



A Primary Care Guide to Lifestyle and Weight Management: Helping patients find their way to LiVe Well


This care process model (CPM) was created by a multidisciplinary team of physicians and other healthcare providers at Intermountain Healthcare. Its purpose is to summarize and promote evidence-based approaches to lifestyle and weight management, and to facilitate implementation in routine primary care. The CPM moves beyond WHAT to do — it focuses on WHY it matters and HOW to be successful. The emphasis is on improved health and well-being, not just weight loss.

► What's New in this CPM?

- **Expansion in scope from the previous CPM:** Rather than focusing only on weight management, this CPM encompasses lifestyle behaviors that lead to overall health and well being — the same behaviors that support healthy weight management. In addition to physical activity, nutrition, and weight, new sections focus on other lifestyle factors not previously highlighted: sleep, stress, social support, mental health, and alcohol and tobacco use.
- **Added focus on WHY and HOW, not just WHAT:** The augmented sections in this CPM were driven by feedback from physicians who asked, “What can we do to be more effective? How can we stay engaged in the challenge to promote healthy behaviors in our patients? How can we keep patients engaged?”
 - **Purpose and principles:** Includes information to promote understanding of key motivating factors for physicians and patients; in other words, finding the “WHY.”
 - **Team strategies and tools:** Includes ideas for helping clinics work as a team: setting a team goal, identifying roles, and defining a workflow process that can complement existing practices for chronic disease management.
 - **Behavior change techniques and tools:** Includes information and examples of ways to engage patients in behavior change: motivational interviewing, readiness to change, and an adaptation of a 5As behavior-change model. The 5As model is integrated throughout the document to provide examples of how the principles of behavior change can be applied across all areas of lifestyle management.
- **New evidence:** Each lifestyle section summarizes the latest evidence and provides practical tips and tools specific to that lifestyle area, including guidance on efficiently addressing the topic with your patient when your time is limited.
- **More comprehensive resources and ideas for success:** New information includes ideas for patient follow-up, including team huddles; billing and coding tips to improve reimbursement; referral resources; information on the revised Weigh to Health® program; and ideas for education, online support, motivational tools, and community resources.



METRICS — HOW WILL WE KNOW WE'RE SUCCESSFUL?

Intermountain will be collecting and tracking a variety of metrics to help measure and report process and outcome successes for both providers and patients. Metrics are marked with this symbol  on the algorithm on page 2, and are summarized on page 31.



Algorithm
including supporting notes and assessment tools

2–3

Building a Framework for Success

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Team Strategies & Tools	6–7
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Evidence-based Guidelines

 Physical Activity & Sedentary Behavior	12–15
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 Other Important Lifestyle Factors: Sleep, Stress, Social Support, Mental Health, Alcohol Use, Tobacco Use	18–20
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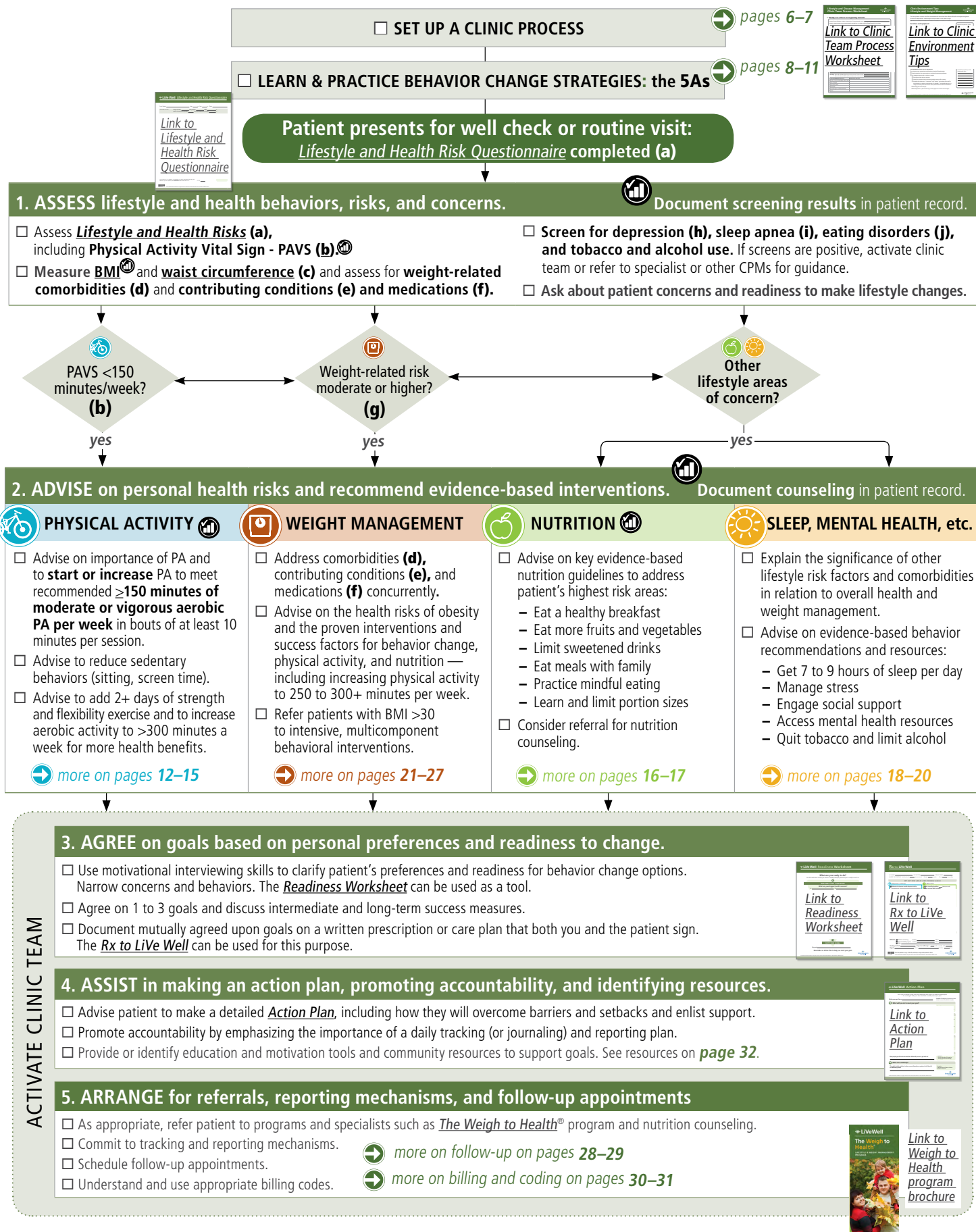
Resources and Referral

Communication, Follow-up, and Referral	28–29
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ALGORITHM



This symbol indicates an Intermountain process or outcome measure. See page 31 for more information.



ALGORITHM NOTES & ASSESSMENT TOOLS

(a) Lifestyle and Health Risk Questionnaire


- Follow clinic processes to distribute and collect Intermountain's *Lifestyle and Health Risk Questionnaire* or another health risk assessment (HRA) or collection form. Depending on your processes, this could be prior to the visit or in the waiting room. Intermountain clinics have the ability to document many of these questions in the HELP2 Preventive/Social Hx tab.
- At a minimum, assessment should include major lifestyle habits and risks related to activity, nutrition, sleep, mental health, weight, and related comorbidities.

(b) The Physical Activity Vital Sign (PAVS)

- On average, how many **days a week** do you perform physical activity or exercise?
- On average, how many **total minutes** of physical activity or exercise do you perform **on each of those days**?
- At what intensity (how hard) do you usually exercise? Light (like a casual walk), moderate (brisk walk), or vigorous (jog or run)

PAVS score: _____ days/week x _____ min/ day = _____ min/week at moderate or vigorous intensity

(c) BMI, waist circumference, and body fat measurement

- Calculate and classify BMI.  [Link to CDC BMI calculator and waist circumference information](#)^{CD1}
- Measure waist circumference.
- Consider other measures of body fat (such as bioelectrical impedance) that may also be used as alternate success factors.

(d) Weight-related comorbidities and risk factors ^{ICS1}

- Major correlation:**
- Waist circumference >35 in. women, >40 in. men
 - Coronary heart disease (CHD)
 - Obstructive sleep apnea (see Table i)
 - Peripheral vascular disease
 - Abdominal aortic aneurysm
 - Symptomatic carotid artery disease
- Minor correlation:**
- Family history of premature CHD
 - Hypertension
 - Dyslipidemia (LDL >130; HDL <40 for men or <50 for women)
 - Type 2 diabetes or pre-diabetes
 - Tobacco use
 - Cancer

(e) Weight-related contributing conditions



Conditions	Possible tests to evaluate for these conditions
Hypothyroidism:	TSH
Diabetes mellitus:	FBG, 2-hr OGTT, 2-hr PPG, HbA1c; see the Diabetes CPM
Cushing's syndrome:	Evening serum cortisol
Polycystic ovarian syndrome (PCOS):	Total and free testosterone, DHEAS, prolactin, TSH, ultrasound, 17-hydroxyprogesterone
Obstructive sleep apnea (OSA):	STOP-BANG questionnaire (see i); refer to Intermountain's Obstructive Sleep Apnea CPM

(f) Weight-related contributing medications

Medications	Examples:
Diabetes, insulin resistance	<ul style="list-style-type: none"> Sulfonylureas Glitazones Thiazolidinediones Insulin
Depression, mood disorders	<ul style="list-style-type: none"> Tricyclic antidepressants Atypical antipsychotics (e.g., Zyprexa, Risperdal, Clozaril) Lithium Paroxetine Some SSRIs/SNRIs Mirtazapine
Hypertension	<ul style="list-style-type: none"> Beta blockers Calcium channel blockers
Other	<ul style="list-style-type: none"> Oral contraceptives Oral glucocorticoids Antiepileptics (e.g., valproic acid, carbamazepine)

See page 25 for more information, examples, and alternatives.

(g) Weight-related risk and recommended interventions

BMI and Obesity Class 	Normal Weight	Overweight		Obese		Extremely Obese
	18.5–24.9	25–29.9	>27 with comorbidities	30–34.9 Class I	35–39.9 Class II	
Intervention 	Low Risk	Moderate risk		Mod-high risk	Severe risk	
Behavior	✓	✓	✓	✓	✓	✓
Activity	✓	✓	✓	✓	✓	✓
Nutrition	✓	✓	✓	✓	✓	✓
Medication		Consider		✓	✓	
Surgery				Consider with comorbidities	✓	

See page 22 for more information on risk level and evidence-based interventions.

(h) Depression Screen

- Use PHQ-2 (note that these 2 questions are included in *Lifestyle and Health Risk Questionnaire*):
 - In the past 2 weeks, have you been feeling down, depressed, or hopeless?
 - In the past 2 weeks, have you had little interest or pleasure in your usual activities?
- If either answer is yes, administer full *PHQ-9*, and activate clinic mental health integration (MHI) process. If not an MHI clinic, consider care management or referral to a mental health specialist based on complexity and severity of patient situation. Refer to Intermountain's *Depression CPM*.

(i) Obstructive Sleep Apnea (OSA) Screen: STOP-BANG

OSA is associated with obesity and other comorbidities such as HTN. Use the *STOP-BANG Questionnaire* to screen and refer patients with 3 or more STOP-BANG risk factors to a sleep specialist and/or sleep testing. See *Obstructive Sleep Apnea CPM*.

[Link to STOP-BANG Questionnaire](#)

S.T.O.P.	B.A.N.G.
<ol style="list-style-type: none"> Snoring: Do you snore loudly (louder than talking or loud enough to be heard through closed doors)? Tiredness/fatigue: Do you often feel tired, fatigued, or sleepy during the daytime, even after a "good" night's sleep? Observed apnea: Has anyone ever observed you stop breathing during your sleep? Pressure: Do you have or are you being treated for high blood pressure? 	<ol style="list-style-type: none"> Body mass index: Is BMI 35 or more? Age: Is patient older than 50 years? Neck size: Is neck circumference over 16 inches for a female or over 17 inches for a male? Gender: Is patient male?

STOP-BANG Questionnaire adapted with permission from Dr. Frances Chung and University Health Network, 2014.

(j) Eating Disorders Screen: The Modified ESP

Eating disorders, especially binge eating, may complicate treatment for obesity.^{CS1} The Modified ESP (Eating Disorders Screen in Primary Care) questionnaire is effective in identifying patients who require further evaluation.^{COT} Refer to Intermountain's *Eating Disorders CPM* for more guidance.

Modified ESP questions:	<ol style="list-style-type: none"> Are you concerned about your eating patterns? Do you ever eat in secret? Does your weight affect the way you feel about yourself? Have any members of your family suffered from an eating disorder?
Scoring:	0–1 "Yes" responses: Eating disorder ruled out 2 or more "Yes" responses: Eating disorder suspected, evaluate further.

► PURPOSE & PRINCIPLES

✓ KEY ACTIONS FOR PROVIDERS

- Rediscover the PURPOSE (the “WHY”) and **importance** of promoting healthy behaviors — and **engage or re-engage** in the process.
- **Plan a team approach** and process. Develop improved understanding and success through PRACTICE (the “HOW”).
- **Determine and track incremental measures of success** that you can celebrate and build on.
- **Help your patients do the same:**
 - Find the “WHY” and engage in the process.
 - Set goals and create an action plan to achieve them.
 - Track, measure, report, and celebrate incremental successes!

PURPOSE: The importance of “WHY”

WHY lifestyle management matters now more than ever

- **More and more research shows the independent effects of lifestyle factors on health — especially physical inactivity.**
Physical inactivity has been called the biggest public health problem of the 21st century. A recent study showed that low cardiorespiratory fitness (CRF) accounted for about 16% of all-cause deaths, much more than obesity, smoking, or diabetes.^{BLA} Another showed that individuals who were obese, but fit, had lower cardiovascular mortality risk than unfit patients of normal weight.^{CHU} Subsequent sections of this CPM provide more information on these and other studies, as well as links to tools and graphs that can be used to show your patients how lifestyle factors can affect their health and mortality.
- **Many patients don’t make healthy choices.**
Community-based research conducted by the American Heart Association indicates that fewer than 39% of Americans eat 3 or more servings of fruits and vegetables per day.^{BAM} The CDC reports that fewer than half (48%) of American adults meet recommended levels of physical activity.^{CDC2}
- **Effective lifestyle management promotes shared accountability for health.**
Lifestyle management is central to shared accountability initiatives, including practice innovations (Personalized Primary Care and Mental Health Integration), payer plans (like the Medicare Annual Wellness Visit), and HEDIS measures for wellness promotion.

WHY it’s important for PCPs to lead the team

- **Primary care providers can build on established relationships.** Your ongoing communication with patients can build the trust and empathy that fosters change.
- **Primary care providers can coordinate and focus a team.** As a primary care provider, you can focus the efforts of clinic staff, specialists, and community or group-based programs. Specialists play an important role in encouraging healthy lifestyle choices, but the heart of the team is in primary care. See pages 6–7 for information and tools to help you build a team process.
- **Research shows that primary care interventions make a significant difference.**
A recent study showed that brief primary care interventions to promote physical activity resulted in one out of every 12 sedentary adults increasing activity levels to meet recommended levels one year later, representing an NNT (number needed to treat) of just 12.^{ORR} Compare this with a statin, which has an NNT of 100 to prevent one heart attack over a 5-year period.^{BIZ}

Finding the “WHY” for your clinic and patients

Lifestyle management requires motivation, persistence, and many moments of success along the way. This is true for both patients and primary care providers. Defining a strong purpose — a “WHY” that sustains motivation over the long term — is a critical step for you, your clinic team, and your patients.

► Find the “WHY” for your clinic:

It can be helpful for the clinic team to discuss your core reasons for helping patients adopt healthier lifestyles. Based on this discussion, consider developing a “WHY” statement that can renew your energy when you encounter barriers.

► Find the “WHY” for your patients:

Each patient’s “WHY” is a little different. Motivation comes from a patient’s own concerns and desires, informed by a provider’s advice given in a collaborative approach. Pages 8–11 present strategies to assist in this process.

