

American Association of Heart Failure Nurses Content Outline

I. Assessment		27%
A. Review Patient History		
1. Review patient record for comorbid conditions		
	a. non-cardiac related conditions that could impact assessment, treatment and prognosis (e.g., COPD, depression, renal disease)	
	b. hypertension	
	c. diabetes	
	d. hyperlipidemia	
	e. obesity	
	f. coronary heart disease (e.g., CVD, CAD)	
	g. valvular heart disease	
	h. sleep-disordered breathing	
	i. recurrent/chronic arrhythmias	
	j. anemia	
	k. primary diagnoses that can result in a secondary diagnosis of heart failure (e.g., pulmonary hypertension, hemochromatosis, viral infection, sarcoidosis, amyloidosis)	
2. Review patient record for heart failure risk factors		
	a. hypertension	
	b. diabetes	
	c. hyperlipidemia	
	d. obesity	
	e. smoking	
	f. coronary heart disease	
	g. valvular heart disease	
	h. exposure to cardiac toxins (e.g., alcohol, cocaine, chemotherapy drugs)	
	i. sleep-disordered breathing	
	j. sustained arrhythmias	
	k. anemia	
	l. non-cardiac related conditions that could impact assessment, treatment and prognosis (e.g., COPD, depression, renal disease)	
	m. primary diagnoses that can result in a secondary diagnosis of heart failure (e.g., pulmonary hypertension, hemochromatosis, viral infection, sarcoidosis, amyloidosis)	
3. Obtain patient information		
	a. family history	
	b. social determinants of health (e.g., social support, financial support, work, marital status, access to care, insurance coverage, transportation, diet, homelessness, language barriers, health literacy)	
	c. current medications, medication allergies, medication use, and medication affordability	
	d. etiology of heart failure	
	e. duration of heart failure	
	f. presence of implantable cardiac device (e.g., CRT, ICD, pacemaker, VAD, cardiomechs)	
	g. adherence to the plan of care (e.g., barriers, self-efficacy, knowledge of heart failure and self-care practices)	
B. Ask patient about new or worsening signs and symptoms of heart failure		
	a. breathing problems (e.g., shortness of breath, orthopnea, paroxysmal nocturnal dyspnea, wheezing)	
	b. functional classification and activity tolerance (e.g., general fatigue, activity intolerance, leg fatigue)	
	c. cough (e.g., nocturnal, recumbent)	
	d. fluid overload (e.g., pedal edema, ascites, scrotal edema, nocturia)	
	e. gastrointestinal problems (e.g., abdominal discomfort, nausea, vomiting, early satiety, change in bowel habits, diarrhea)	
	f. mental status changes (e.g., confusion, delirium)	
	g. palpitations	
	h. ICD shocks	
	i. dizziness, lightheadedness, or syncope	
	j. angina or anginal equivalents	
	k. sleep disturbance (e.g., insomnia, snoring, early arousal, daytime somnolence)	
	l. changes in urine output (e.g., quantity, color)	
	m. dry mouth or thirst	
	n. skin alterations (e.g., color, bruising, temperature, mottling)	
	o. weight gain or weight loss	
C. Perform physical assessment		
1. Assess signs of change in fluid level status/fluid overload		
	a. heart sounds (e.g., S3, murmurs)	
	b. elevated jugular venous pressure/distension	
	c. lung sounds (e.g., crackles, rales, wheezing)	

