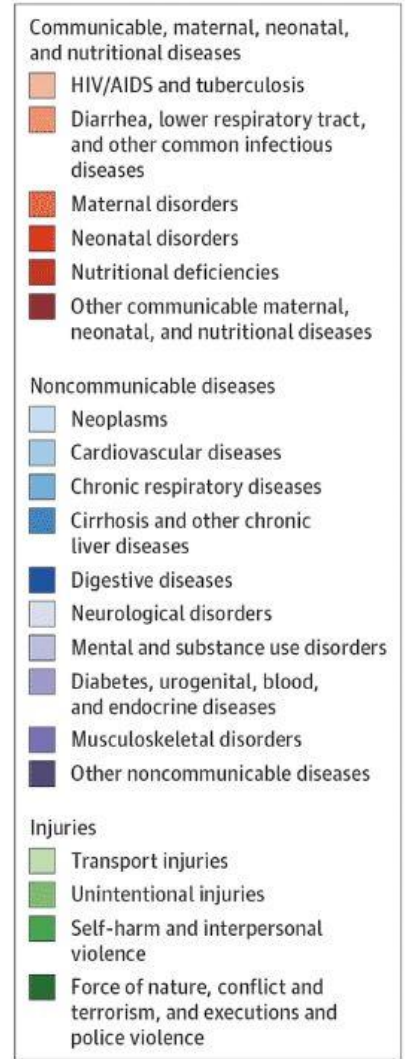
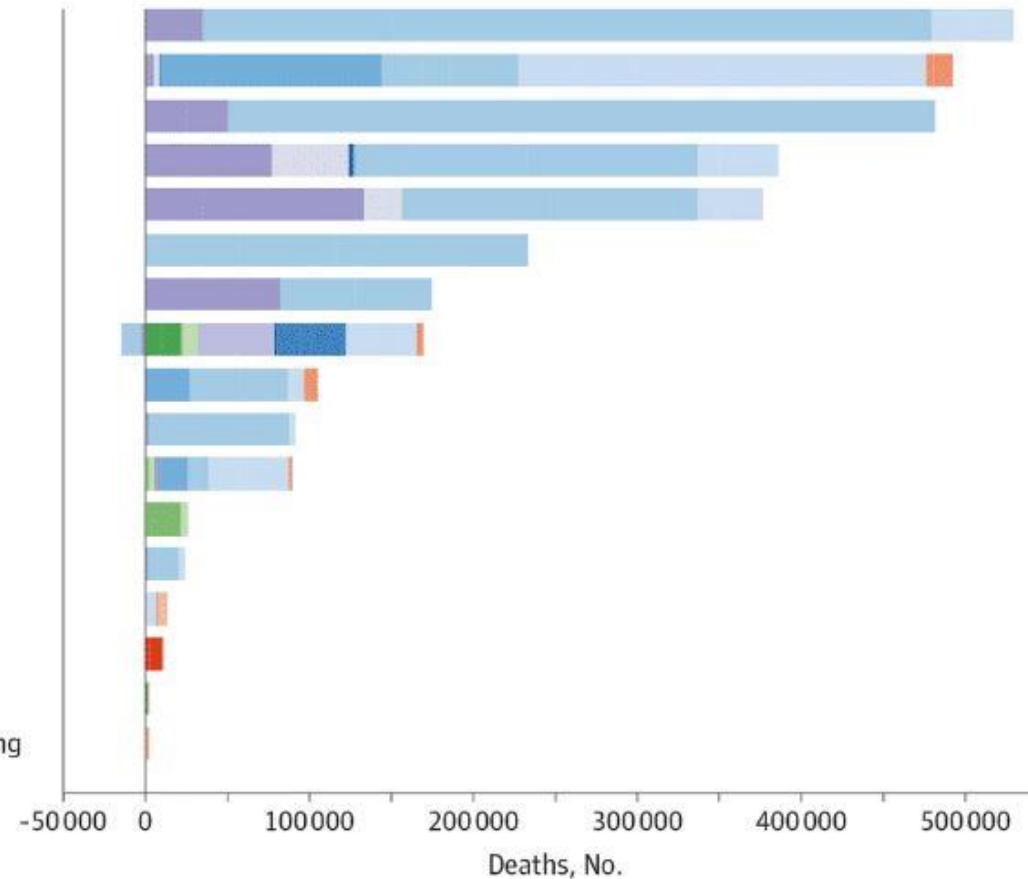


