

Your action plan for heart failure with reduced ejection fraction

If you have **heart failure with reduced ejection fraction** (also called HFrEF or systolic heart failure), it's normal to feel scared or unsure about the future. But heart failure can be managed - and proper treatment can help you feel better and live longer.

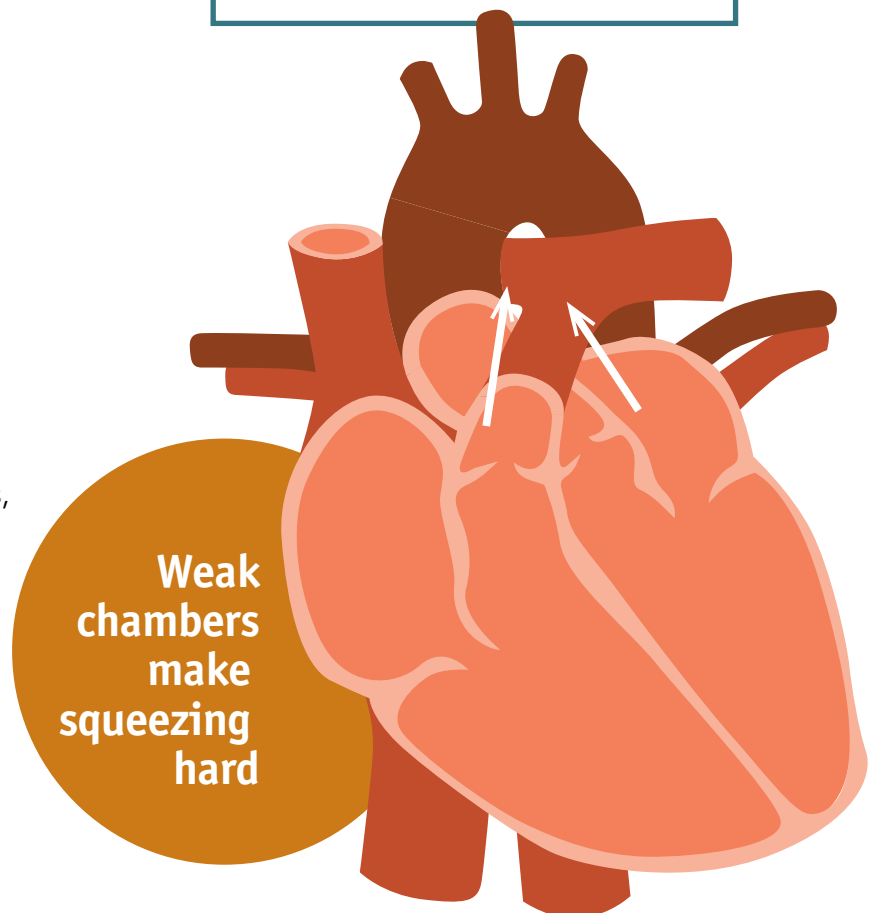
Use this action plan to learn how best to manage your heart failure. There is space to write down information about your heart failure, your goals for treatment, questions, and the treatment options that you review with your health care team.

HFrEF explained

Having heart failure doesn't mean that your heart has stopped working. But it is weaker than it should be. HFrEF (pronounced heff-reff) is one type of heart failure. If you have HFrEF, your heart muscle isn't squeezing with enough force to push the amount of oxygen-rich blood out to the body needed to keep up with its demands. That's why you may feel out of breath or overly tired.

Ejection fraction (EF) is a measure of how well and how much blood your heart pumps out with each beat. Normally, the heart pushes 50% or more of the blood in the heart out to the body. With HFrEF, your ejection fraction is 40% or less, so it is reduced.

Remember that **you are at the center of your care**, so it's important that you feel comfortable sharing any concerns or questions with your health care team now and in the future.





Key things to keep in mind



Play an active role in your care right from the start. You'll learn more and feel more in control. Ask questions. Write down and share your goals for managing your heart failure and other conditions.



Medications can make a big difference. There are **four core therapies** that should be at the heart of your treatment plan – plus some others, if needed. Together, these medicines can help you feel better, stay out of the hospital and prolong your life.

