



# **PRACTICAL APPROACHES TO SELF-CARE MANAGEMENT**

Harleah Buck RN PhD

Karen Harkness RN PhD

May 11, 2019

There are no  
conflicts of  
interest to  
report

© MARK ANDERSON

WWW.ANDERSTOONS.COM



"Before we begin, full disclosure - I am  
man's best friend."



# Objectives

**In this *interactive* workshop you will:**

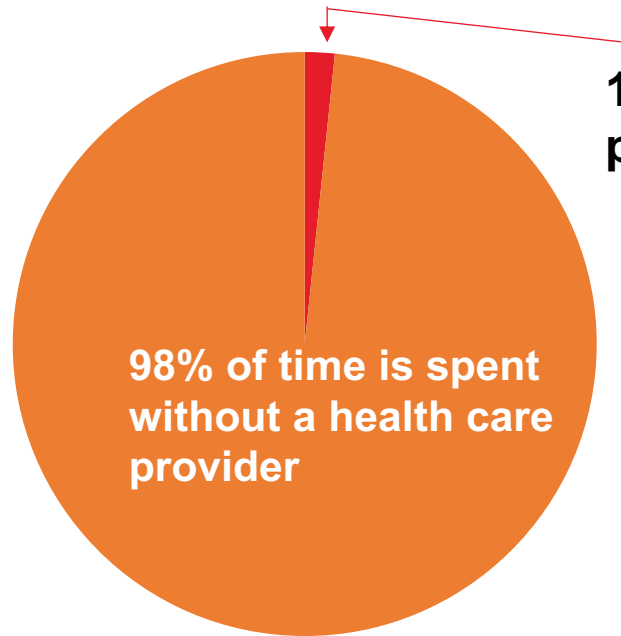
- Learn about the factors that impact heart failure patients' engagement in self-care;
- Review practical approaches that integrate the role of family caregivers in patient self-care;
- Learn important tips for supporting patient education and self-care engagement in challenging situations.

# Self-care- Definition

“Self-care is defined as a naturalistic decision-making process addressing both the prevention and management of chronic illness, with the core elements of self-care maintenance, self-care monitoring and self-care management”

Riegel et al., Self-Care for the Prevention and Management of Cardiovascular Disease and Stroke. A Scientific Statement for Healthcare Professionals From the American Heart Association. *J Am Heart Assoc.* 2017, Aug 31, 6(9)

# Why is self-care important?



## 1. People may spend only 2% of their time with health care providers in a year

Example:

Time spent with HCP in a year (124 hours)

Time awake / year (16 hours X 365= 5840 hours)

Total time with health care provider/ YR: 2%

Assumptions in example:

Clinic appointment: 1/month X12 months (12 hours)

Hospital: 7 day LOS (112 hours awake)

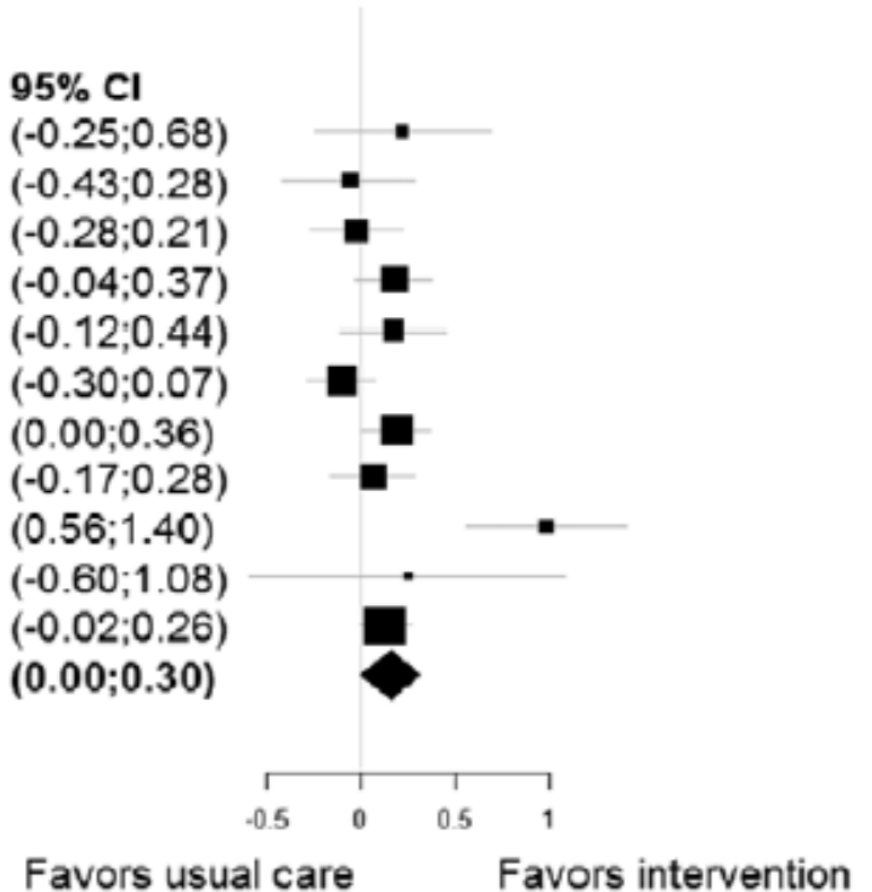
## 2. Engagement in self-care in people with heart failure helps decrease hospitalizations for heart failure and can improve quality of life and decrease mortality