		d. ascites e. edema (pitting or non-pitting) f. liver (e.g., hepatojugular reflux, liver span test) g. weight or change in weight from last assessment	
		2. Assess signs of change in perfusion status/poor perfusion	
		a. heart sounds (e.g., audibly distant S2, laterally displaced apical beat) b. cool, mottled skin c. orthostatic blood pressure changes d. narrowed pulse pressure/pulsus alternans e. altered mentation/cognitive dysfunction f. abnormal pulse or rhythm (e.g., tachycardia, irregular, bradycardia)	
		D. Review Lab Test Results	
		a. chemistry panel (e.g., electrolytes, sodium, potassium, magnesium, glucose) b. renal function (blood urea nitrogen, creatinine, glomerular filtration rate) c. lipid profile d. CBC e. hemoglobin A1C f. liver function tests (e.g., transaminases, albumin) g. thyroid function h. BNP levels/NT-proBNP levels i. uric acid level j. iron levels	
		E. Review Cardiac/Pulmonary Test Results	
		a. ejection fraction (from echocardiogram, cardiac catheterization, nuclear study, or CT) b. ECG abnormalities (e.g., QRS width, rate and rhythm) c. chest x-ray d. cardiac catheterization (e.g., left and right) e. cardiac device diagnostics/interrogation (e.g., pacemaker, ICD, cardiomechs, loop recorder, wearable defibrillator)	
II. Planning			15%
		A. Determine Patient's Clinical Status	
		a. ACC/AHA stage b. HFrEF, HFpEF, HFmrEF, and HFimpEF c. New York Heart Association (NYHA) functional class d. six minute walk test e. quality of life measures (e.g., Minnesota, KCCQ-12 (Kansas City Questionnaire)) f. frailty score g. orthostatic hypotension	
		B. Integrate assessment findings into plan of care	
		1. Determine care plan objectives	
		a. patient acuity b. care setting c. clinical status (e.g., co-morbidities and prognosis, hemodynamic profile [ex. wet and cold]) d. patient and family preferences, including shared decision making e. etiology of heart failure f. social determinants of health (e.g., social support, financial support, work, marital status, access to care, access to exercise activities, transportation, diet, homelessness, geographic location, education, health literacy) g. selfcare management (e.g., lifestyle modification, medical plan, medication plan)	
		2. Prioritize implementation of the plan of care based on assessment findings and clinical status	
		a. history b. signs and symptoms c. test results d. pathophysiology e. resources f. social support g. what matters, medication, mentation, and mobility (Four-Ms)	
III. Implementation			30%
		A. Implement pharmacologic treatment	
		1. Administer pharmacologic agents for systolic dysfunction (HFrEF or HFmrEF)	
		a. ARNI, ACE inhibitors, and angiotensin receptor blockers (ARBs) b. Guideline-recommended beta-adrenergic receptor blockers c. aldosterone antagonists (MRA) d. SGLT2 inhibitor e. oral nitrates and hydralazine	
		2. Administer additional pharmacologic agents for systolic dysfunction (HFrEF)	
		a. ivabradine	

	b. vericiguat c. digoxin d. PUFA supplementation e. potassium binders
	3. Administer pharmacologic agents recommended for patients with HF and preserved systolic function (HFpEF)
	a. SGLT2 inhibitor b. ARNI c. aldosterone antagonists (MRA) d. angiotensin receptor blockers (ARBs)
	4. Continue all GDMTs for HFimpEF
	5. Administer diuretic agents to reduce fluid overload
	a. loop of Henle agents b. thiazide diuretics (distal tubule) c. thiazide-like agents (proximal and distal tubule agents)
	6. Administer other frequently-prescribed pharmacologic agents
	a. electrolyte supplements b. statins c. anticoagulants d. antiplatelets e. antiarrhythmic agents f. nitrates g. iron
	7. Assess serum electrolytes and drug levels
	8. Monitor patient for medication therapeutic effects, interactions, and side effects
	9. Recommend pneumococcal vaccine, annual influenza vaccination, and other applicable vaccinations
	10. Complete medication reconciliation (e.g., OTC, prescription)
	a. admission b. discharge c. appointments
	B. Implement non-pharmacologic strategies
	1. Develop a teaching plan based on patient factors that may influence education and management
	a. heart failure b. barriers/readiness to change c. literacy d. language barrier e. health literacy f. cognitive status g. psychological state h. self-efficacy for self-care i. cultural beliefs j. social determinants of health k. preferred methods for learning l. advance directives m. goals of care n. end-of-life care o. quality-of-life preferences
	2. Develop an individualized education plan for patients/caregivers
	a. definition and cause of patient's heart failure b. pathophysiology of heart failure syndrome c. recognition and management of escalating symptoms d. prognosis e. indications, use, and adverse effects of heart failure medications f. risk factor modifications (e.g., blood pressure, body mass index) g. diet recommendations (e.g., sodium intake, label reading, eating out) h. fluid management (e.g., daily weight monitoring, fluid restriction) i. activity and exercise recommendations; including cardiac rehabilitation j. treatment adherence k. follow-up recommendations (e.g., next appointment, 7-day appointment out of hospital, weight changes) l. avoidance of substances that may worsen heart failure (e.g., NSAIDs, ephedrine, drugs, alcohol, tobacco)
	3. Determine appropriate learning methods, according to patient/caregiver preference
	a. one-on-one b. group c. virtual d. written materials e. video materials
	4. Screen patients for eligibility for implanted cardiac rhythm management devices
	a. biventricular pacemaker/cardiac resynchronization therapy (CRT) and implanted cardiac defibrillator (ICD)

