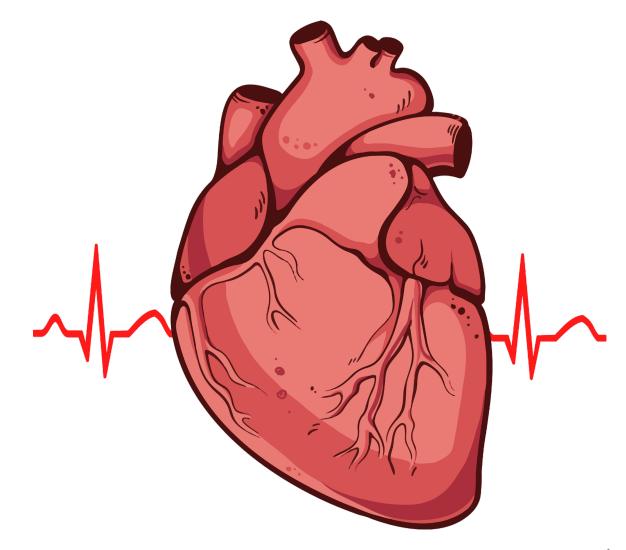
## Heart Failure

Michigan Center for Clinical Systems Improvement (Mi-CCSI)

Disease State Management Module







At the conclusion of this presentation, the participant will be able to:

- 1. Address biopsychosocial issues associated with health failure diagnosis and ongoing care.
- 2. Suggest workflows to increase health literacy and engage patients with heart failure in the course of routine care.
- 3. Demonstrate examples of strategies patients can deploy for self-management of heart failure.
- 4. Proactively address common clinical scenarios using customized tools such as a Heart Failure Action Plan.
- 5. List resources patients can access to further support their journey with heart failure.



# Heart Failure (HF) Overview

- Complex and long-term clinical syndrome that is one of the most common causes of hospitalization, hospital readmission, and death
- There were 6.2 million people age 20 or older with HF in the United States between 2013 and 2016
  - Increase from 5.7 million between 2009 and 2012
  - Projected to increase to more than 8 million people 18 or older by 2030
- Characterized by specific signs and symptoms related to fluid retention and reduced perfusion
- Patient self-management is a crucial component of long-term management of HF
- There is immense opportunity to support patients in developing the knowledge, skills, and engagement necessary for self-management



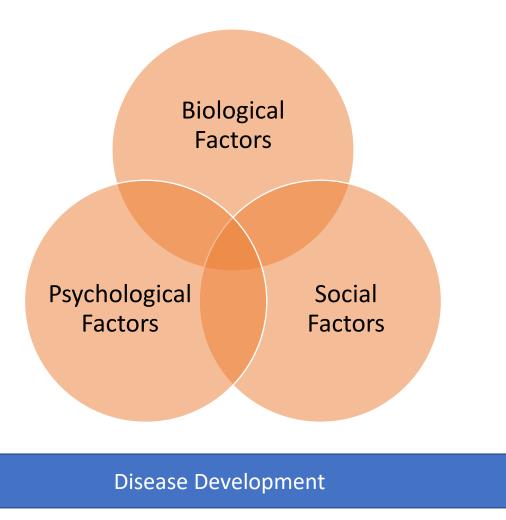
- 65-year old white women with a BMI of 42.
- Recently hospitalized for a HF exacerbation.
- History of diabetes, hypertension, and dyslipidemia and was diagnosed with HF by her primary care physician 6 months ago.
- Most recently, A1C = 11.4%, BP = 165/90, and LDL-C = 254
- Works 40 hours a week in the infant room of a local daycare center.
- Lives with her adult daughter, who also works at the daycare center.
- Primary care physician provided a HF action plan at diagnosis.



# Biopsychosocial Issues



### Biopsychosocial Model



#### Biologic Factors

#### Comorbidities

- May exacerbate HF symptoms, add complexity to therapeutic regimens, and result in recommendations coming from numerous (and possibly conflicting) sources
- Physical challenges imposed by comorbidities may impact self-management abilities

#### Medication side effects

- May result in adherence issues that impact efficacy
- Certain patient populations may be more susceptible

## Psychological Factors

- Approximately one-quarter to one-half of patients with HF have cognitive impairment
- Depression and anxiety are highly prevalent in patients with HF
- Isolation
- End of life