Jonkman et al., Do self-management interventions work in patients with heart failure? An individual patient data meta-analysis.  
*Circulation*. 2016; 133(12): 1189-1198

# Self-care interventions and HF-related Quality of Life

## HF-related QoL 12 months

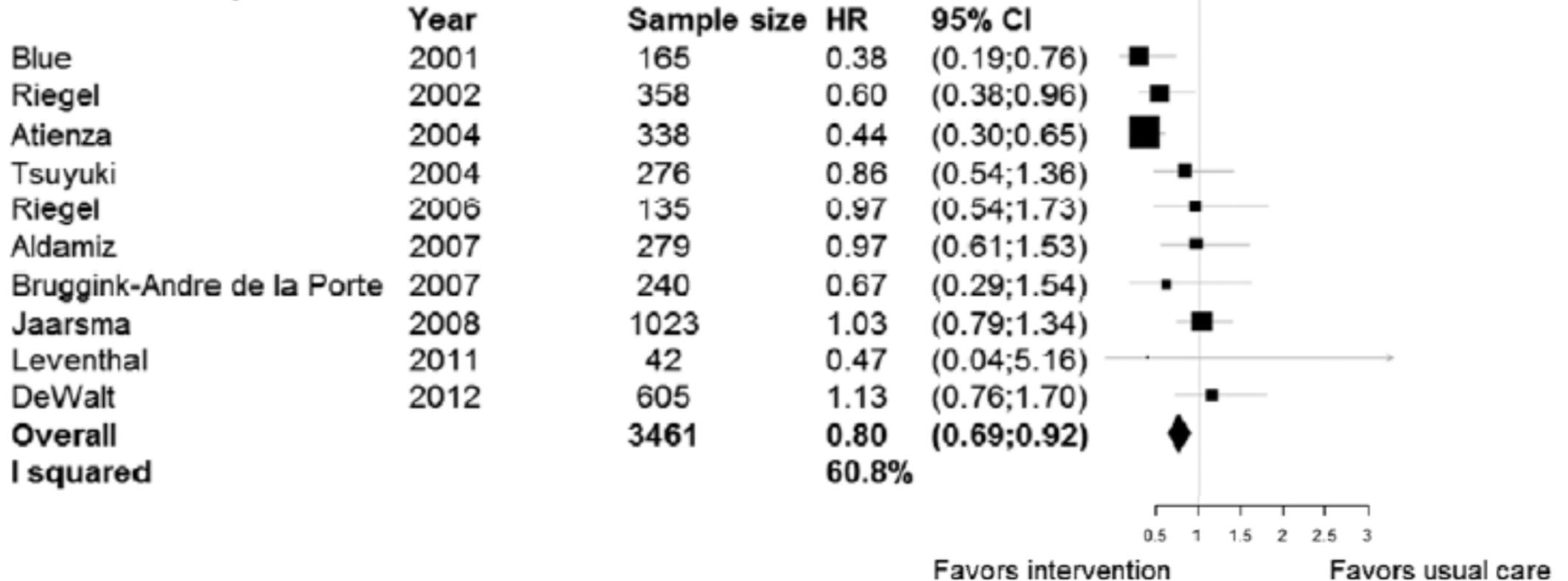
|                            | Year | Sample size | SMD          | 95% CI             |
|----------------------------|------|-------------|--------------|--------------------|
| Blue                       | 2001 | 165         | 0.21         | (-0.25;0.68)       |
| Stromberg                  | 2003 | 106         | -0.07        | (-0.43;0.28)       |
| Martensson                 | 2005 | 153         | -0.03        | (-0.28;0.21)       |
| Sisk                       | 2006 | 406         | 0.17         | (-0.04;0.37)       |
| Bruggink-Andre de la Porte | 2007 | 240         | 0.16         | (-0.12;0.44)       |
| Jaarsma                    | 2008 | 1023        | -0.11        | (-0.30;0.07)       |
| Smeulders                  | 2009 | 317         | 0.18         | (0.00;0.36)        |
| Peters-Klimm               | 2010 | 197         | 0.06         | (-0.17;0.28)       |
| Otsu                       | 2011 | 102         | 0.98         | (0.56;1.40)        |
| Leventhal                  | 2011 | 42          | 0.24         | (-0.60;1.08)       |
| DeWalt                     | 2012 | 605         | 0.12         | (-0.02;0.26)       |
| <b>Overall</b>             |      | <b>3356</b> | <b>0.15</b>  | <b>(0.00;0.30)</b> |
| <b>I squared</b>           |      |             | <b>43.6%</b> |                    |



SMD- Standardized Mean Difference;  
 CI- Confidence Interval;  
 HR- Hazard Ratio  
 QOL- Quality of Life