Risk Factors and Related Deaths

A Risk factors and related deaths

Risk factors

- Dietary risks
- Tobacco use
- High systolic blood pressure
- High body mass index
- High fasting plasma glucose
- High total cholesterol
- Impaired kidney function
- Alcohol and drug use
- Air pollution
- Low physical activity
- Occupational risks
- Low bone mineral density
- Residential radon and lead exposure
- Unsafe sex
- Child and maternal malnutrition
- Sexual abuse and violence
- Unsafe water, sanitation, and handwashing



Effect of Lifestyle Habits

- Ford, et. al studied over 23,000 participants aged 35-65, mean follow-up 7.8 years
- Evaluated lifestyle factors:
 - BMI<30
 - No tobacco use
 - 3.5 hr/week or more physical activity
 - High intake fruits, vegetables, whole grains and low red meat consumption
- Following **all 4** healthy lifestyle factors resulted in a **78% decreased risk** of developing chronic disease compared to 0 healthy lifestyle factors



What is Lifestyle Medicine?

Lifestyle medicine is the **evidence-based** practice of helping **individuals and communities** with comprehensive **lifestyle changes** (including nutrition, physical activity, stress management, social support, restorative sleep and toxic exposures) to help **prevent, treat, and even reverse** the progression of chronic diseases by addressing **underlying causes**.





The Six Pillars

Healthful eating

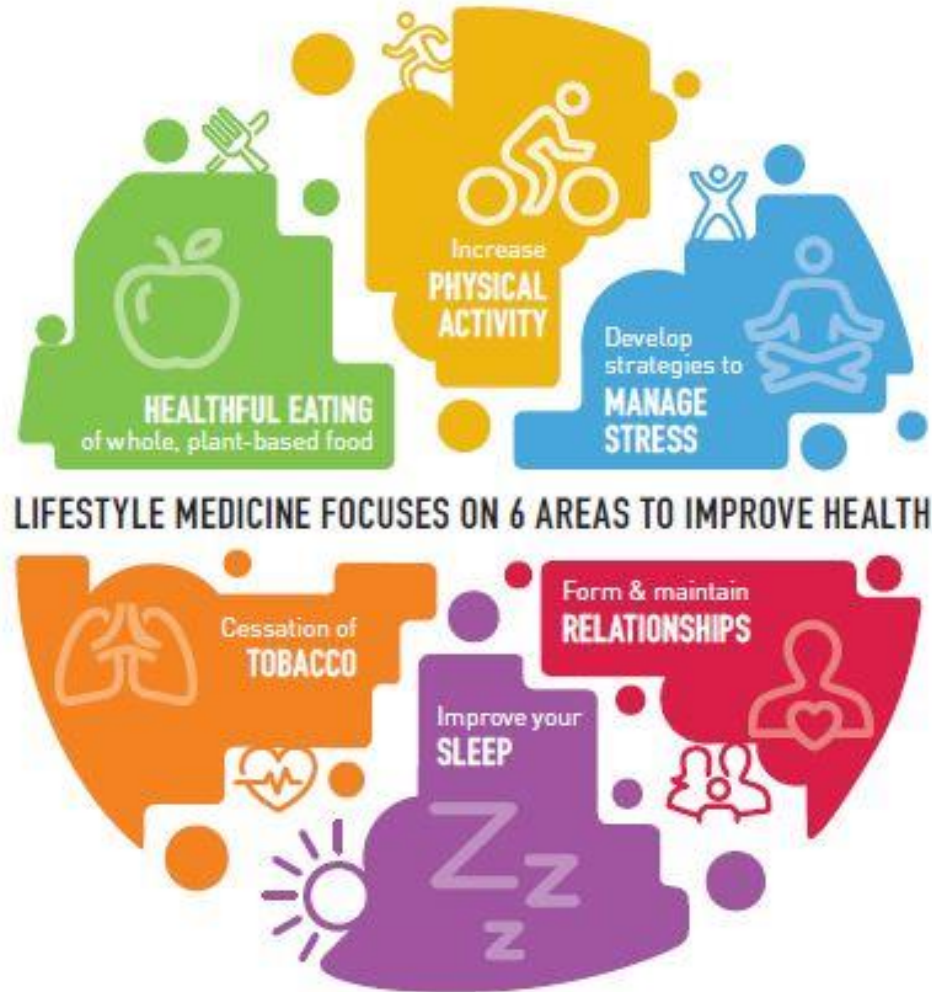
Physical activity

Stress management

Relationships

Sleep

Tobacco cessation





How am I going to add Lifestyle Medicine into my already overloaded clinical workflows?!?