Some of these drugs have other uses – for example, to treat diabetes or blood pressure – but they work really well for heart failure, too. If you have trouble paying for your medicine, tell your care team; there are prescription assistance programs to help.



Learn how to make healthy choices to help improve your overall health. For example, eating healthy, watching how much salt you eat, and being active. Ask about cardiac rehabilitation too.



Know what signs to watch for and report to help you stay ahead of any problems and prevent a hospital stay. For example, weighing yourself every day to see if the number on the scale goes up too quickly; this can be an early red flag that you are starting to retain fluid – even if you feel OK.



Work with your care team to address other health conditions and risk factors that can complicate HFrEF. For example, high blood pressure, heart valve disease, heart rhythm problems, sleep apnea, diabetes, obesity, among others.



Stay positive and talk openly with your care team about your feelings and how you are coping. Your mental health is important. Connecting with other people who have heart failure might also help.



Train yourself to pace yourself. Try not to overdo it, even on days when you have the energy to go, go, go. Build in time to rest and recoup if you need to.

What you'll find inside

This action plan will help you and your health care team review:

- **Your heart failure summary** 4
- **Your goals and preferences** 6
- **Your treatment plan** 8
 - Medications 10
 - Lifestyle changes 17
 - Devices 19
- **Follow-up visits and tests** 20
- **Avoiding setbacks in your care** 21
- **Heart failure stoplight - when to call** 23
- **More information and resources** 24

More tools

You'll also find worksheets to track your medications, symptoms, and how heart failure is affecting your life.

Your heart failure summary

Date: ____/____/____ Name: _____ Age: _____

Your core health team

	Name of clinician or clinic	Phone number
Primary care		
General cardiologist (heart doctor)		
Heart failure specialist		
Other specialists you see regularly (for example, for diabetes or your kidneys): _____ _____ _____		

About your heart failure

When were you first told you have heart failure? ____/____ (month/year)

In general, does your heart failure limit what you are able to do?

- Not really
- Only slightly
- Significantly
- Severely
- I haven't thought about it

What symptoms have you had: (Check all that apply)

- Shortness of breath
With activity, at rest, when lying down or all:

- Weakness
- Difficulty exercising
- Chest pain or tightness
- Swelling, especially in the legs, ankles, feet
- Extreme tiredness/fatigue
- Fast or fluttering heartbeats (palpitations)
- Rapid changes in weight
- Other symptoms: _____
- None

Your goals and preferences

Although your health care team will have specific clinical goals for treating your heart failure, they also want to know what matters most to you when it comes to your treatment.

Think about your main goals for managing heart failure, as well as what concerns you most. Write down your thoughts now or before your next visit.

Treatment goals usually center around:

- Treating any conditions that may have led to heart failure
- Easing symptoms so you feel better
- Helping you live longer and with a better quality of life
- Improving your heart’s pumping function, or at least slowing how quickly the condition gets worse

Are there other things that are important to you? Be sure to talk with your care team about your goals for treatment.

When it comes to treating my heart failure, it is most important that I am able to (for example, making sure my condition doesn’t limit my ability to do certain tasks, hobbies, travel or other activities, childcare, life events):

1. _____
2. _____
3. _____

When I think about my heart failure, I am most worried about:

1. _____
2. _____
3. _____

What is most important to me when it comes to my heart failure care?

1. _____
2. _____
3. _____

How important is it to me that my heart failure treatment:

(Check which ones are most important)

Helps my symptoms
Which are most bothersome?

Improves my ability to do my usual activities
Which activities are most important?

Makes my quality of life better
In what ways?

Addresses my other health issues
Which ones, specifically?

- Keeps me out of the hospital
- Helps me live longer
- Other goals that are not listed above:



TIP: Your goals may change over time. Let your health care team know so they can best meet your needs.

Your treatment plan

Your treatment plan will be tailored to your goals and how severe your heart failure is.

Heart failure is best managed through a combination of heart-healthy habits, medications and paying close attention to signs that suggest your condition may be flaring up or getting worse. Together, these treatments aim to lower the stress on your heart.

In addition to reporting how you feel, we will review:

- Medications
- Lifestyle changes
- Devices, if needed
- Follow-up visits, tests
- Avoiding setbacks
- When to call

Close watch of signs and symptoms

One of the best ways to manage heart failure well is to pay attention to how you are feeling day-to-day. It can also help guide your treatment.