# Self-care interventions and HF related hospitalizations- time to event

## HF-related hospitalization time-to-event

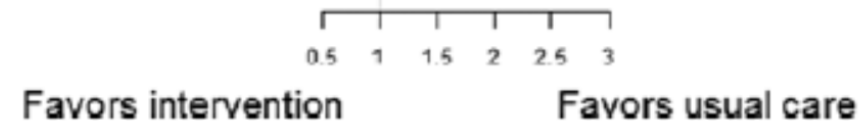


SMD- Standardized Mean Difference;  
CI- Confidence Interval;  
HR- Hazard Ratio  
QOL- Quality of Life

# Self-care interventions and time to mortality

## Mortality time-to-event

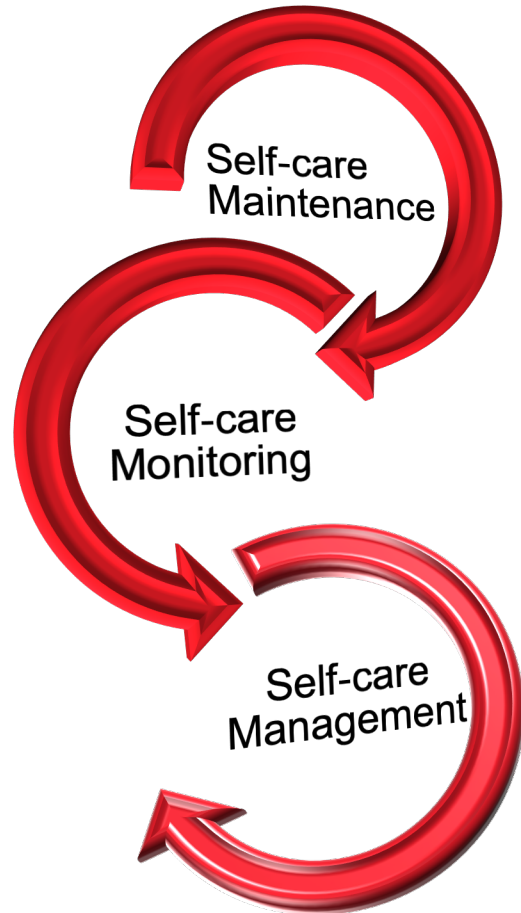
|                            | Year | Sample size | HR           | 95% CI             |  |
|----------------------------|------|-------------|--------------|--------------------|--|
| Rich                       | 1995 | 282         | 0.95         | (0.60;1.50)        |  |
| Blue                       | 2001 | 165         | 0.93         | (0.54;1.63)        |  |
| Riegel                     | 2002 | 358         | 0.87         | (0.48;1.59)        |  |
| Stromberg                  | 2003 | 106         | 0.31         | (0.13;0.73)        |  |
| Atienza                    | 2004 | 338         | 0.56         | (0.35;0.89)        |  |
| Tsuyuki                    | 2004 | 276         | 1.24         | (0.66;2.32)        |  |
| Riegel                     | 2006 | 135         | 0.82         | (0.30;2.26)        |  |
| Aldamiz                    | 2007 | 279         | 1.05         | (0.58;1.91)        |  |
| Bruggink-Andre de la Porte | 2007 | 240         | 0.52         | (0.26;1.05)        |  |
| Jaarsma                    | 2008 | 1023        | 0.98         | (0.80;1.21)        |  |
| Peters-Klimm               | 2010 | 197         | 1.05         | (0.30;3.62)        |  |
| Leventhal                  | 2011 | 42          | 0.48         | (0.09;2.64)        |  |
| DeWalt                     | 2012 | 605         | 0.69         | (0.32;1.48)        |  |
| Heisler                    | 2013 | 266         | 2.01         | (1.15;3.53)        |  |
| <b>Overall</b>             |      | <b>4312</b> | <b>0.91</b>  | <b>(0.79;1.04)</b> |  |
| <b>I squared</b>           |      |             | <b>43.8%</b> |                    |  |



SMD- Standardized Mean Difference;  
 CI- Confidence Interval;  
 HR- Hazard Ratio  
 QOL- Quality of Life



# Self-care: 3 Core Elements



What do I do to help feel well and help prevent my heart failure from getting worse?

What are my symptoms of heart failure and are they different from my usual pattern?

What do I need to do about my symptoms when they are changing?

**Regular  
exercise**



**Daily  
weights**



**Medications  
as prescribed**



**Self care  
maintenance**



**Salt, fluid,  
alcohol  
restrictions**

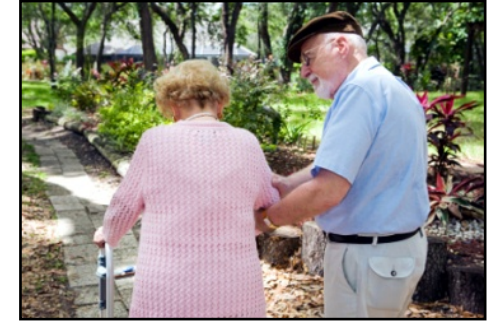


**No smoking**





# Exercise and physical activity



## National Guidelines (2017)

We recommend regular exercise to improve exercise capacity, symptoms, and quality of life

(Strong Recommendation; Moderate-Quality Evidence)

We recommend regular exercise in HF patient with reduced EF to decrease hospital admissions.