PURPOSE & PRINCIPLES, *continued***PRINCIPLES: Understanding through PRACTICE (the “HOW”)****Recognizing and meeting the challenges**

- **Weight loss is not the only measure of success.** *Your team* is successful if you can implement small goals in promoting lifestyle management, one step at a time. *Your patients* are successful if they can move closer to adopting healthier lifestyle habits, one stage of change at a time. Successful adoption of healthier habits in and of itself improves health and counts as success — even without weight loss!
- **Change is an ongoing process, not a single event.** This CPM provides tools to help your clinic and your patients successfully plan, implement, and evaluate ongoing lifestyle changes.
- **Outlining a workflow process can help with time limits.** This CPM promotes a team approach that can ease the individual PCP burden of promoting lifestyle management during the appointment. The process takes some planning, but the investment pays off.
- **This CPM provides coding advice to make reimbursement easier.** See page 31 for a link to a guide to payer algorithms and coding for lifestyle and weight management.

Following a general process — the “5As”

Beginning with the algorithm on *page 2*, this CPM presents and reinforces a process based on the “5As” behavior management approach, originally used for smoking cessation in primary care,^{JAY} and successfully adapted for alcohol counseling, weight management, and nutrition counseling.^{CAR,SCHL} This model is endorsed by the Centers for Medicare and Medicaid Services and the United States Preventive Services Task Force.^{SCHL,USPS}

The 5As do not represent rigid linear steps, but rather help shape an ongoing conversation that promotes successful behavior change, partly by helping patients find their “WHY.”

- **Assess** lifestyle and health risks, behaviors, and concerns.
- **Advise** on personal health risks and evidence-based interventions and behaviors.
- **Agree** on 1 to 3 specific goals based on personal preferences and readiness to change.
- **Assist** in making an action plan, promoting accountability, and identifying resources.
- **Arrange** for referrals, reporting mechanisms, and follow-up appointments.

HOW TO USE THIS CPM

- **Team strategies and tools (pages 6–7):** This section and its associated tools will help you implement lifestyle management as a clinic team — identifying roles, setting a team goal, and defining a workflow process.
- **Behavior change techniques and tools (pages 8–11):** This section and its associated tools will help you use motivational interviewing techniques to assess and promote readiness to change, help patients identify and narrow their concerns, and help patients set achievable goals. The end of the section provides ideas for adapting the 5As to fit your time.
- **Evidence-based guidelines (pages 12–27):** Each section — Physical Activity, Nutrition, Weight Management, etc. — summarizes evidence-based recommendations and provides practical tips and tools for efficiently following the 5As.
- **Advice and tools for follow-up, communication, and billing and coding (pages 28–35):** This section provides ideas and tools to plan efficient “team huddles” and patient follow-up — and use billing codes that result in better reimbursement.

**Lifestyle & Weight Management
TOOL KITS**

Throughout this CPM, you’ll find a list of tools at the end of every section. These tools are available individually, or as part of a Clinic Implementation Kit and/or a Patient Tool Kit. The contents of both of these Kits can be accessed online or ordered from i-printstore:

- **To access online:** The tools and a range of other resources are linked online at www.intermountain.net/lifestyle and www.intermountainphysician.org/lifestyle
- **To order:** Order the kit contents and refills as needed from i-printstore.com.

Clinic Implementation Kit

The *Clinic Implementation Kit* includes tools to help you integrate lifestyle and weight management into your clinic processes and culture. This includes the CPM, clinic worksheets, slide presentations, and coding reimbursement guide — along with a sample copy of each of the tools from the Patient Tool Kit.

Patient Tool Kit

The *Patient Tool Kit* includes all the tools you’d actually use with patients or give to patients — including questionnaires, worksheets, patient education, and trackers.

MORE SUPPORT

Initiatives aimed at shifting the culture toward wellness can support your efforts in promoting lifestyle management.

- **Public *LiVe Well* campaign:** In 2013, Intermountain and SelectHealth began rolling out public messages focused on wellness and lifestyle choices.
- **National initiatives:** Messages for the public (such as letsmove.gov), and resources for providers (such as exerciseismedicine.org).

► TEAM STRATEGIES & TOOLS

✓ KEY ACTIONS FOR PROVIDERS

• Create a team structure using the elements of success.

A successful approach focuses on identifying and defining team roles, resources, and processes — and fostering an environment of communication and coordination.

• Build a team process at your clinic. See the suggested process steps and supporting tools on page 7.

• Adapt your approach over time. Developing a team approach is a process, not a single event. Most clinics will need to find a way to make the process work with existing staff and resources. Over time, this plan can evolve based on improvements in prevention and wellness reimbursement patterns and other changes in the healthcare system.

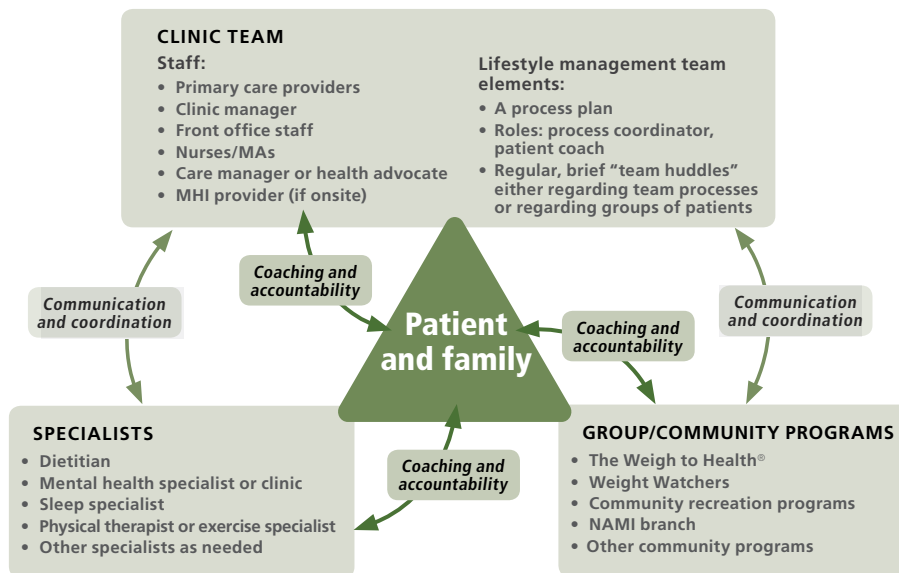
YOUR EXAMPLE INSPIRES PATIENTS!

Research shows that physicians who adopt healthy lifestyle behaviors have a more significant impact on patient choices to pursue physical activity.¹⁰⁸ This doesn't mean every physician needs to be a perfect physical specimen — the point is adopting lifestyle choices, such as regular physical activity, to improve your own health. Being on a similar path toward better health can provide a powerful example.

Make your focus on lifestyle management evident in the overall clinic environment. For example, display individual staff wellness goals or patient education information, or make wellness a regular part of patient and staff discussions. Refer to the [Clinical Environment Tips](#) worksheet for more ideas.



Team structure and elements for success



A team that can promote lifestyle management has the general elements shown above, drawn together with a focus on coordination, communication, and coaching. Elements that help the team work together include:

• Team ROLES: A clinic team with defined roles. Main roles:

- **Who will function as the process coordinator.** This role oversees the workflow process and communication, and alters the process as needed based on team feedback.
- **Who will function as patient coach(es).** This role works with patients to evaluate their readiness to change and set an achievable goal, then enables follow-up communication. Different team members may fill this role in different ways, depending on other clinic processes and individual patient needs.

- **Team RESOURCES, including education tools and referral resources.** Resources may include care process models, guidelines, and patient education materials you plan to use regularly — as well as a list of specialists and group/community programs you may regularly refer to.
- **Team PROCESSES based on a team goal.** See the next page for a summary of how to create a workflow process, along with tools that facilitate this task. Team processes should also include a plan for communicating with specialists, communicating with patients who have set lifestyle management goals, and conducting **regular, brief “team huddles”** or other methods to evaluate team processes or patients’ goals and progress. See page 28 for more information on communication and follow-up methods.
- **Clinic ENVIRONMENT.** Your clinic environment should set an example to engage and inspire patients. See the sidebar for more information, including a link to [Clinical Environment Tips](#).

TEAM STRATEGIES & TOOLS, *continued*

Building a process at your clinic

- **Get started in a staff meeting.** It may be helpful to introduce lifestyle management information and the team concept at a staff meeting. At each clinic, the team approach will work a little differently based on the resources available. The brief slide presentation **Creating a Lifestyle Management Team** reinforces the importance of lifestyle management and can help get your team started. See the *TOOLS* list in the sidebar.
- **Define your team approach.** Use the **Lifestyle Management *Clinic Team Process Worksheet*** (see *TOOLS*) to facilitate the following steps:
 1. **Identify area(s) of focus and supporting materials.**
 2. **Discuss a team approach and document a team goal.** Discuss and choose an achievable team goal for promoting lifestyle management — and how and when to measure success.
 3. **Identify clinic team roles and plan for provider and staff education.** Define who will oversee the process, who will coach and educate patients, and what training physicians and staff may need.
 4. **Define a team workflow process.** Outline a specific workflow process for meeting the goal in a typical appointment (including tools used and who does what).
 5. **Coordinate with resources and specialists.** Identify referral resources and specialists, and define a plan for communication.
- **Take the process step by step.** It's not practical to accomplish all these planning steps in a single session. It's more effective to begin an iterative process; when one small goal is accomplished, set another one. With each success, promoting lifestyle management can become more routine for your team.



LOOKING TOWARD THE FUTURE . . .

As healthcare evolves, primary care improvements may include:

- Onsite consulting staff (dietitian, PT, mental health specialist)
- Group visits, family visits, and other service delivery options
- Onsite gyms or other facility improvements

Current initiatives support some of these changes. Others will become more feasible and more important as we move beyond a fee-for-service environment and coding options evolve (see pages 30 and 31 for more discussion on health care reform requirements and coding).

No matter what the future brings, working as a clinic team to meet shared goals will always be essential.

CLINIC PROCESS EXAMPLE

Using the *Lifestyle Management Clinic Team Process Worksheet*, one clinic made the following plans:

1. **Team resources / communication:** Dr. Jones will act as process coordinator, Emily will be coach for most patients. Team brainstormed exercise programs for referrals and made a list of community rec centers. Susan (receptionist) will order copies of patient education on physical activity (PA).
2. **First team goal:** Measure and record the physical activity vital sign (PAVS), share result with patient, and recommend 150 min physical activity/week. If patients want tips, give education and list of resources and add note in HELP2. Measure success in 3 months (using HELP2 records). *Future goal: For sedentary patients, add brief conversation around readiness or goal-setting.*
3. **Process:**
 - Susan (receptionist): Distribute and collect PA questionnaire in waiting room (2 min)
 - Amy (RN): During vitals/check in, briefly mention purpose of PAVS (1 min)
 - Dr. Jones: Share PA questionnaire results and briefly share recommendation of 150 minutes of activity each week; ask patient if they'd like tips or help with this (2 min)
 - John (APRN): For patients who answer yes to physician question, give/explain handout and list of community rec centers; answer questions and refer to group program if desired (2 to 5 min)
 - John or Amy: Record PA results in HELP2 Preventive/Social Hx tab; make note if education was given (2 min)
 - Team huddles: 10 min at end of day on patients, brown bag every 2 weeks on process
4. **Clinic environment:** Susan will set up place to post information about local charity walks, fun runs or rides, and other active events that patients or staff can sign up and train for.

CLINIC TEAM PROCESS TOOLS

Clinic Implementation Kit



- **Lifestyle and Disease Management Clinic Team Process Worksheet**
- **Lifestyle and Weight Management Clinic Environment Tips**
- **Lifestyle and Weight Management Coding and Reimbursement Guide**
- **Creating a Lifestyle Management Team (presentation for team meetings)**



▶ BEHAVIOR CHANGE TECHNIQUES & TOOLS

✓ KEY ACTIONS FOR PROVIDERS

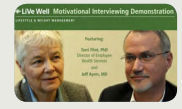
- **Be present in the process.**
Learn and practice techniques — such as motivational interviewing — to engage patients in the behavior change process.
- **Use the 5As framework to promote behavior change:**
Assess, Advise, Agree, Assist, Arrange.
- **Find ways to adapt** the principles and framework of the 5As when time is short.

Engaging patients in the behavior change process: motivational interviewing and readiness to change

Motivational interviewing is a collaborative method of addressing the common problem of ambivalence toward change. It differs from more coercive methods of encouraging change in that it draws on the patient’s personal values and motivations. It involves:

- Asking open-ended questions to elicit the patient’s concerns and context (work, family, etc.).
- Listening actively and summarizing the patient’s concerns back to them.
- Empathizing and clarifying the patient’s experience without judging, criticizing, or imposing your own values.
- Enlisting the patient in suggesting options, setting goals, and planning details.

▼ Follow the [link](#) for an example of motivational interviewing in action



Readiness to change: Most patients are ready to change *something*. The video link above illustrates how motivational interviewing can be used to help patients identify something they are currently ready to change — and then arrive at ways to do it.

If a patient is not ready to address a critical issue, success can be measured by helping the patient move toward readiness. The table below recommends interventions and dialogue to increase a patient’s readiness in relation to a particular concern. If the patient is not ready to change:

- Assess the patient’s current stage of readiness by observing patient comments.
- Consider a brief intervention appropriate to that stage, as described in the table below.
- If the behavior change is critical and the patient is not ready, refer to a care manager or specialist for further motivational interactions with the patient.

TABLE 1. Assessing and promoting patient readiness for behavior change^{KUS}

	PATIENT READINESS ----->				
	Not ready ----->		Unsure ----->		Ready ----->
What the PATIENT may think or say:	Patient does not realize the issue is a problem, or is not interested in changing. <i>"I can't even think about changing that right now."</i>	Patient is aware of the problem, but may not feel ready or able to change yet. <i>"I know I should do this. My spouse wants me to do it."</i>	Patient has decided to change and is thinking about how to do it. <i>"I've been thinking more about making this change."</i>	Patient is actively trying to change the behavior. <i>"I've been getting ready and I have a plan."</i>	Patient has changed the behavior but may relapse. <i>"I'm doing it. I really messed up, but I started again the next day."</i>
Possible PROVIDER interventions and dialogue to help move patients forward on the readiness scale:	Help patient start to think about change. <i>"That's okay. What change could you consider right now?"</i>	Help patient resolve ambivalence and find internal motivations <i>"Can I give you more information about how this change could benefit you?"</i>	Help and troubleshoot barriers and increase self-efficacy related to this change. <i>"What might make you feel more ready or able?"</i>	Help build skills in self-monitoring, stimulus control, and problem solving. <i>"Great. Let's discuss the details of your plan."</i>	Help normalize relapse and plan for maintenance. <i>"Great job. What helped you get back on track?"</i>

BEHAVIOR CHANGE TECHNIQUES & TOOLS, *continued*

The 5As of behavior change JAY,CAR,SCHL,USPS,ZIM

Addressing lifestyle-related health conditions, including weight management, requires patients to modify behavioral risk factors. The evidence-based behavior-change framework known as the 5As (Assess, Advise, Agree, Assist, Arrange) outlines a sequence of support activities that are effective for helping patients change multiple risk behaviors. Integrating this 5As framework with **motivational interviewing** and the behavioral concept of **readiness to change** helps identify changes the patient is most willing and able to make.^{ZIM} A series of worksheets, introduced in the text, is designed to help clinicians and patients go through this process together.

1. ASSESS lifestyle and health behaviors, risks, and concerns.

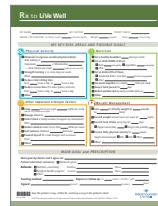
- **Ask about lifestyle habits** related to activity, nutrition, sleep, mental health, social support, tobacco, alcohol, and weight. This may include previous attempts at behavior change and weight loss. Intermountain's *Lifestyle & Health Risk Questionnaire* may be used to collect this information.
- **Do a physical exam, symptom assessment, and health risk screen** including BMI, waist circumference, and other labs and tests to assess lifestyle-related comorbidities such as obesity, hypertension, dyslipidemia, sleep disorders, and depression.
- **Ask about patient concerns and readiness to make lifestyle changes to improve health.** Using open ended questions, ask patients to tell you what *they* are most concerned about. Demonstrate active listening by clarifying and amplifying the patient's experience without judging, criticizing, or imposing your own values.



