



AAVBC

AMERICAN ACADEMY OF VALUE BASED CARE

Heart Failure Medication Treatment Quick Reference Guide

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LANDSCAPE OF HF MEDICATION UTILIZATION IN VBC

Heart failure (HF) affects more than **6 million US adults** and is a leading cause of hospitalization in older adults.^{1,2} The largest **avoidable treatment gap** is not the absence of effective therapy, but delayed initiation, incomplete use, and slow titration of **guideline-directed medical therapy (GDMT)**.^{3,4} In **heart failure with reduced ejection fraction (HFrEF)**, the **four foundational medication classes** act through complementary pathways and should generally be **started rapidly** at low doses rather than prescribed sequentially over many months.^{1,4} **Diuretics** remain essential for congestion but **do not replace GDMT**.^{1,5}



AAVBC PERSPECTIVE

The **American Academy of Value-Based Care (AAVBC)** supports a shift from **reactive diuretic management** to **accountable, longitudinal optimization of HF therapy**. For eligible patients with HFrEF, primary care clinicians should **help initiate** and **advance the four foundational pillars**: an **angiotensin receptor-neprilysin inhibitor (ARNI)**, evidence-based **beta-blocker**, **mineralocorticoid receptor antagonist (MRA)**, and **sodium-glucose cotransporter-2 (SGLT2) inhibitor**.^{3,4} The practical goal is **not** to maximize one drug before starting the next, but to **establish all four classes quickly at tolerated doses**, then titrate while monitoring blood pressure, renal function, potassium, heart rate, congestion, symptoms, and affordability.^{1,4,6}

High-value HF care also requires distinguishing congestion from **disease progression**, continuing GDMT **after ejection fraction improves**, **reconciling medications** after every hospitalization, and **removing drugs** that worsen HF.^{1,7-9} In HF with preserved or mildly reduced ejection fraction (**HFpEF/HFmrEF**), SGLT2 inhibitors and careful volume management provide the **strongest medication foundation**, with additional therapy **individualized by**: Ejection fraction, comorbidity, blood pressure, kidney function, and congestion.



MAKING CONNECTIONS

For additional context on **clinical presentations of HF**, **clinical coding**, and **quality metrics**, please consult the [AAVBC HF QRG](#).

Prevalence and Clinical Context in Older Adults

HF affects roughly **6.7 million U.S. adults** (crude prevalence ~1.9–2.8%), a burden that climbs steeply with age: from ~**1.95%** at **ages 40–59** to ~**5.9%** at **60–69**, ~**8.2%** at **70–79**, and ~**12.6%** in those **≥80 years**—and is projected to reach ~8.7 million by 2030 as the population ages.⁶ Presentations split roughly evenly, with HFpEF accounting for **approximately 50%** (up to ~60%) of cases and reduced ejection fraction the remainder, and the HFpEF share is rising ~**1% per year** toward becoming the dominant subtype.^{7,8} Importantly, **HFpEF is substantially underdiagnosed**, particularly in older community-dwelling and Black patients—among ARIC

participants with unexplained dyspnea and no HFpEF diagnosis, **35%** had a **high-risk H₂FPEF score** (≥ 5), indicating many true cases go unrecognized.⁹

CLINICAL SCENARIO	CLINICAL SIGNIFICANCE IN OLDER ADULTS ^{1,10}	KEY PCP CONSIDERATIONS* ^{1,4,11}
Newly diagnosed HFrEF, LVEF $\leq 40\%$	Early risk of hospitalization and death is high	Start the four foundational classes rapidly at low doses when hemodynamically stable; do not wait to maximize one class first
HFmrEF, LVEF 41%-49%	Often behaves biologically like lower-EF HF , especially near 40%	Use an SGLT2 inhibitor ; consider ARNI/ACE inhibitor/ARB, beta-blocker, and MRA when appropriate
HFpEF, LVEF $\geq 50\%$	Common in older adults with : hypertension, obesity, CKD, diabetes, and atrial fibrillation	Use an SGLT2 inhibitor to reduce HF events ; treat congestion and comorbidities; avoid reflexive HFrEF-style polypharmacy without a clear indication
Recent HF hospitalization	Highest-risk period for readmission and death	Reconcile and initiate GDMT before or promptly after discharge; contact within 48-72 hours and complete follow-up within 7 days when feasible
CKD or modest creatinine rise	Common reason for inappropriate undertreatment	Interpret renal changes in clinical context; monitor closely rather than automatically stopping RAAS inhibition, MRA, or SGLT2 therapy
Frailty, falls, or low blood pressure	Treatment tolerance may be limited by reserve rather than age	Assess : orthostasis, volume status, and competing drugs; prioritize therapies with mortality benefit and reduce nonessential BP-lowering agents
Polypharmacy	Increases : hypotension, AKI, bradycardia, and nonadherence	Reconcile every visit ; remove NSAIDs, duplicate RAAS blockade, unnecessary potassium, and other avoidable contributors