(Strong Recommendation; Moderate-Quality Evidence)



2017 Comprehensive Update of the Canadian  
Cardiovascular Society Guidelines for the Management of  
Heart Failure



# Sodium and Fluid Restriction

## National Guidelines



### Sodium Restriction

We suggest that patients with heart failure should restrict their dietary salt intake to between 2g/d and 3g/d.

(Weak Recommendation; Low-Quality Evidence)

**Practical tip:** The optimal quantity of salt in the diet is still a subject of debate. The amount of salt should be adapted to the clinical situation, the severity of symptoms, and baseline consumption without interfering with other nutritional content.

### Fluid Restriction

We suggest that restriction of daily fluid intake to approximately 2 L/d should be considered for patients with fluid retention or congestion that is not easily controlled with diuretics.

(Weak Recommendation; Low-Quality Evidence)

#### Practical tips:

- The appropriate quantity of fluid intake is a subject of debate. Strick limits should be imposed where there is clear fluid overload or demonstrated sensitivity to fluid intake.
- Severely limiting daily fluid intake to <1.5 L might have adverse consequences on nutrition, renal function, and quality of life without known additional benefit and should be applied selectively
- Special considerations for patients with hyponatremia should be applied.



# Medication tips



Organizing medications- “some people find it difficult to remember to take all of their medications. I am wondering how you manage- do you organize and remember to take your pills?” Do you find it difficult at times?

# Medication tips



Side effects when titrating and optimizing medications with 'low blood pressure' – dealing with fatigue, avoiding symptomatic hypotension

## **Asymptomatic low blood pressure**

- Stagger dose of ACE inhibitor/ARB and Beta Blocker (at least 2 hours between medications)
- Consider splitting daily dose to BID
- Use Bisoprolol rather than Carvedilol (more Beta 1 selective)
- Take beta blocker with meals (slows absorption)
- Consider decreasing diuretic
- Consider volume depletion, or other meds (cardiovascular or other) that can contribute to hypotension or orthostatic hypotension (e.g. alpha-blocker)



# Daily weight

## Daily weights

We suggest daily morning weight should be monitored in patients with heart failure with fluid retention or congestion that is not easily controlled with diuretics or in patients with significant renal dysfunction. (Weak Recommendation; Low-Quality Evidence)

**Practical tip:** Weight should be closely monitored for unstable or frail patients. Any rapid weight gain (i.e., >1.5 or 2 Kg) should prompt a rapid medical visit. Weight loss should also be addressed medically.





# Symptom Monitoring, Perception and Interpretation

- Personalize Signs and Symptoms- How do you know if you are starting to retain fluid?
- Expect a large variety of vague descriptions from patients/family caregivers.
- Help clarify signs and symptoms that are probably not related to heart failure
- Story telling – ‘tell me about...a typical day... the last week.... highlight signs or symptoms that reflect HF decompensation (e.g. what did you feel like just prior to hospitalization?)
- Repeat reinforcement is often necessary









## Heart Failure Zones



### EVERY DAY

#### EVERY DAY

- Weigh yourself in the morning before breakfast. Write it down. Compare your weight today to your weight yesterday.
- Keep the total amount of fluids you drink to only 6 to 8 glasses each day. (6-8 glasses equals 1500-2000 mL or 48-64 oz)
- Take your medicine exactly how your doctor said.
- Check for swelling in your feet, ankles, legs, and stomach.
- Eat foods that are low in salt or salt-free.
- Balance activity and rest periods.



### Which zone are you in today?

### GREEN SAFE ZONE

#### ALL CLEAR – This zone is your goal!

Your symptoms are under control. You have:

- No shortness of breath.
- No chest discomfort, pressure, or pain.
- No swelling or increase in swelling of your feet, ankles, legs, or stomach.
- No weight gain of more than 4 lbs (2 kg) over 2 days in a row or 5 lbs (2.5 kg) in 1 week.



### YELLOW CAUTION ZONE

#### CAUTION – This zone is a warning

Call your Health Care provider (eg. Doctor, nurse) if you have any of the following:

- You gain more than 4 lbs (2 kg) over 2 days in a row or 5 lbs (2.5 kg) in 1 week.
- You have vomiting and/or diarrhea that lasts more than 2 days.
- You feel more short of breath than usual.
- You have increased swelling in your feet, ankles, legs, or stomach.
- You have a dry hacking cough.
- You feel more tired and don't have the energy to do daily activities.
- You feel lightheaded or dizzy, and this is new for you.
- You feel uneasy, like something does not feel right.
- You find it harder for you to breathe when you are lying down.
- You find it easier to sleep by adding pillows or sitting up in a chair.



Healthcare Provider: \_\_\_\_\_ Phone Number: \_\_\_\_\_

### RED DANGER ZONE

#### EMERGENCY – This zone means act fast!

Go to emergency room or call 9-1-1 if you have any of the following:

- You are struggling to breathe.
- Your shortness of breath does not go away while sitting still.
- You have a fast heartbeat that does not slow down when you rest.
- You have chest pain that does not go away with rest or with medicine.
- You are having trouble thinking clearly or are feeling confused.
- You have fainted.



