

“ Lifestyle is the most potent medicine we have. ”

— DAVID KATZ, MD, MPH

Incorporating Lifestyle Medicine into Everyday Family Practice:

IMPLEMENTATION GUIDE AND RESOURCES

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Table of Contents

Introduction	3
The Lifestyle Medicine Framework	4
Leadership for Incorporating Lifestyle Medicine into Everyday Practice	6
Tools for the Lifestyle Medicine Team	10
Reimbursement and Coding	12
Conclusion	12
References	13

List of Tables and Figures

Figure 1. Domains of Lifestyle Medicine	4
Figure 2. Leading a Lifestyle Medicine Change Initiative	6
Table 1. Incorporating the Lifestyle Medicine Approach in the Clinical Care Team	10
Table 2. Lifestyle Medicine Assessment Tools	11

Accompanying Handouts

1. Leading Change: Incorporating Lifestyle Medicine into Everyday Practice
2. Practice Assessment for Opportunities to Incorporate Lifestyle Medicine
3. Additional Tools for the Lifestyle Medicine Team
4. Reimbursement and Coding for Lifestyle Medicine
5. Lifestyle Medicine Assessment (LMA) Tool: Survey and Bullseye Chart

Introduction

Chronic disease and mental health conditions are leading causes of death and disability in the United States and are responsible for \$3.4 trillion in annual health care expenditures.¹ The Centers for Disease Control and Prevention (CDC) estimates that six in 10 Americans have at least one chronic disease and four in 10 have two or more chronic diseases.² Nearly 80% of all chronic disease is preventable, and lifestyle behaviors are responsible for 40% of all premature deaths.^{3,4} Smoking, physical inactivity, poor diet, and alcohol consumption are among the most influential lifestyle factors.⁵ There is increased recognition of the roles that sleep, stress, and social connection play in morbidity and mortality.^{6,11}

Lifestyle medicine is an evidence-based approach to prevent, treat, and reverse disease progression by replacing unhealthy behaviors with healthy ones.¹² For example, lifestyle interventions are more effective than metformin in preventing progression from prediabetes to diabetes.¹³ Lifestyle interventions are also first-line therapies for treating hypertension,¹⁴ hyperlipidemia,^{15,16} and obesity.¹⁷ Lifestyle medicine can put some cases of type 2 diabetes in remission,^{18–20} reverse or regress certain types of cardiovascular disease,^{21,22} and modulate gene expression in patients with prostate cancer.²³

Different organizations define lifestyle medicine with varying numbers of domains. For practical purposes, the American Academy of Family Physicians (AAFP) will focus on five main domains: connectedness (i.e., relationships), movement (i.e., physical activity), nutrition, recovery (i.e., sleep and stress), and substance use.^{24,25} Lifestyle medicine helps patients live healthier by creating personalized treatment plans targeting these domains and improving the conditions in which people live, work, and play.²⁶ Beyond its substantial impact on chronic disease, lifestyle medicine is arguably one of the cheapest^{27,28} and most accessible treatments. It can be delivered to underserved populations and communities and in a way that is culturally sensitive to all genders and ethnicities.

Conceptually, lifestyle medicine is not new. However, the formal field of lifestyle medicine was established in 2004 with the American College of Lifestyle Medicine's founding.²⁹ The discipline and practice of lifestyle medicine were introduced in the landmark 2010 *Journal of the American Medical Association (JAMA)* publication of the article, "Physician competencies for prescribing lifestyle medicine."³⁰ The inaugural lifestyle medicine board exam was offered in 2017, establishing a certification process for physicians and allied health professionals to demonstrate their competency in this practice area.²⁹ While lifestyle medicine is considered a new discipline, it should be viewed as a complement to conventional medical approaches and treatment.

Family physicians are ideally positioned to champion and prescribe lifestyle medicine in the clinic. They can also work collaboratively with community health professionals to help patients sustain healthy behaviors over time.

This practice manual provides guidance in integrating lifestyle medicine principles into everyday family medicine practice and is intended to help family physicians and other health care professionals incorporate the principles of lifestyle medicine with or without formal training or certification.