Take the time to check in with yourself each day. Tell your health care team if and when you start to feel badly or notice your heart failure might be getting worse.

Asking yourself these questions can help:

- In general, how do I feel today - both physically and emotionally?
- Compared with a regular or average day with heart failure, today I feel:
 - Better
 - Worse
 - About the same
 - Different - In what way(s)?
- How does having heart failure affect my emotional health? My sleep? My concentration or ability to focus on tasks?
- What activities am I able to do (or not do) because of my heart failure?



- Are there signs that my heart failure might be getting worse? Do I notice:

⚠️ **Swelling** in my feet, legs, ankles or stomach

⚠️ **Sudden weight gain**, which can be a red flag that fluid is building up in my body

Call your health care team right away if you gain 3 pounds in a 24-hour period or more than 5 pounds in a week. Talk about what to do if you start noticing weight gain; for example, should you have a plan to start or increase the amount of a diuretic or water pill?

⚠️ **That I need to sit upright in a chair** or use pillows to prop myself up to sleep or breathe easier

⚠️ **Feeling out of breath** even with small bouts of activity

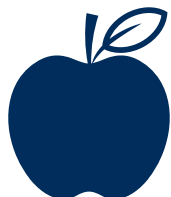
Things I can do every day to stay as heart healthy as possible:



Weigh myself with the same scale every morning after going to the bathroom and before breakfast and write it down using the monthly calendar [Your Heart Failure Daily Tracker](#)



Stay in sync with my body and pay attention to signs that my heart failure is getting worse; use [Making the Most of Your Follow-Up Visits](#)



Choose heart-healthy foods that are low in salt (sodium)



Take my medications as directed; use [Heart Failure Medications](#)



TIP: It is important to play an active role in your health, make decisions together with your care team, report how you are feeling, and ask questions. Use the worksheets, [Making the Most of Your Follow-Up Visits](#) and [Your Heart Failure Daily Tracker](#), to help track heart failure symptoms, triggers and how the condition affects usual activities in between your health care visits.

Medications

Medications are a very important part of treating heart failure.

In fact, taking the right combination of heart failure medications - in addition to making healthy choices - can help you **feel better, stay out of the hospital and live longer.**



Medications can help:

- The heart pump better
- Ease symptoms, such as fluid buildup or shortness of breath
- Slow how quickly the disease progresses (gets worse)
- Add years of life when someone takes the main four medicines recommended for HFrEF

With HFrEF, four types of medications are essential. You may hear your health care team refer to these as the “four pillars of heart failure medication” or “guideline-directed medical therapy.” These medicines have been proven to help patients feel their best, avoid going to the hospital and live longer. Heart failure is a leading cause of hospitalization among people 65 and older.

The 4 pillars of heart failure medications

<p>ARNI, Angiotensin II receptor blocker neprilysin inhibitor or ACE inhibitors, Angiotensin- converting enzyme inhibitors or ARBs, Angiotensin II receptor blockers</p>	<p>SGLT2 inhibitor, sodium-glucose cotransporter 2 inhibitor</p>	<p>Beta blocker</p>	<p>MRA, mineralocorticoid receptor antagonists</p>
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Usually, these medications are started before adding other medications known to be helpful for heart failure. If you are retaining fluid, diuretics should be added. Ask if you should have a plan in place to begin taking a diuretic if you notice swelling or weight gain. Diuretics help the body get rid of excess fluid.

In general, you will start on all four of these core medications within a short time frame, typically at the lowest dose. Your care team will gradually increase the dose (called titrating or escalating the dose) based on how you feel, lab tests and echocardiograms to look at heart function.

Medications often need to be adjusted. Partner with your care team to get the amount of each medication you take to the goal amount or dose. Stick with it and try not to get frustrated.

What to expect

What other patients wished they had known:

- Heart failure medicines need to be taken for life.
- Medications and their doses will change often until a person reaches the goal dose. These changes will occur regardless of how you are feeling. But it is important to make these changes to get the most benefit from these treatments.
- Starting and being on so many medications can feel overwhelming. Find out what to do if you miss a dose and consider using a pillbox or some other system that makes it easy to take and organize your medications. Forgetting to or not taking medications is among the most common reasons people with heart failure end up in the hospital.