ABBREVIATIONS: PCP = primary care provider; HFrEF = heart failure with reduced ejection fraction; LVEF = left ventricular ejection fraction; HFmrEF = heart failure with mildly reduced ejection fraction; EF = ejection fraction; HF = heart failure; SGLT2 = sodium-glucose cotransporter 2; ARNI = angiotensin receptor-neprilysin inhibitor; ACE = angiotensin-converting enzyme; ARB = angiotensin receptor blocker; MRA = mineralocorticoid receptor antagonist; HFpEF = heart failure with preserved ejection fraction; CKD = chronic kidney disease; GDMT = guideline-directed medical therapy; RAAS = renin-angiotensin-aldosterone system; BP = blood pressure; AKI = acute kidney injury; NSAIDs = nonsteroidal anti-inflammatory drugs

***Consult FDA labels for the most up-to-date dosage information, contraindications, and drug-drug interactions**

Direct Savings and Value Impact Matrix

VALUE LEVER	CLINICAL STRATEGY ^{1,4}	FINANCIAL MECHANISM AND IMPACT ^{3,10,12}
Rapid four-pillar initiation	Start eligible HFrEF patients on: ARNI/ACE inhibitor/ARB, evidence-based beta-blocker, MRA, and SGLT2 inhibitor within weeks	Reduces preventable worsening HF, emergency care, hospitalization, and mortality
Discharge medication closure	Reconcile therapy before discharge and confirm access, laboratory orders, and follow-up	Targets the period of greatest readmission risk and prevents unintentional discontinuation
Congestion surveillance	Track: weight, edema, orthopnea, blood pressure, and diuretic response	Enables outpatient intervention before congestion requires emergency or inpatient care
Generic substitution	Use generic carvedilol, metoprolol succinate, spironolactone, ACE inhibitors, ARBs, and loop diuretics when clinically appropriate	Preserves evidence-based therapy while reducing out-of-pocket cost and abandonment
Laboratory stewardship	Pair RAAS therapy and MRAs with scheduled potassium and renal monitoring	Prevents avoidable hyperkalemia and AKI while reducing inappropriate permanent discontinuation
Medication avoidance	Remove: NSAIDs, thiazolidinediones, harmful nondihydropyridine calcium channel blockers in HFrEF, and duplicate RAAS blockade	Reduces: congestion, renal injury, decompensation, and medication-related admissions
Adherence support	Use 90-day fills , synchronized refills, pharmacist review, teach-back, and patient-specific cost checks	Improves persistence and proportion of days covered while reducing therapeutic gaps

ABBREVIATIONS: HFrEF = heart failure with reduced ejection fraction; ARNI = angiotensin receptor-neprilysin inhibitor; ACE = angiotensin-converting enzyme; ARB = angiotensin receptor blocker; MRA = mineralocorticoid receptor antagonist; SGLT2 = sodium-glucose cotransporter 2; HF = heart failure; RAAS = renin-angiotensin-aldosterone system; AKI = acute kidney injury; NSAIDs = nonsteroidal anti-inflammatory drugs

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INDICATIONS AND CONTRAINDICATIONS

Indications

Medication selection begins with: HF phenotype, LVEF, symptoms, congestion, kidney function, potassium, blood pressure, rhythm, and recent hospitalization history.