▲ The *Lifestyle and Health Risk Questionnaire* asks evidence-based questions related to the issues addressed in this CPM.

2. ADVISE on personal health risks and relevant evidence-based interventions and behavior changes.

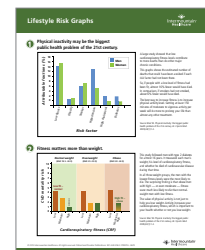
- **Discuss personal health risks and why they are so important.** Explain the results of your assessment in whole health terms — how patients' current risks affect their whole health picture — and the consequences of not addressing them. See the sidebar for a tool that can be used to show patients how their habits affect their health.
- **Discuss and recommend interventions and behavior changes that could address the patient's biggest health concerns.** Tailor your advice to what might be important to the patient. Ask for the patient's ideas, and suggest others. The *Rx to Live Well*, discussed more on the following page, lists the primary evidence-based behaviors for the lifestyle issues discussed in this CPM.
- **Use motivational interviewing skills to help elicit the patient's own concerns and reasons to change — in other words, help them find their own "WHY."** Let patients make their own case for taking steps to reduce their personal health risks, in their own words. Ask, "What do you think might happen if you make a change? Or if you don't make a change?"



Note: Patients may not be ready to work on the concerns that are the top priorities for the physician. The *Patient Readiness table* on page 8 provides ideas to increase patients' readiness to address important concerns. However, remember that patients are more likely to succeed when working on their own priorities — and experiencing success with one concern will increase self-efficacy for addressing other concerns.

✓ KEY MESSAGES FOR PATIENTS

- **This is a partnership.** Patients and providers bring equally important perspectives to determining next steps.
- **Find meaningful motivations to change.** Examine personal motivators and incentives for making changes and remind yourself of these reasons when setbacks happen.
- **Do what you're most ready to do.** You'll have the greatest success if you choose to make changes you feel willing and able to do right now.
- **Set one to three goal.** Choose goals you feel confident you can achieve. Experiencing success with one goal will increase your confidence that you'll be able to achieve the next one.
- **Make an action plan.** You're much more likely to succeed if you make a detailed plan for success.
- **Track and report.** Keeping a food, activity, and/or weight journal — and being accountable to record and report your progress to another person — are proven success factors for behavior change.

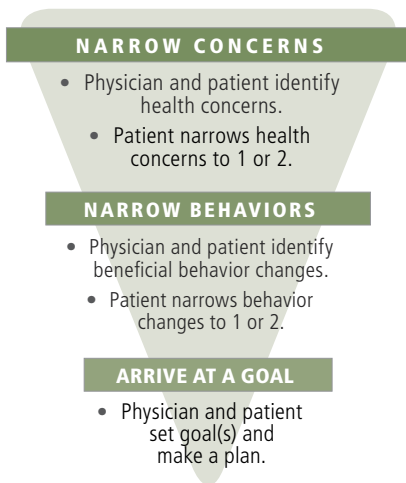


▲ The *Lifestyle Risk Graphs* tool can be used to advise your patients how inactivity and other lifestyle factors affect their health.

BEHAVIOR CHANGE TECHNIQUES & TOOLS, *continued*

NARROWING TO A GOAL

The diagram below illustrates the process described here of helping a patient narrow health concerns and behaviors to arrive at 1 or 2 appropriate and achievable behavior change goals.

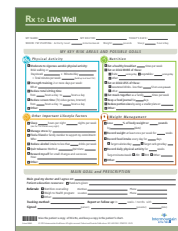


3. AGREE on specific measurable goals based on personal preferences and readiness to change.

- Clarify and narrow your patient's preferences and readiness for recommended behavior changes.** The *Readiness Worksheet* is a tool that can help patients give a numerical value to their readiness to address a health concern, and make relevant behavior changes. Choose to work on the concern the patient is most ready to address.
- Agree on 1 or 2 behavior-change goals.** Set goals that both you and your patient believe will address the concerns and that the patient feels ready to work on. **Make goals specific, measurable, realistic, and sustainable.** For example, instead of just telling the patient to exercise more, say *get 30 minutes of moderate-intensity physical activity 3 days a week for 1 month, then we'll increase the number of days.*
- Discuss intermediate and long-term success measures.** Advise your patient to think of the behavior change as a lifelong quest, not a sprint. Set a goal the patient has a good chance of achieving. As patients master challenges, self-efficacy will increase, and they will be able to set more challenging goals.^{STR}
- Document mutually agreed upon goals on a written prescription or care plan that both you and the patient sign.** The bottom section of the *Rx to LiVe Well* provides a space for this purpose. Keep a copy of the signed prescription in the patient's chart.



- ▲ The *Readiness Worksheet* is a tool to help determine which behaviors the patient is ready to change.



- ▲ *Rx to LiVe Well* is a tool for prescribing health behaviors (Agree) and referring to specialists (Arrange).

4. ASSIST in making an action plan, promoting accountability, and identifying resources.

- Advise patients to create a detailed action plan for reaching their goals.** The *LiVe Well Action Plan* is a tool that can be used for this purpose. If office time is limited, the patient can complete the plan at home. An good action plan should include:
 - **Specific behaviors the patient will perform**, including how, when, and where.
 - **Identification of social support**, including family or friends, coworkers, healthcare providers, or group leaders who can serve as role models or cheerleaders. Social support has been clearly shown to increase success.^{KIE}
 - **Anticipation of barriers and high-risk situations**, including a plan to avoid or overcome them.
 - **Recognition of relapse.** Most people get off track occasionally. Making a plan for how to get started again can prevent discouragement. Counsel patients to consider relapses as instructive; relapses can help patients identify risky situations to avoid in the future, and how to get back on track.
- Promote accountability through tracking and reporting.** Discuss the importance of daily tracking and identify a person the patient will report progress to.
- Provide or identify resources to support goals.** This could include handouts, websites, motivational aids, and community groups.



- ▲ An *Action Plan* worksheet is available as a tool to help the patient make a plan to reach a goal (Assist).



- ▲ The *LiVe Well 1-Week Habit Tracker* helps patients track sleep, nutrition, physical activity, and weight goals.

BEHAVIOR CHANGE TECHNIQUES & TOOLS, *continued*

5. ARRANGE for referrals, reporting mechanisms, and follow-up appointments.

Behavior change is most successful with intense follow-up. Pages 28 and 29 provide more details and ideas for follow-up, but here are a few tips:

- **Specify a follow-up plan on the patient's *Rx to LiVe Well*.** Keep a copy in the patient's chart and share it with the practice team as appropriate.
- **Determine when to manage patients yourself, engage others on the team, or refer to specialists:**
 - **Try to move the patient along the readiness scale.** If the patient is unwilling or unable to make critical behavior changes, use tips from Table 1 on page 8 to try to increase readiness. Enlist your team for support based on your clinical processes.
 - **Consider referral** to a care manager, health coach, dietitian, or behavior change specialist (see sidebar). Refer patients with possible contraindications, mobility problems or other special needs to appropriate specialists for evaluation and advice.



TIME-EFFICIENT 5As:

At many office visits, the time available to discuss behavior change is limited. But even very brief behavioral counseling is better than none at all — and will increase patient motivation and reinforce the importance of patient responsibility for modifying behavioral risk factors.


TABLE 2. Integrating the 5As behavior change approach into a busy office environment	
If you have	Then
No time	Point out your concerns and arrange follow-up. <i>"Your exam showed some wellness issues that I'd like to discuss with you at a future appointment. My MA will give you a handout and can help you schedule an appointment where we can talk."</i>
1 minute	<input type="checkbox"/> ADVISE briefly on one of the patient's most important risks. <input type="checkbox"/> ASSIST by providing a patient education handout or link to online information. <input type="checkbox"/> ARRANGE a follow-up appointment or specialist referral. <i>For example: "You know, 150 minutes of moderate-intensity physical activity each week is important to your health, and it looks like you're only getting about 60 minutes. Here's some information to help you increase your activity level. I'd like to discuss this more with you at a future appointment. How does that sound?"</i>
2 to 5 minutes	Above plus: <input type="checkbox"/> ADVISE further about the importance of relevant behavior changes <input type="checkbox"/> AGREE mutually on a goal and document the goal and a follow-up plan on a brief prescription such as the <i>Rx to LiVe Well</i> ; save a copy in the patient's chart. <i>For example: "You know, 150 minutes of moderate-intensity physical activity each week is important to your health, and it looks like you're getting only 60 minutes. Can you think of a way to increase your activity that you feel ready to take on?" "Great. I'll keep that goal in your record. I'd like you to keep track of how you're doing, and then I'd like to check on your progress in a few months."</i>
5 to 10 minutes or more	Above plus: <input type="checkbox"/> Use more open-ended questions to assess readiness and help the patient focus on an effective goal <i>For example: "I'm noticing a few issues that put you at risk for other health problems. It looks like you're not getting enough physical activity or sleep, and you've mentioned you drink a lot of soda. Which of these concerns you the most?" "You'd like to get more active — that's great. What are some ways you could increase your activity?" "Okay, out of those, which do you feel you are ready and able to do?" "Great. Let's write that as your goal. Here's a prescription and an Action Plan — people who make a plan often do better with their goals. My MA can help you with a follow-up appointment so I can check on your progress in a few months."</i>

ENGAGE YOUR TEAM — REFER WHEN NEEDED






Individualize your treatment of patients based on your patient's physical and social/emotional complexity and level of family support — as well as the comfort level of you and your team. Remember, you don't need to go it alone. Engage your team every step of the way. Use tips in this section to move your patient along the readiness scale — but refer to comprehensive programs and behavior change experts as needed. Clinic tools presented on pages 6 and 7 help you work with your team to identify such resources.

BEHAVIOR CHANGE TOOLS

Clinic Implementation Kit

- Motivational interviewing **6-minute video demonstration** 

Patient Tool Kit

- *Lifestyle and Health Risk Questionnaire* 
- *Rx to LiVe Well* prescription and follow-up plan 
- *Readiness Worksheet* 
- *LiVe Well Action Plan* to help patients outline steps to meet their goals 
- The *LiVe Well 1-Week Habit Tracker* helps patients track sleep, nutrition, physical activity, and weight. 



PHYSICAL ACTIVITY & SEDENTARY BEHAVIOR

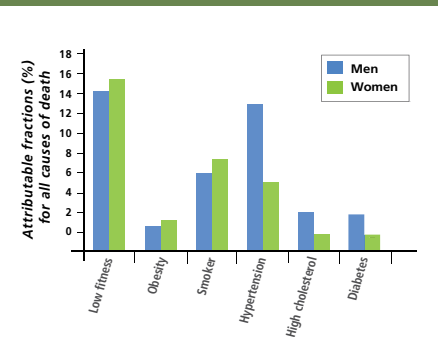
✓ KEY ACTIONS FOR PROVIDERS

- **Emphasize the importance of physical activity** for health — regardless of obesity or other health status.
- **Assess physical activity and sedentary behaviors** at every visit. Use the Physical Activity Vital Sign (PAVS). Based on PAVS results, counsel patients to **start, increase, or continue exercise**.
- **Advise about how much physical activity is enough:** (per Physical Activity Guidelines for Americans, summarized on page 14). Promote the message: **none is bad, some is good, and more is better.**
- **Advise all patients to reduce sedentary behaviors** even if they meet current physical activity recommendations.
- **Ask** about readiness to change and **Agree** on goals.
- **Assist** patients with making an action plan and finding resources to help them meet goals.
- **Arrange** as appropriate for exercise stress testing, physical therapy, cardiac rehabilitation, LiVe Well Centers, or other help for patients with cardiovascular contraindications or mobility problems.

Why it's so important

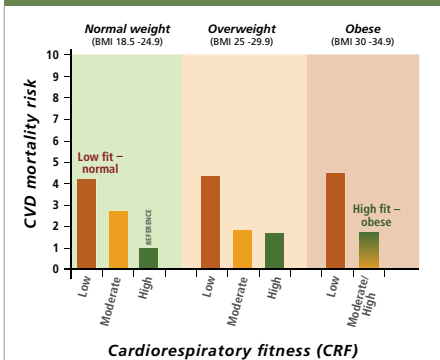
Physical activity is vital for everyone. Globally, physical inactivity is considered the 4th leading cause of death, resulting in an estimated 3.2 million deaths.^{WHO} Increased physical activity (independent of weight) reduces rates of hypertension, stroke, heart disease, type 2 diabetes, breast and colon cancer, and depression — and helps improve sleep quality, mental outlook, bone health, and even cognitive function.^{LEE,USPS} Several studies have shown low cardiorespiratory fitness (CRF) to be a bigger contributor to CVD and all-cause mortality than other risk factors like obesity, smoking, and diabetes. See Figures 3 and 4 below.

FIGURE 3. Relative contributions of cardiorespiratory fitness (CRF) and other risk factors to all-cause mortality



This study of more than 40,000 men and nearly 13,000 women showed that **low cardiorespiratory fitness is a stronger independent predictor of all-cause mortality** than obesity, smoking, hypertension, high cholesterol, or diabetes.^{BLA}

FIGURE 4. Comparison of low, moderate, and high CRF levels and obesity status as contributors to CVD mortality risk



This study showed that low CRF is a bigger risk factor for CVD mortality than obesity; in other words, **it's better to be fit and obese than unfit and of normal weight.**^{BLA,CHU}

Reducing sedentary behaviors is important, too. Sedentary behavior time (sitting, TV viewing, etc.) has been associated with increased risk for diabetes and other chronic diseases — and has been shown to be an independent predictor of mortality, **even for those who perform the recommended amount of moderate to vigorous physical activity.**^{MAT,VAN,GEO} One study concluded that 30 minutes of physical activity cannot undo the harmful effects of prolonged sitting,^{OWE} while others showed that TV viewing time may have adverse health consequences that rival those of obesity and smoking.^{VEE,DUN1} One mechanism for this risk may be related to glucose metabolism. A study of sedentary workers showed that interrupting sitting time with short bouts of light-intensity or moderate-intensity walking reduced postprandial glucose and insulin levels.^{DUN2} The implications of this are yet to be determined; this is a new area of research, where more study is warranted to determine ideal recommendations.

TABLE 3. "Physical activity" and related definitions^{PATE, HHS1}

Physical activity (PA)	Any bodily movement produced by skeletal muscles that requires energy expenditure. In this CPM and in the 2008 Physical Activity Guidelines for Americans, the term "physical activity" usually refers to the subset of activity that produces substantial health benefits — e.g., moderate-intensity to vigorous-intensity activity in bouts of at least 10 minutes at a time. This can be from leisure-time physical activity, transportation (e.g., walking or cycling), occupational or household work, play, games, sports, or planned exercise.
Exercise	A form of physical activity that is planned and structured; the term "exercise" is often used synonymously with "physical activity."
Baseline activity	The light-intensity activities of daily life, such as standing, walking slowly, and lifting lightweight objects. May also include short episodes of moderate or vigorous activity, such as climbing a few flights of stairs, but episodes aren't long enough to count toward meeting recommended physical activity levels. However, emerging literature demonstrates clear physiological benefits to increased amounts of baseline or light-intensity activities, more research remains to be done to qualify and quantify these effects.
Inactivity	The absence of moderate or vigorous physical activity above "baseline activity."
Sedentary behaviors	Activities — such as sitting, lying down, and watching television — that do not increase energy expenditure substantially above the resting level. This is different from "inactivity" (see above).

PHYSICAL ACTIVITY & SEDENTARY BEHAVIOR, *continued*

Following the 5As

1. Assess and prescribe physical activity at every visit. Physical activity (PA) is the primary modifiable risk factor to improve CRF. Therefore, PA levels should be considered a vital sign for health and should be assessed and prescribed at every office visit.