- Screening
- SMART Goals
- Individual or Group visits
- Patient Homework
- Frequent Follow-up
- Walk the Talk



Lifestyle Medicine Assessment Tool

Lifestyle Score: 20

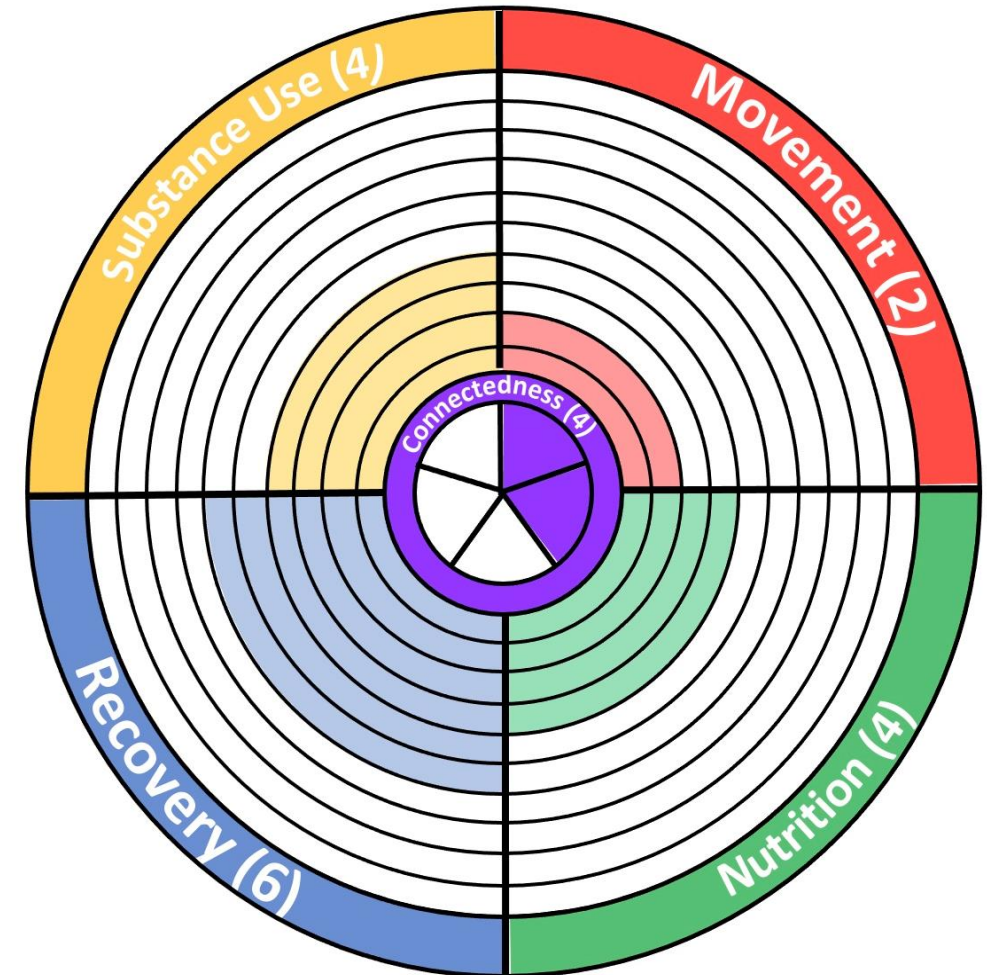
Connectedness (4)	Points
Felt your life had a sense of purpose	2
Engaged in two or more spiritual or religious practices (e.g., meditation, prayer, church services, etc.)	0
Interacted with one or more club(s) or organization(s) (e.g., athletic, community, school group, etc.)	0
Spent at least two hours in nature (approximately 20 minutes daily)	0
Visited or spoke to a close friend or family member on three or more separate occasions	2
Connectedness Domain Total:	4