The Heart and Stroke Foundation gratefully acknowledges Cardiac Services BC and the experts at British Columbia's Heart Failure Network as the original creators of this resource.  
\*The heart and / icon and the Heart&Stroke word mark are trademarks of the Heart and Stroke Foundation of Canada.

F17 V1



**Personalize**  
What are your early symptoms?

**Action Plan**  
What should you do if you notice a change?

# Self-care in heart failure is not easy

- Self-care is a skill and requires practice and learning over time
- Let patients know that others have difficulties too and encourage them to share concerns and problems
- Repeat reinforcement is often necessary
- Patients regard self-care within a process of adaptation that strives to maintain independence and quality of life

*"My weight just kept going up- I knew if I gained weight I would need to go back to the hospital. So I just stopped checking my weight."*

*"They told me not to have any canned foods, no canned soups and no lunch meats.... I didn't have any canned foods and lunch meats. I had pizza and hot wings and Pepsi Cola".*

# Factors affecting self-care activities and decision-making

*“It’s complicated”*

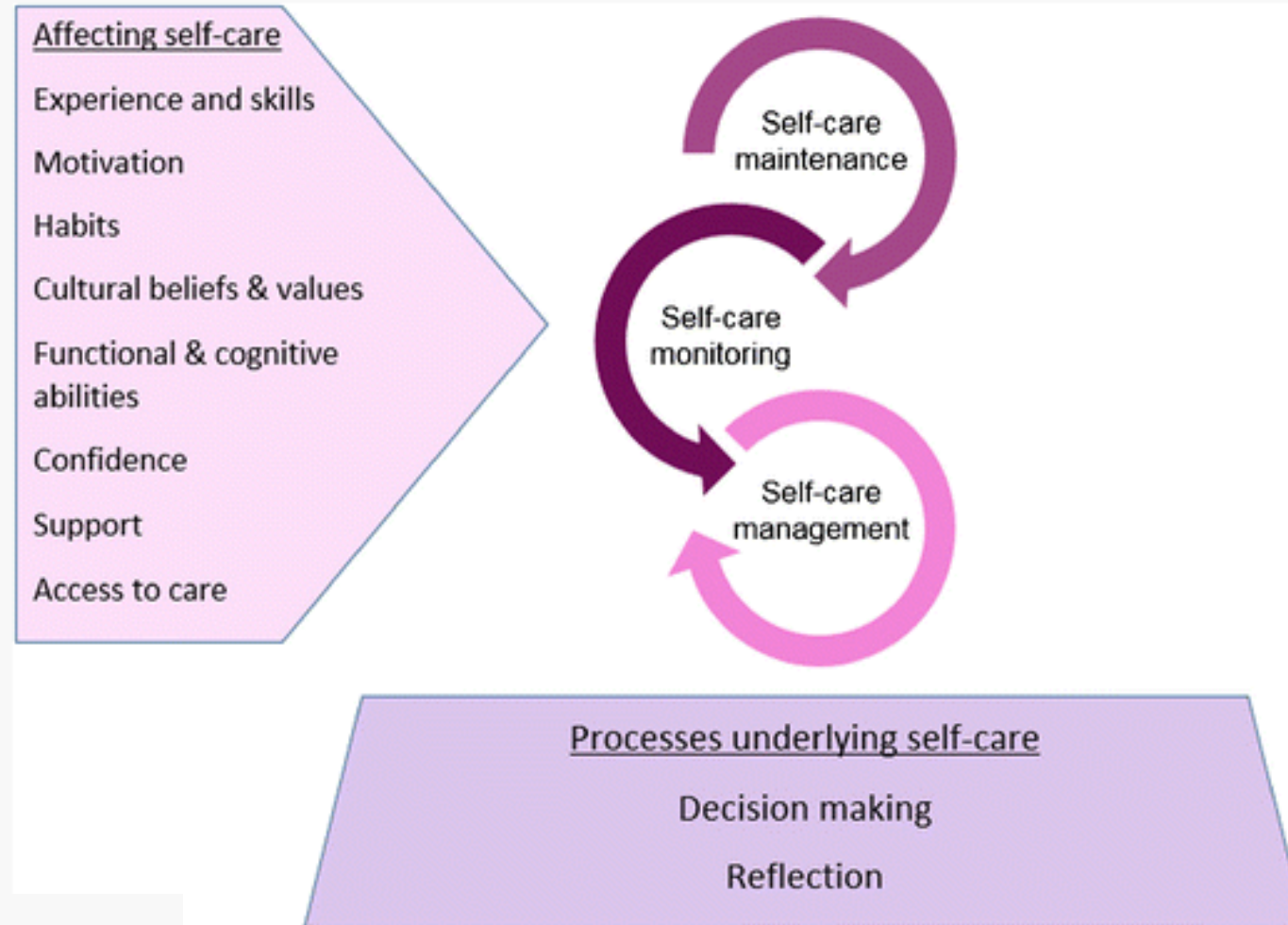


Fig. 1

Factors affecting self-care and processes underlying self-care according to the middle-range theory of self-care of chronic illness