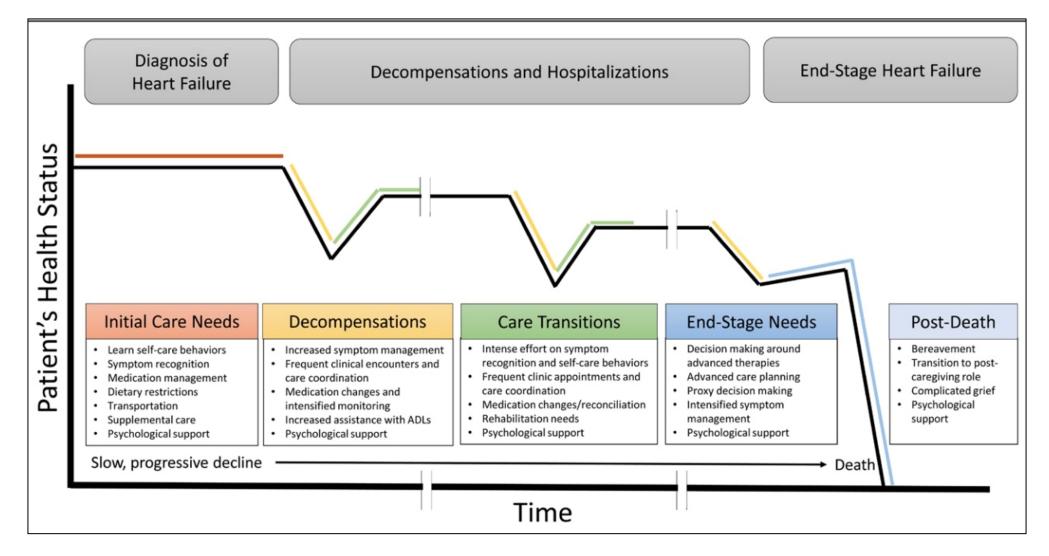


#### Social and Economic Factors

- Costs associated with medications, tools for self-management (e.g., scale), "healthy" food, and formal exercise programs or gym memberships
- Health literacy
- Insurance coverage and access to care
- Availability of and access to fresh fruits and vegetables
- Support systems



#### Care Needs Based on Phases of Illness





#### The Importance of Involving Caregivers

- The MOTIVATE-HF study found that the benefits of motivational interviewing may be potentiated when caregivers are involved, especially in regards to self-care management (e.g., responding to symptoms).
- Another study, recently published in the *Journal of Cardiovascular Nursing*, found that involving caregivers in discharge education can significantly reduce 30-day readmission rates for patients with HF and cognitive impairment.
- In a study designed to assess the effect of caregiver education in primary care on hospitalizations in patients with HF, it was found that caregivers play a particularly important role in early recognition of signs and symptoms of worsening heart failure.

 As we consider our initial meeting with Judy, what biopsychosocial factors should we keep top of mind?

#### Biologic Factors

- Does Judy's condition result in any physical limitations or challenges in terms of activities of daily living? Does this result in reliance on others for assistance? How does Judy feel about that?
- Are Judy's uncontrolled comorbidities contributing to her HF prognosis? Is she aware of this?

#### **Psychological Factors**

- Is it possible that some sort of cognitive impairment is contributing to Judy's challenges with medication adherence?
- Has Judy been screened for depression?

#### Social and Economic Factors

- Does Judy have challenges with affording her medications, a scale, health food, etc?
- We know that Judy lives with her adult daughter, who also works at the same daycare center. What opportunity's exist to engage Judy's daughter in her care plan?



- During your initial care management assessment with Judy you focus on understanding what she knows about her disease state and medical care plan and you learn the following:
  - Although she is always in close proximity to her daughter at home and work, her daughter can't always attend medical appointments with her
  - Can't remember where she put the information she received at her initial appointment
  - Having difficulty with the cost of her medications, so she stopped taking some of them
  - Has to take a break on the way from her car to the infant room in the daycare center – she sits in the waiting room for 10 minutes to catch her breath
  - Screens positive for depression (PHQ-9 score = 10)



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## Workflows for Engagement



#### Benefits of Self-Management

- Self-management is an essential component of chronic HF management
  - Improved self-management skills may reduce the odds of readmission at one year by 40%
  - The inability to self-manage diet and medications may account for as many as 20% of HF admissions