Movement (2)	Points
Total amount of cardiorespiratory exercise during the week (e.g., brisk walk, jog, etc.) (in minutes)	2
Total number of resistance training workouts performed (e.g., pushups, squats, pullups, etc.)	0
Average number of hours spent sitting each day	0
Movement Domain Total:	2

Nutrition (4)	Points
Average number of daily servings of vegetables	1
Average number of daily servings of fruit	1
Used olive oil as your primary oil or used no oil when cooking	0
Total number of sit-down or take-out restaurant meals	0
Total number of sweetened drinks consumed (e.g., juice, sweetened coffee or tea, soda, sports drinks)	2
Average number of packaged snacks per day (e.g., chips, crackers, cookies, candy, protein bars, etc.)	0
Nutrition Domain Total:	4

Recovery (6)	Points
Average number of hours slept per night	3
Woke up feeling refreshed and rested on most days	2
Felt that you were able to manage and deal with stressors effectively most days	0
Felt you had enough time to take care of yourself most days	1
Sleep Domain Total:	6

Substance Use (4)	Points
Smoked, vaped, or used tobacco/e-cigarettes	0
Highest number of alcoholic drinks consumed on any single day	2
Average number of alcoholic drinks consumed on days alcohol was consumed (select less than one if you did not drink any alcohol)	2
Substance Use Domain Total:	4



Connectedness (10)	Points
Felt your life had a sense of purpose	2
Engaged in two or more spiritual or religious practices (e.g., meditation, prayer, church services, etc.)	2
Interacted with one or more club(s) or organization(s) (e.g., athletic, community, school group, etc.)	2
Spent at least two hours in nature (approximately 20 minutes daily)	2
Visited or spoke to a close friend or family member on three or more separate occasions	2
Connectedness Domain Total:	10



Movement (10)	Points
Total amount of cardiorespiratory exercise during the week (e.g., brisk walk, jog, etc.) (in minutes)	5
Total number of resistance training workouts performed (e.g., pushups, squats, pullups, etc.)	2
Average number of hours spent sitting each day	3
Movement Domain Total:	10



Nutrition (10)	Points
Average number of daily servings of vegetables	2
Average number of daily servings of fruit	2
Used olive oil as your primary oil or used no oil when cooking	1
Total number of sit-down or take-out restaurant meals	1
Total number of sweetened drinks consumed (e.g., juice, sweetened coffee or tea, soda, sports drinks)	2
Average number of packaged snacks per day (e.g., chips, crackers, cookies, candy, protein bars, etc.)	2
Nutrition Domain Total:	10



Recovery (10)	Points
Average number of hours slept per night	5
Woke up feeling refreshed and rested on most days	2
Felt that you were able to manage and deal with stressors effectively most days	2
Felt you had enough time to take care of yourself most days	1
Sleep Domain Total:	10



Substance Use (10)	Points
Smoked, vaped, or used tobacco/e-cigarettes	6
Highest number of alcoholic drinks consumed on any single day	2
Average number of alcoholic drinks consumed on days alcohol was consumed (select less than one if you did not drink any alcohol)	2
Substance Use Domain Total:	10