Patients and Caregivers handle the patient's self-care in one of four ways –

*Do you know which way your patient uses?*

**Patient does all self-care**

**Caregiver does all self-care**

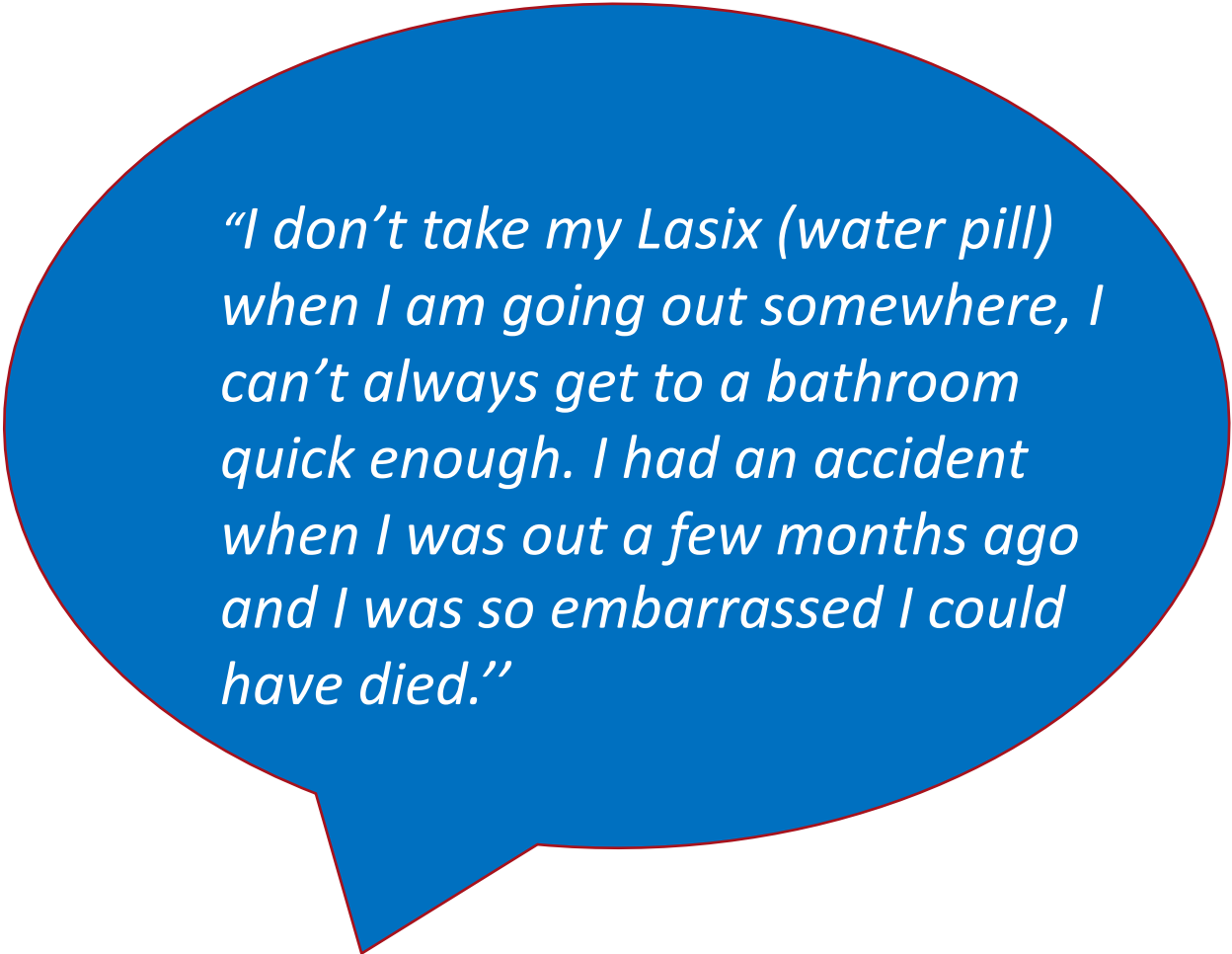
**Patient and Caregiver collaborate on self-care**

**Patient and Caregiver are at cross purposes on self-care**

# Self care in heart failure-past experience

Do you foresee any potential problems with this arrangement?

How do you approach this situation?



*"I don't take my Lasix (water pill) when I am going out somewhere, I can't always get to a bathroom quick enough. I had an accident when I was out a few months ago and I was so embarrassed I could have died."*

# Good intentions, not so good outcomes

How do you approach situations when people had good intentions, but their actions and decisions actually made things worse?