Physical activity behavior assessment. Studies have shown significant agreement between brief self-reported physical activity assessments and activity counts recorded by an accelerometer in terms of categorizing participants as sufficiently active.^{BALL,GRE,MAR} Since moderate to vigorous physical activity is more highly correlated with improvements in cardiorespiratory fitness and reduced all-cause mortality than other levels of activity, the ability of such brief assessments to distinguish between sufficient and insufficient PA may be improved by using wording that conveys the intensity of activity.^{SMI} See the recommended **Physical Activity Vital Sign (PAVS)** questions in Table 4 below.

TABLE 4. Physical activity behavior assessment

The Physical Activity Vital Sign (PAVS)

1. On average, how many days a week do you perform physical activity or exercise?
2. On average, how many total minutes of physical activity or exercise do you perform on each of those days?
3. On average, at what intensity (how hard) do you usually exercise? Use the following definitions to help patients define their exercise intensity level:
 - Light intensity is like a casual walk
 - Moderate intensity is like a brisk walk.
 - Vigorous activity is like jogging or running.

PAVS score = days a week X minutes a day = ____ min/week at moderate or vigorous intensity

Questions to assess sedentary behaviors

- Do you have a sedentary job?
- How many “screen-time” hours do you have each day: TV, video games, sitting at the computer (not counting work and school computer time)?
- How many total hours do you spend sitting each day (*including* at work and school)?

Physical activity counseling and prescription. It’s more practical and actionable for physicians to counsel patients to “increase activity” than to “be more fit.” Based on a patient’s PAVS, physicians should counsel patients as follows (*see specifics on page 14*):

0: Start exercise

<150: Increase exercise time and/or intensity

>150: Continue exercise (or increase to meet weight loss and other health goals)

The multi-organizational **Exercise is Medicine** initiative coordinated by the American College of Sports Medicine (ACSM) supports the focus on encouraging primary care physicians and other healthcare providers to **routinely include assessment and prescription of physical activity in every patient care visit**. More information and supporting tools can be found at www.exerciseismedicine.org.

REMEMBER: PROVIDER COUNSELING MAKES A DIFFERENCE!

Studies show that structured physical activity counseling by primary care provider is recalled by patients — and even if they don’t change now, you’ve moved them further along the readiness scale.^{JAY} In one recent large study, the number needed to treat (NNT) to move 1 additional sedentary adult to meet internationally recommended levels of activity at 12 months was only 12.^{ORR} Imagine how many patients could be influenced in the course of a year!

✓ KEY MESSAGES FOR PATIENTS

- **Inactivity is as bad for your health as being overweight**, using tobacco, or having high blood pressure, high cholesterol, or diabetes. **It’s actually better to be active and overweight than inactive and normal weight.**
- **None is bad, some is good, more is better.** Any amount of activity is better than none. Don’t be discouraged if you can’t meet the recommendations right away.
- **Focus on aerobic activity first.** This shows the most substantial health benefits.
- **Choose activities you enjoy and can continue lifelong.** Enlist support from a friend or family member.
- **Move more all day long.** Sit less. Watch TV less. If you have to sit a lot for your job, get up and move around for 2 to 3 minutes every 30 to 60 minutes — or as often as possible.
- **Build up gradually** by increasing one or more of the following factors: frequency (how often), intensity (how hard) or duration (how long). A good plan is to increase time first, by about 10 minutes a day, then gradually increase intensity. Aim for at least 150 minutes a week — or at least 250 to 300 minutes for losing weight and keeping it off.
- **For further health benefits**, add other activities like muscular strengthening exercises, weight-bearing exercise for bone health, and activities to improve balance and flexibility.

PHYSICAL ACTIVITY & SEDENTARY BEHAVIOR, *continued*

HOW MUCH PHYSICAL ACTIVITY IS ENOUGH?

The 2008 Physical Activity Guidelines for Americans divide the amount of aerobic physical activity an adult gets each week into 4 categories: inactive, low, medium, and high (see table below). This provides a rule of thumb for how total amount of physical activity is related to health benefits, reinforcing the concept **none is bad, some is good, more is better.**

Additional benefit	<p>High level More than 300 minutes per week of moderate-intensity aerobic activity</p>
Substantial benefit	<p>Medium level At least 150 minutes per week of moderate-intensity activity in bouts of at least 10 minutes at a time.</p>
Some benefit	<p>Low level Activity at least 10 minutes or more beyond baseline, but fewer than the recommended 150 minutes of moderate-intensity physical activity per week</p>
No benefit	<p>Inactive No physical activity of at least 10 minutes per week or more beyond baseline</p>

ALSO ADVISE:
SIT LESS, MOVE MORE!

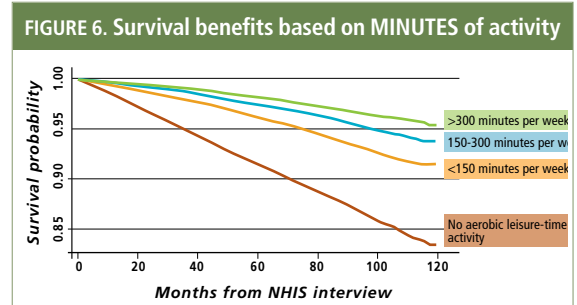
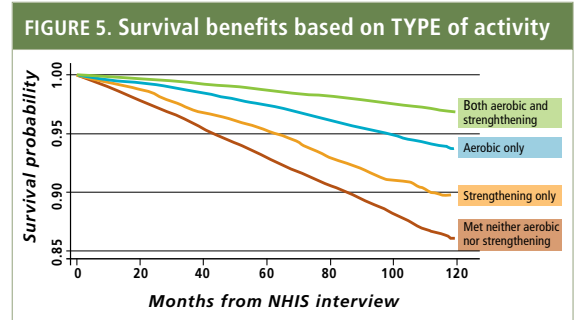
Even if patients meet recommended levels of physical activity, other sedentary behaviors may independently increase their risk for health problems. See Table 5 for suggested goals for reducing sedentary behaviors.

2. Advise on what types and how much physical activity to do.

Aerobic physical activity shows the most substantial health benefits (see Figure 5 at right).^{SCHO} While strengthening activities by themselves did not significantly reduce mortality risks, they appear to provide added benefits.

Some is clearly better than none. Most health benefits occur with at least 150 minutes of moderate-intensity aerobic physical activity (see Figure 6).^{SCHO} However, even lower amounts of physical activity show significant health benefits over no activity at all.

More is better. Additional health benefits occur as the total amount of PA increases, either through greater frequency, higher intensity, and/or longer duration (see the top line in Figure 6).^{SCHO} Studies provide clear evidence of a dose-response relation between PA and weight loss, with most studies showing that at least 250 to 300 minutes a week are necessary for successful weight loss and long-term weight maintenance. See page 24 for more activity-related success factors for weight management.



Figures 5 and 6 adapted from Schoenborn CA and Stommel M. Adherence to the 2008 adult physical activity guidelines and mortality risk. *Am J Prev Med* 2011;40(5):514–521.

TABLE 5. Physical activity recommendations^{HHS1, CDC2, HAS, ICSI}

Aerobic physical activity:

- At least **150 minutes per week** of moderate-intensity to vigorous-intensity activity in sessions of at least 10 minutes at a time, preferably spread throughout the week.
- **For additional health benefits** — including weight loss and long-term maintenance of weight loss — aim for at least **250 to 300 minutes per week.**

Sedentary behaviors:

Though more research is needed about the effects of various levels of sedentary behaviors on overall health and a healthy weight, the following are reasonable goals based on what we *do* know:

- Aim for less than 2 hours of screen time (not counting work/school computer time) per day.
- Aim for less than 6 hours of sitting per day (*including* time spent sitting at work).
- If you have a sedentary job, take an activity break for 2 to 3 minutes every 30 to 60 minutes, or as often as possible.
- Try to move more all day: take the stairs, park farther away, get outside and play.

Other types of activity:

- **Muscular strengthening (resistance) activities:** Moderate-intensity to high-intensity strengthening activities involving all major muscle groups, performed on 2 or more days a week, can provide added survival benefits and help build or maintain bone and muscle mass, which is especially important for older individuals or those trying to lose and maintain weight.
- **Neuromotor activities:** To improve flexibility and balance, aim to do activities such as yoga, tai chi, and stretching a couple of times each week.
- **Bone strengthening activities:** Weight-bearing activities put force on the bones to promote bone growth and strength. These activities can also be aerobic or muscle-strengthening; examples include jumping jacks, running, brisk walking, and weight-lifting.

PHYSICAL ACTIVITY & SEDENTARY BEHAVIOR, *continued*

3. Discuss and agree on physical activity goals.

- **Find the why.** Encourage patients to identify the benefits of regular physical activity that would mean the most to them personally.
- **Encourage patients to identify activities they enjoy** and are ready to do.
- **Base initial goals on current activity status and readiness to change.** Start from where the patient is, and gradually increase from there. Choose realistic and achievable initial goals with a high chance of success. Remember that **some is better than none!**
- **Use the F.I.T.T. mnemonic to advise gradual increases.** Although guidelines have shifted away from using specific frequencies and duration, the **F.I.T.T.** mnemonic can help you counsel patients to gradually increase their total amount of physical activity by modifying one or more of the fit factors: more **F**requent, more **I**ntense, more **T**ime, or a different **T**ype. Remember that aerobic physical activity shows the most health benefits; so in most cases, it's best to focus on it first.
- **Document mutually agreed upon goals** on a written prescription or care plan that both you and the patient sign. The Physical Activity section of the *Rx to Live Well* can be used for this purpose.


4. Assist the patient with ways and resources to meet their goals.

- **Encourage the patient to increase chance of success by making a detailed plan** to reach their goal — including what they'll do, when, with whom, and how they will overcome anticipated barriers. The *Live Well Action Plan* is a good tool for this purpose.
- **Provide education materials and a list of local fitness programs and resources** See the *TOOLS* at right for ideas.
- **Suggest tools for accountability**, such as the following (see *TOOLS* for ideas):
 - **Pedometers and electronic activity monitors.** Pedometers are a proven tool to help keep patients motivated and accountable for exercise. Walking 10,000 steps a day is a way many people can choose to meet the activity guidelines. An increasing number of electronic activity monitors automatically track steps and other activity and upload data. The *TOOLS* box at right lists examples.
 - **Trackers.** These can include simple paper trackers such the *Weigh to Health Habit Tracker*, or any of a multitude of free online tracker applications.
 - **Social or community support** — such as an exercise buddy, an online forum, a group class with workmates, family, or friends — can be helpful to some patients.

5. ARRANGE for referrals and follow-up.

- **Refer patients with possible cardiovascular contraindications or chronic activity limitations** to appropriate specialists (physical therapist or exercise physiologist) for further evaluation before beginning an exercise program.^{ICSL,EIM} Also see the *Exercise is Medicine Physical Activity Questionnaire* for a sample screening tool.
- **Refer to appropriate specialists or provide suggestions for adapting exercise** based on unique physical and health needs. A physical therapist or exercise physiologist can help create an appropriate exercise plan. See the *Exercise is Medicine Your Prescription for Health Flier Series*.^{EIM}
- **Set a specific time to follow up** with you or another member of the healthcare team.

FIGURE 7. Sample Physical Activity Prescription

 **Physical Activity**

- Moderate or vigorous aerobic physical activity:**
Brisk walking or swimming
Days/week 3 x Minutes/day 5
= Total minutes per week: 135 (build up to at least 150)
- Strength training 2 or more days per week:**
What: Go to gym
- Reduce total sitting time**
from _____ hours a day to _____ hours a day
- Reduce screen time** (TV, video games, Internet)
from _____ hours a day to _____ hours a day
- Other:** Each hour at work stand up and walk around for 2 minutes

PHYSICAL ACTIVITY TOOLS

Patient Tool Kit

- *Intermountain's Live Well, Move More Patient Fact Sheet* can be accessed and ordered on i-printstore.com or linked to via *HELP2*.



Other resources and links

- **Exercise is Medicine website:** www.exerciseismedicine.org
- **Utah Department of Health** www.choosehealth.utah.gov.
- **Pedometers and electronic monitors.** Inexpensive analog pedometers — as well as more sophisticated electronic activity monitors (such as Jawbone Up, Nike FitBand, and Fit Bit) — are available at most pharmacies, sporting goods stores, or online.
- **Online trackers.** Popular online activity and nutrition trackers include SparkPeople, MyFitnessPal, FitDay, Fitocracy, RunKeeper, and Endomondo.

Patients can find links to many of the above tools from the www.intermountainhealthcare.org/wellness page. See page 32 for links to other resources.



NUTRITION AND HEALTHY EATING HABITS

✓ KEY ACTIONS FOR PROVIDERS

- **Assess key nutrition habits and risks** as part of overall health risk assessment.
- **Advise on evidence-based lifelong nutrition habits** relevant to the patient's identified risks.
- **Ask about readiness to change and agree on goals.**
- **Assist patients with an action plan** and resources to help them reach their goals.
- **Arrange** for referral for nutrition counseling or programs such as *The Weigh to Health*®. Set up a plan for reporting progress and schedule any follow-up appointments.

WHEN TO REFER TO A DIETITIAN

Refer patients with nutrition-related conditions for individualized nutrition counseling (medical nutrition therapy, or MNT) — especially patients with any of the following conditions: diabetes, cancer, high blood pressure, heart disease, COPD, obesity, celiac disease, congestive heart failure, anorexia, bulimia, Crohn's disease, failure to thrive, metabolic syndrome, food allergies, cystic fibrosis, GI surgery, kidney failure, genetic and metabolic disorders, and sleep apnea.

SelectHealth members with any nutrition-related condition are eligible for up to 5 individualized counseling sessions with an Intermountain RD per year as preventive therapy with no copay.

Why it's important

Good nutrition remains key to improving health and preventing and/or reversing obesity and chronic diet-related diseases such as heart disease and diabetes. Current research supports more positive messages of developing small, incremental lifelong eating habits, choosing foods wisely, and moving away from a dieting mindset toward eating mindfully.

Following the 5As

1. Assess nutrition habits and risks as part of an overall lifestyle and health risk assessment.

TABLE 6. Key nutrition questions to include in a health risk assessment:

- On average, how many days a week do you eat a healthy breakfast?
- On average, how many servings of fruits and vegetables do you eat each day?
- On average, how many servings of sweetened drinks do you have per day or week?
- On average, how many meals per week do you eat with your family?

2. Advise on the key evidence-based nutrition habits (see Table 7) relevant to your patient's identified risks. Encourage small incremental changes that will have the most impact and that the patient is likely to be able to maintain for the long term.

3. Agree on 1 or 2 goals.


Discuss problem areas that the patient is ready and willing to change. Agree on 1 or 2 specific behavior changes and identify intermediate and long-term success measures. Document on a prescription or care plan such as the nutrition section of the *Rx to Live Well* (shown at right) that both you and the patient sign.

4. Assist patient with resources for success.

- Encourage the patient to write an **Action Plan** with specifics of how they will reach their goal — including identifying barriers, enlisting support, tracking, and reporting.
- Provide or recommend education materials and tools for accountability, including trackers, carb or calorie counters. See *TOOLS*.

5. Arrange for referrals, progress reporting, and follow-up appointments.

FIGURE 8. Sample healthy eating prescription

 **Nutrition**

Eat a healthy breakfast ____ times per week

Eat or drink **MORE** of these:

fruits: ____ servings/day vegetables: ____ servings/day

other: _____

Eat or drink **LESS** of these:

sweetened drinks - less than 3 12-oz servings/week

other: _____

Eat meals together as a family 7 times per week

Keep a food journal for ____ days

Reduce portion sizes: _____

Other: _____

For more information on medical nutrition therapy:

The general nutrition advice and healthy eating habits above apply to everyone, regardless of weight or health status. Patients with chronic disease may need to focus more on specific nutrients. For weight loss, several other dietary factors have been studied, and may be effective in some circumstances — e.g., meal replacements and very low calorie diets. Refer to pages 24 and 25 for more information on these and other nutrition success factors for weight loss.

