

Table S1 Structure of the CHF-PROM

Domains	Subdomains	Items
Physical domain	Somatic symptoms	PHD1-, PHD2-, PHD3-, PHD4-, PHD5-, PHD6-, PHD7-, PHD8-
	Appetite symptoms	PHD9-, PHD10-, PHD11-, PHD12-
	Independence	PHD13, PHD14, PHD15, PHD16
Psychological domain	anxiety	PSD1-, PSD2-, PSD3-, PSD4-, PSD5-, PSD6-, PSD7-, PSD8-
	Depression	PSD9-, PSD10-, PSD11-, PSD12-, PSD13-, PSD14-
	Fear	PSD15-, PSD16-, PSD17-
	Paranoia	PSD18-, PSD19-, PSD20-, PSD21-
Social domain	Social support	SOD1, SOD2, SOD3, SOD4, SOD5
	Support utilization	SOD6, SOD7, SOD8
Therapeutic domain	Compliance	TRE1, TRE2
	Satisfaction	TRE3, TRE4, TRE5, TRE6, TRE7, TRE8, TRE9, TRE10
	Side effects	TRE11, TRE12-

CHF-PROM, chronic heart failure - patient reported outcome measures; PHD, physical domain; PSD, psychological domain; SOD, social domain; TRE, therapeutic domain.

Table S2 Comparison the baseline characteristics between completed the follow-up group and lost to follow-up group

	Completed the follow-up	Lost to follow-up	<i>P</i>
	n=315	n=93	
Age	66.1±15.0	68.7±12.2	0.148
Women	138(43.8%)	40(43.0%)	0.963
Body Mass Index (kg/m²)	24.2±4.1	23.6±3.8	0.243
Heart rate	77.9±15.7	80.2±17.9	0.318
Systolic pressure (mmHg)	127.6±19.6	124.9±23.2	0.345
Diastolic pressure (mmHg)	77.4±12.6	73.7±16.5	0.050
Marital state			0.702
Single	6(1.9%)	2(2.2%)	
Married	259(82.2%)	73(78.5%)	
Divorced	1(0.3%)	0	
Widowed	49 (15.6%)	18(19.4%)	
Education			0.095
Illiteracy	27(8.6%)	8(8.6%)	
Low level	195(61.9%)	67(72.0%)	
Secondary school and high level	93(29.5%)	18(19.4%)	
Occupation			0.881
Nonmanual workers	98(31.1%)	28(30.1%)	
Manual workers	217(68.9%)	65(69.9%)	
Income			0.272
Low	132(41.9%)	48(51.6%)	
Medium	178(56.5%)	43(46.2%)	
High	5(1.6%)	2(2.2%)	
Health care			0.476
City health insurance	214(67.9%)	57(61.3%)	
Rural health insurance	98(31.1%)	36(38.7%)	
Self-paying	3(1.0%)	0	
NYHA			0.210
II	54(17.1%)	11(11.8%)	
III	145(46.0%)	37(39.8%)	
IV	116(36.8%)	45(48.4%)	
Complications			
Coronary heart disease	156(49.5%)	46(49.5%)	0.960
Hypertension	190(60.3%)	54(58.1%)	0.787
Atrial fibrillation	117(37.1%)	46(49.5%)	0.060
Valvular heart disease	77(24.4%)	26(28.0%)	0.551
Hyperlipidemia	99(31.4%)	22(23.7%)	0.219
Diabetes	111(35.2%)	22(23.7%)	0.076
COPD	73(23.2%)	28(30.1%)	0.268

	Completed the follow-up	Lost to follow-up	P
Chronic renal insufficiency	83(26.3%)	34(36.6%)	0.109
Cancers	24(7.6%)	11(11.8%)	0.321
Central nervous system disease	69(21.9%)	26(28.0%)	0.277
LVEF (%)	43.8±14.3	41.8±13.6	0.330
Drugs			
Nitrates	145(46.0%)	40(43.0%)	0.693
Diuretics	223(70.8%)	64(68.8%)	0.707
Digoxin	77(24.4%)	28(30.1%)	0.356
Beta-blockers	150(47.6%)	34(36.6%)	0.125
ACEI/ARBs	154(48.9%)	25(26.9%)	0.002*
Aldosterone antagonists	209(66.3%)	48(51.6%)	0.029*

ACEI, angiotensin converting enzyme inhibitors; ARB, angiotensin receptor antagonist; COPD,

Chronic obstructive pulmonary disease; LVEF, left ventricular ejection fraction; NYHA, New York

Heart Association functional class.

Table S3 Comparison of the fitting index in growth mixture models for overall scores

	LL	AIC	BIC	aBIC	Entropy	LMR-test	BLRT	Probability of groups
Linear models								
2C	-5861.640	11755.281	11813.777	11763.039	0.979	0.217	<0.001	0.024/0.976
3C	-5848.273	11730.546	11792.698	11738.789	0.869	0.186	<0.001	0.168/0.014/0.818
4C	-5840.027	11718.054	11787.517	11727.267	0.894	<0.001	0.013	0.164/0.014/0.010/0.811
Quadratic function models								
2C	-5806.983	11655.965	11732.741	11666.148	0.911	0.227	<0.001	0.126/0.874
3C	-5788.702	11627.404	11718.803	11639.526	0.935	0.005	<0.001	0.129/0.014/0.857
4C	-5775.746	11609.491	11715.515	11623.553	0.900	0.312	<0.001	0.063/0.119/0.014/0.804
Undefined curve models								
2C	-5838.005	11706.011	11760.851	11713.284	0.841	0.044	<0.001	0.140/0.860
3C	-5820.568	11677.137	11742.945	11685.865	0.878	0.005	<0.001	0.014/0.808/0.178
4C	-5814.045	11670.089	11746.865	11680.272	0.794	0.517	0.0202	0.014/0.122/0.720/0.143

AIC, akaike information criterion; BIC, bayesian information criterion; aBIC, adjusted BIC; BLRT, bootstrapped likelihood ratio test; LL, log-likelihood; LMR-test, lo-mendell-rubin test.