TIP: Many people with heart failure take more than eight different medications. Each medication works differently – often in complementary ways – to help relieve your symptoms and keep your heart from working so hard to pump blood to your body.

Make sure you understand why you are taking each medicine and how it helps.



Below is a list of heart failure medications that are often used to treat HFrEF and a simple explanation of how each one works. Use the medication list that follows to write down the name of each medication you should start taking and note other important information.

Check off which medications you are already taking and which ones are being added.

Medications for HFrEF (the 4 pillars)	Common examples - listed by the generic followed by (brand) name
<p><input type="checkbox"/> Mineralocorticoid receptor antagonist A type of diuretic that helps the body remove excess water and sodium through the urine but prevents loss of potassium.</p>	<p>eplerenone (Inspra) spironolactone (Aldactone)</p>
<p><input type="checkbox"/> Angiotensin II receptor blocker neprilysin inhibitor (ARNI)</p> <p>-OR-</p> <p><input type="checkbox"/> Angiotensin-converting enzyme inhibitors (ACE inhibitors)</p> <p>-OR-</p> <p><input type="checkbox"/> Angiotensin II receptor blockers (ARBs) ACE inhibitors and ARBs widen and relax blood vessels and ease the amount of work the heart has to do to pump blood. They also lower blood pressure. ARNIs work similarly but are stronger due to an additional ingredient. To help decide if an ARNI is right for you, the American College of Cardiology has created a tool to help. CardioSmart.org/HFDecisionAids</p>	<p>sacubitril/valsartan (Entresto)</p> <p>-OR-</p> <p>captopril (Capoten) enalapril (Vasotec) lisinopril (Prinivil, Zestril) ramipril (Altace)</p> <p>-OR-</p> <p>candesartan (Atacand) losartan (Cozaar) valsartan (Diovan)</p>
<p><input type="checkbox"/> Beta blocker Beta blockers slow the heart rate, lower blood pressure and may reverse some of the heart damage.</p>	<p>bisoprolol (Zebeta) carvedilol (Coreg) metoprolol succinate (Toprol)</p>

<p><input type="checkbox"/> Sodium-glucose cotransporter 2 (SGLT2) inhibitor Originally used to treat diabetes, these medicines have clear benefits for people with heart failure, including fewer heart-related deaths and hospitalizations.</p>	<p>dapagliflozin (Farxiga) empagliflozin (Jardiance)</p>
<p>Medications that may be added</p>	
<p><input type="checkbox"/> Diuretic (water pill), as needed Diuretics help get rid of excess water (fluid buildup) in the body.</p>	<p>furosemide (Lasix) bumetanide (Bumex) torsemide (Demadex)</p>
<p><input type="checkbox"/> Hydralazine and isosorbide dinitrate Widen or relax blood vessels to make it easier for the heart to pump. There is a lot of data that this medicine improves outcomes for African Americans.</p>	<p>hydralazine isosorbide dinitrate</p>
<p><input type="checkbox"/> Sinoatrial node inhibitor This medicine slows heart rate and reduces the amount of oxygen the heart needs and how much the heart needs to work to pump blood. It is used with beta blockers if they do not lower heart rate enough.</p>	<p>ivabradine (Corlanor)</p>
<p><input type="checkbox"/> Digoxin Slows heart rate and strengthens heart muscle contractions to pump more blood</p>	<p>digoxin (Lanoxin)</p>
<p><input type="checkbox"/> Other</p>	

Your heart failure medication list

Keep an updated copy of this list in your purse or wallet.

Not taking medications as prescribed is the #1 reason people with heart failure go to the hospital. Let your health care team know if you have questions or concerns.