NUTRITION & HEALTHY EATING HABITS, *continued*

TABLE 7. Top evidence-based nutrition recommendations AND, DGAC, ICSI, USDA1





Recommendation	Evidence statement
WHAT you eat	Be aware of calorie needs <small>Link^{USDA2}</small> People who are most successful at maintaining a healthy body weight throughout life do so through awareness and continued attention to calorie balance appropriate for their age, gender, and activity level. ^{USDA1}
	Eat a healthy breakfast Skipping breakfast is associated with increased risk of type 2 diabetes and obesity and a higher BMI, despite lower reported daily energy intakes. Breakfast eaters have been shown to do less impulsive snacking and to eat less at later meals. ^{MEK}
	Eat more fruits and vegetables In addition to providing essential nutrients and fiber and contributing to weight loss, moderate evidence indicates that 2½ cups of vegetables and fruits per day is associated with a reduced risk of cardiovascular disease, including heart attack and stroke. And some vegetables and fruits may be protective against certain types of cancer. ^{USDA1} Increasing fruit and vegetable intake to 5 to 10 servings a day can significantly reduce blood pressure. ^{DGAC}
	Reduce intake of sweetened drinks Intake of sweetened beverages has been linked to obesity, type 2 diabetes, hypertension, and cardiovascular disease in both children and adults. The results of several studies provide a strong impetus for efforts to reduce consumption of sugar sweetened beverages (and alcohol), especially excessive portions served at low cost. ^{CAP}
	Eat MORE healthy (nutrient-rich) foods and FEWER nutrient-poor foods (empty calories) Instead of focusing on forbidden foods or exact nutrient amounts, focus on eating more nutrient-rich food, and fewer foods and beverages that are nutrient poor (empty calories) or that may have other adverse affects. ^{USDA1} The “Choose My Plate” 10-Tip series can help support specific goals in this area (see <i>TOOLS</i>). MORE of these: • fruits and vegetables • whole grains • lean proteins and fish • nuts, seeds, and legumes • low-fat dairy products and water LESS of these: • sweetened drinks • processed foods with added fat, sugar, or sodium • alcohol • other energy-dense foods
	Stick to healthy ratios of fat, protein, and carbohydrates Evidence shows no optimal proportion of nutrients for weight loss, as long as patients stay within healthy ranges: fat 20% to 35%; protein 10% to 35%; and carbohydrates 45% to 65%. The key is to find what works for the individual; for example, an insulin-resistant patient may respond better to a lower-carbohydrate diet. ^{DGAC}
HOW and WHY you eat	Eat meals with family Regular family meals are strongly associated with healthier eating patterns. A meta-analytic review of 17 studies of over 180,000 children and adolescents showed that those who share 3 or more family meals per week are 12% less likely to be overweight, 20% less likely to eat unhealthy foods, 35% less likely to engage in disordered eating behaviors, and 24% more likely to eat healthy foods. ^{HAM}
	Practice mindful eating — and keep a “food and feelings” journal Mindful eating means paying attention to the connections between emotions and eating choices, evaluating hunger levels before eating, slowing the pace of eating, and eating away from distractions like the TV. Mindful eating has been shown to help patients regain a sense of hunger and fullness, develop a sense of empowerment and enjoyment with regard to eating, improve self-esteem, and successfully lose weight and maintain weight loss. ^{COLE} Portion control and caloric balance are natural outgrowths of mindful eating. Keeping a food journal to record emotional triggers, hunger levels and responses, and actual food intake and patterns is a proven success factor for diet-related behavior modification and weight loss. ^{ICSI}
	Learn and limit portion sizes Portion control at meals and snacks results in reduced energy intake and weight loss, and should be included as part of a comprehensive weight management program. ^{AND} Research shows that eating more at one meal doesn’t lead to eating less at subsequent meals, significantly increasing daily energy intake and promoting weight gain. Portion size awareness and simple interventions like using a smaller plate for meals can make a big impact.

✓ KEY MESSAGES FOR PATIENTS

- **Focus on building lifelong healthy eating habits** instead of dieting.
- **Don’t think of foods as “good” or “bad.”** Instead, improve diet habits by making better choices more often: **MORE** nutrient-rich foods, **FEWER** nutrient-poor foods.
- **Focus on 1 or 2 nutrition goals at a time** until they become habit. Start by choosing goals for which you think you have a good chance of success!
- **Practice mindful eating.** Eat only when you’re physically hungry, plan meals, enjoy your food.
- **Be accountable** by keeping a food journal, enlisting support, and reporting your progress.

NUTRITION TOOLS

Patient Tool Kit

- ***LiVe Well, Eat Well*** patient fact sheet covers key messages from this section 
- ***Choose MyPlate 10 Tips*** fact sheet series support specific goals (e.g., *Add More Vegetables to Your Plate*) 
- ***Food & Feelings 1-Day Journal*** to help patients understand WHY they eat 
- ***LiVe Well 1-Week Habit Tracker*** to help patients track WHAT they eat, along with physical activity, sleep, and weight 

Other links and resources

- **Intermountainhealthcare.org/nutrition** includes a list of registered dietitians, classes, and links to other resources. See page 32 for more resource links.



OTHER IMPORTANT LIFESTYLE FACTORS

✓ KEY ACTIONS FOR PROVIDERS

- **Sleep:** Recommend 7 to 9 hours of sleep per night, educate patients on sleep hygiene, and screen for obstructive sleep apnea.
- **Stress:** Educate patients on the importance of stress management in achieving weight management and behavior change.
- **Social support:** Ask patients about their level of family, social, or environmental support for lifestyle management. Consider group programs for weight loss.
- **Mental health:** Screen for depression. Promote physical activity.
- **Alcohol use:** Ask about alcohol use, including drinks per day and week. Counsel on the empty calorie content of alcoholic drinks, and the health risks of drinking more than 1 drink a day for women, or 2 for men.
- **Tobacco use:** Ask about tobacco use and exposure to second-hand smoke. Provide resources for tobacco cessation as needed.

Sleep

- **Why it's important:**
 - **For general health:** Patients who sleep fewer than 5 hours per night are 2.5 times more likely to have diabetes and have a 15% higher all-cause mortality risk, compared to those who sleep 7 to 8 hours. Adults with chronic sleep loss also report higher rates of depression and anxiety. Obstructive sleep apnea contributes to diabetes onset, is associated with hypertension, and increases stroke risk.^{IOM}
 - **For weight management:** Sleeping less than 7 hours per night is associated with obesity: the shorter the sleep, the higher the BMI.^{NED} Sleep loss also undermines weight loss efforts, partly because it affects hormones associated with satiety and hunger.^{IOM,NED}
- **Evidence-based recommendations:**
 - **Adults need 7 to 9 hours of high-quality sleep per night**, according to the National Sleep Foundation.^{NSLF} While naps early in the day (2 hours or less) are helpful, “catching up” on sleep on the weekend doesn’t return people to baseline functioning.^{IOM}
 - **Educate patients on good sleep hygiene**, such as bedtime routines, a bedroom that promotes sleep, avoidance of alcohol and caffeine too close to bedtime, etc.
 - **Screen patients for obstructive sleep apnea (OSA).** See the *STOP-BANG* screening tool in *Table (i)* on page 3 and Intermountain’s *Obstructive Sleep Apnea CPM* for more information.
- **Resources and referral:** Resources available include the fact sheet *Live Well, Sleep Well*, plus several fact sheets and a screening tool on sleep apnea. Refer patients to a sleep specialist if OSA screen is positive. Consider referring patients with chronic insomnia to a mental health specialist; behavioral sleep therapy has been shown to be as effective as medication.^{NED}

Stress

- **Why it's important:**
 - **Chronic stress is associated with biological changes**, including prolonged elevation of circulating cortisol, which may enhance appetite and increase visceral fat deposition, independent of dietary intake.^{MOO} Some studies have found these effects to be small.^{WAR}
 - **Chronic stress is also associated with behavioral changes**, including increased energy intake as a coping strategy.^{MOO}
 - **People of lower socioeconomic status experience higher stress levels, poorer dietary behaviors, and higher body weight.** These patterns are more pronounced in women than in men.^{MOO}
- **Evidence-based recommendations:**
 - **Educate patients on the importance of stress management and stress-reduction techniques**, including physical activity, meditation, social connectedness, and community engagement.^{HCGI} Improving physical and emotional states will increase success of behavior change efforts.
 - **Help patients identify the support necessary** to maintain positive mental well-being.
- **Resources and referral:** A *Live Well, Stress Less* patient fact sheet is available (see *TOOLS* on page 20). Refer patients to employee assistance programs or counseling.

OTHER IMPORTANT LIFESTYLE FACTORS, *continued*

Social support / environment

- **Why it's important:**
 - **Family and friends can impact lifestyle choices and weight management — for better or worse.** A study of overweight/obese women showed that social support — particularly support from friends for healthy eating and support from family for physical activity — improved weight loss efforts.^{K1E} In contrast, a large survey showed that negative social influence undermined nutrition and exercise decisions.^{MAC}
 - **Social environments can foster obesity.** An analysis of Framingham Heart Study data showed that obesity seems to occur in social clusters. For example, a person's chances of becoming obese increased by 57% if a friend became obese.^{CHR}
 - **Intentionally recruiting weight loss partners can foster success.** A study of overweight adults in an exercise program encouraged some participants to invite partners to join them; participants with at least 1 successful partner lost more weight than those with no successful partners, or no partners at all.^{GOR}
- **Evidence-based recommendations:**
 - **Ask patients about their social support network.** If the patient lacks satisfactory social support, consider more proactive follow-up (contact by care manager, etc.).
 - **As patients set lifestyle management goals, help them identify partners and supporters.** The *Rx to Live Well* Patient Worksheet prompts patients to identify people who can help them meet their goal. Patients may need help in building confidence to access their support system.
- **Resources and referral:** Consider referring patients to group programs (such as *The Weigh to Health*®) or to Mental Health Integration (MHI) care management. For more information on MHI, see the *Mental Health Integration CPM*.


Mental health

- **Why it's important:**
 - **Levels of obesity are higher among those with depression, bipolar disorder, and schizophrenia,** as is mortality from obesity-related conditions.^{ALL}
 - **Some mental health medications can cause weight gain —** particularly some mood stabilizers, antipsychotics, and antidepressant medications. See *page 25* for more information and alternatives.
- **Evidence-based recommendations:**
 - **Screen for depression and other mental disorders using the PHQ-2.** Refer to the *Depression CPM* and *Mental Health Integration CPM* for information on referral and treatment.
 - **Recognize that mental health affects, and is affected by, weight management and behavior change.** Make adjustments to care with this awareness in mind.
 - **Promote physical activity.** Particularly for those with depression, substantial research indicates physical activity provides both mental and physical health benefits.
- **Resources and referral:** If depression or other mental health disorders are suspected, refer to an MHI care manager or a mental health specialist. Patient handouts are available on depression and a range of other mental health conditions. See **TOOLS** on the *following page*.

KEY MESSAGES FOR PATIENTS

- **Don't overlook these other important lifestyle factors.** They can sabotage your efforts to reach and maintain a healthy weight and can significantly affect your overall health and well being.
- **Remember that your mental and physical health work together.** Don't overlook symptoms of sadness or anxiety. If you've lost interest in activities or social connections, talk with your doctor.
- **As with activity and nutrition, work with your healthcare provider** to set goals in high-risk areas, enlist support from family and friends, track and report your progress, and celebrate your successes! See below for **example prescription** from the *Rx to Live Well*. ▼

FIGURE 9. Sample lifestyle prescription

 *Other Important Lifestyle Factors*

Sleep 7 hours per night 6 nights per week
(aim for 7 to 9 hours every night)

Manage stress by: _____

Find a friend or family member to support my commitment:
Who: my husband

Reduce alcohol intake to less than _____ drinks per week

Quit tobacco: Method: _____ Quit date: _____

Reward myself for small changes and successes
How: get the latest book in my series

Other: _____

WHAT IS MENTAL HEALTH INTEGRATION?

Mental Health Integration is a team process that incorporates mental health as a component of wellness in a primary care setting. Primary care offices who have implemented MHI have shown improved mental health outcomes, as well as higher patient and provider satisfaction scores.

OTHER IMPORTANT LIFESTYLE FACTORS, *continued*

OTHER IMPORTANT LIFESTYLE TOOLS

Patient Tool Kit

- [LiVe Well, Sleep Well patient fact sheet](#)



- [LiVe Well, Stress Less patient fact sheet](#)



- [Your Weight, Your Medications: Healthy Resources](#)



- [Mental Health patient handout: Depression](#)



- [Quitting Tobacco: Your Journey to Freedom booklet](#)



- [Weight Management Activity Prescription Pad](#)



Alcohol use

• Why it's important:

- **For general health:** Heavier than moderate alcohol use (more than 1 drink a day for women and 2 for men) can lead to increased risk of health problems, including some cancers; relationship or work problems; and increased risk for motor vehicle accidents, violence, and drowning.
- **For weight loss:** Since alcohol contains sugar and empty calories, it can contribute to weight gain the same way sweetened drinks can. Heavier than moderate alcohol use over time is associated with weight gain and obesity, regardless of the type of alcohol used.^{USDA1} Lifetime alcohol use is associated with increased waist circumference and abdominal adiposity in both men and women.^{BER} A new study shows that Americans tend to eat more calories and fat on the days they also have alcoholic drinks.^{BRE}

• Evidence-based recommendations:

- Ask all patients about alcohol use. Advise alcohol users to do so moderation — up to 1 drink per day for women, and up to 2 drinks per day for men. One drink is 12 ounces of beer, 5 ounces of wine, or 1.5 ounces of hard liquor.^{USDA1}
- Advise patients to monitor calorie intake from alcoholic beverages and any accompanying mixers. Reducing alcohol intake is a strategy that can be used by adults to consume fewer calories.^{USDA1}

• Resources and referral:

- For more information on screening and counseling for alcohol use and abuse — including the CAGE and SMAST questionnaires — see Intermountain's [Preventive Care Recommendations](#).
- For advice on where to send patients for alcohol and drug treatment, contact Intermountain's behavioral health referral network line. For SelectHealth plan members, call 800-876-1989 or 801-442-1989. For all other patients, call 211 for community referrals.

Tobacco use

• Why it's important:

- **For general health:** Smoking harms nearly every organ in the body. In addition to causing nearly 1 in 5 deaths in the United States, the adverse effects of smoking decrease everyday quality of life.^{CDC3}
- **For weight loss:** Smoking damages the airways and alveoli of the lungs, causing lung diseases. Lung diseases decrease capacity for physical exercise, a necessary component of weight management and wellness.

• Evidence-based recommendations:

- Ask all adults about tobacco use and provide tobacco cessation interventions for those who use tobacco products.^{USPS}
- Ask all pregnant women about tobacco use and provide augmented, pregnancy-related counseling for those who smoke.^{USPS}

• Resources and referral:

- The Utah Tobacco Quit line (800-QUITNOW), a free, phone-based individual counseling program, is available to all Utah teens, uninsured adults, and adults on Medicare or Medicaid.
- The Quit for Life program, a phone-based individual counseling program available to Select Health members. (866-QUIT-4-LIFE)
- The Intermountain booklet [Quitting Tobacco: Your Journey to Freedom](#) provides additional help and resources.



WEIGHT MANAGEMENT STRATEGIES

This section summarizes evidence-based recommendations for obesity screening and interventions, highlights evidence about the physiological challenges of long-term weight maintenance, and outlines strategies to overcome barriers and promote lifelong behavior change.

Finding and reinforcing the WHY

Weight loss and maintenance requires long-term persistence. Because of this, a strong sense of purpose is especially important for success. The physician *and* the patient need to stay focused on personal motivations. When results are slow, remember that the activities required for weight loss improve health and fitness whether the patient loses weight or not.

- **Physicians** may be motivated by helping patients remain healthy and prevent disease, or by increasing patients' satisfaction with the practice.
- **Patients** have a variety of motivations. Use motivational interviewing to draw out a patients' personal motivations and barriers. See page 8 for motivational interviewing and other behavior change tips and techniques.

