



Cost-Effectiveness of the Self-Care Management System for Heart Failure

Eisaku Nakane, MD; Takao Kato, MD; Nozomi Tanaka; Makoto Idouji, MD;
Yuki Yamamoto, MD; Wataru Saitou, MD; Toka Hamaguchi, MD;
Mariko Yano, MD; Takeshi Harita, MD; Yuhei Yamaji, MD;
Hiroki Fukuda, MD; Tetsuya Haruna, MD; Moriaki Inoko, MD

Supplementary File

Supplementary Methods: Page 3

Supplementary Figure Legend: Page 4

Supplementary Figure: Page 5-8

Supplementary Methods

Propensity matching

A logistic regression model was developed to make the PS for the induction of the self-management program with 19 baseline variables (age, number of prior hospitalizations, living alone, atrial fibrillation or flutter, implantable cardioverter defibrillator, dementia, left ventricular ejection fraction <40%, brain natriuretic peptides > 235 pg/ml as a median value, estimated glomerular filtration rate < 30 ml/min/1.73 m², serum potassium >4.3 mEq/L as a median value, serum albumin < 3.5 g/dL, hemoglobin < 13g/dL, and the use of beta-blocker use, angiotensin converting enzyme inhibitor or angiotensin 2 receptor blocker, loop diuretics, tolvaptan, inotropic agent, and calcium antagonist). The c-statistics were 0.748.¹ See more details in Nakane E, et al.¹

References of the supplementary file

1. Nakane E, Kato T, Tanaka N, Kuriyama T, Kimura K, Nishiwaki S, et al. Association of the induction of a self-care management system with 1-year outcomes in patients hospitalized for heart failure. *J Cardiol* 2021; **77**: 48-56.

Supplementary Figure legends

Supplementary Figure. (A) The HF point self-care assessment sheet: the first page for patient instruction, (B) the second page. (C) The instruction for clinic and outpatient. (D) The interaction between clinics, hospitals, and patients. AF, atrial fibrillation; ER, emergency department; HF, heart failure.

Supplementary Figure. (A)

Instruction for Self-care Management

ID:

Name:

Record the status of your body every day and use it to manage heart failure.
This record will be helpful in treating you. Be sure to show it to your doctor when you visit.

Date (Day/Month):

Ideal water intake per day: ml

Ideal body weight in the morning: kg

If your body weight exceeds kg, you should take tablets of Furosemide (20mg).

If your body weight exceeds kg, you should limit the water intake more strictly.

If your body weight exceeds kg, you should visit or consult a doctor about the increase in body weight.

Supplementary Figure. (B)

Heart failure management record form

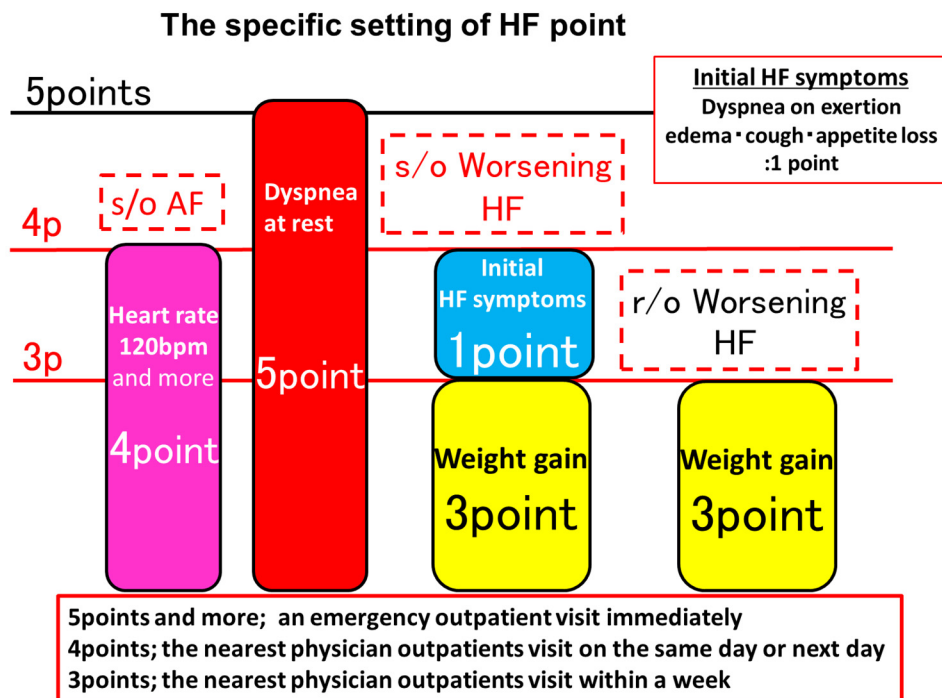
Month/Day	/	/	/	/	/	/	/	
Day of the week	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
Body weight(kg)								
If BW exceeds the limit, check 3points	3 P	0 P	3 P	0 P	3 P	0 P	3 P	
	0 P	3 P	0 P	3 P	0 P	3 P	0 P	
Blood pressure(mmHg)	/	/	/	/	/	/	/	
HR(bpm)								
120 or mor:4 P	4 P	0 P	4 P	0 P	4 P	0 P	4 P	
Dyspnea at rest	Y	N	Y	N	Y	N	Y	
	0 P	5 P	0 P	5 P	0 P	5 P	0 P	
Symptoms	Shortness of breath when going out, bathing, climbing stairs	Y	N	Y	N	Y	N	Y
	Edema gets worse	Y	N	Y	N	Y	N	Y
	Cough	Y	N	Y	N	Y	N	Y
	Loss of appetite	Y	N	Y	N	Y	N	Y
	One point if there is at least one Y.	1 P	0 P	1 P	0 P	1 P	0 P	1 P
Points (Summation)								

I took the medicine (after)	breakfast, lunch, dinner	breakfast, lunch, dinner	breakfast, lunch, dinner	breakfast, lunch, dinner	breakfast, lunch, dinner	breakfast, lunch, dinner	breakfast, lunch, dinner
Water intake (mL)							

If points are
5 points or more → you go to ER immediately
[] Hospital, outpatient (tel no.) Nighttime or holidays (tel. no.)
4P → you go to unscheduled visit on today or tomorrow
3P → you go to unscheduled visit within a week
Home doctor or [] hospital

Name [institution]

Supplementary Figure. (C)



Supplementary Figure. (D)

