



Implementing Lifestyle Prescriptions in Primary Care

Contributing authors on behalf of Team Best Practices:

Eileen Seeholzer, MD, MS, Case Western Reserve University
 Kate Gawlik, DNP, APRN-CNP, The Ohio State University
 Shanail Berry Lampkin, MD, Case Western Reserve University
 Randy Wexler, MD, MPH, The Ohio State University

Healthy lifestyle behaviors contribute to the prevention, improvement, and management of chronic medical conditions. These behaviors alone, or combined with medication, are the foundation of treatment for many chronic diseases, especially hypertension and diabetes.¹⁻³

The importance of recommending and prescribing healthy lifestyle behaviors is often overlooked or under-emphasized during patient visits.⁴ This document discusses the use of lifestyle prescriptions in primary care and emphasizes simple strategies clinicians can use to incorporate this tool into practice.

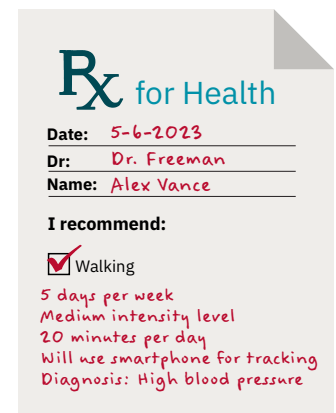
What Is a Lifestyle Prescription?

A lifestyle prescription is a plan that a clinician and patient develop together to target a mutually agreed upon healthy lifestyle change. For example, a lifestyle prescription can guide how specific diet or exercise interventions that are effective for treating chronic disease and reducing cardiovascular risk will be implemented.⁵

Behavioral recommendations that are presented as lifestyle prescriptions demonstrate to patients the importance of adopting lifestyle changes and treating them as daily, regular doses of medicine. These prescriptions have been shown to be effective for increasing physical activity, decreasing body mass index, increasing self-reported consumption of fruits and vegetables, and **smoking cessation** (especially if connected to cessation support).⁶⁻¹⁰

A lifestyle prescription outlines a specific, individualized plan for a recommended behavior (e.g., increasing physical activity, improving dietary choices), including how the patient will make the behavioral change. The format implies that the “type” and “dose” of the medication can be changed or adjusted over time to improve effectiveness. The prescription is meant to improve a patient’s clarity, engagement, confidence, prioritization, and commitment to making and sustaining the selected plan as part of their health management.

Figure 1. Examples of Lifestyle Prescriptions



Performing a Lifestyle History and Physical Examination

Before writing a lifestyle prescription with a patient, the clinical team should first perform a physical examination and obtain or update a patient's lifestyle history. The history should include social determinants of health, which are necessary to understand a patient's opportunities and barriers to making various choices at a given time.

A solid understanding of a patient's unique circumstances is important to the development of practical plans. For example, instructing a patient to walk regularly outside is not helpful if the patient feels it is unsafe to walk in their neighborhood, or has caregiving duties that prevent them from leaving the house to walk. Directing a patient to increase their consumption of fruits and vegetables is not reasonable if they cannot access or afford them regularly.

Lifestyle History Topics to Consider

- **Work/School:** Hours worked, activity in job, food and activity options (e.g., fitness facility).
- **Transportation:** Neighborhood walkability; reliability of transportation; work/school commute time, cost, and type.
- **Caregiving Obligations:** For household members and other loved ones.
- **Home Built Environment:** Stairs, exercise equipment, space, kitchen equipment, and housing stability.
- **Skills/Experience:** Comfort with meal preparation and activities, ability to manage one's own health and quality of life.
- **Physical Activity:** Prior/current exercise and preferences, nearby parks/exercise facilities and memberships.
- **Food:** Typical choices, convenient and affordable grocery options, and food insecurity.
- **Personal Supports for Healthy Change:** At home, other relationships, support groups, social isolation issues, and financial strain.
- **Personal Safety Issues:** Home, workplace, and neighborhood.
- **Pain or Other Physical Limitations That May Impede Physical Activity**
- **Mental Health and Substance Use:** Mental health disorders, stress, tobacco and alcohol use, and intimate partner violence.

Lifestyle History Resources

- *Strategies for Promotion of a Healthy Lifestyle in Clinical Settings: Pillars of Ideal Cardiovascular Health: A Science Advisory From the American Heart Association:*
This article includes tools and examples to assess dietary history, activity, tobacco and alcohol use, and sleep, and outlines practical steps for changing behavior.¹¹
- *Social Determinants of Health Screening Forms:*
Example forms can be found on [Cardi-OH.org](https://www.heart.org) and [AAFP.org](https://www.aafp.org).
- *Physical Activity Readiness Questionnaire (PAR-Q):*
For patients planning to start low- to moderate-intensity exercise, a simple tool like the **PAR-Q+** can assess exercise risk.¹² In nearly all cases, the benefits from activity outweigh the risks.