Understanding and explaining the physiological challenges

Understanding the challenges of weight loss and why some people are more successful than others can help you set reasonable expectations and reinforce the importance of **building lifelong, sustainable healthy habits**. Here's what the studies show:

- **20% actually do succeed!** About 20% of overweight people succeed at long-term maintenance of weight loss (defined as intentionally losing at least 10% of initial body weight and maintaining the loss for at least 1 year).^{WNG1} Understanding the common habits of these "successful losers" can help you counsel and motivate your patients.
- **The dose of exercise needed to lose weight and maintain weight loss is relatively large, which may limit motivation.** To lose weight — and to maintain weight loss long term — studies suggest a minimum of 250 to 300 minutes per week, or about an hour a day, most days of the week.^{WING1, LAD, ICSI} This can be discouraging and may limit adherence, so it's important to help patients strategize in this area.
- **People experience a significant and disproportionate decline in energy expenditure after weight loss.** After reaching and maintaining a 10% or greater weight loss over months or years, patients demonstrate a 300 to 400 kcal per day reduction in energy expenditure compared to matched subjects at their usual weight.^{ROS} This exacerbates the potential for weight regain.
- **Lower energy expenditure is amplified if weight loss results mostly from restricting calories.** This is likely due to loss of lean tissue and lowered metabolic rate. Increasing levels of physical activity may spare the loss of fat-free mass and help counter the detrimental effects of caloric restriction.^{WAD1} The percent of weight lost as fat, including abdominal and visceral fat, is greater with exercise than with diet.^{DGAC}
- **Other biological effects compound the difficulty of weight loss and weight maintenance.** Growing evidence shows that the decline in energy needs after weight loss is amplified by biological factors that decrease satiation (thus increasing energy intake) and conserve energy by keeping fat stores at a defined threshold. Much of this may be mediated by the adipocyte-derived hormone leptin. More research is needed to explore the implications for clinical practice.^{HAV, KIS, SUM}

✓ KEY ACTIONS FOR PROVIDERS

- **Help patients find and reinforce WHY** they are trying to lose weight.
- **Plan for weight-loss maintenance from the beginning** by being aware of and educating patients about weight-loss challenges.
- **Assess BMI, PAVS, waist circumference, comorbidities, and contributing factors.** Stratify risk and advise on appropriate interventions.
- **Agree on weight-loss goals,** help plan for success, and encourage patients to find support.
- **Prescribe evidence-based behavioral, activity, and nutrition advice** for both weight loss and long-term weight maintenance.
- **Provide or refer appropriate patients to intensive, multicomponent behavioral intervention programs** — such as Intermountain's *Weigh to Health*[®] program.
- **Arrange for frequent follow-up** and patient contact.
- **Consider other interventions,** such as special diets, pharmacological therapy, and/or surgery only in carefully selected patients and only as an adjunct to intensive lifestyle management.

WEIGHT MANAGEMENT STRATEGIES, *continued*

✓ KEY MESSAGES FOR PATIENTS

- **Make changes to both dietary and activity habits.** Focus on building lifelong healthy habits — not on quick fixes.
- **Learn about the physiologic challenges** of weight loss and long-term weight maintenance and use evidence-based tactics to overcome them.
- **Aim for high doses of regular physical activity.** Successful weight loss and maintenance requires 250 minutes a week or more. You can build up gradually and break it up into sessions of as little as 10 minutes at a time.
- **Weight loss is not the only measure of success.** Even if you don't lose much weight, the healthy behaviors you develop for weight loss success also lead to significant improvements in overall health.
- **Find what works for you,** and stick to it! Make a plan, and don't let slip-ups derail you.

▶ *For all patients, even those at low risk, recommend lifelong lifestyle management, including behavior change, physical activity, and nutrition. See page 24 for a summary of proven success factors in these areas.*

▶ *For all patients with BMI >30, offer or refer for intensive, multicomponent behavioral interventions (see page 24). This may also be appropriate for patients with BMI >27 with comorbidities.*

▶ *For high-risk patients, consider other therapies — such as special diets, weight-loss medications, and bariatric surgery. These therapies are usually reserved for patients for whom 6 months of intensive lifestyle management has failed to result in adequate weight loss. However, they may be considered earlier for some patients. See pages 25 to 27.*


Following the 5As

1. Assess the patient's health and lifestyle risks and behaviors.

- **BMI.** Measure and record height, weight, and BMI for ALL adults at every visit. [Link to CDC BMI calculator.](#)^{CDC1}
- **Physical inactivity and sedentary behavior.** Assess the Physical Activity Vital Sign (PAVS) at every visit (see page 13 for details).
- **Waist circumference and other body fat measures.** Waist circumference over 35 inches for women or 40 inches for men indicates excess abdominal and visceral fat, and is considered an additional weight-related comorbidity. Reduction in waist circumference can be considered a success factor, even in the absence of weight loss. Also consider other measures of body fat (such as bioelectrical impedance) that may also be used as alternate success factors.
- **Other comorbidities.** Assess for other lifestyle and weight-related comorbidities, including hypertension, dyslipidemia, type 2 diabetes, and coronary artery disease (see table (d) on page 3).
- **Conditions and medications that may contribute to weight gain.** See tables (e) and (f) on page 3. For more on contributing medications and alternatives, see page 25.
- **Personal and family history of weight and weight loss attempts.**
- **Readiness and willingness to make changes in various lifestyle areas.**

2. **Advise.** Based on the patient's unique risk profile, advise them about their health risks, recommended weight loss, and appropriate evidence-based interventions. Share risk charts and graphs with patients (see resources on page 32). Address patient concerns and answer questions about treatment options.

TABLE 8. Recommended interventions based on BMI and comorbidities^{ICSI, USPS}

BMI and obesity class ▶	Normal BMI 18.5–24.9	Overweight BMI 25–29.9		Obese BMI 30–39.9		Extremely Obese BMI 40 or more
		25–26.9	27–29.9	30–34.9	35–39.9	
Recommended Interventions ▼	Low risk		Moderate risk		Mod-high risk	Severe risk
Behavior	✓	✓	✓	✓	✓	✓
Activity	✓	✓	✓	✓	✓	✓
Nutrition	✓	✓	✓	✓	✓	✓
Intensive, multicomponent behavioral interventions (see page 24)			Consider with comorbidities	✓	✓	✓
Meal replacements or very low calorie diets (see page 25)			Consider with comorbidities	Consider	Consider	Consider
Weight loss medications (see pages 25 and 26)			Consider with comorbidities	Consider	Consider	Consider
Bariatric surgery (see page 27)					Consider with comorbidities	Consider

WEIGHT MANAGEMENT STRATEGIES, *continued*

3. Agree on realistic weight-loss goals and success measures.

- **Assess and promote readiness.** Assess the patient’s current readiness and attitude toward losing weight. Asking about previous weight loss attempts, successes, and barriers may be helpful.
- **Reinforce the message of building lifelong, sustainable habits,** including regular physical activity and ongoing dietary balance. Focus on helping patients find activities and eating patterns they enjoy and are likely to continue throughout life.
- **Agree on a weight-loss goal and pace.** For most patients, aim for initial weight loss of 5% to 10% of total body weight. This percent has been shown to significantly lower the risk of diabetes and other weight-related health conditions.^{DPP} Aim for a loss of 1 to 2 pounds per week.^{LAD}
- **Agree on behavior-change goals that will support weight loss.** Write mutually agreed upon goals on a written prescription or care plan that both you and the patient sign. You can use the weight management section of the *Rx to Live Well* for this purpose.
- **Agree on how you will measure success.** Reducing weight and waist circumference are primary measures of success, but not the only ones. Other measures may include body fat reduction, improving one or more activity or nutrition habits, and even “feeling better” physically or emotionally.

4. Assist patient in reaching weight-loss goals.

- **Advise patients to make a detailed action plan that includes tactics for overcoming barriers and setbacks and ways to enlist support.** Family and friends can both help and hinder weight loss.^{KIE} Encourage patients to draw on helpful social support and be assertive in unhelpful social situations.^{ICSI}
- **Teach skills required for maintaining behavior changes,** including:
 - **Self-monitoring.** Regularly tracking weight, diet, and physical activity helps patients better understand their own patterns, control their behaviors, and maintain lifestyle changes.
 - **Stimulus control.** Help patients learn to modify their environment to limit exposure to unhealthy foods and facilitate physical activity.^{KUS} Ongoing use of the *Readiness Worksheet* and the *Action Plan* can help patients set realistic goals, troubleshoot barriers, and plan for starting again after a relapse.
- **Provide a list of community resources** as appropriate, including physical activity programs or gyms, classes, or groups.

5. Arrange a follow-up plan and promote accountability.

- **Refer for nutrition counseling and/or behavioral intervention** as appropriate. See page 24 for what qualifies as “intensive, multicomponent behavioral intervention.” See pages 29 and 30 for more details on *The Weigh to Health®* program and other ways to provide recommended levels of intervention.
- **Determine a follow-up plan.** The plan should include a regular schedule for following up and reporting progress with you or someone else.
- **At every visit, reevaluate BMI and other risk factors and set new goals.**
- **Celebrate success.** Patient self-efficacy increases with success. Look for opportunities to celebrate success and acknowledge short-term accomplishments.
- **Arrange for more intensive therapy and more frequent follow-up if needed.** If lifestyle changes are not improving outcomes after 6 months, consider more intensive diet therapies, weight-loss medications, or surgery (see pages 25 to 27). These options might be considered earlier for patient with severe obesity-related risk.

THE RX TO LIVE WELL

Use the Weight Management section of the *Rx to Live Well* to help patients set weight loss and tracking goals. Use other sections of the Rx to help set 1 or 2 specific lifestyle behavior goals to help them reach their weight loss and other health goals.

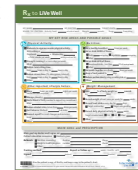


FIGURE 10. Sample weight management prescription

Weight Management

Lose _____% of body weight or _____ pounds by _____ (date)

Record weight at least once per week for _____ weeks

Record food intake every day for 14 days

Target calories/day: _____ Target carb gms/day: 200

Record daily physical activity for _____ weeks

Target minutes/week: 250 300 Other: 200 min

Other: **follow-up appt with Dr. Jones in 2 weeks**

SUCCESSFUL LOSERS

The National Weight Control Registry (NWCR) was established in 1994 to evaluate the characteristics of people who have succeed at long-term weight loss. The NWCR is currently tracking more than 10,000 people and uses detailed annual follow-up surveys to examine the behavioral characteristics and strategies those people use to maintain weight loss. Here’s what the findings show:^{NWCR}

- Most report continuing to maintain a low-calorie, low-fat diet.
- 78% eat breakfast every day.
- 75% weigh themselves at least once a week.
- 62% watch fewer than 10 hours of TV per week.
- 90% exercise, on average, about 1 hour per day.

See the next page for a summary of these and other behaviors shown to be success factors for successful weight loss and weight-loss maintenance.

WEIGHT MANAGEMENT STRATEGIES, *continued***INTENSIVE,
MULTICOMPONENT
BEHAVIORAL INTERVENTION**

The U.S. Preventive Services Task Force (USPSTF) found adequate evidence that **intensive, multicomponent behavioral interventions** for obese adults can lead to weight loss, as well as improved glucose tolerance and other physiologic risk factors for cardiovascular disease.^{USPS}

The most effective interventions were comprehensive and of high intensity — **12 to 26 sessions in a year** — and incorporated the following components:

- **Behavioral management** activities, such as setting weight-loss goals
- **Improving diet** or nutrition
- **Increased physical activity**
- **Addressing barriers to change**
- **Self-monitoring**
- **Coming up with strategies** to maintain lifestyle changes

For obese patients with BMI >30, such intensive programs resulted in an **average weight loss of 8.8 to 15.4 pounds**, compared to little or no weight loss with controls. These interventions also **improved glucose tolerance and other physiologic risk factors** for cardiovascular disease.^{USPS} For obese patients with elevated plasma glucose levels, behavioral interventions have been shown to **decrease diabetes incidence by about 50% over 2 to 3 years** (number needed to treat — only 7!).^{DPP}

Although intensive interventions may be impractical within many primary care settings, patients may be referred from primary care to hospital- or community-based programs, such as Intermountain's **The Weigh to Health®** program. For more information, see page 29.

Key evidence-based lifestyle SUCCESS FACTORS^{ICSI, LAD, SCL, WING1, NWCR}

The tables below summarize lifestyle factors most highly correlated with initial and long-term success. In general, the focus for **weight loss** is on problem solving — experimenting with what works and identifying practices that can be sustained. For **weight-loss maintenance**, the focus shifts to sustaining successful practices by making them routine.

TABLE 9. SUCCESS FACTORS for weight LOSS and weight-loss MAINTENANCE

Behavior (also see pages 8 to 11)	
For weight LOSS	For weight-loss MAINTENANCE
<ul style="list-style-type: none"> • Identify triggers, such as stress, emotional eating, boredom, or poor sleep.^{ICSI} • Set specific, measurable goals.^{ICSI} • Track and report progress. Keep a daily food and exercise journal, weigh at least weekly, and record and report progress regularly. • Follow up frequently with the doctor, dietitian, or weight-loss counselor. • Seek support from family and friends. • Remember WHY: personal motivations, progress already made, etc. 	<ul style="list-style-type: none"> • Stay accountable. Continue to keep a food and exercise journal, and weigh at least weekly.^{LAD} • Continue what works. Reinforce and continue successful behaviors and daily routines.^{SCI} • Celebrate ongoing commitment. Find self-rewards for sticking to a diet or exercise plan.^{SCI} • Don't let setbacks become habits. Recognize that it's normal to get off track; make a plan for catching "slips" before they turn into habits.
Physical activity (also see pages 12 to 15)	
For weight LOSS	For weight-loss MAINTENANCE
<ul style="list-style-type: none"> • Get at least 250 to 300 minutes of moderate or vigorous aerobic exercise per week. (This is equivalent to about an hour a day or 2,500 or more calories per week.)^{WING1, LAD, ICSI} • Find enjoyable activities that can become sustainable habits. • Build up gradually and consistently by increasing Frequency, Intensity, Time, and/or Type. Start by increasing time by 10 minutes a day. • Plan activity into every day. Make it routine, not an afterthought. • Move more all day. Decrease overall sedentary behaviors like watching TV. 	<ul style="list-style-type: none"> • Continue with high levels of physical activity (similar to the amounts needed for weight loss). • Continue successful daily routines of enjoyable and sustainable activities.^{SCI} • Continue an overall more active lifestyle with less sedentary time. • Add resistance exercises for all major muscle groups at least 2 days a week to help maintain lean body mass and metabolic rate.
Nutrition (also see pages 16 and 17)	
For weight LOSS	For weight-loss MAINTENANCE
<ul style="list-style-type: none"> • Be aware of calorie needs based on age, gender, and activity level. Link^{USDA2} • Reduce calories by 500–1,000 per day for a gradual weight loss of 1 to 2 pounds per week. • Keep a food journal to increase awareness of nutrition practices and to honestly evaluate portion sizes and overall food intake. • Find what works individually. Evidence shows no optimal proportion of nutrients for weight loss, as long as patients stay within healthy ranges for calories from fat (20%–35%), protein (10%–35%) and carbohydrates (45%–65%). The key is to find what works for the individual; for example, an insulin-resistant patient may respond better to a lower-carb diet. • Consider intensive diet therapies for appropriate patients (see page 25) and referral for individualized nutrition counseling.^{USPS} 	<ul style="list-style-type: none"> • Continue to maintain appropriate calorie balance throughout life. Evidence suggests that due to physiological changes that decrease energy needs, a patient needs to continue to eat about 300 to 400 fewer calories per day below pre-weight-loss practice to maintain new weight.^{ROS} • Continue to keep a food journal. • Eat breakfast regularly.^{NWCR} • Maintain routines. Maintain a consistent eating pattern across weekdays and weekends.^{WING1} • Eat plenty of low-fat sources of protein.^{SCI}

WEIGHT MANAGEMENT STRATEGIES, *continued*

Intensive diet therapies

- **When to consider:** Consider intensive diet therapies to promote early success in obese patients (BMI 30 and higher) or overweight patients with comorbidities. These therapies should only be used as an adjunct to ongoing lifestyle management.
- **Meal replacements:** A meal replacement plan can consist of 2 or more meal and snack replacements, which can be purchased or self-prepared. These plans are portion and calorie controlled with specific macronutrient balance (carb/protein/fat ratios) that aid in weight loss efforts. Several studies comparing meal replacement plans to general reduced-calorie diets have shown equivalent or greater weight loss and improvements in metabolic risk factors, insulin, and other health measures with meal replacements. Meal replacement plans may be especially helpful for those who have difficulty selecting healthy foods and controlling portions.^{WAD1,AND,KON,ADA}
- **Very low calorie diets (VLCDs):** A VLCD is typically defined as less than 50% of a person’s predicted resting energy expenditure, or about 800 to 1,000 calories. Studies have shown that VLCDs produce greater initial weight loss than reduced-calorie diets. However, a maintenance program is important; otherwise, patients tend to rapidly regain the weight in 6 to 12 months. When used appropriately, VLCD results can be similar to gastric bypass surgery.^{WAD2,ADA} **VLCDs should be used only under medical supervision by experienced practitioners (including a dietitian), and only with supplements.** These diets are NOT for children, pregnant or nursing mothers, patients who are not obese, patients with eating disorders, or patients with type 1 diabetes — and may be contraindicated with other medical conditions and medications.^{AND}

Pharmacological therapy

- **When to consider:** Carefully consider the risks and benefits of pharmacological therapy before initiating. Use only for patients who meet these criteria:
 - **Patients with BMI >30, BMI >27 with any other weight-related risk factors,** or comorbidities like high waist circumference, diabetes, hypertension, or heart disease.
 - **Patients who have undergone 6 months of intensive lifestyle intervention** that has failed to result in adequate weight loss, and the patient is committed to continuing intensive lifestyle intervention.
- **Medications that may cause weight gain:** Before initiating drug therapy, evaluate the patient’s current medications. Some may make weight loss more difficult. If possible, consider alternative medications.