## Challenges of HF Self-Management

Comply with diet and exercise recommendations

Actively engage with clinicians

Follow complex medical regimen

Patient Expectations

Modify medications and behavior according to symptoms



## Adherence Rates -Literature Review

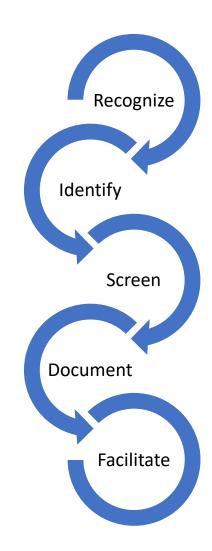
- On average, patients have an adequate supply of a given medication *on hand* 60-88% of the time
  - The longer patients are receiving medication therapy for treatment of HF, the lower their rate of adherence
- An observational study of 202 patients recently discharged after a HF exacerbation showed that 14% reported weighing themselves daily and 9% reported monitoring themselves for symptom changes
- 9-53% of patients report engaging in no physical activity at all





### Health Literacy

- "The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions" – Institute of Medicine
- Reading literacy and health literacy are not the same
- The Heart Failure Society of America (HFSA) proposes a five-step approach to address low health literacy





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#### Sense Making

Knowledge

Action



## Motivational Interviewing and Sense Making











LISTEN FOR SENSE MAKING LINKED TO SPECIFIC BEHAVIORS CLARIFY SENSE MAKING WITH OPEN-ENDED QUESTIONS REFLECT BACK YOUR
UNDERSTANDING AND
DEVELOP RAPPORT

IDENTIFY MISSING OR INCORRECT INFORMATION

ADDRESS KNO WLEDGE GAPS AFTER ASKING FOR PERMISSION





INVITE THE PATIENT TO RECONSIDER THEIR PERSPECTIVE AND CONCLUSION SUMMARIZE AND DISCUSS NEXT STEPS





## Components of Effective Self-Management



KNOWLEDGE



**SKILLS** 



BEHAVIOR CHANGE / ENGAGEMENT



# Helping Patients Engage in Self-Care

#### Knowledge

- Use the teach-back technique
- Ask specific questions to ensure understanding
- Limit the amount of information provided per session
- Repeat, reinforce, and review in subsequent sessions

#### Skills

- Provide experiential learning opportunities
- Explore role playing
- Host group visits for multiple patients and their caregivers

#### Behavior Change/Patient Engagement

- Use motivational interviewing techniques
- Inquire about beliefs surrounding HF causes and treatment effectiveness
- Ask about life goals and link self-care regimens to those goals
- Identify concrete action items
- Let the patient take the lead on brainstorming and planning and supplement as needed

### Example

#### Knowledge

 Have the patient explain why limiting salt is an important component of self-care

#### Skills

 Ask the patient to identify the amount of salt in a food item, using a food label

## Behavior Change / Engagement

• Link behavior change to reduced risk of hospital admission throughout your discussions

#### HF Action Plan



- Sometimes referred to as a self-check plan
- All patients with HF should receive a HF action plan
- Divided into green, yellow/orange, and red zones
- Zones correspond to status (e.g., stable, emergency)
- Plan includes self-assessment questions and a customized response plan
- Customization should be based on the patient's condition and self-care abilities



## Daily Self-Monitoring – Recipe for Success

Does the patient understand why daily self-monitoring is important?





#### Patient Self-Assessment

#### Breathing

- Can I breathe as well as I usually can?
- Am I getting out of breath doing things I can normally do without a problem?
- Am I coughing more than usual?
- Did I use more pillows than usual to sleep last night?

#### Weight

- Has my weight gone up or down compared to yesterday? If so, by how many pounds?
- Has my weight gone up or gone down compared to a week ago? If so, by how many pounds?

#### Swelling

- Are my ankles more swollen than usual?
- Do my socks or shoes feel tighter?
- Do my clothes feel tighter at the waste?
- Do my rings fit more snugly?