Assessing Patient Readiness

Before considering a lifestyle prescription, clinicians should help patients consider their readiness. A patient's stage of readiness to change is behavior-specific and may alter over time depending on circumstances. This means a patient may be ready for significant changes in physical activity, whereas they may be ready for only small dietary changes or even none at all. The transtheoretical model (TTM) categorizes readiness for behavior change into five stages: Precontemplation, Contemplation, Preparation, Action, Maintenance (Figure 2).^{13,14}

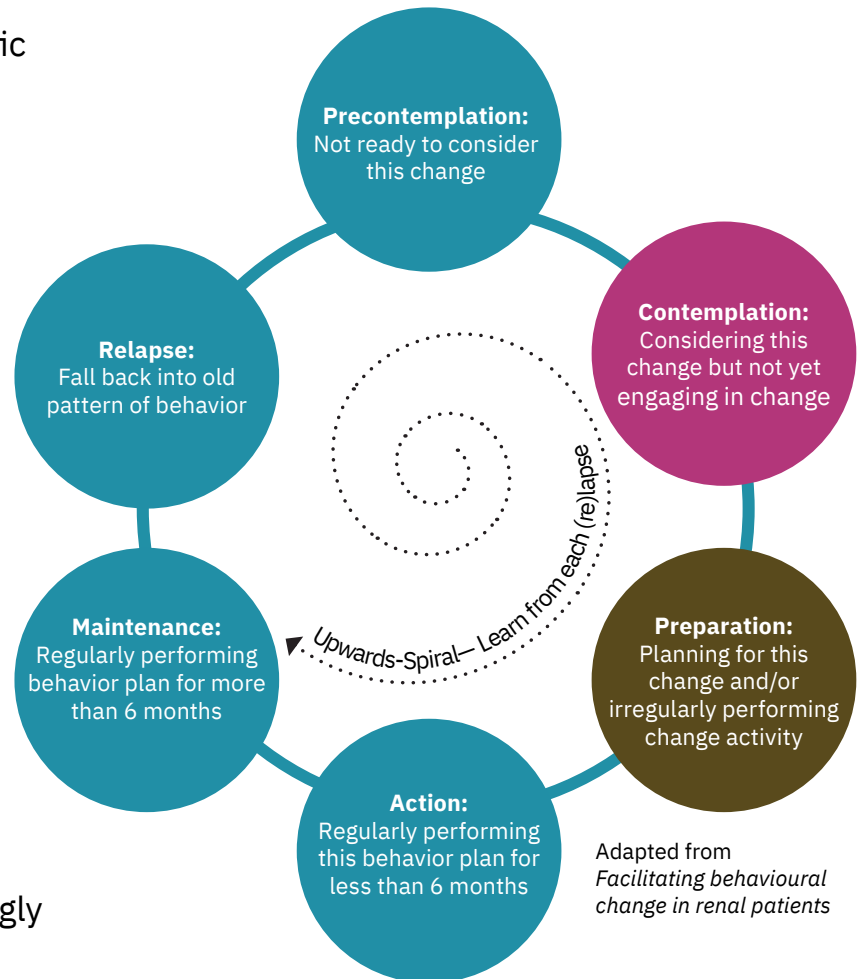
The TTM has demonstrated strong evidence for continuous and effective use to help patients change health behaviors.⁸ A patient's current stage will help to determine whether and when to use a lifestyle prescription effectively. Lifestyle prescriptions should be strongly considered during the contemplation, Preparation, and Relapse stages of behavior change.

Patient-centered tools, such as **motivational interviewing** or the 5A's approach (Ask-Assess-Advise-Assist-Arrange), foster a shared decision making process (see **Figure 3**).

Other Considerations to Discern Readiness to Change:¹¹

- **Motivation:** Patient is ready to make the type of long-term change that is effective.
- **Stress Level:** Patient is free enough of major life crises to adopt/change behaviors.
- **Psychiatric Issues:** Patient does not have significantly untreated or under-treated issues (e.g., depression, substance abuse, bulimia nervosa).
- **Medical Issues:** Patient's medical problems are stable.
- **Time Availability:** Patient can devote the necessary time for at least 13 to 26 weeks.