*"I noticed I wasn't peeing as much and my weight was going up. I started drinking iced tea to help 'flush out my kidneys and help the water pills work better'".*

*"They told me not to have any canned foods, no canned soups and no lunch meats.... I didn't have any canned foods and lunch meats. I had pizza and hot wings and Pepsi Cola".*

# Factors Affecting Self-Care-

## Supportive learning environment

| Domain               | Description   | Tips   |
|----------------------|---|--|
| Learning environment | <p>Patients need a safe environment (e.g. not punitive) to explore real or potential situations where self-care is difficult.</p> <p>Patients may experience many difficulties despite deliberate attempts to make healthy choices.</p> | <ul style="list-style-type: none"><li>• Creative problem-solving, cognitive behavioural strategies and mutual goal setting are necessary.</li><li>• Let patients know that others have difficulties and encourage them to share concerns or problems.</li><li>• Repeat reinforcement is often necessary.</li></ul> |

Howlett et al., CCS Heart Failure Companion, 2016

Riegel et al., 2007 in Spaling et al. JAN, 2015



# Factors Affecting Self-Care – Emotional Status

*“Considering how I used to be an now...that has changed drastically.....I find it very hard sometimes to deal with it...its very emotional. This morning after I got into the office for a while I just, uh, cried a little bit, a sense of hopelessness....I’m not capable of doing the walking that I used to...I fell a sense of inadequacy...Sometimes you just get fed up and think that was a day I just had a real down spiraling. I just ate what I wanted. I put salt on everything and I didn’t care”*

| Domain           | Description  | Tips   |
|------------------|--|--|
| Emotional Status | Symptoms such as anxiety and depression can have a negative impact on engaging in self-care. | <ul style="list-style-type: none"><li>• Counselling to recognize benefits and overcome barriers of self-care</li><li>• Reinforcing positive behaviors</li><li>• Setting mutual and realistic goals</li><li>• Celebrating successes</li></ul> |

Harkness et al., J CV Nurs, 2016

# 'Motivation Mis-Match'

**HCP-** Intended motivation- recognize fluid accumulation early and have an action plan to manage fluid accumulation to *avoid* hospitalization

**Patient-** Actual motivation - identifies when you *need to go back* to the hospital

Any suggestions for supporting self-care?

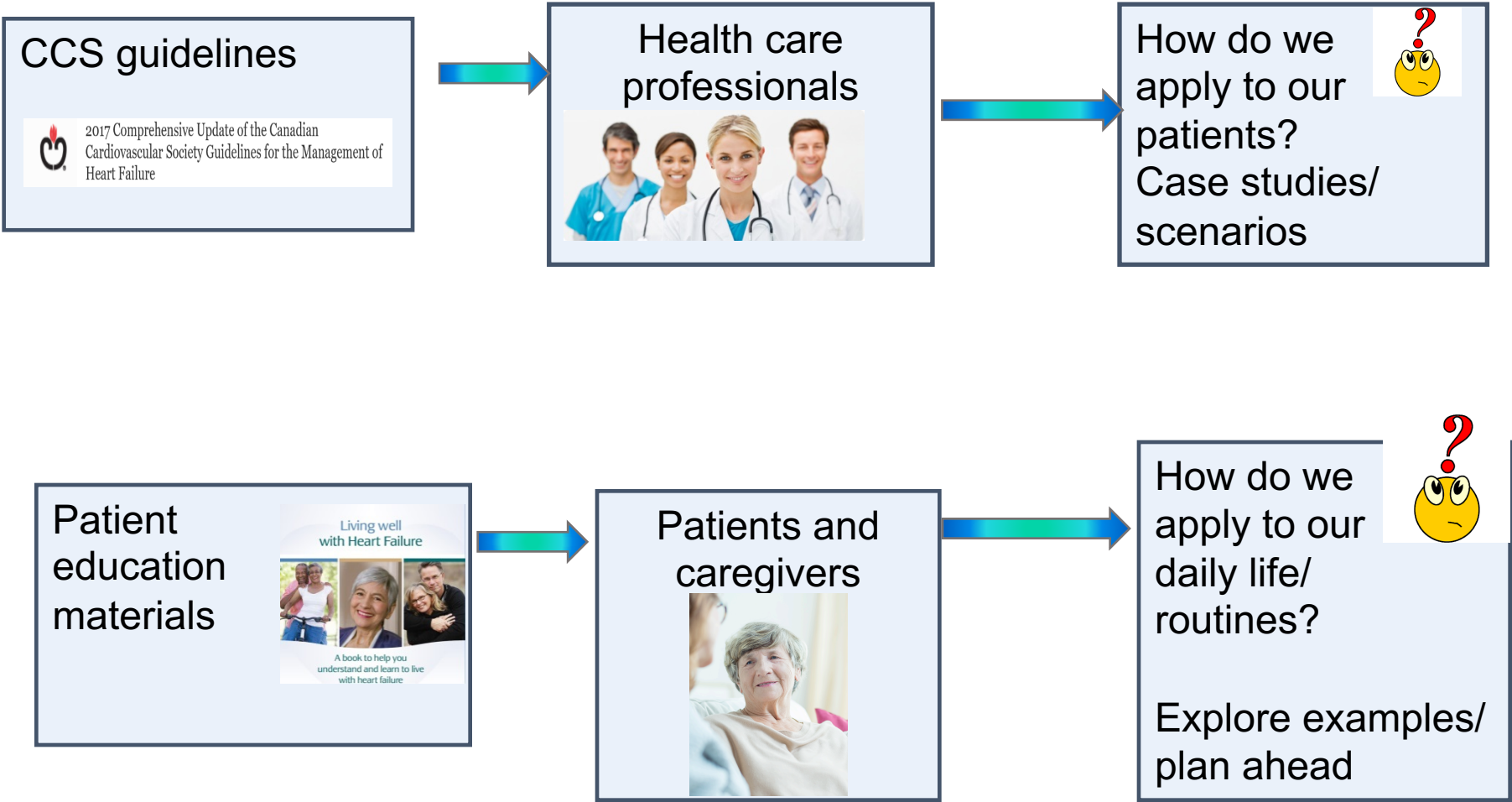
*Instructions- check weight daily and if you increase by 5 pounds in a week, call the clinic.*