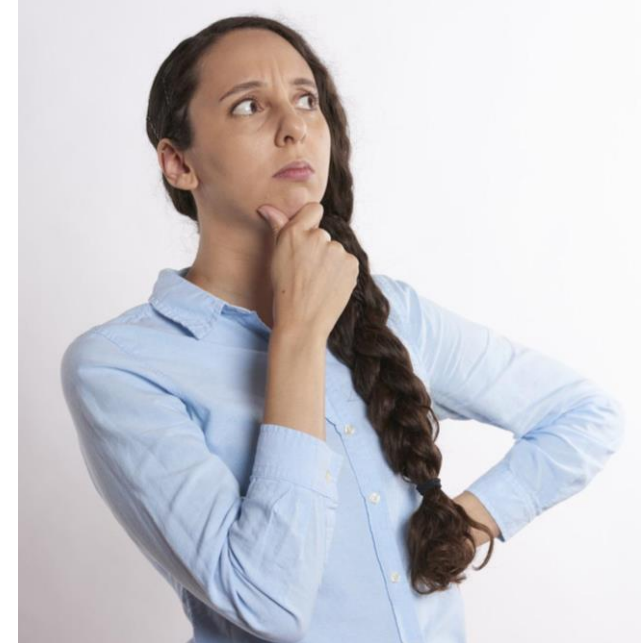
Other Screening/Assessment Tools

- PHQ2 and PHQ9
- GAD2 and GAD7
- Perceived Stress Scale
- Satisfaction with Life Scale
- Physical Activity Vital Signs
- Pittsburgh Sleep Quality Index
- AUDIT-C and AUDIT-10
- National Institute on Drug Abuse (NIDA) Quick Screen
- Social Support Questionnaire (SSQ6)
- Starting the Conversation - Nutrition



Readiness to Change

- Stages of Change
 - Pre-contemplation
 - Contemplation
 - Preparation
 - Action
 - Maintenance
 - Relapse
- When considering a lifestyle change:
 - How **important** is it to you to make a change (scale 1-10)?
 - How **confident** are you that you can successfully make this change (scale 1-10)?
 - Score of 7 or higher on both questions increases likelihood of successfully implementing desired change



Lifestyle Change Prescription

- Set a SMART Goal
 - SPECIFIC
 - MEASURABLE
 - ACHIEVABLE
 - RELEVANT
 - TIME BOUND



Options for Individual visit

E/M Code Requirements (2021 changes)

- Coding for outpatient visits based on **EITHER**:
 - Medical decision making (MDM) **OR**
 - Total time on the day of the visit



Individual Visit Time-Based Billing

- Total time includes time spent on day of visit:
 - **Before**
 - Reviewing chart/labs, etc.
 - **During** (face-to-face)
 - **After**
 - Charting in EHR
 - Ordering labs, radiology studies, medications, referrals
 - Discussing patient's care with other health professionals/family members
 - Calling patient later in the day with results/additional recommendations
 - Documentation example
 - "Total time spent caring for patient on day of encounter was XX minutes"
 - Only use for individual visits – can NOT use for group visits



Total Time on Day of Visit

Visit Level	Established Patient	New Patient
Level 2	99212: 10-19 minutes	99202: 15-29 minutes
Level 3	99213: 20-29 minutes	99203: 30-44 minutes
Level 4	99214: 30-39 minutes	99204: 45-59 minutes
Level 5	99215: 40-54 minutes	99205: 60-74 minutes

A new patient is one that has not received professional services from a provider of the **same** specialty/subspecialty within the **same** practice for **3** years



Shared Medical Appointments (SMAs)

- Typically conducted over a 90 minute or 2-hour period
- Target group size usually 10-15 patients
- Each patient must have some brief individual time with billing provider
- Physical location of group visit needs an NPI# for optimal billing
 - ▣ Telehealth is currently another option for virtual SMAs
- You can **NOT** use time as criteria for coding for an SMA – coding must be based on MDM
 - ▣ 99213 is most commonly used code
 - ▣ Can also use codes for allied health professionals if they are running the visit – i.e. Medical Nutrition Therapy codes
- Co-pays can be an issue for patients if frequent SMAs



Shared Medical Appointments (SMAs)

- Benefits:
 - The power of group support
 - More time for education and goal-setting
- Don't forget a Group Medical Visit Consent Form
- How often?
 - Weekly, bi-weekly, monthly
- Create templates for documentation of education and SMART goals in medical record
- CMS confirms "from a payment perspective, there is no prohibition on group members observing while a physician provides a service to another beneficiary."



Culinary Medicine SMAs



Comparison of SMA and Individual Visits

	Shared Medical Appointment	Individual Visit
Number of patients	12	12
Total time spent	2 hours	4 hours (20 minutes/pt)
E/M code reimbursement	99213 – approx. \$92/pt	99213 – approx. \$92/pt
Total reimbursement	\$1,104/2 hours	\$1,104/4 hours
Reimbursement/hour	\$552/hr	\$276/hr

- Additional info from AAFP about coding for SMAs:
 - <https://www.aafp.org/family-physician/practice-and-career/getting-paid/coding/group-visits.html>