Figure 2. Transtheoretical Model (TTM) of Patient Readiness to Change

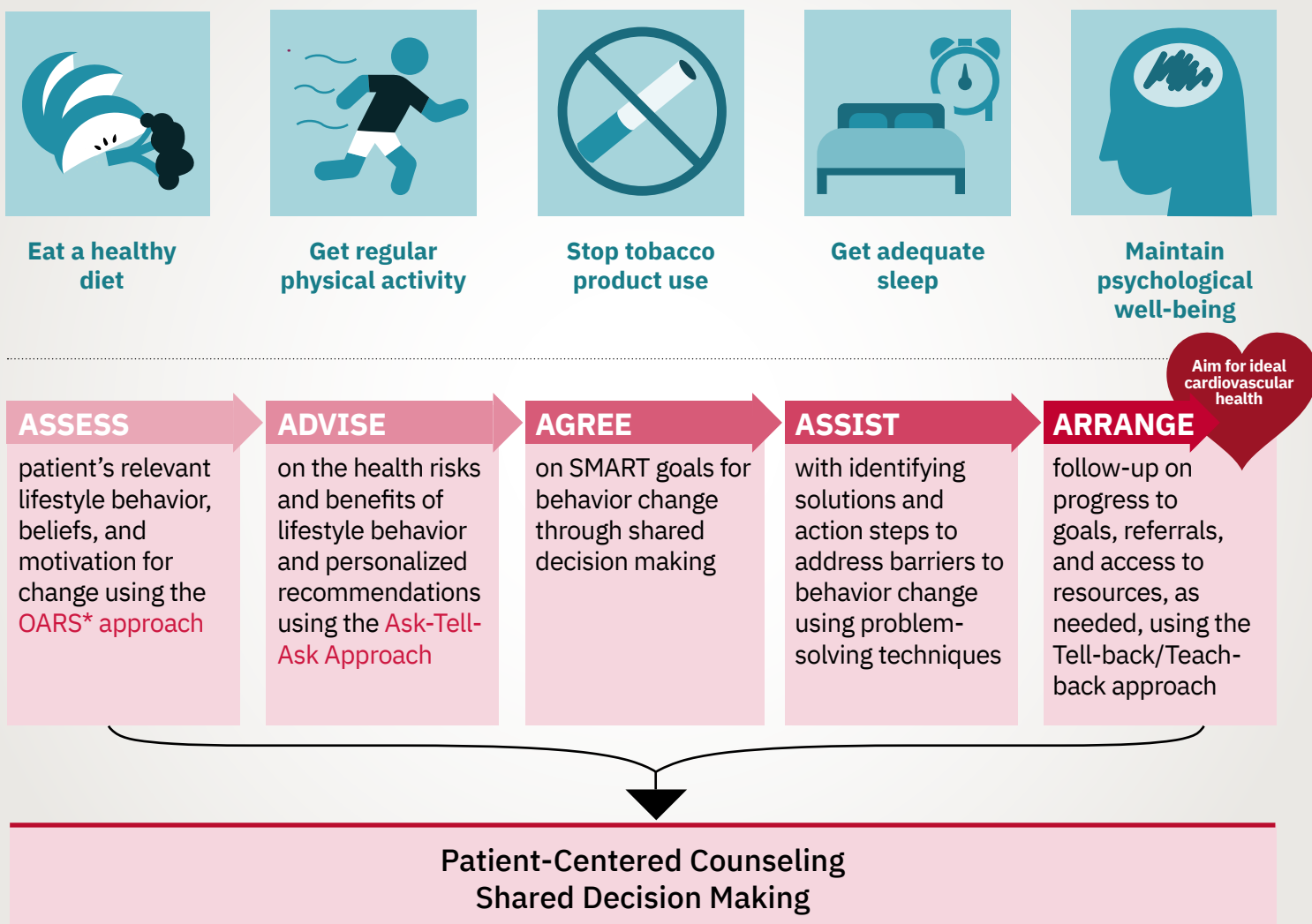


Writing Lifestyle Prescriptions

Lifestyle prescriptions require a patient to actively follow a diet, activity, or other recommendation anywhere from several times a week to several times a day. The patient should understand the potential short- and long-term effectiveness or benefits of the “medicine” they plan to “take” for improving health, reducing risk, or managing a chronic condition. Use the 5A’s to work with the patient to develop a lifestyle prescription that fits the patient’s readiness, needs, and goals.