**HCP**

*"My weight just kept going up- I knew if I gained weight I would need to go back to the hospital. So I just stopped checking my weight."*

**Patient**

# Beyond knowledge..





## Summary

- Heart failure in self-care is a skill and learned over time.
- Self-care is difficult- patients and caregivers need a learning environment that is supportive rather than punitive. Let them know that others have difficulties too and encourage them to share concerns and problems.
- To integrate self-care in daily life, education should include strategies that promote self-efficacy, learning and application of the recommendation into daily life.

## “The relationship”

“People don't care how much you know until they know how much you care”

Theodore Roosevelt

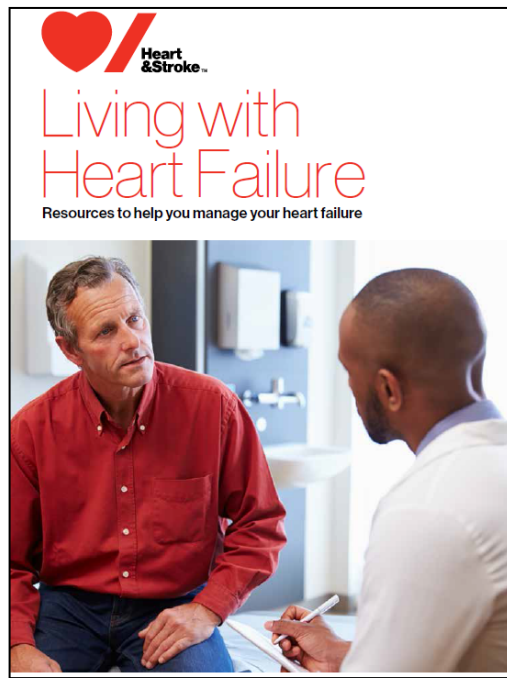


*“They listen... like my input... I feel so much better. They don't argue with me... respect me as a person. That is really, really important to me... they are interested in me”*

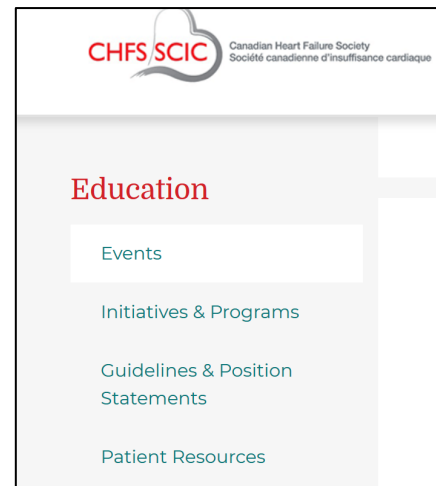
# Resources



[www.heartlife.ca](http://www.heartlife.ca)



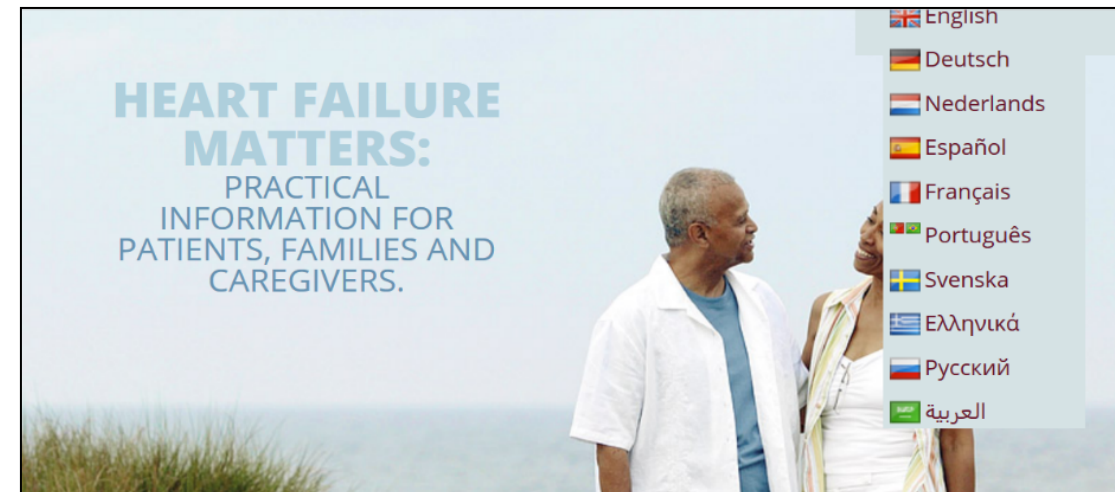
<http://www.heartandstroke.ca/heart/conditions/heart-failure>



[www.heartfailure.ca](http://www.heartfailure.ca)



<https://sqic.org>



[http://www.heartfailurematters.org/en\\_GB](http://www.heartfailurematters.org/en_GB)