The Lifestyle Medicine Framework

Lifestyle medicine applies the medical, behavioral, environmental, and motivational principles to prevent, treat, and reverse chronic conditions.^{25,31} It focuses on five main domains: connectedness, movement, nutrition, recovery, and substance use. When addressing all domains together, lifestyle medicine can address multiple chronic diseases simultaneously.³¹

Connectedness

Connection, relationships, and purpose give meaning to life. This domain is central to lifestyle medicine as it helps patients identify motivations for changing their lifestyle and discovers reasons for patients' choices. Studies link a person's social ties with behavioral, psychological, and physiological processes that directly affect health.¹⁰ Having poor social relationships (as identified by loneliness)

among adults 50 years and older is associated with increased risk of heart disease, stroke, dementia, depression, anxiety, suicide, hospitalization, and emergency department visits.⁹

The connectedness domain focuses on relationships individuals have with themselves, family and friends, community, nature, and a higher power. Several studies have shown that people who practice religion or spirituality have improved mental health and are able to adapt more quickly to health problems.³² These benefits have physiological consequences that can improve physical health, affect disease risk, and influence treatment response.³² This domain encourages an individual to practice meditation, mindfulness, and explore their religious faith or any spiritual practice that is meaningful to them.

Movement

Lack of movement is one of the leading modifiable risk factors for many non-communicable diseases such as heart disease, type 2 diabetes, and breast and colon cancers.^{33,34} The 2018 Physical Activity Guidelines (PAG) encourages all adults to get 150-300 minutes of moderate-intensity aerobic physical activity, 75-150 minutes of vigorous-intensity aerobic physical activity, or an equivalent combination of both moderate- and vigorous-intensity aerobic activity spread across each week. At least two full-body strength training sessions per week should also be performed involving all major muscle groups. At a minimum, these strength-training sessions should include some type of hip-hinging movement (i.e., squat or deadlift), an upper body pressure exercise (i.e., pushups or overhead press), and an upper-body pulling movement (i.e., pullup or row). If individuals with chronic conditions or disabilities are unable to achieve the recommended guidelines, they should be as active as their abilities allow.³⁵

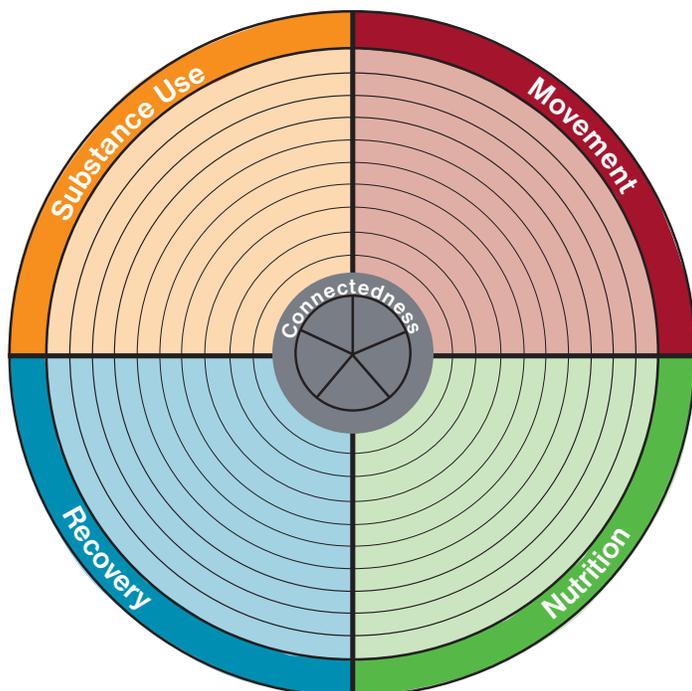


Figure 1. Domains of Lifestyle Medicine

Nutrition

Evidence suggests that an unhealthy diet may have overtaken tobacco use as the leading cause of premature death in the United States.³⁶ Although an “optimal diet” remains an area of frequent review, healthy dietary patterns such as the Mediterranean diet offer insight into what types of food promote health and may be associated with a reduced risk of major chronic disease.³⁷ The best dietary advice comes from author Michael Pollan: “eat food, not too much, mostly plants.”³⁸ A healthy nutritional plan should focus on whole, minimally processed food and vegetable consumption and reducing or (preferably) eliminating all sugar-sweetened beverages.³⁹