Patient Homework - Videos

- **TEDx talks:**

- Meagan Grega, MD, FACLM "Why Lifestyle is the BEST Medicine":
<https://www.youtube.com/watch?v=efGa8QD8pU4>
- Param Dedhia, MD "Sleep: The Secret to Living the Best 1/3 of Your Life":
<https://www.youtube.com/watch?v=KnD0uQlalg8>
- Robert Waldinger "What Makes a Good Life? Lessons from the Longest Study on Happiness": <https://www.youtube.com/watch?v=8KkKuTCFvzI>
- Dr. Wendy Suzuki "The Brain Changing Benefits of Exercise":
https://www.ted.com/talks/wendy_suzuki_the_brain_changing_benefits_of_exercise
- Dr. Yami Cazorla "Chicken to Chickpeas: A 30-Day Experiment Changed my Life": <https://www.youtube.com/watch?v=yIA9gAtabmg>



Patient Homework - Videos

- **Movies:**

- Plantwise - <https://www.adventhealth.com/plantwise-documentary/watch-plantwise-documentary>
- Forks Over Knives - <https://www.forksoverknives.com/the-film/>
- The Game Changers - <https://gamechangersmovie.com/>
- Code Blue: Redefining the Practice of Medicine - <https://www.codebluedoc.com/>



Patient Homework - Books

■ Books

- ❑ **“How Not To Die”** – Michael Greger, MD
- ❑ **“Proteinaholic”** – Garth Davis, MD
- ❑ **“Blue Zones”** – Dan Buettner
- ❑ **“Salt, Sugar, Fat”** – Michael Moss
- ❑ **“Undo It! How Simple Lifestyle Changes Can Reverse Most Chronic Diseases”** – Dean Ornish, MD
- ❑ **“Mastering Diabetes”** – Cyrus Khambatta and Robby Barbaro
- ❑ **“Dr. Neal Barnard’s Program for Reversing Diabetes”** – Neal Barnard, MD
- ❑ **“The Pleasure Trap”** – Doug Lisle, PhD
- ❑ **“Prevent and Reverse Heart Disease”** – Caldwell B. Esselstyn, Jr. MD
- ❑ **“Fiber Fueled”** – Will Bulsiewicz, MD
- ❑ **“Dopamine Nation”** – Anna Lembke, MD



Patient Homework - Websites

■ Websites

- ❑ NutritionFacts.org - <https://nutritionfacts.org/>
- ❑ Forks Over Knives - <https://www.forksoverknives.com/>
- ❑ Blue Zones - <https://www.bluezones.com/>
- ❑ PLANTSTRONG - <https://plantstrong.com>
- ❑ Physician's Committee for Responsible Medicine (PCRM) - <https://www.pcrm.org/good-nutrition/plant-based-diets/recipes>
- ❑ True Health Initiative - <https://www.truehealthinitiative.org/true-health-revealed-podcast/>
- ❑ The Whole Health Cure podcast with Dr. Sharon Bergquist - <https://thewholehealthcure.simplecast.com/>
- ❑ Insight Timer: <https://insighttimer.com/>



**Don't forget about
DE-PRESCRIBING!**



Be a Lifestyle Medicine Champion!

- Ask about lifestyle behaviors at every visit
- Have posters and handouts about healthy lifestyle habits prominently displayed/available
- Provide frequent follow-up for patients who are in the process of behavior change
- Walk the Talk – physicians who are physically active and engage in healthy eating habits are more likely to counsel their patients on diet and exercise



Abramson, S., et al. (2000). Personal exercise habits and counseling practices of primary care physicians: A national survey. *Clinical Journal of Sport Medicine*, 10(1), 40-48.

35 Howe M, Leidel A, Krishnan SM, Weber A, Rubenfire M, Jackson EA. Patient-related diet and exercise counseling: do providers' own lifestyle habits matter? *Prev Cardiol*.

