

Tools for the Lifestyle Medicine Team

Numerous tools are available to assess the lifestyle medicine domains found in the implementation guide and resources. Additional domains with corresponding tools are also listed and described in the table below.

Tools were specifically selected for their brevity, validity, and/or relevance to patient care.

Lifestyle Domain	Assessment Tool	Description
Global Assessment	RAND 36-Item Short Form (SF-36)	The tool focuses on eight health concepts: physical functioning, bodily pain, role limitations due to physical health problems, role limitations due to personal or emotional problems, emotional well-being, social functioning, energy/fatigue, and general health perceptions. ¹²
Connectedness <i>Relationships and social</i> <i>connectedness can be</i> <i>challenging to measure,</i> <i>so various proxy measures</i> <i>are used.</i>	Patient Health Questionnaire-9 (PHQ-9) and PHQ-2	The PHQ-9 is a nine-item instrument used for the diagnosis of depression. The score ranges from 0-27, with a three-point score possible for each item. A score of 5, 10, 15, or 20 determines the cutoff point for mild, moderate, moderately severe, and severe depression. ³ The PHQ-2 is the shorter version with only two items for depression screening. ⁴
	Meaning in Life Questionnaire (MLQ)	The tool is a 10-item measure for the "presence of meaning in life" and "search for meaning in life" subscales. The items are rated on a seven-point scale from "absolutely true" to "absolutely untrue". ⁵⁷
Nutrition <i>A thorough assessment can</i> <i>be conducted in collaboration</i> <i>with a dietitian.</i>	24-hour Dietary Recall Interview	The structured interview asks participants to recall all food and drink they have consumed in the previous 24 hours (usually from midnight to midnight). ⁸
	Daily Food Diary	A food diary can help the patient note their daily food intake.9
	Mediterranean Diet Adherence Screener (MEDAS)	The 14-item food frequency questionnaire has a total score ranging from 0-14. A score of five and under is considered weak adherence, 6-9 is moderate to fair adherence, and 10 or greater indicates good adherence to diet. ^{10,11}
	Rapid Eating Assessment for Participants – shortened version (REAP-S)	The shortened version of REAP consists of 13 questions to assess the nutrient intake for the previous week. Possible scores range from 13-39, a higher score indicating a higher diet quality. ¹²

Lifestyle Domain	Assessment Tool	Description
Movement (or Physical Activity) A detailed assessment can be conducted in collaboration with a fitness trainer.	Preparticipation Screening	The tool helps identify risk factors before starting exercise. ¹³
	International Sedentary Assessment Tool (ISAT)	The six-item tool assesses the sedentary behavior over the past week. ¹⁴
	Sedentary Time and Activity Reporting Questionnaire (STAR-Q) for adults	The self-administered questionnaire captures information on all types of activities and sedentary behaviors for the prior month. ¹⁵
	International Physical Activity Questionnaire (IPAQ)	There are two versions of IPAQ – a short- and long-form questionnaire – both involve a seven-day recall of physical activity. The short form is feasible to administer, and the long form is used primarily for research purposes. ¹⁶
	 Consider assessing all health-related fitness domains such as: Body composition: Bioelectrical impedance analysis (BIA), skinfolds, dual-energy X-ray absorptiometry (DXA), waist circumference, and body mass index (BMI)¹⁷ Mobility for older adults: Timed Up & Go (Stand up from a chair, walk three meters, turn around, and sit back down in the chair)¹⁸ Cardiorespiratory fitness: YMCA three-minute step test (six-minute walking test for patients 40-80 years old)¹⁹ Muscular strength: Grip test^{20,21} Muscular endurance: Push-ups or curl-ups Flexibility: Sit and reach 	
Recovery	Consensus Sleep Diary	The questionnaire gathers information about daily sleep patterns. ²²
	Single-item Sleep Quality Scale (SQS)	The self-administered questionnaire directs respondents to rate the overall quality of sleep over a 7-day recall period. The score ranges from 0-10 with 0 as terrible to 10 as excellent. ²³
	Generalized Anxiety Disorder (GAD-7)	The seven-item tool helps diagnose an anxiety disorder. It asks the respondents to rate anxiety symptoms on a Likert scale of 0-3. Scores of 5, 10, and 15 represent mild, moderate, and severe levels of anxiety, respectfully. ²⁴
Substance Use	CAGE questionnaire	The tool has four questions to screen patients for addictive disorders. Two "yes" responses indicate a positive screening test. ²⁵
	Single Alcohol Screening Question (SASQ)	The tool is a single question for unhealthy alcohol use: "How many times in the past year have you had X or more drinks in a day?" 'X' is five drinks for men and four drinks for women. ²⁶
	Alcohol Use Disorder Identification Test- Consumption (AUDIT-C)	The three-question instrument screens for alcohol consumption. The sum of three question scores ranges from 0-12. Four or more points in men and three or more points in women suggest alcohol misuse. ²⁷
	Screener and Opioid Assessment for Patients with Pain-Revised (SOAPP-R)	The 24-item instrument predicts problematic drug-related behaviors, with a score of 18 or greater indicating a risk of opioid misuse. ²⁸
Behavior Change	Readiness Ruler	The tool examines the patient's readiness to change on a scale of 1-10. The higher the score, the greater the likelihood to change. ²⁹
Social Determinants of Health	Social Needs Screening Tool	The tool screens for the social needs of housing, food, transportation, utilities, child care, employment, education, finances, and personal safety. ³⁰