#### Everyday things

- Can I do all the things I normally do, such as get dressed on my own, make meals, or go for walks?
- Do I feel dizzy or more tired than usual?
- Do I have any new symptoms, like pressure or pain in my chest?
- Does my heartbeat feel strange or irregular?
   Do I feel like I might pass out?



l feel well	My symptoms:  Weight on target. Target rangekg  Little or no swelling  Breathing is easy	What to do:  Keep taking my pills  Keep doing my daily checks – weight, swelling and breathing (see next page)  Keep eating a healthy, low salt diet  Keep making changes to improve my health
l do not feel well	Weight up bykg over 1-2 days  Swelling in ankles, legs or abdomen. Hard to breathe when active or at night Need to use more pillows at night Constant cough or wheeze Very tired  Weight down bykg over 1-2 days Dry mouth/skin Dizziness	What to do:  If my weight has increased:  If my weight has decreased:  Call my doctor or nurse:
I need to get help now, call 111	My symptoms:  Sudden, severe shortness of breath  Angina not relieved after following angina action plan  Develop new chest pain/tightness/heaviness  Sweating, weakness or fainting	What to do: Call 111 for emergency help NOW.

# HF Action Plan – Heart Foundation



#### HF Action Plan – Heart Foundation (Green)

My symptoms:

Weight on target. Target range \_\_\_\_\_kg

Little or no swelling

Breathing is easy

What to do:

Keep taking my pills

Keep doing my daily checks – weight, swelling and breathing (see next page)

Keep eating a healthy, low salt diet

Keep making changes to improve my health



## HF Action Plan – Heart Foundation (Yellow/Orange)

Weight up by \_\_\_\_\_kg over 1-2 days What to do: Swelling in ankles, legs or abdomen. If my weight has increased: Hard to breathe when active or at night Need to use more pillows at night Constant cough or wheeze I do not feel well Very tired If my weight has decreased: Weight down by \_\_\_\_kg over 1-2 days Dry mouth/skin Dizziness Call my doctor or nurse:



#### HF Action Plan – Heart Foundation (Red)

# need to get help now, call 111

#### My symptoms:

- Sudden, severe shortness of breath
- Angina not relieved after following angina action plan
- Develop new chest pain/tightness/heaviness
- Sweating, weakness or fainting

#### What to do:

Call 111 for emergency help NOW.



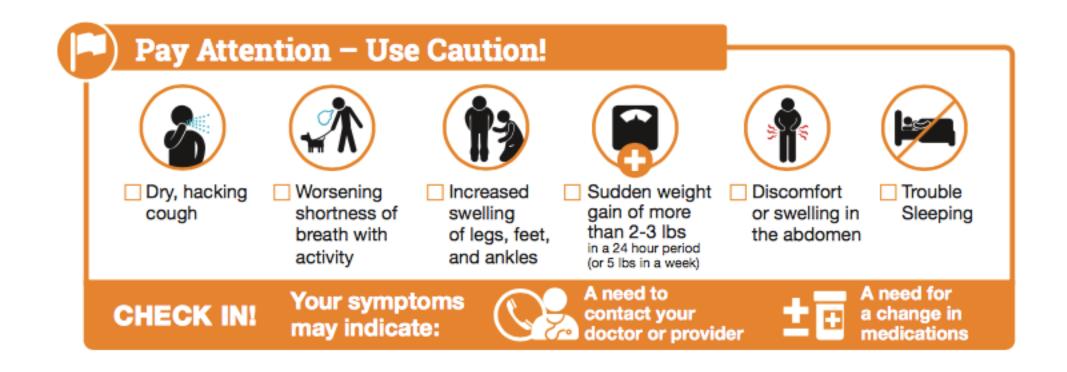


HF Action
Plan –
American
Heart
Association

## HF Action Plan – American Heart Association (Green)



## HF Action Plan – American Heart Association (Yellow/Orange)



## HF Action Plan – American Heart Association (Red)



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Yes...



Do you remember the last time you were in the hospital and you couldn't breathe very well? And the doctors you saw in the hospital kept referring to the extra fluid in your body?

Yes...

Well the reason we ask you to weigh yourself once a day is because weighing yourself can detect the beginning of that fluid accumulation, which serves as an early warning sign of something that could become serious enough to require hospitalization. An increase in your weight from one day to the next of 2 lb or more or over the course of a week of 5 lb or more could signal that fluid is starting to build up. If you weigh yourself every day and give me a call if you notice any changes, there's a real chance that we can work together to keep you out of the hospital.



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What? Why didn't someone tell me that before? I'd do just about anything to stay out of the hospital.



I am sorry that there was confusion about why your doctor was requesting that you weigh yourself every day. That is something that I've had other patients confused about in the past. I really appreciate that you took the time to listen to the information on the importance of weight monitoring for your heart failure. Now that I've shared this, what are your thoughts on weighing yourself daily?



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What can you think of that might help you remember?