HFrEF: Four Foundational Pillars

- **ARNI, ACE inhibitor, or ARB:** **Sacubitril/valsartan** is preferred when feasible. Use an ACE inhibitor or ARB **when ARNI therapy is not tolerated**, contraindicated, or affordable. **Never combine these classes**⁴
- **Evidence-based beta-blocker:** Use carvedilol, metoprolol succinate, or bisoprolol in **clinically stable patients**. These are **not interchangeable** with every beta-blocker⁴
- **MRA:** Use spironolactone or eplerenone in **eligible symptomatic HFrEF** when **eGFR is >30 mL/min/1.73 m²** and **potassium is <5.0 mEq/L**, with close monitoring¹
- **SGLT2 inhibitor:** Use dapagliflozin or empagliflozin for **HFrEF regardless of diabetes status** when not contraindicated. No titration is required⁴

Symptom Control and Add-On Therapy

- **Loop diuretic:** Furosemide, torsemide, or bumetanide for **clinical congestion**. Adjust to **maintain euvolemia**; diuretics improve symptoms but are **not substitutes for mortality-reducing GDMT**⁴
- **Hydralazine/isosorbide dinitrate:** Add for self-identified **Black patients with persistent NYHA class III-IV HFrEF** despite optimal therapy, or consider when ARNI/ACE inhibitor/ARB therapy **cannot be used**¹
- **Ivabradine:** Consider for **stable symptomatic HFrEF with LVEF ≤35%**, sinus rhythm, and resting heart rate ≥70 beats/min **despite maximally tolerated evidence-based beta-blocker therapy**¹
- **Vericiguat:** Consider after **recent worsening HFrEF** requiring hospitalization or intravenous diuretics despite GDMT^{1,5}
- **Digoxin:** May reduce HF hospitalization in **selected symptomatic HFrEF patients** but requires cautious dosing and monitoring, especially in **older adults and CKD**¹
- **Intravenous iron:** Consider for **symptomatic HF with iron deficiency** after appropriate laboratory confirmation; **oral iron is generally inadequate** for this purpose¹⁰

HFmrEF and HFpEF

- Use **dapagliflozin** or **empagliflozin** to reduce worsening HF and hospitalization across the **preserved and mildly reduced EF spectrum**^{1,11}
- Use loop diuretics for congestion at the **lowest dose that maintains euolemia**¹¹
- Consider an MRA, ARNI, or ARB in **selected patients**, particularly when **LVEF is closer to 40%-50%**, while monitoring blood pressure, potassium, and kidney function¹
- Treat hypertension, atrial fibrillation, coronary disease, obesity, diabetes, CKD, and sleep apnea as **independent drivers of symptoms and outcomes**¹¹

Special Considerations in Older Adults

CONSIDERATION	KEY POINTS* ^{4,10,11,13-15}
Age is not a contraindication	GDMT efficacy is consistent across age subgroups , including ≥ 75 years, with the highest event rates, and greatest absolute benefit , in the oldest patients; time to benefit is generally within 1 month
Start low, monitor closely	Altered pharmacokinetics raise risk of : hypotension, hyperkalemia, and renal change; recheck : BP, potassium, creatinine, and heart rate 1-2 weeks after each change
Falls and orthostasis	Multifactorial (orthostasis, overdiuresis, sedatives, deconditioning); stagger BP-lowering doses and deprescribe non-GDMT antihypertensives before reducing GDMT
Polypharmacy	Reconcile at every visit ; use Beers or STOPP/START to identify inappropriate medications; prioritize GDMT over non-evidence-based agents
CKD	MRAs generally avoided at eGFR <30 ; SGLT2 inhibitors may be used down to eGFR 20 mL/min/1.73 m² ; do not reflexively stop RAAS inhibition for modest, stable creatinine rises
Multimorbidity	Favor agents treating several conditions at once (e.g., SGLT2 inhibitors for HF, CKD, diabetes) to limit pill burden
Goals of care	With severe frailty, advanced dementia, or limited prognosis, individualize GDMT intensity through shared decision-making; deprescribing may be appropriate when burden exceeds benefit

ABBREVIATIONS: GDMT = guideline-directed medical therapy; BP = blood pressure; STOPP/START = Screening Tool of Older Persons' Prescriptions/Screening Tool to Alert to Right Treatment; CKD = chronic kidney disease; MRAs = mineralocorticoid receptor antagonists; eGFR = estimated glomerular filtration rate; SGLT2 = sodium-glucose cotransporter 2; RAAS = renin-angiotensin-aldosterone system; HF = heart failure