Drug type	Medication name	Reason for taking	Start date	Starting dose (amount)	Target dose (amount)	How often (for example 1 or 2 times a day)	When to take and how (with or without food)	What to do if I miss a dose	Side effects to watch for
<i>Example: ACE inhibitor</i>	<i>Lisinopril</i>	<i>Heart failure and high blood pressure</i>	<i>4/26/23</i>	<i>10 mg</i>		<i>1 time</i>	<i>Morning</i>		
Mineralocorticoid receptor antagonist (MRA)									
Angiotensin II receptor blocker neprilysin inhibitor (ARNI) - or - Angiotensin-converting enzyme inhibitor (ACE inhibitor) - or - Angiotensin II receptor blocker (ARB)									

Beta blocker									
Sodium-glucose cotransporter 2 (SGLT2) inhibitor									
Diuretic									
Hydralazine and isosorbide dinitrate									
Sinoatrial node inhibitor									
Digoxin									
Other									



Medication reminders

- Always take your medications as directed.
- Be sure you understand why each medicine is recommended and how it helps.
- You may start taking a medication at a low dose (amount). Your clinician will gradually increase the dose so you can get the most benefit..
- Be sure to review all of the medications you take - including for other conditions - supplements and over-the-counter medications at each visit.
- Let your care team know if you have any issues with your medications - for example, remembering to take them, concerns about side effects/how they make you feel, difficulty paying for them, and/or not understanding why certain medications are needed.
- Sometimes medications that once worked don't work as well. If this happens, you may need to switch to a different medication.

Other medications

It's important to review other medications (prescribed, dietary supplements and over-the-counter medicines) that you take for other heart issues (blockages in the blood vessels, enlarged heart muscle, heart rhythm disorder, previous heart attack, high blood pressure), stroke, diabetes, or other medical conditions. For example, do you take a blood thinner, a statin (to lower cholesterol) or aspirin?

Health condition(s)	Medication(s)
Notes	

Lifestyle changes

Check all that apply and add personal recommendations.



- Eat heart healthy.** There are several eating plans known to be good for the heart. In preparing meals, focus on fresh fruits and vegetables, whole grains, fish, low fat dairy, and nuts.



- Limit sodium (salt).** Doing so helps prevent fluid buildup (swelling) and eases heart failure symptoms.



1 teaspoon salt
= 2,300 mg sodium

I should consume no more than _____ milligrams of **sodium** per day.

Nutrition Facts	
Serving Size 1 cup (300g)	
Servings Per Container 6	
Amount Per Serving	
Calories 358	Calories from Fat 90
% Daily Value	
Total Fat 5%	15 %
Saturated Fat 1.7%	25 %
Trans Fat 1%	5 %
Cholesterol 50mg	29%
Sodium 300mg	17%
Total Carbohydrate 10g	11%
Dietary Fiber 2g	5 %
Sugars 3g	
Protein 10%	
Vitamin A 1%	Vitamin C 3%
Calcium 3%	Iron 1%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

TIP:

- Beware that processed and prepared foods can have a lot of hidden sodium
- Start reading food labels to see how much salt is in a serving
- When eating out, ask the server what dishes have little or no salt or, better yet, if the chef can prepare a meal with no salt
- Ditch the saltshaker and add some flavor with herbs, lemon juice and spices



- Get regular physical activity.** Exercise has many health benefits, including strengthening the heart. It can also help boost one’s energy level, mood and outlook.

I should aim to get _____ minutes of physical activity on most days of the week. The types of activities that are safe for me include:

- | | |
|--|---------------------------------------|
| <input type="checkbox"/> Swimming | <input type="checkbox"/> Dancing |
| <input type="checkbox"/> Biking | <input type="checkbox"/> Gardening |
| <input type="checkbox"/> Walking (even around the block or yard) | <input type="checkbox"/> Yoga/tai chi |
| | <input type="checkbox"/> Other: _____ |





- Say yes to cardiac rehabilitation, if you qualify.** Cardiac rehab may be an option for you depending on your insurance coverage and ejection fraction.

Among other things, this three-month outpatient program offers:

- One-on-one supervised exercise that is tailored to your fitness ability and heart function
- Practical advice for heart-healthy eating and lowering stress
- Support for managing medications
- Smoking cessation for those who use tobacco

Cardiac rehab is a great way to jump start physical activity in a monitored and controlled way. For patients who haven't been very active, this can allay any fears of starting to work out. Because it is supervised, it gives them a confidence boost and additional medical and social support if needed.

Read more at [CardioSmart.org/CardiacRehab](https://www.heart.org/healthlibrary/article/0,1752,202333,00.html)



- Restrict fluids.** Some people with advanced heart failure or congestion (when too much fluid builds up in the body) need to pay attention to how much fluid they get. Remember, fluids in fruits, soups and other foods also count toward your daily amount.