Recovery

Recovery is the body’s ability to rejuvenate and recharge itself, encompassing both sleep and stress. Sleep has a significant impact on health, including chronic disease development.¹¹ Sleep may play a vital role in metabolic regulation, emotion regulation, performance, memory consolidation, brain recuperation, and learning.⁴⁰ The amount of sleep each person needs varies, but the National Sleep Foundation, American Academy of Sleep Medicine, and Sleep Research Society recommend an average of 7-9 hours of sleep per night for adults and 8-10 hours of sleep per night for adolescents.^{41,42}

Stress is unique in that it impacts every other domain. It can be challenging to assess, as everyone experiences some level of stress. It is not necessarily the amount of stress, rather the individual’s capacity to manage it successfully. An individual’s susceptibility to stress depends on genetic vulnerability, coping style, personality type, and social support. Short-term stress can boost the immune system,⁷ while chronic stress can increase the susceptibility to disease, including cardiovascular disease, diabetes, cancer, autoimmune syndromes, and psychiatric illness such as depression and anxiety disorders.⁸ Identifying patients with more stress than they can manage and connecting them with a counselor or other mental health professional can profoundly impact the patient’s physical and mental health.

Substance Use

In 2018, approximately 164.8 million people 12 years or older in the United States had uncontrolled use of a substance such as tobacco, alcohol, or illicit drugs in the past month.⁴³ Evidence has linked substance use disorder with a higher risk of morbidity and mortality associated with various medical, mental, and accidental conditions.⁴⁴ Substance use disorder is often the manifestation of underlying anxiety, stress, depression, or other mental health issues that have not been adequately addressed or treated. Rather than focusing exclusively on discouraging the use of these substances, lifestyle medicine seeks to explore why patients feel compelled to use those substances and what perceived benefits patients get from using them.

Social Determinants of Health

Social determinants of health (SDoH) fundamentally influence all domains of lifestyle medicine. The lifestyle choices patients make are subject to the resources available to them. For instance, living in a food desert, transportation access, and poverty limit patients' access and ability to choose healthy food.⁴⁵ Likewise, access to parks, open space, and bicycle lanes could influence physical activity.⁴⁶ Community conditions and other social determinants may play a direct role in perpetuating unhealthy lifestyles and sustaining disparities in health outcomes among vulnerable groups.²⁶ Physicians incorporating lifestyle medicine should act as advocates for these patients to address the social determinants affecting their health. The AAFP has developed [resources to help patients advocate for health equity and healthier communities](#).

Leadership for Incorporating Lifestyle Medicine into Everyday Practice

Incorporating lifestyle medicine into your practice will require support and effort from different staff levels within and outside the practice. This could include individuals on the clinical care team, practice or health system leadership, information technology staff, and administrative employees. A leadership plan for incorporating lifestyle medicine into your practice is described in the following sections.⁴⁷