LIFESTYLE MANAGEMENT IS ALWAYS KEY

More intensive weight management strategies like meal replacements, VLCDs, weight loss medications, and bariatric surgery *always* require ongoing lifestyle management for long-term success. In addition to a healthy diet and regular physical activity, remind patients of the important role that sleep, stress management, social support, and mental health can play in reaching and maintaining a healthy weight. See pages 18 to 20 for more information.

ALTERNATIVE MEDICINES

In general, complementary or alternative medicines are NOT recommended for weight loss due to uncertain efficacy and/or safety concerns.^{POD} See the table below.

TABLE 11. Alternative Medicines		
Class		Examples
A	Some evidence for weight loss effects; more evidence needed	<ul style="list-style-type: none"> • Capsaicin • Green tea • Psyllium
B	No evidence for weight loss effects	<ul style="list-style-type: none"> • Chitin • Guar gum • L-Carnitine • Hoodia • Fenugreek • Human chorionic gonadotropin (hCG)
C	Inconsistent clinical data for weight loss effects	<ul style="list-style-type: none"> • Caffeine • Chromium • Ginseng • Glucomannan • Hydroxycitric acid • Pyruvate • St. John’s wort • Linoleic acid
D	Strong evidence for weight loss effects, but with safety concerns; discourage use	<ul style="list-style-type: none"> • Bitter orange • Ephedrine • Ma Huang (ephedra)

TABLE 10. Medications that may affect weight^{FAV, LES}

Condition(s)	Medications that may promote weight GAIN	Alternatives — weight NEUTRAL or may promote weight LOSS
Diabetes, insulin resistance, metabolic syndrome	<ul style="list-style-type: none"> • Sulfonylureas • Metiglinide • Thiazolidinediones • Insulin 	<ul style="list-style-type: none"> • Metformin: may promote modest weight loss. • GLP-1 agonists (e.g. exenatide, liraglutide): may promote weight loss. <p>See Intermountain’s <i>Diabetes CPM</i> for more info.</p>
Depression, mood disorders	<ul style="list-style-type: none"> • Tricyclic antidepressants • Atypical antipsychotics (e.g., olanzapine, risperdone, clozapine) • Lithium • Paroxetine • Some SSRIs/SNRIs • Mirtazapine 	<ul style="list-style-type: none"> • Bupropion: may promote weight loss. • Floxetine and sertraline: may promote initial weight loss, often followed by weight gain <p>See Intermountain’s <i>Depression CPM</i> for more info.</p>
Hypertension	<ul style="list-style-type: none"> • Beta blockers • Calcium channel blockers 	<p>See Intermountain’s <i>Hypertension CPM</i> for more info.</p>
Other	<ul style="list-style-type: none"> • Oral, injected, or implanted contraceptives • Oral glucocorticoids • Antiepileptics (e.g., valproic acid, carbamazepine, gabapentin) 	<ul style="list-style-type: none"> • Antiepileptics (e.g., zonisamide, topiramate): may promote weight loss.

WEIGHT MANAGEMENT STRATEGIES, *continued*

FDA EFFICACY BENCHMARKS:

• **Meet this criteria:**

- More than a 5% difference in mean weight loss between the active-product group and the placebo-treated group (*and* statistically significant)

OR

• **Meet both these criteria:**

- More than 35% of active-product subjects lost 5% or more of their baseline body weight **AND**
- The percent of active-product subjects who lost more than 5% of their baseline body weight is approximately double the proportion in the placebo group (*and* statistically significant)

- **FDA-approved weight loss medications.** See Table 12 below for a summary of FDA-approved weight loss medications. These medications meet the FDA weight-loss requirements listed in the sidebar. Most patients will need to pay cash for weight loss medications, as most insurers (including SelectHealth) do not cover them.
- **Patient education and shared decision making.** Educate patients about the risks and benefits of drug therapy — including realistic expectations, the importance of ongoing intensive lifestyle therapies, and how and when to monitor and report side effects. A *Weight Loss Medications* patient fact sheet is available to guide this discussion. Involve the patient in choice of drug and commitment to ongoing lifestyle changes.
- **Monitoring and follow-up.**
 - Follow up within 2 to 4 weeks of drug initiation to check for side effects and efficacy.
 - If the patient has severe side effects or has not lost at least 4 to 5 pounds within 4 weeks, reevaluate the chosen medication and its dosing and/or consider discontinuing the medication.
 - For most patients, loss of 10% of body weight is a reasonable goal and good result; loss of >15% is excellent.
 - See Table 12 below for monitoring and follow-up recommendations for specific medications.

TABLE 12. Medications FDA-approved for weight loss (link to dailymed.NHI.com for latest FDA information)

	Orlistat (Xenical, Alli OTC)	Phentermine (Adipex-P)	Diethylpropion (Tenuate, Tepanil)	Lorcaserin hydrochloride (Belviq)	Phentermine/ topiramate (Qsymia)
Approval	1999	Prior to 1980	Prior to 1980	NEW June 2012	NEW July 2012
Category and primary action	Lipase inhibitor: reduces intestinal fat absorption	Appetite suppressant: stimulates NE (norepinephrine) release	Appetite suppressant: stimulates NE (norepinephrine) release	Activates serotonin (5-HT) 2C receptors; decreases food consumption and promotes satiety	Sympathomimetic amine + antiepileptic: suppresses appetite and promotes satiety
Max trial length	4 years	9 months	1 year	2 years	2 years
Avg weight loss versus placebo	-3.0 kg (6.6 lb) at 1 year	-3.5 kg (7.7 lb) at 36 weeks	-3.0 kg (6.6 lb) at 1 year	-3.3 kg (7.3 lbs) at 2 years	-7.8 kg (17.2 lb) at 1 year
Recommended dosing	Xenical 120 mg 3x/day; Alli OTC 60 mg 3x/day with meals	15 mg/day to 37.5 mg/day	75 mg/day	10 mg twice daily	Once daily in a.m. Start at 3.75/23 mg/day x 2 weeks, then 7.5/46 mg/day. Evaluate at 14 weeks to d/c or titrate up to max 15/92 mg/day if sufficient (3%) weight loss is not achieved.
Cost	Xenical \$475/month Alli \$65/month	\$30/month	\$30/month	\$200/month	\$180/month
Risks and precautions	Pregnancy category X. FDA revised label to include safety information on rare liver injury.	Pregnancy category X. Potential for abuse and dependence. Contraindicated with MAOIs, other central appetite suppressants, uncontrolled HTN, seizures, CHF, stroke, arrhythmias, agitation	Pregnancy category B. Potential for abuse and dependence. Contraindicated with MAOIs, other central appetite suppressants, uncontrolled HTN, seizures, CHF, arrhythmias, stroke, agitation	Pregnancy category X. Potential for abuse and dependence. Risk with other serotonergic drugs; risk for recreational use (euphoria, altered mood, etc.); increased risk of hypoglycemia, headache, back pain, cough, and fatigue in diabetic patients	Pregnancy category X. Potential for abuse and dependence. Contraindications: pregnancy, glaucoma, hyperthyroidism, and taking within 14 days of an MAOI; antiepileptic drugs may increase suicide ideation
Potential side effects	Diarrhea, flatulence, bloating, abdominal pain, dyspepsia	Most common: hypertension, dizziness, headache, GI symptoms, insomnia	Most common: hypertension, dizziness, headache, GI symptoms, insomnia	Fatigue and cognitive changes, headache, dizziness, fatigue, nausea, dry mouth, constipation	Paraesthesia, dizziness, dysgeusia, insomnia, constipation, dry mouth
Monitoring and follow-up	<ul style="list-style-type: none"> • Balanced, reduced-calorie diet with about 30% of calories from fat. • Add fat-soluble vitamin supplement. 	<ul style="list-style-type: none"> • Check blood pressure weekly. • Consider cardiac evaluation and echocardiogram before, during, and after therapy. • Pregnancy test monthly. • Recommended for short-term use (a few weeks) 	<ul style="list-style-type: none"> • Check blood pressure weekly. • Consider cardiac evaluation and echocardiogram before, during, and after therapy. • Pregnancy test monthly. 	<ul style="list-style-type: none"> • Caution use of heavy machinery when initiating therapy. • If dyspnea or edema develops, evaluate for valvular heart disease. • Discontinue if 5% weight loss not achieved in 12 weeks. • Pregnancy test monthly. 	<ul style="list-style-type: none"> • Obtain baseline blood chemistry profile; monitor periodically. • Monitor for elevation in heart rate, suicidal thoughts, mood and sleep changes, cognitive impairment, and angle closure glaucoma. • Discontinue if 5% weight loss not achieved after 26 weeks. • Pregnancy test monthly.

WEIGHT MANAGEMENT STRATEGIES, *continued***Bariatric surgery**

Candidates: Bariatric surgery used in addition to intensive lifestyle interventions is the most effective therapy available for morbid obesity. It can improve or completely resolve obesity comorbidities.^{MBS} Appropriate candidates include:

- **Patients with a BMI of 40 or higher (extremely obese).** In addition, bariatric surgery is sometimes indicated for patients with a BMI of **30 to 39** and serious weight-related health problems, such as diabetes, severe GERD, or ventral hernia. Laparoscopic adjustable gastric banding (lap banding) is FDA approved for these patients.^{ICSI}
- **Patients who have been unable to achieve or maintain a healthy weight** through non-operative means, including nutritional counseling, diet, exercise, intensive multicomponent behavioral interventions, and/or pharmacological therapy.

Surgical options: Bariatric surgery works by limiting food intake and/or interfering with the body's ability to absorb nutrients. Types of operative procedures have increased and are continuously evolving; both open and laparoscopic bariatric techniques are effective therapies.^{MBS} Options include adjustable gastric band; gastric bypass (Roux-en-Y); biliopancreatic diversion with a duodenal switch; and sleeve gastrectomy.

Clinical efficacy. Some patients lose as much as 50 percent of their body weight after surgery, and nearly half keep the pounds off for up to 10 years.^{BUC} A new study by LDS Hospital researchers, published in JAMA, showed the following benefits for patients who underwent gastric bypass (Roux-en-Y):^{ADM}

- **Effective maintenance of weight loss:** Surgical patients lost an average of 34.9% of their initial weight 2 years after surgery, and kept off 27.7% of the weight 6 years after surgery. Of these patients, 96% maintained more than 10% weight loss from baseline, and 76% had maintained more than 20%. By contrast, patients in the groups without surgery either lost no weight or gained weight over the next 6 years.
- **Remission of type 2 diabetes:** 62% of patients who had diabetes before surgery were in remission after 6 years. That compares to only 8% and 6% for the nonsurgical groups. Gastric bypass patients who did not have diabetes before the surgery were 5 to 9 times less likely to develop diabetes than nonsurgical participants.

Cost effectiveness: Though more research is needed, a recent analysis of patient-level cost data for 3,651 patients up to 5 years after surgery estimated that all costs of bariatric surgery were recouped within 2 years for laparoscopic surgery patients and within 4 years for open surgery patients.^{FIN}

The bariatric surgery team: A multidisciplinary team should evaluate and care for patients considering bariatric surgery. Once a patient and the PCP have decided bariatric surgery is the best option to treat the patient's obesity, the PCP should refer the patient for surgical consultation. Bariatric surgery candidates should have a comprehensive medical evaluation before the operation, including evaluation by subspecialists (e.g., cardiologists, psychiatrists, and psychologists) as needed.

Program certification: The American Society for Metabolic and Bariatric Surgery (ASMBS) and the American College of Surgeons (ACS) are joining together to become the new certifying body for bariatric surgery programs. Criteria for certification are still under review. For more information, visit the [ASMBS website](#) or the [LDS Hospital Bariatric Surgery website](#).

Insurance coverage: Most commercial insurers don't cover bariatric surgery, though some either cover or have optional riders. Coverage is also available for Medicare patients and other programs sponsored by the federal government. Coverage is limited to certain procedures and program requirements. For example, Medicare requires patients to have a BMI of 35 or higher with at least one obesity comorbidity, and the procedure must be done at a certified program. See *pages 30 and 31* for more information and links to resources on coverage for obesity-related interventions.

REFERRAL, FOLLOW-UP, AND COMMUNICATION

Frequent follow-up is critical for successful weight loss. Follow-up doesn't need to fall solely to the PCP clinic. Rather, PCPs are encouraged to refer to hospital or community programs and specialists for intensive multicomponent interventions. See the following pages for ideas and tools for follow-up, referral, and communication — both within your clinic and between your clinic and other programs and specialists.

WEIGHT MANAGEMENT TOOLS**Patient Tool Kit**

- ***The Weigh to Health*[®] Program brochure.**

See page 29 for more information on this program.



- ***The Weigh to Health*[®] booklet includes behavior, nutrition, and activity advice for how to reach and maintain a healthy body weight.**



- ***The Live Well 1-Week Habit Tracker.*** Single page, front and back.



- ***Weight Loss Medications*** patient fact sheet explains how medications work, who should take them, risks and benefits, and what to expect.



All the above tools and more are available at intermountainhealthcare.org/weight

► COMMUNICATION, FOLLOW-UP, & REFERRAL

✓ KEY ACTIONS FOR PROVIDERS

- **If you haven't already, designate clinic staff members to play these 2 key roles:**
 - **A process coordinator** to arrange for ongoing team communication via team huddles or team process follow-up meetings.
 - **Patient coach(es)** to counsel patients, plan follow-up, and communicate with specialists after a referral.
- **Work with your team's process coordinator to plan for regular team communication and follow-up using "team huddles"** — including daily or weekly brief stand-up meetings and/or monthly or quarterly team process meetings.
- **Arrange regular follow-up** visits, calls, or other touch points with patients to promote **accountability**. In a follow-up visit, the physician and patient can discuss strategies for overcoming barriers, celebrate successes, and set new goals.
- **Refer as appropriate for intensive, multi-component behavioral interventions**
- **Use communication tools** such as the HELP2 Message Log to communicate about a patient's goals, expectations, and progress.