I should limit my daily fluid intake to _____ cups, which is about _____ ounces.



- Avoid tobacco use.** Let your health care team know if you smoke and need help quitting. It's not easy, but there are resources to help. It's also a good idea to avoid breathing in other people's tobacco smoke.



- Use alcohol in moderation.** It's generally a good idea to limit alcohol to no more than one drink a day. If, however, your heart failure was thought to be due to alcohol, it should be avoided.



- Reduce stress and talk about your feelings.** Stress and anxiety can make the heart work harder. Find healthy ways to cope with stress. You might try deep breathing exercises, yoga, music therapy, joining a support group, or seeing a mental health counselor.

Also, tell your health care team if you are feeling unusually sad or down. You may be depressed, and there are treatments available.



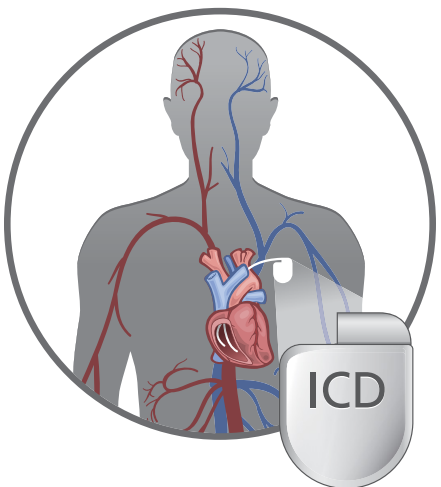
- Stay up-to-date with vaccines.** If you have heart disease, you are more likely to get very sick from the flu, COVID and other illnesses. Getting appropriate vaccinations on time is the best way to protect yourself and your loved ones.

Devices

Many people with heart failure are advised to consider adding a device. A device is placed near the heart to help it work and/or to monitor someone's condition.

For people with your type of heart failure, these may include:

- An implantable cardioverter defibrillator (ICD)
- Cardiac resynchronization therapy (CRT)



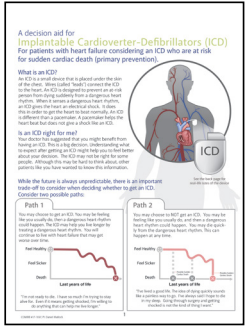
My care team and I discussed placing a (check all that apply):

- ICD
- CRT-Pacemaker
- CRT-Defibrillator
- Other (for example, CardioMEMS, valve repair or replacement, MitraClip)

Together, we decided I should:

- Have an _____ (insert device name) placed on _____ (add date)
- Revisit our discussion about a device as an option in _____ (month/year)

Use the space below to write down any other important notes or follow-up questions:



For more information, the American College of Cardiology has a decision aid for implantable cardioverter defibrillators (ICD) [CardioSmart.org/ICDDecisionAid](https://www.cardiosmart.org/ICDDecisionAid)

▶ Follow-up visits and tests

How will you and your care team know if your heart failure is getting worse?

By taking into account:

- **How you are feeling** (better, worse, the same or different in some way)
- Your report of **signs and symptoms** (shortness of breath, swelling, fatigue, any rapid weight gain)
- **Physical exams**
- Results of **lab work and imaging tests**
 - Echocardiograms show moving pictures of your heart's structure and how well it is pumping; you have low ejection fraction, which means that the amount of blood the heart is able to squeeze out is much less than it is normally
 - Electrocardiograms or ECGs check for problems with the heart's electrical activity
 - Blood tests can give information about lots of things, including:
 - How your kidneys are working
 - If you have elevated levels of natriuretic peptides, hormones that rise during heart failure episodes (Note: some medications can affect levels of this hormone, so talk with your health care team)
 - Low iron levels or anemia



It's important to remember that you will have frequent follow-up visits and tests to assess how you are doing.

Your test or lab results

Use this space to write down recent test results and what they mean:

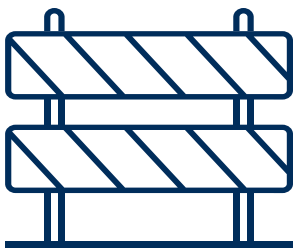
▶ Avoiding setbacks in your care

Following your heart failure care plan is critical to your heart’s success. But many things can get in the way. For example:

- You might find it hard to take your medications as directed or keep up with follow-up appointments, routine blood work and imaging tests
- Other conditions can also make heart failure worse if they aren’t treated

It is helpful for your health care team to know what might get in the way when managing your treatment plan.