2010 Fall;13(4):180-5. doi: 10.1111/j.1751-7141.2010.00079.x. Epub 2010 Aug 16. PMID: 20860642.

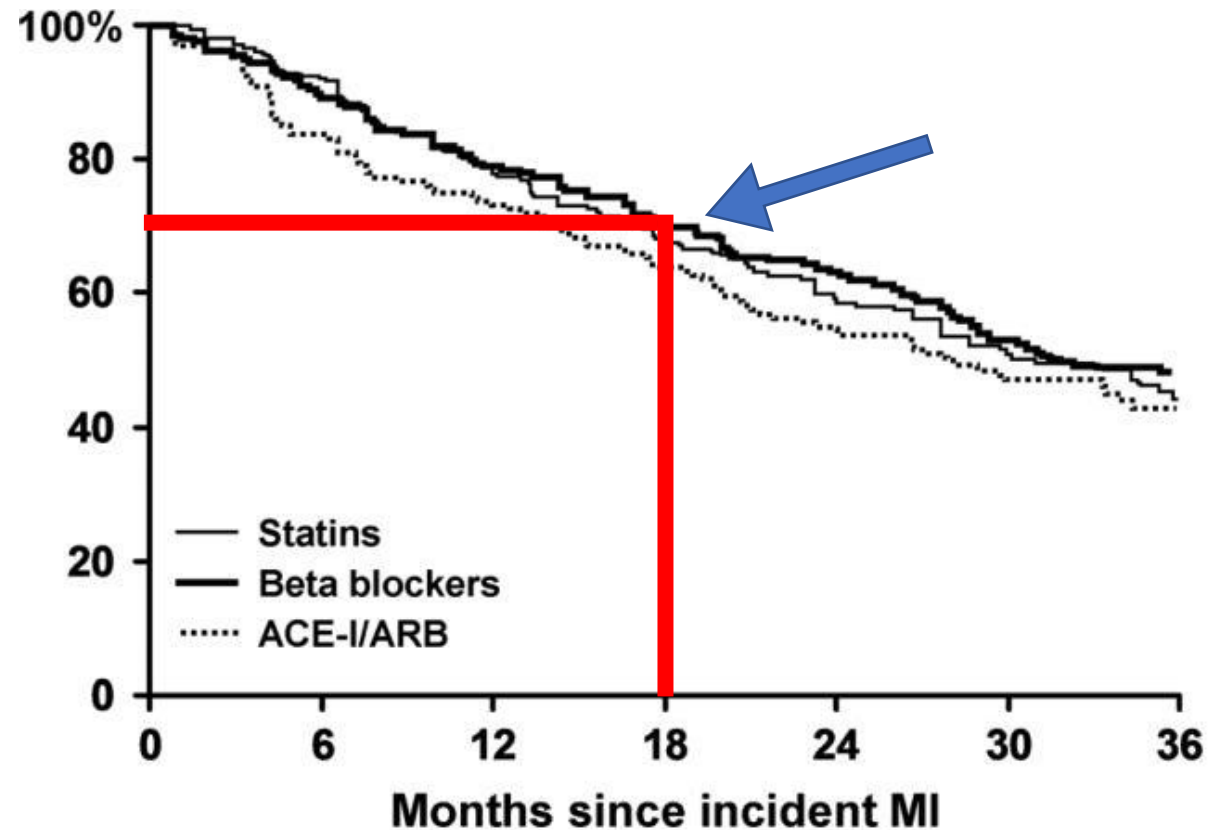


**OK...sounds great.
But will patients
actually do this?**



Medication Adherence after MI in the Community

At 18 months after MI, 70% of patients are still taking their medications (30% have stopped!).



Behavior Adherence with Lifestyle Medicine Intervention

Behavior	Mean change at 18 months	Participants who improved over 18 months
Physical activity (steps/wk)	5,596	63%
Calories consumed daily	-391	75%
Vegetables (servings/day)	2.6	59%
Dietary saturated fat (g/day)	-8	83%
Dietary fiber (g/day)	4	67%
Sweets (% of calories/day)	-3	69%

At 18 months, an average of 70% of participants adhered to behavior changes.



Additional Clinician Resources

- American College of Lifestyle Medicine (ACLM) website: <https://lifestylemedicine.org/>
- Exercise is Medicine website: <https://www.exerciseismedicine.org/>
- ACLM Whole Food Plant-Based Handout (English and Spanish)
- ACLM Dietary Spectrum Handout
- ACLM Food Frequency Handout
- AAFP Lifestyle Medicine Assessment Tool
- AAFP Incorporating Lifestyle Medicine Into Practice Guide and Editorial
- AAFP Tools for the Lifestyle Medicine Team





The Six Pillars

Healthful eating

Physical activity

Stress management

Relationships

Sleep

Tobacco cessation