Maybe I could move the scale into the bathroom so that I weigh myself before my morning shower?



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Great idea Judy. We've had a really good conversation, and I'd like to make sure you and I are understanding the same next steps. Can you repeat the plan to me to make sure I've got it right?



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I'll move my scale to the bathroom. Then I can weigh myself every morning. I'll call you if my weight increases by over 2 lbs from one day to the next or over 5 lbs over the course of a week.



- You and Judy continue on to document her target weight on her HF action plan, along with instructions on what to do if she notices differences in her weight from the previous day or over the course of a week.
- You talk through a few "what if" scenarios and have Judy explain what she would do in each situation.
- You schedule your next visit at a time when Judy's daughter will be able to attend.



## Patient Self-Assessment – Recipe for Success

- Coach patients on screening tools to use to assess symptom severity for things like exercise tolerance, breathing at night, and dizziness/lightheadedness (e.g., no shortness of breath, shortness of breath after moderate exertion, shortness of breath after mild exertion, shortness of breath at rest)
- For each symptom, instruct patients on which level of severity would require diet/medication modification and when an immediate call to the physician's office would be required, per their customized HF action plan
- Swelling
  - Instruct patients to examine their legs each day for swelling or an increase in existing swelling, noting how far up the leg the swelling reaches



# Sodium Restriction – Recipe for Success

- Recommendations typically suggest restricting sodium to < 3 grams per day</li>
- Fill in knowledge gaps, as needed, on the following:
  - Assessing food labels and calculating daily intake
  - The relationship between sodium intake and swelling
  - Sodium and salt are the same thing
  - "Hidden sources" (e.g., seasoning, restaurant food, etc)



#### Activity – Recipe for Success

- Studies have shown that patients with HF who engage in routine exercise experience improvements in quality of life
- May also reduce the rate of hospitalization
- Consult with the provider managing the patient's condition regarding activity to ensure safety



#### Medication – The Why

- Medication therapy reduces hospitalization and mortality rates
- Higher adherence correlates to fewer emergency and hospital visits
- One study found that 88% adherence or better would be necessary to improve event-free survival for patients with HF

'Drugs don't work in patients who don't take them'

(C. Everett Koop, MD, US Surgeon General, 1985)



#### Medication Management

- How to help ensure adherence:
  - Inquire about barriers to filling and refilling prescription medications (e.g., transportation, cost)
  - Encourage the use of a single pharmacy for all prescription medications
  - Encourage routines (e.g., place medications next to coffee maker) and the use of pill boxes
  - Write down dose changes AND provide instructions for disposal of medications that will no longer be used
  - Educate on anticipated side effects, including what to do if side effects occur
  - Provide guidance for times when routine will be disrupted (e.g., travel)
  - Make sure the patient knows the name (brand AND generic) of their diuretic relying on knowing what it looks like is NOT sufficient and should be discouraged





#### When to Refer to a Specialist or HF Program

- New onset HF
- Second opinion regarding cause
- Annual review for patients with established advanced HF
- Chronic HF with "high-risk features"
- To assist with medication therapy or to address comorbid conditions which may complicate treatment (e.g., chronic renal disease)
- For consideration of device therapy in patients with persistently reduced LVEF ≤ 35% despite guideline-directed medication therapy for ≥ 3 months
- Discussion regarding participation in a clinical trial



#### Care Coordination

- The average Medicare patient with HF sees 15 providers per year.
  - Primary care team (physician, care manager, social worker, etc.)
  - Cardiologist, advanced heart failure clinic
  - Specialists for other comorbidities (e.g., endocrinologist, urologist, etc.)
- Make sure patients have name and contact information for their care providers, including who
  to call for what
- Refer patients to heart failure education classes, when available
- A referral to palliative care early in the disease process can provide meaningful support to patients and their families
- Engage hospice care near the end stage



#### Patient Resources

- Heart Failure Society of America Education Modules
- American Association of Heart Failure Nurses Self-Care Tip Sheets
- <u>CDC Patient Education Hand Outs</u>
- American Heart Association- Resources to Support Patient Care



### Patient Case – Judy (Final Thoughts)

- Self-management is a process
- Continuous follow-up and revisiting of previously discussed topics will be crucial to Judy's success
- Judy's priorities may change over time evolve your approach as her perspective changes
- Don't lose sight of safety priorities
- Let the patient take the lead in the process of goal setting



## Thank you!