Table S4 Comparison of the fitting index in growth mixture models for physical scores

	LL	AIC	BIC	aBIC	Entropy	LMR-test	BLRT	Probability of groups
Linear models								
2C	-4941.535	9909.070	9956.598	9915.374	0.794	0.162	<0.001	0.804/0.196
3C	-4916.685	9871.369	9940.833	9880.582	0.825	0.130	<0.001	0.080/0.622/ 0.297
4C	-4913.855	9865.710	9935.173	9874.923	0.815	0.105	<0.001	0.073/0.238/ 0.587/0.101
Quadratic function models								
2C	-4827.362	9690.724	9756.532	9699.452	0.800	0.424	<0.001	0.241/0.759
3C	-4791.933	9627.866	9708.298	9638.534	0.921	0.001	<0.001	0.052/0.294/ 0.654
4C	-4782.170	9616.340	9711.396	9628.948	0.889	0.616	<0.001	0.594/0.203/ 0.045/0.157
Undefined curve models								
2C	-4801.283	9636.566	9698.718	9644.809	0.786	0.481	<0.001	0.199/0.801
3C	-4779.541	9599.081	9672.201	9608.780	0.894	0.122	<0.001	0.056/0.301/ 0.643
4C	-4766.393	9578.786	9662.873	9589.938	0.910	0.013	<0.001	0.259/0.598/ 0.031/0.112

AIC, akaike information criterion; BIC, bayesian information criterion; aBIC, adjusted BIC; BLRT, bootstrapped likelihood ratio test; LL, log-likelihood; LMR-test, lo-mendell-rubin test.

Table S5 Comparison of the fitting index in growth mixture models for psychological scores

	LL	AIC	BIC	aBIC	Entropy	LMR-test	BLRT	Probability of groups
Linear models								
2C	-4578.659	9183. 318	9230. 755	9189. 531	0.991	0.008	<0.001	0.912/0.088
3C	-4512.695	9057. 389	9115. 773	9065. 036	0.995	0.009	<0.001	0.873/0.085/ 0.042
4C	-4481.688	9001. 376	9070. 706	9010. 457	0.992	0.050	<0.001	0.035/0.870/ 0.056/0.039
Quadratic function models								
2C	-4502.640	9041. 280	9106. 962	9049. 883	0.991	0.012	<0.001	0.085/0.915
3C	-4451.600	8947. 199	9027. 477	8957. 714	0.992	0.307	<0.001	0.894/0.067/ 0.039
4C	-4387.291	8826. 582	8921. 455	8839. 008	0.989	0.368	<0.001	0.039/0.049/ 0.056/0.856
Undefined curve models								
2C	-4470.737	8975. 475	9037. 507	8983. 599	0.992	0.009	<0.001	0.085/0.915
3C	-4420.278	8880. 555	8953. 535	8890. 114	0.993	0.118	<0.001	0.039/0.894 /0.067
4C	-4396.462	8838. 924	8922. 851	8849. 917	0.970	0.473	<0.001	0.039/0.049 /0.056/0.856

AIC, akaike information criterion; BIC, bayesian information criterion; aBIC, adjusted BIC; BLRT, bootstrapped likelihood ratio test; LL, log-likelihood; LMR-test, lo-mendell-rubin test.

Table S6 Comparison of the fitting index in growth mixture models for therapeutic scores

	LL	AIC	BIC	aBIC	Entropy	LMR-test	BLRT	Probability of groups
Linear models								
2C	-4301.234	8628.467	8675.995	8634.771	0.982	0.001	<0.001	0.514/0.416
3C	-4260.911	8553.821	8612.317	8561.580	0.957	0.035	<0.001	0.077/0.507/ 0.416
4C	-4273.818	8585.636	8655.100	8594.850	0.916	0.211	<0.001	0.343/0.112/ 0.504/0.042
Quadratic function models								
2C	-4264.104	8564.209	8630.017	8572.937	0.979	<0.001	<0.001	0.517/0.483
3C	-4224.642	8493.284	8573.716	8503.952	0.959	0.021	<0.001	0.416/0.507/ 0.077
4C	-4200.295	8452.590	8547.645	8465.197	0.968	0.490	<0.001	0.406/0.490/ 0.045/0.059
Undefined curve models								
2C	-4231.548	8489.096	8536.624	8495.400	0.988	0.001	<0.001	0.346/0.654
3C	-4186.728	8405.456	8463.952	8413.214	0.994	<0.001	<0.001	0.654/0.318/ 0.028
4C	-4162.794	8363.587	8433.051	8372.800	0.982	0.216	<0.001	0.042/0.283/ 0.647/0.028

AIC, akaike information criterion; BIC, bayesian information criterion; aBIC, adjusted BIC; BLRT, bootstrapped likelihood ratio test; LL, log-likelihood; LMR-test, lo-mendell-rubin test.