The SMART (Specific, Measurable, Achievable, Relevant, Time-Base) goal format is commonly used for lifestyle behavior change.¹⁵ Figure 3 illustrates how to combine the 5A’s and the SMART goal format.¹¹

Figure 3. The 5A’s Model for Lifestyle-Related Behavior Change Counseling in Clinical Settings



CVD Indicates cardiovascular disease

*OARS=Open-ended questions/affirm what patient says/reflect what patient says/summarize

Adapted from *Strategies for Promotion of a Healthy Lifestyle in Clinical Settings: Pillars of Ideal Cardiovascular Health: A Science Advisory From the American Heart Association*

The FITT (Frequency, Intensity, Time, Type) is a format for physical activity plans and the TAF (Type, Amount, Frequency) is a format for nutrition plans. Table 1 shows examples of lifestyle prescriptions using FITT and TAF.¹⁶

Table 1. Lifestyle Prescriptions Using FITT and TAF

Exercise		Nutrition	
Frequency	4 times each week	Type	Vegetables such as broccoli, kale, and brussel sprouts
Intensity	Moderate to vigorous based on age (for more information – click here)	Amount	1 serving (1/2 cup cooked, 1 cup fresh)
Time	At least 30 minutes each session	Frequency	Once daily
Type	Walking		

Adapted from *Lifestyle medicine competencies for primary care physicians*¹⁶

Tips for Effective Design

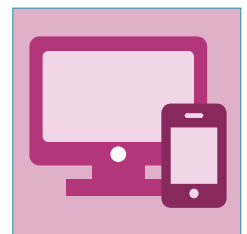
Base prescriptions on patient’s starting place and provide them to the patient verbally and in writing. For example:

- If the long-term goal for cardiovascular risk reduction is to reach 150 or more minutes of walking weekly over most days, use the FITT format (e.g., *Starting Monday, I will walk to the mailbox two times a day and take the stairs two times a day.*)
- If the issue is sleep hygiene, establish a SMART goal (e.g., *Starting Sunday, I will be in bed and be device-free by 10:30 PM nightly.*)



Engage patients in tracking efforts (e.g., electronic, paper):

- For diet and activity changes, patients who track behaviors are more successful than those who do not.¹⁷⁻¹⁹ With tracking, patients do better with consistent lifestyle “medicine” adherence and often see more clearly the relationship between their efforts and their results (Figure 3).¹⁹
- When possible, include suggestions for methods (e.g., journaling, use of stress management tools) and metrics (e.g., food intake, cigarettes smoked) for tracking behavior.



Plan for follow-up:

- To check progress and assess for barriers, schedule timely follow-up visits or include the discussion as part of regular chronic care visits with the clinician or a team member.
- Adjust the lifestyle prescription, as necessary, as patients move between behavior change and motivation levels.
- Use the electronic medical record or add the lifestyle prescription to the medication list to ensure sustained accountability, as many patients see multiple clinicians.



Using an Interprofessional Team Approach

Ensuring successful adoption and implementation of a lifestyle prescription may require additional care partners.

- Registered dietitians can help patients to practically apply recommended dietary changes.
- Social workers can help to alleviate barriers, such as transportation issues, food insecurity concerns, and housing instability.
- Behavioral health specialists or community health workers can provide additional strategies to help the patient learn and better manage unique stressors that may affect adherence.

All care team members should be aware of community and office resources to assist patients when barriers are encountered or potential opportunities are available. For example, connecting patients to local food banks or discount grocers may improve access and reduce stigma for patients who have food insecurity, and identifying community resources for exercise increases patients' awareness of safe and feasible options.

Supporting Patients Using Community and Office Resources

When clinician and care team members familiarize themselves with and have lists of options available in the community served, patients can consider these suggestions during the plan-making process:

- Recreation centers or low-cost gyms that patients can use to follow a regular, structured exercise plan, regardless of weather.
- Exercise videos that can be checked out of the library.
- Outdoor walks if there is a local park or safe space in a patient's neighborhood.
- Free, internet-based exercise resources (e.g., YouTube or TikTok), apps for tracking food and activity, or electronic food and diet resources (for patients with dependable internet access and a smart phone, tablet, or TV).