Possible roadblocks to sticking with your treatment plan



Certain factors might make taking your medications, exercising, limiting fluids or engaging in your heart failure plan more difficult. For example, out-of-pocket costs, forgetting to take all of your medications, concerns about side effects, no help at home, travel, not knowing how to get started or understanding the information you were given.

It can be helpful to think about and recognize what makes it easy or hard to manage your condition. It can help your care team come up with possible solutions to support you.

Concern	What makes it hard	What seems to help
Taking my medications		
Limiting my salt (sodium) intake		
Weighing myself daily		
Exercising		
Making it to my medical visits or going for follow-up tests		
Other:		

Conditions that can make heart failure worse and should be treated






Half of people with heart failure have five or more co-existing conditions. Many of these can aggravate heart failure if they are not treated.

If you have any of the following conditions, it's important for us to discuss them. Be sure to tell each of your health care professionals about all of your health issues and treatments. This will help to coordinate your care.

- Blockages in my heart's arteries (coronary artery disease)
- Chronic kidney disease
- Diabetes
- Sleep apnea
- Atrial fibrillation or other issues with your heart rhythm
- Thyroid disease (having either too much or too little thyroid hormone)
- Heart valve disease (when one or more of the heart's valves doesn't work properly)
- Depression or anxiety
- High blood pressure or cholesterol
- High use of alcohol
- Previous cancer treatment
- Anemia or iron deficiency
- Other conditions: _____

Notes, follow-up and any referrals (for example, sleep specialist, cardiac rehab, dietitian):

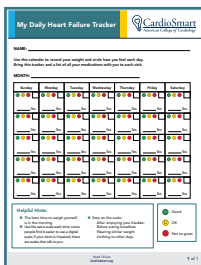
How will I know how I'm doing and when to call?

<p>All Clear Zone</p> 	<p>This is the safety zone if you have:</p> <ul style="list-style-type: none"> ✓ No shortness of breath ✓ No weight gain more than 2 pounds (it may change 1 or 2 pounds some days) ✓ No swelling of your feet, ankles, legs or stomach ✓ No chest pain
<p>Warning Zone</p> 	<p>Call your health care provider if you have:</p> <ul style="list-style-type: none"> ⚠ Weight gain of 3 pounds in 1 day or 5 pounds in 1 week ⚠ More swelling of your feet, ankles, legs or stomach ⚠ Difficulty breathing when lying down. Feeling the need to sleep up in a chair. ⚠ Feeling uneasy or you know something is not right ⚠ No energy or feeling more tired ⚠ More shortness of breath ⚠ Dry hacking cough ⚠ Dizziness
<p>Medical Alert Zone</p> 	<p>Go to the emergency room or call 911 if you have:</p> <ul style="list-style-type: none"> ⚠ A hard time breathing ⚠ Unrelieved shortness of breath while sitting still ⚠ Chest pain ⚠ Confusion or can't think clearly

Source: This material is adapted from similar tools including that offered by Alliant Quality's "Zone Tool Heart Failure" and Improving Chronic Illness Care's "Red-Yellow-Green Congestive Heart Failure Tool."

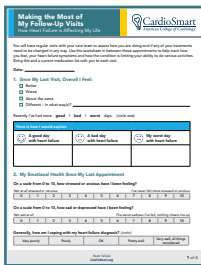
▶ More information and resources

Managing heart failure may seem overwhelming at times. The American College of Cardiology has developed information and tools with input from patients and experts to help you. Go to CardioSmart.org/HeartFailure to download and print these tools.



Your Heart Failure Daily Tracker

Write down how you feel and how much you weigh each morning on this calendar.



Making the Most of Your Follow-Up Visits

Log your heart failure symptoms and how often they occur. Keep tabs on how heart failure affects your ability to take part in activities.



Your Heart Failure Checklist

Steps you can take to best manage heart failure.

Mended Hearts

<https://mendedhearts.org>