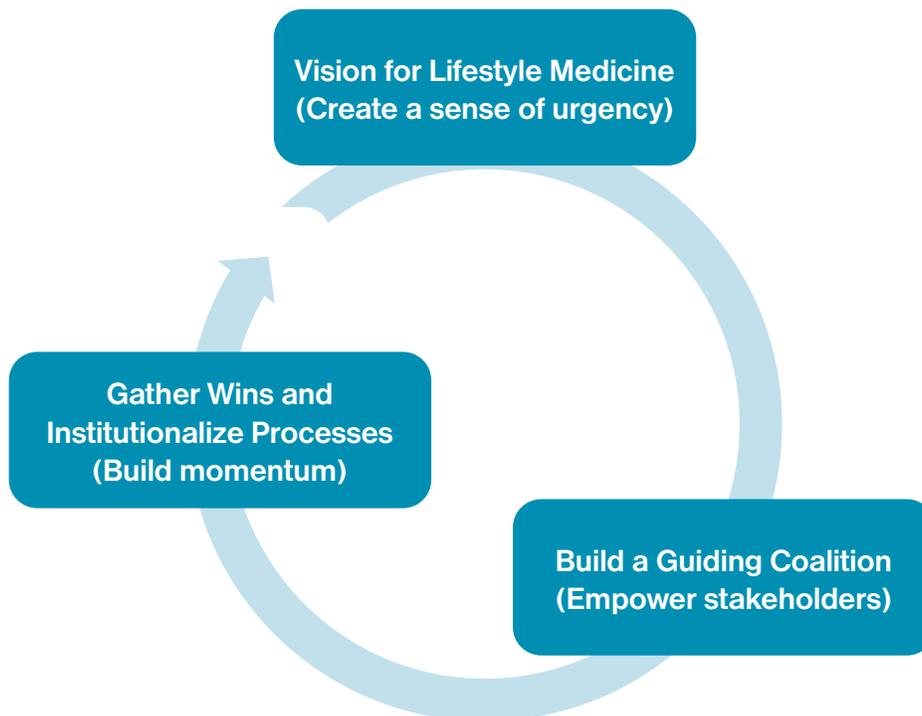


Figure 2. Leading a Lifestyle Medicine Change Initiative

Create a Vision That Fosters a Sense of Urgency

A sense of urgency is necessary to create the requisite motivation and energy needed to create change. Individuals experience a sense of urgency when they feel that the status quo is untenable and that working towards change will benefit them and the organization. This requires balancing between helping the practice's stakeholders recognize the need to incorporate lifestyle medicine and feeling comfortable working towards this goal. Creating a vision for implementing lifestyle medicine into your practice can effectively foster a sense of urgency.

A vision statement should communicate an inspirational idea about a better future. It should be easy to communicate, feasible, emotionally appealing, and strategically aligned with the practice or organization's mission.⁴⁸ A vision statement for lifestyle medicine may foster a sense of urgency if it highlights how potential improvements to patients' health, cost savings, new revenue sources, and improved quality metrics benefit the patient, staff, practice, and health system.

Building a Strong Coalition

All change initiatives require a team effort. A guiding team will lead the change initiative, and others will support the change and do their part.

First, establish a team to guide the lifestyle medicine change initiative. This guiding team is the core to building an energized lifestyle medicine program.⁴⁸ This team should include individuals most excited and engaged in making a change. Ideally, this team is led by a physician with a particular interest in lifestyle medicine. The team would also include non-physicians such as a clinical staff champion (e.g., nurse or medical assistant) and an administrative champion (e.g., administrative assistant, office manager, clerical leader, organizational administrator). Integrating both clinical and non-clinical members will help improve engagement at all levels of the practice. The guiding team should meet regularly to create a vision for change and develop strategic initiatives for the practice. They would be responsible for engaging and educating the staff, assessing the practice, implementing changes, and evaluating successes and opportunities. See the accompanying handout for practice assessment.

Ask the following questions about change efforts:

- Am I satisfied with my health and my patients' health outcomes with my current practice, or do I see room for improvement?
- Do I feel frustrated, overwhelmed, or burned out with a lack of progress toward health goals (mine or my patients)? Am I making a difference for my patients?
- Do I believe that lifestyle change is a critical component for me, my staff, and patients' health to improve? If so, am I able to convey that to patients in my current practice?

Next, communicate your vision for change and empower and engage the stakeholders to act. The team should deliver the message in a memorable, creative, and authentic way that prompts discussion without cynicism.⁴⁸ This will help build buy-in and avoid resistance to change. Barriers should be removed to help empower people to act. Creating a lifestyle medicine culture requires physicians and other clinical staff to discuss the positive impact healthy lifestyles have on patients' health. Holding these conversations may be difficult, as it may question everyone's health behaviors. It is necessary to communicate a clear and consistent message to all relevant stakeholders, including practice staff and patients. Physicians who apply lifestyle change in their own lives can become better advocates for their patients.⁴⁹⁻⁵¹

It is crucial to build an office culture focused on teaching and modeling lifestyle behaviors. See the tips to the right for creating a lifestyle medicine-friendly office culture. The office culture will not change overnight. It requires continued discussion and support for patients and clinical staff at all levels by celebrating wins and addressing any challenges.