	5. Screen patients for advanced therapies	
	a. referral to advanced heart failure clinic b. transplant c. Mechanical Circulatory Support (MCS) (e.g., ventricular assist device (VAD), Impella, intra-aortic balloon pump) d. inotropic therapy e. ultrafiltration f. multiple admissions/re-admissions	
	6. Educate patient on self-care	
	7. Integrate interactive processes, such as skill-building and demonstration, when assessing learning comprehension	
	8. Re-assess learning comprehension and patient's stage of illness in order to adjust and implement education/ counseling plan on an ongoing basis	
	9. Provide a physical activity/exercise plan	
	10. Determine eligibility for cardiac rehabilitation	
	11. Provide dietary recommendations	
	a. heart healthy diet b. food preservation	
	12. Provide fluid management recommendations	
	a. daily weight assessment/weight monitoring b. fluid restriction (as ordered)	
	13. Guide patient in acquiring/using self-care skills	
	a. managing stress	
	14. Screen patients	
	a. chronic pain b. cognitive ability c. sleep disorders d. depression e. suicide f. anxiety g. domestic violence h. environmental safety i. fall risk j. anemia k. thyroid dysfunction l. gout m. other frequently-occurring comorbid conditions (e.g., COPD, atrial fibrillation, renal dysfunction)	
	15. Guide patient and caregivers on stress-reduction techniques	
	C. Recommend patient referrals	
	a. heart failure disease management program b. social work c. home care d. nutritionist/dietician e. physical/occupational therapy f. cardiac specialist (e.g., electrophysiologist, cardiac surgery, interventional cardiologist) g. non-cardiac specialist (e.g., endocrinologist, psychiatrist, pulmonologist, nephrologist, hematologist) h. cardiac rehabilitation i. genetic counseling j. remote patient monitoring k. sleep specialist l. hospice/palliative care m. support groups n. case management o. prescription assistance programs p. mental health	
IV. Evaluation		20%
	A. Evaluate effectiveness of patient therapies across all transitions of care	
	a. Pharmacologic interventions (e.g., diuretics, GDMT)	
	i. class ii. dose iii. tolerance iv. effectiveness v. interactions vi. adherence to drug plan vii. medication reconciliation	
	b. Non-pharmacologic interventions	
	i. outpatient monitoring (e.g., home monitoring, telemonitoring, device diagnostic monitoring, weight, blood pressure, and pulse logs/apps)	

		ii. self-care (e.g., exercise, diet, signs/symptoms of worsening condition, seeking follow-up)	
		c. consultation/referral (e.g., home health)	
		d. changes in NYHA Class and ACC/AHA stage	
		e. palliative/end-of-life/advance directives	
		f. psycho/social patient outcomes (e.g., mood, cognitive functioning, quality of life)	
	B. Evaluate effectiveness of teaching		
		a. patient (and family) education	
		b. understanding of and adherence with dietary sodium restriction	
		c. understanding of and adherence with medical regimen (e.g., managing comorbidities, medications, and laboratory tests/blood work, follow-up with providers, immunizations)	
		d. understanding of and adherence with fluid management plan	
		e. adherence to exercise plan	
V. Professional Standards			8%
	A. Demonstrate professionalism		
		1. Provide rationale for the role of certification in heart failure nursing	
		2. Participate in continuing education related to heart failure themes	
		a. continuing education activities (e.g., attend conferences, in-services, webinars, journal articles, professional organizations/websites)	
		3. Follow legal parameters for nursing care of the heart failure patient	
		a. HIPAA	
		b. consent	
		c. negligence	
		d. malpractice	
		4. Apply ethical principles in heart failure practice	
		a. autonomy	
		b. justice	
		c. beneficence	
		d. non-maleficence	
		5. Advocate for family/caregiver awareness and involvement in care planning and delivery	
	B. Maintain and improve performance		
		1. Participate in quality improvement activities	
		2. Provide interdisciplinary/collaborative care	
		3. Use a collaborative framework in action planning	
		4. Identify disparities and gaps in clinical management of heart failure patients	
		5. Incorporate evidence-based practices and professional guideline recommendations when managing patients with heart failure	
		6. Utilize professional communication techniques with patients and colleagues	
		a. motivational interviewing techniques	
		7. Articulate and communicate clinical issues accurately and completely	
		a. handoff communication/SBAR	