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REFERENCES

- RAND. 36-Item Short Form Survey (SF-36) Scoring Instructions. Accessed April 8, 2021. www.rand.org/health-care/surveys_tools/ mos/36-item-short-form/scoring.html
- RAND. 36-Item Short Form Survey Instrument (SF-36). Accessed April 8, 2021. www.rand.org/health-care/surveys_tools/mos/36-itemshort-form/survey-instrument.html
- Kroenke K, Spitzer RL, Williams JBW. The PHQ-9: validity of a brief depression severity measure. J Gen Intern Med. 2001;16(9):606-613.
- Kroenke K, Spitzer RL, Williams JBW. The patient health questionnaire-2: validity of a two-item depression screener. *Med Care*. 2003;41(11):1284-1292.
- Positive Psychology Center. Meaning in Life Questionnaire. Accessed April 8, 2021. https://ppc.sas.upenn.edu/resources/questionnairesresearchers/meaning-life-questionnaire
- Steger MF. The Meaning in Life Questionnaire. Accessed April 8, 2021. www.michaelfsteger.com/?page_id=13
- Steger MF, Frazier P, Oishi S, Kaler M. The Meaning in Life Questionnaire: assessing the presence of and search for meaning in life. *J Couns Psychol.* 2006;53(1):80-93.
- Center for Disease Control and Prevention. 24-hour Dietary Recall Interview. Accessed April 8, 2021. www.cdc.gov/nchs/data/nhanes/ dietary.pdf
- Center for Disease Control and Prevention. Improving your eating habits. Accessed April 8, 2021. www.cdc.gov/healthyweight/losing_ weight/eating_habits.html
- García-Conesa MT, Philippou E, Pafilas C, et al. Exploring the validity of the 14-item Mediterranean Diet Adherence Screener (Medas): a cross-national study in seven European countries around the Mediterranean region. *Nutrients*. 2020;12(10):1-18.
- Shroder H, Fito M, Estruch R, et al. A short screener is valid for assessing Mediterranean diet adherence among older Spanish men and women. *J Nutr.* 2011;141(6):1140-1145.
- Johnston CS, Bliss C, Knurick JR, Scholtz C. Rapid Eating Assessment for Participants [shortened version] scores are associated with Healthy Eating Index-2010 scores and other indices of diet quality in healthy adult omnivores and vegetarians. *Nutr J.* 2018;17(1):89.
- American College of Sports Medicine. Health care providers' action guide. Accessed April 8, 2021. www.exerciseismedicine.org/assets/ page_documents/EIM Health Care Providers Action Guide clickable links.pdf
- Prince SA, LeBlanc AG, Colley RC, Saunders TJ. Measurement of sedentary behaviour in population health surveys: a review and recommendations. *PeerJ.* 2017;2017(12):e4130.
- Csizmadi I, Neilson HK, Kopciuk KA, et al. The Sedentary Time and Activity Reporting Questionnaire (STAR-Q): reliability and validity against doubly labeled water and 7-day activity diaries. *Am J Epidemiol.* 2014;180(4):424-435.
- Craig CL, Marshall AL, Sjostrom M, et al. International Physical Activity Questionnaire: 12-country reliability and validity. *Med Sci Sport Exerc.* 2003;35(8):1381-1395.

- Committee on Fitness Measures and Health Outcomes in Youth, Food and Nutrition Board, Institute of Medicine, Pate R, Oria M, Pillsbury L. *Health-related Fitness Measures for Youth: Body Composition.* Washington, D.C.: National Academies Press; 2012.
- Podsiadlo D, Richardson S. The timed "Up & Go": a test of basic functional mobility for frail elderly persons. *J Am Geriatr Soc.* 1991;39(2):142-148.
- Santo AS, Golding LA. Predicting maximum oxygen uptake from a modified 3-minute step test. *Res Q Exerc Sport.* 2003;74(1):110-115.
- Litchfield RE. Grip strength–What is it? What does it mean? Accessed April 8, 2021. http://lib.dr.iastate.edu/extension_families_ pubs/38
- Trosclair D, Bellar D, Judge LW, Smith J, Mazerat N, Brignac A. Handgrip strength as a predictor of muscular strength and endurance. J Strength Cond Res. 2011;25:S99.
- Carney CE, Buysse DJ, Ancoli-Israel S, et al. The consensus sleep diary: standardizing prospective sleep self-monitoring. *Sleep.* 2012;35(2):287-302.
- Snyder E, Cai B, DeMuro C, Morrison MF, Ball W. A new single-item sleep quality scale: results of psychometric evaluation in patients with chronic primary insomnia and depression. *J Clin Sleep Med.* 2018;14(11):1849-1857.
- Spitzer RL, Kroenke K, Williams JBW, Löwe B. A brief measure for assessing generalized anxiety disorder: The GAD-7. Arch Intern Med. 2006;166(10):1092-1097.
- 25. Rustin TA. Assessing nicotine dependence. *Am Fam Physician*. 2000;62(3):579.
- Smith PC, Schmidt SM, Allensworth-Davies D, Saitz R. Primary care validation of a single-question alcohol screening test. *J Gen Intern Med.* 2009;24(7):783-788.
- Frank D, DeBenedetti AF, Volk RJ, Williams EC, Kivlahan DR, Bradley KA. Effectiveness of the AUDIT-C as a screening test for alcohol misuse in three race/ethnic groups. *J Gen Intern Med.* 2008;23(6):781-787.
- Butler SF, Fernandez K, Benoit C, Budman SH, Jamison RN. Validation of the revised Screener and Opioid Assessment for Patients With Pain (SOAPP-R). *J Pain.* 2008;9(4):360-372.
- 29. Indiana University. Readiness Ruler. Accessed April 8, 2021. https://iprc.iu.edu/sbirtapp/mi/ruler.php
- American Academy of Family Physicians. Social Needs Screening Tool. Accessed April 8, 2021. www.aafp.org/dam/AAFP/documents/ patient_care/everyone_project/hops19-physician-form-sdoh.pdf