Celebrate Success and Institutionalize the Process

It is essential to have some easy successes during your change process to build momentum. Celebrate short-term wins to show stakeholders your work can be successful. It could include changing the practice's aesthetics to be more conducive to healthy lifestyles,

Tips to Build a Lifestyle Medicine Office Culture

- Introduce five-minute lifestyle medicine tips or movement incorporated into regular staff meetings.
- Encourage monthly office-based challenges where staff can track their progress. These might include reducing or eliminating sweetened beverages, increasing steps in a day, or reducing screen usage to one-hour before bedtime. Posting progress in a public place for patients to see will help start conversations among patients and staff. Solicit staff for challenge ideas.
- Host health office lunches and dinners where healthy dishes are served and recipes are shared among staff. Recipes could be compiled into an office cookbook to share with staff and patients. Serve healthy food options at meetings or on food carts.
- Encourage staff walking groups during lunch or before or after office hours. Based on the office location groups can be visible to patients coming and going. Consider walking meetings, which boosts creativity.
- Track patient metrics (e.g., weight loss or body mass index progress, prescriptions discontinued). Empower staff to alert clinicians to significant patient progress (i.e., flag in chart) so it can be recognized at patient visits.
- Celebrate success by highlighting staff and patient progress towards healthy goals during a patient visit or for staff as individual or group recognition.
- Design an office T-shirt worn by physicians and staff to highlight your practice's healthy lifestyle approach. Badges or pins can promote various aspects of health to stimulate lifestyle discussions with patients.
- Use social media to provide information to your patients regarding local events, successes within the practice, patient stories (with appropriate permissions), recipes, and relevant health-related articles or other resources.

incorporating physical activity vital signs during patient visits, or other small but significant clinical process changes. Over time, wins should increase, and the credibility obtained from short-term wins can be used to tackle bigger goals requiring system-wide change, such as implementing lifestyle medicine assessment forms into office visit templates and training staff to collect them.⁴⁷ One effective tool for doing this is the Plan, Do, Study, Act (PDSA) approach.⁵² This approach tests interventions on a smaller scale, empowering stakeholders to provide input and rapid feedback on the intervention's effectiveness before widespread implementation. PDSA cycles should be focused on a specific change and should be reasonably rapid – not taking longer than three months.⁵³ Lifestyle medicine needs to be rooted in the organization's norms and values. Otherwise, the practice of lifestyle medicine will degrade once pressure is removed or the coalition is disbanded. Keep working until lifestyle medicine is entirely incorporated into everyday practice.

Incorporating Lifestyle Medicine in Clinical Care

The foundation of lifestyle medicine's efficacy is the ability to facilitate patient behavior change. The Transtheoretical Model (TTM), or Stage of Change model, is the most widely used behavior change framework.⁵⁴ While it was initially developed to help people quit smoking, it applies to lifestyle behaviors as well. The model posits that individuals move through six stages of change: precontemplation, contemplation, preparation, action, maintenance, and termination.

Leveraging an individual's current stage of change allows targeted interventions to motivate and inspire an individual to progress to the next stage. The goal is for individuals to incorporate their behavior into daily life without continued assistance in maintaining the behavior. However, relapses can happen, and it is important to provide consistent motivation and support over time to minimize setbacks.

Various team members (i.e., physicians, nurses, physician assistants, medical assistants, health educators, fitness trainers, nutritionists, dietitians, behavioral therapists, social workers, administrative staff) may play different roles during these stages of change. Some of the functions might be distinct for certain care team members, but other responsibilities might be interchangeable among all staff members depending on the practice's type and size. The team effort – with shared goals, clear roles, mutual trust, effective communication, and measurable process and outcomes – can considerably enhance care quality.^{55,56}

The following table lists each stage of change with the associated interventions and team members' roles to help patients proceed from one stage to the next.