This section describes effective strategies for team communication, following up with patients, and communicating with specialists.

Team communication and follow-up: team huddles

Effective communication and follow-up are the keys to weight and lifestyle management in primary care — both for promoting successful implementation by the clinic team and for affecting successful behavior change by patients. Regular **"team huddles"** allow brief and focused communication among clinic staff members to plan patient follow-up and improve team processes. The staff member designated as the process coordinator for your team is the best person to arrange a time and format for these team meetings. These meeting can take 2 forms; here are **tips to make them happen**:

- **Daily or weekly team huddles for PATIENT follow-up** (10 minutes or less) to discuss patients who have set lifestyle goals and will need follow-up. Establish a regular place, time, agenda, and attendees (the patient coach and any others who counsel patients) for these meetings. It may be helpful to post a small white board (out of patient view) or use a shared document to note the names of patients who have set lifestyle management goals. At each meeting, briefly discuss these patients, set a follow-up plan, and then erase the list.
- **Weekly or monthly brief (15 to 20 minutes) meetings for TEAM PROCESS follow-up** to evaluate the current team goal and process, plan improvements, set a new goal, and so forth. For these meetings, consider scheduling a brown bag every few weeks or months or using 15 minutes of an existing staff meeting. A set agenda with brief questions focused on the team's current lifestyle and weight management goal can help this meeting go quickly. Consider these agenda items:
 - What's working well in our team process for lifestyle management?
 - What's not working smoothly — how can we improve the process?
 - Are there any brief success stories to share?
 - Is it time to set a new team goal for weight & lifestyle management?

Patient coaching and follow-up

Frequent follow-up has been shown to be vital to for successful weight loss efforts. Patients who have set a lifestyle management goal need to be able to report their success, discuss problems or barriers, and set new goals to move forward in their path to change.

Tips for making this happen:

- **Use designated patient coaches or care managers** to help patients set lifestyle management goals — and then follow-up on their progress. Follow-up strategies may include brief phone calls or emails sent through a patient portal.
- **Offer follow-up visits to engage patients in continuing behavior change efforts.** Patients who set lifestyle management goals often recognize the benefit of ongoing guidance and appreciate follow-up visits, even if a copay or co-insurance is involved. See *pages 30 and 31* for information on how healthcare reforms supports regular lifestyle counseling and follow-up.

COMMUNICATION, FOLLOW-UP, & REFERRAL, *continued*

Referral and specialist communication and follow-up

Intensive, multicomponent behavioral interventions

Providing the necessary frequency and intensity of follow-up in the primary care setting can be challenging. **Consider referring patients with obesity and other healthcare problems to programs such as Intermountain’s *The Weigh to Health*® program, described below.**

Intermountain’s *The Weigh to Health*® Lifestyle and Weight Management Program

This program provides the intensity and frequency of intervention that meets the USPSTF’s recommendations for obesity management, and thus the preventive care stipulations for coverage under the Affordable Care Act (see page 30 for more information on insurance coverage).



The program includes **at least 12 sessions over a 6-month period**, as follows:

- A group orientation
- 2 individual sessions with a registered dietitian (RD), along with RD follow-up contact at 6, 12, and 18 weeks
- At least 9 group classes over 6 months, covering nutrition, exercise, and behavior change — including topics such as intuitive eating, stress management, and menu planning.
- Regular communication and reporting to physician (see sidebar).

Weight Watchers and other programs may also help meet recommendations for intensive, multicomponent behavior interventions. See page 32 for other resources.

Referral and communication with other specialists

When the primary care physician partners with specialists, such as a registered dietitians or mental health specialists, patients feel that there is a team supporting their efforts. Communication between the primary care clinic and the specialist helps ensure consistent messaging and shows patients that the team is coordinated — avoiding the sense of navigating a “maze” of care. See the tips below for improving referrals and communication with specialists:

- **Consider finding 1 or 2 people in each specialty to use for all referrals out of your clinic.** The *Lifestyle Management Clinical Team Process Worksheet* (see *TOOLS*) can be used for this purpose. Contact information for Intermountain’s outpatient registered dietitians is posted online at intermountainhealthcare.org/nutrition. For behavioral health specialty treatment, follow the Mental Health Integration process (if MHI is available at your clinic) to ensure effective communication and specialist support.
- **The patient coach or care manager can play a critical role in communicating with specialists** about the patient’s goals and progress.
- **Consider including specialists by speaker phone occasionally in stand-up meetings** to discuss patient goals.
- **Use email or the HELP2 message log**, if available, to communicate patient goals and other critical information as part of a referral.

WEIGH TO HEALTH® PROGRESS NOTES IN HELP2

Dietitians post regular updates in the “Nutrition Education” Clinical Note type in HELP2. Updates include patients’ personal goals, classes attended, barriers to goals, progress to date, and more.



FOLLOW-UP & REFERRAL TOOLS

Clinic Implementation Kit

- ***Clinic Team Process Worksheet***



- ***Creating a Lifestyle Management Team*** (presentation for team meetings)



- ***Rx to Live Well***: Use to “prescribe” changes, encourage follow-up and tracking, and make referrals to programs or specialists such as The Weigh to Health®.



- ***The Weigh to Health® Lifestyle and Weight Management*** program brochure.



Other links and resources

- **Intermountainhealthcare.org/nutrition** includes a list of registered dietitians, classes, and links to other resources. See page 32 for more resource links.

▶ HEALTHCARE REFORM REQUIREMENTS & SUCCESS MEASURES

✓ KEY POINTS

- **The Affordable Care Act** requires coverage for obesity screening for all patients, intensive multicomponent behavioral intervention for patients with BMI >30, and healthy diet counseling for adults with specific diet-related chronic diseases.
- **Intermountain's Weigh to Health® program** is a great way to meet the ACA requirements for obesity counseling.
- **Medicare** covers obesity screening and counseling, and **Utah Medicaid** covers medical nutrition therapy for certain patients.
- HEDIS requirements, meaningful use of the electronic medical record (EMR), and Personalized Primary Care (PPC) also reinforce the importance of providing weight and lifestyle management screening and counseling.
- Refer to Intermountain's [Weight & Lifestyle Management Coding and Reimbursement Guide](#) for further explanation and tips on coverage and documentation and coding requirements.

Coding and reimbursement for lifestyle management has traditionally been challenging. However, healthcare reforms have brought a new focus on preventive care, with expanded opportunities for providers and additional requirements for expanded payer coverage.

ACA requirements: commercial and individual health plans

The Affordable Care Act stipulates that for new commercial or individual health policies beginning on or after September 23, 2010, **preventive services with "strong scientific evidence"** of health benefits must be **covered under a preventive benefit** where the patient has **no cost sharing** (no copayment, co-insurance, or deductible).^{ACA} Services with "strong scientific evidence" are those **recommended by the USPSTF with an A or B rating**.^{USPS} See Table 12 below for a summary of lifestyle management services with an A or B recommendation:

TABLE 12. Obesity screening and counseling

Service	Recommendation	Meeting the requirement
Obesity screening for all adult patients	BMI to screen for obesity.	This CPM recommends BMI be recorded at each visit.
Obesity counseling (intensive multicomponent behavioral intervention) for patients with BMI >30	Intensive, multicomponent counseling and behavioral interventions to promote sustained weight loss (to include behavioral management, improving diet/nutrition and increasing physical activity, addressing barriers to change, self-monitoring, and strategies for maintenance): <ul style="list-style-type: none"> • Sessions: 12 to 26 individual or group sessions in a year (based on the July 2012 USPSTF guideline update).^{USPS} • Providers: Primary care clinicians or specialists, such as dietitians who participate in a multicomponent behavioral intervention program 	<ul style="list-style-type: none"> • Intermountain's <i>Weigh to Health</i>® program meets these requirements. See page 29 and the information below the table, for more information • If the <i>Weigh to Health</i>® program is not feasible, recommend that your patients contact their insurers to ask what program would be covered under the obesity counseling requirement
Healthy diet counseling	Intensive behavioral dietary counseling for individuals with diet-related chronic disease: <ul style="list-style-type: none"> • Sessions: At least 2 to 3 group or individual sessions of at least 30 minutes • Providers: Dietitian, or specially trained primary care clinician (e.g., physician, nurse, or nurse practitioner) 	<ul style="list-style-type: none"> • SelectHealth commercial coverage includes 5 visits to a registered dietitian with no copay for members. Additional visits are covered under the general medical benefit. • Other payer coverage varies.

Intermountain's Weigh to Health® program, ACA requirements, and SelectHealth



Intermountain's Weigh to Health® program meets ACA requirements for obesity counseling by providing at least 12 sessions over a 6-month period, and including multiple behavior, activity, and nutrition components and strategies (see the description on [page 29](#)).

SelectHealth members (and others with insurance coverage for the program) can attend with no up-front cost. For participants who complete the program, the program fee will be billed directly to the patient's insurance provider. Participants who do not complete the program will be billed directly for the sessions attended. (The ACA does not mandate full coverage for counseling that is not "intensive" — i.e., at least 12 sessions.)

HEALTHCARE REFORM REQUIREMENTS & SUCCESS MEASURES, *continued*

Medicare and Medicaid requirements

- **Medicare obesity screening and counseling:** For Medicare patients with obesity, CMS covers behavioral counseling for obesity provided in a primary care setting, furnished by a primary care physician or qualified practitioner:
 - One face-to-face visit every week for the first month
 - One face-to-face visit every other week for months 2 to 6 (at the 6-month visit, obesity must be reassessed and weight loss recorded; to be eligible for monthly visits described below, the patient must have achieved 3 kg weight loss in the first six months of visits)
 - One face-to-face visit every month for months 7 to 12 (if the patient has met the 3 kg weight loss requirement by month 6)
- **Utah Medicaid lifestyle and weight management services:** Utah Medicaid requirements and coverage are evolving. For current information on Medicaid coverage and coding for lifestyle and weight management services, see the [Utah Medicaid Coverage and Reimbursement Lookup Tool](http://health.utah.gov/medicaid/stplan/lookup/CoverageLookup.php) at health.utah.gov/medicaid/stplan/lookup/CoverageLookup.php.

Other requirements and measures

- **HEDIS requirements:** Physical activity assessment and counseling are HEDIS quality measures for older adults and for children and adolescents. CMS reimbursement is in part tied to our ability to **improve rates of physical activity assessment and counseling**.
- **Meaningful use of the electronic medical record (EMR):** CMS provides extra benefits (and eventually will impose penalties) based on whether the patient’s EMR includes **height, weight, and calculated BMI**.
- **Personalized Primary Care:** Personalized Primary Care (PPC) is Intermountain’s medical home initiative. By focusing on illness prevention and effective chronic condition management, PPC helps manage costs as Intermountain becomes an Accountable Care Organization (ACO). Intermountain’s PPC initiative is based on NCQA medical home standards, and requires clinics to focus on 3 chronic conditions, one of which must be behavioral. Lifestyle and weight management is an appropriate choice for the behavioral focus. The PPC initiative also focuses on clinical quality measurement and improvement of measures for chronic illness and prevention. Measurement of the **Physical Activity Vital Sign (PAVS)** and **counseling for nutrition and physical activity** are good options to meet this requirement.



2013 INTERMOUNTAIN LIFESTYLE METRICS

Examples of metrics that Intermountain will be measuring and reporting:

- BMI and change in weight
- Percent of patients with the Physical Activity Vital Sign (PAVS) recorded in HELP2 (including minutes per day, days per week, and intensity)
- Percent of patients who have been advised to start, maintain, or increase physical activity — or advised to improve nutrition

Additional metrics — such as number of visits or patients referred — will be added as evaluation and reporting evolve.

✓ TIPS ON CODING AND REIMBURSEMENT

The [Lifestyle & Weight Management Coding and Reimbursement Guide](#) provides detailed tables to aid in effective reimbursement based on current evidence about coding strategies.^{OWO, AMA1, AMA2} While coverage for lifestyle management is not always guaranteed and may vary by payer, the coding combinations covered in the guide have been reviewed by Intermountain coding and reimbursement specialists. Highlights of the guide include:

- Service codes to support both individual and group visits focused on lifestyle management counseling to support problem management.
- How to code for a problem-focused (E/M) service that arises during a preventive visit. You can prevent bundling of services by adding the appropriate E/M service code, modifier 25, and separate documentation. Inform the patient that while there will be no copy or bill for the preventive visit, the problem-focused services will be billed as usual.
- Suggestions for appropriate coding for visits that meet the full ACA obesity counseling requirement (described on page 30). Referral to a program such as *The Weigh to Health*® is a good way to meet this requirement.

CODING & REIMBURSEMENT TOOLS

Clinic Implementation Kit

[The Lifestyle and Weight Management Coding and Reimbursement Guide](#) provides effective coding combinations to bill for lifestyle management services. See other resources on page 32.



► TOOLS & RESOURCES

Access ALL tools

Access all the tools and links on this page from Intermountain's Lifestyle & Weight Management topic page at intermountain.net/lifestyle and intermountainphysician.org/lifestyle.

To order the kit or individual items for your practice, go to i-printstore.com.



Intermountain Lifestyle TOOL KITS

Clinic Implementation Kit

- [Lifestyle & Weight Management CPM](#)
- [Lifestyle & Weight Management CPM Reference List](#)
- [Lifestyle & Disease Management Clinic Team Process Worksheet](#)
- [Lifestyle & Weight Management Clinic Environment Tips](#)
- [Lifestyle & Weight Management Coding and Reimbursement Guide](#)
- [Creating a Lifestyle Management Team in Your Clinic](#) (slide set for clinic staff meetings)
- [Motivational Interviewing Demo](#) (6 minutes)
- [Lifestyle & Weight Management Inactivity Risk Graphs](#)

Patient Tool Kit

Assessment & Behavior Modification Tools

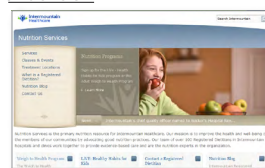
- LiVe Well [Lifestyle and Health Risk Questionnaire](#)
- [Rx to LiVe Well](#)
- LiVe Well [Readiness Worksheet](#)
- LiVe Well [Action Plan](#)
- LiVe Well [Food & Feelings 1-Day Journal](#)
- [Live Well 1-Week Habit Tracker](#)

Patient Education Tools

- [LiVe Well, Move More](#) patient fact sheet
- [Live Well, Eat Well](#) patient fact sheet
- [ChooseMyPlate 10-tips fact sheet series](#)
- [LiVe Well, Sleep Well](#) patient fact sheet
- [Live Well, Stress Less](#) patient fact sheet
- [Quitting Tobacco: Your Journey to Freedom](#) booklet
- [The Weigh to Health®](#) booklet
- [The Weigh to Health®](#) Habit Tracker
- [The Weigh to Health®](#) 20 Habits handout
- [The Weigh to Health®](#) Lifestyle & Weight Management Program brochure
- [Weight Loss Medications](#) patient fact sheet

Other Intermountain online resources

Intermountainhealthcare.org/nutrition



Information on registered dietitians, a nutrition blog, and a subpage on The Weigh to Health®

Intermountainhealthcare.org/wellness



Patient access to Intermountain patient education tools that supports this CPM, along with other general wellness resources

Intermountainhealthcare.org/weight



Patient access to Intermountain weight management patient education and related resources

IntermountainLiVeWell.org



Information and resources (including video) for consumers and families on nutrition, activity, and managing stress

Other online and community resources

www.choosehealth.utah.gov



Health information and local resources for consumers, providers, and businesses

www.exerciseismedicine.org



Tools to help providers and the public increase physical activity, including a Keys to Exercise video series

www.ChooseMyPlate.gov



USDA nutrition information, videos, daily food plans, a SuperTracker for nutrition and physical activity, and more

www.weightwatchers.com



Help finding a local program. Weight Watchers uses an evidence-based approach to weight loss with demonstrated long-term effectiveness.

Guidelines and references

For a list of guidelines and references used in the development of this CPM, go to intermountain.net/lifestyle or intermountainphysician.org/lifestyle.

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