References

1. American Diabetes Association. Standards of Medical Care in Diabetes-2022 abridged for primary care providers. *Clin Diabetes*. 2022;40(1):10-38. doi:10.2337/cd22-as01.
2. Arnett DK, Blumenthal RS, Albert MA, et al. 2019 ACC/AHA guideline on the primary prevention of cardiovascular disease: a report of the American College of Cardiology/American Heart Association task force on clinical practice guidelines. *Circulation*. 2019;140(11):e596-e646. doi:10.1161/CIR.0000000000000678.
3. Whelton PK, Carey RM, Aronow WS, et al. 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA guideline for the prevention, detection, evaluation, and management of high blood pressure in adults: executive summary: a report of the American College of Cardiology/American Heart Association task force on clinical practice guidelines. *J Am Coll Cardiol*. 2018;71(19):2199-2269. doi:10.1016/j.jacc.2017.11.005.
4. Goldberg DM, Cho B-Y, Lin H-C. Factors influencing U.S. physicians' decision to provide behavioral counseling. *Prev Med*. 2019;119:70-76. doi:10.1016/j.ypmed.2018.12.015.
5. US Preventive Services Task Force, Krist AH, Davidson KW, et al. Behavioral counseling interventions to promote a healthy diet and physical activity for cardiovascular disease prevention in adults with cardiovascular risk factors: US Preventive Services Task Force recommendation statement. *JAMA*. 2020;324(20):2069-2075. doi:10.1001/jama.2020.21749.
6. Cunningham P. Patient engagement during medical visits and smoking cessation counseling. *JAMA Intern Med*. 2014;174(8):1291-1298. doi:10.1001/jamainternmed.2014.2170.
7. Grandes G, Sanchez A, Sanchez-Pinilla RO, et al. Effectiveness of physical activity advice and prescription by physicians in routine primary care: a cluster randomized trial. *Arch Intern Med*. 2009;169(7):694-701. doi: 10.1001/archinternmed.2009.23.
8. Cavanagh M, Jurkowski J, Bozlak C, et al. Veggie Rx: an outcome evaluation of a healthy food incentive programme. *Public Health Nutr*. 2017;20(14):2636-2641. doi:10.1017/S1368980016002081.
9. Lyonnais MJ, Rafferty AP, Spratt S, Jilcott Pitts S. A produce prescription program in eastern North Carolina results in increased voucher redemption rates and increased fruit and vegetable intake among participants. *Nutrients*. 2022;14(12):2431. doi:10.3390/nu14122431.
10. Marcinkevage J, Auvinen A, Nambuthiri S. Washington state's fruit and vegetable prescription program: improving affordability of healthy foods for low-income patients. *Prev Chronic Dis*. 2019;16:E91. doi:10.5888/pcd16.180617.
11. Kris-Etherton PM, Petersen KS, Després J-P, et al. Strategies for promotion of a healthy lifestyle in clinical settings: pillars of ideal cardiovascular health: a science advisory from the American Heart Association. *Circulation*. 2021;144(24):e495-e514. doi:10.1161/CIR.0000000000001018.
12. Warburton DER, Jamnik VK, Bredin SS, et al. Evidence-based risk assessment and recommendations for physical activity clearance: an introduction. *Appl Physiol Nutr Metab*. 2011;36 Suppl 1:S1-S2. doi:10.1139/h11-060.
13. Prochaska JO, DiClemente CC. Stages and processes of self-change of smoking, toward an integrative model of change. *J Consult Clin Psychol*. 1983;51(3):390-395. doi:10.1037/0022-006X.51.3.390.
14. Hashemzadeh M, Rahimi A, Zare-Farashbandi F, et al. Transtheoretical model of health behavioral change: a systematic review. *Iran J Nurs Midwifery Res*. 2019;24(2):83-90. doi:10.4103/ijnmr.IJNMR_94_17.
15. Dysinger WS. Lifestyle medicine prescriptions. *Am J Lifestyle Med*. 2021;15(5):555-556. doi:10.1177/15598276211006627.
16. Dysinger WS. Lifestyle medicine competencies for primary care physicians. *Virtual Mentor*. 2013;15(4):306-310. doi: 10.1001/virtualmentor.2013.15.4.medu1-1304.
17. Hodkinson A, Kontopantelis E, Adeniji C, et al. Interventions using wearable physical activity trackers among adults with cardiometabolic conditions: a systematic review and meta-analysis. *JAMA Netw Open*. 2021;4(7):e2116382. doi: 10.1001/jamanet-workopen.2021.16382.
18. Fakhri El Khoury C, Karavetian M, Halfens RJG, et al. The effects of dietary mobile apps on nutritional outcomes in adults with chronic diseases: a systematic review and meta-analysis. *J Acad Nutr Diet*. 2019;119(4):626-651. doi: 10.1016/j.jand.2018.11.010.
19. Park J-M, Choi J-E, Lee HS, et al. Effect of walking steps measured by a wearable activity tracker on improving components of metabolic syndrome: a prospective study. *Int J Environ Res Public Health*. 2022;19(9):5433. doi:10.3390/ijerph19095433.

Partners



In partnership with



The Ohio Cardiovascular & Diabetes Health Collaborative is funded by the Ohio Department of Medicaid and administered by the Ohio Colleges of Medicine Government Resource Center. The views expressed in this document are solely those of the authors and do not represent the views of the state of Ohio or federal Medicaid programs.