TABLE 1: Incorporating the Lifestyle Medicine Approach in the Clinical Care Team

STAGE OF BEHAVIOR CHANGE ⁵⁴	INTERVENTIONS
<p>Precontemplation stage The patient is not engaged and has no intention of lifestyle change.</p>	<ul style="list-style-type: none"> • Assess the barriers hindering the patient’s ability to incorporate lifestyle change such as lack of knowledge, motivation, cost, sociocultural environment (access to housing, healthy food, parks or open space, transportation)^{45,56} • Act as an advocate for patient to fight barriers
<p>Contemplation stage The patient is not exercising any change but is committed to acting soon.</p>	<ul style="list-style-type: none"> • Increase the patient’s awareness of their current behavioral pattern
<p>Preparation stage The patient is taking some steps towards change (e.g., joining a gym, signing up for exercise classes).</p>	<ul style="list-style-type: none"> • Develop an action plan in coordination with the patient • Help the patient connect with exercise classes or community resources as needed • Educate the patient
<p>Action phase The patient is acting on behavior change (e.g., eating better, being more physically active, quitting smoking).</p>	<ul style="list-style-type: none"> • Regular education • Keep track of progress
<p>Maintenance The patient is maintaining daily lifestyle changes.</p>	<ul style="list-style-type: none"> • Ensure consistency • Regular follow up
<p>Relapse The patient is failing to maintain a routine and falling back into previous habits.</p>	<ul style="list-style-type: none"> • Find out the reason for relapse • Develop a new action plan
<p>Team Members: physicians, nurse practitioners, registered nurses, physician assistants, medical assistants, social workers, fitness trainers, nutritionists, dieticians, behavioral health therapists, administrative staff, information technology staff, receptionists</p>	

Tools for the Lifestyle Medicine Team

Effectively practicing lifestyle medicine requires understanding each lifestyle medicine area and assessing whether one has facilitated behavior change across the domains.

Start the comprehensive assessment using the Lifestyle Medicine Assessment (LMA) screening tool. The LMA consists of 21 items that succinctly screen for healthy behavior across all lifestyle medicine domains: connectedness, nutrition, movement, recovery, and substance use. Individuals can earn up to 10 points for each LMA domain with a possible total of 50 points for the entire assessment. The lower the score, the more opportunity to improve patient health through lifestyle behavior change. The tool can quickly identify areas of success that should be commended and reveal areas that require additional assistance.²⁴

An important feature of the LMA tool is that every item is a behavior that the individual can control. While patients can't choose how much weight they lose, they can decide to exercise for a certain number of minutes or eat more vegetables. The LMA tool can be repeated weekly to monitor behavior changes over time. However, it can also be adapted for an annual exam by changing the instruction language from "the last seven days" to "an average week."

While a patient with a score of less than 10 in any domain could be improved upon, your care team should pay particular attention to any score less than 7. These represent areas that should be explored further using a domain-specific tool. The following are the most commonly used domain-specific tools.

TABLE 2: Lifestyle Medicine Assessment Tools

Lifestyle Domains	Assessment tools	
Connectedness	Social Support Questionnaire (SSQ6)	This instrument has six questions that ask about the people in your life and whom you can rely on to get help or support. ⁵⁷
Nutrition	Starting The Conversation	This eight-item instrument asks about food frequency. Each item can score between 0-2. The higher the score, the worse the food habit. ⁵⁸
Movement	Physical Activity Vital Signs	This tool asks questions about the average time spent on physical activity. ⁵⁹
Recovery (Sleep, Stress)	Pittsburg Sleep Quality Index	This self-rated questionnaire assesses sleep quality and disturbances over one month. It calculates the patient's scores on seven components. The higher the score, the worse the quality of sleep. ^{60,61}
	Perceived Stress Scale	This 10-item tool measures the current perceived level of stress in an individual. Scores range 0-40, with higher numbers indicating higher perceived stress. A four-item questionnaire can also be made from questions 2, 4, 5, and 10. ⁶²
Substance Use	National Institute on Drug Abuse (NIDA) Quick Screen	This tool screens for alcohol, tobacco products, prescription drugs for non-medical reasons, and illegal drug use. The responses range from "never" to "daily" or "almost daily." If a patient answers "yes" to any substance, proceed with the NIDA-Modified ASSIST questionnaire. ⁶³

There are numerous other tools available to assess each lifestyle medicine domain.

Reimbursement and Coding

All insurance plans, including Medicare and Medicaid, cover initial preventive physical examinations and annual wellness visits. These plans also cover various individual screening and counseling services that fall under lifestyle medicine interventions.

Conclusion

Changing behavior can be challenging – especially for patients with a multitude of socioeconomic factors. However, incorporating lifestyle medicine into your practice can make a difference in your team and patients' health and forge lasting connections to build healthier communities.

As you and your practice work toward incorporating lifestyle medicine, please check back with the AAFP for new resources at www.aafp.org/lifestylemedicine. Please contact us for feedback or other questions about lifestyle medicine and health equity at healthequity@aafp.org.

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