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Contraindications

CATEGORY	CONTRAINDICATION/ PRECAUTION* ^{1,4,16-18}	APPLIES TO* ^{1,4,16-18}	PCP RESPONSE ^{1,4,16,19}
Angioedema	Prior ACE inhibitor- or ARNI-associated angioedema	ARNI; ACE inhibitor	Avoid the implicated class; ARNI is contraindicated with a history of ACE inhibitor/ARNI-related angioedema
Pregnancy	Pregnancy or planned pregnancy	ARNI, ACE inhibitor, ARB, MRA, SGLT2 inhibitor	Avoid because of fetal risk ; coordinate alternative therapy
Hyperkalemia	Potassium ≥ 5.0 mEq/L at initiation	MRA; caution with RAAS inhibitors	Correct reversible causes; do not initiate MRA until eligible; intensify monitoring
Kidney dysfunction	eGFR ≤ 30 mL/min/ 1.73 m^2 for MRA initiation	Spironolactone, eplerenone	Do not initiate routinely ; seek specialist input if benefits may outweigh risks
Severe hypotension	Symptomatic hypotension or shock	ARNI/ACE inhibitor/ARB, beta-blocker, diuretic	Assess perfusion and volume; reduce nonessential BP-lowering drugs and excess diuresis before abandoning GDMT
Acute decompensation	Cardiogenic shock , severe hypoperfusion, or inotrope requirement	Beta-blocker initiation or up-titration	Do not initiate or increase until stabilized ; continuation decisions should be individualized
Bradycardia/heart block	Symptomatic bradycardia or advanced AV block without pacing	Beta-blocker, ivabradine, digoxin	Hold or reduce rate-slowing therapy and evaluate rhythm
Type 1 diabetes/DKA risk	Type 1 diabetes, active ketoacidosis, prolonged fasting, or major acute illness	SGLT2 inhibitor	Avoid in type 1 diabetes; temporarily hold during serious illness, prolonged fasting, or surgery according to product guidance
Dialysis/very low eGFR	Renal function below the product-specific initiation threshold or dialysis	SGLT2 inhibitor	Follow current FDA labeling; do not use glucose-lowering thresholds as the sole HF threshold
Negative inotropy	HFrEF with reduced systolic function	Verapamil, diltiazem	Avoid routine use because these agents can worsen HFrEF

CATEGORY	CONTRAINDICATION/ PRECAUTION* ^{1,4,16-18}	APPLIES TO* ^{1,4,16-18}	PCP RESPONSE ^{1,4,16,19}
Fluid retention/ renal injury	HF, especially with congestion or CKD	NSAIDs, COX-2 inhibitors, thiazolidinediones	Avoid when possible; choose alternatives and educate patients about OTC products

ABBREVIATIONS: PCP = primary care provider; ACE = angiotensin-converting enzyme; ARNI = angiotensin receptor-neprilysin inhibitor; ARB = angiotensin receptor blocker; MRA = mineralocorticoid receptor antagonist; SGLT2 = sodium-glucose cotransporter 2; RAAS = renin-angiotensin-aldosterone system; eGFR = estimated glomerular filtration rate; BP = blood pressure; GDMT = guideline-directed medical therapy; AV = atrioventricular; DKA = diabetic ketoacidosis; FDA = US Food and Drug Administration; CYP3A4 = cytochrome P450 3A4; HFrEF = heart failure with reduced ejection fraction; HF = heart failure; CKD = chronic kidney disease; NSAIDs = nonsteroidal anti-inflammatory drugs; COX-2 = cyclooxygenase-2; OTC = over-the-counter

***Consult FDA labels for the most up-to-date dosage and duration information, contraindications, and drug-drug interactions**

Major HF Medication DDIs

INTERACTION	INTERACTING AGENTS* ^{1,20}	HF DRUG AFFECTED* ^{1,19}	CLINICAL EFFECT*	PCP RESPONSE* ^{1,19,21}
RAAS-related hyperkalemia	Potassium supplements, potassium- containing salt substitutes, trimethoprim- sulfamethoxazole, heparin/LMWH	ARNI, ACE inhibitor, ARB, MRA	Additive hyperkalemia, amplified by diabetes, CKD, and older age	Discontinue potassium supplements when starting an MRA; avoid TMP-SMX when possible; recheck potassium/renal function after any change
Combined RAAS blockade	ACE inhibitor + ARB, or either + MRA, or aliskiren	ARNI, ACE inhibitor, ARB, MRA	AKI and severe hyperkalemia; ARNI + ACE inhibitor also causes angioedema	Do not combine ACE inhibitor + ARB + MRA (triple RAAS blockade discouraged); never co-prescribe ARNI with an ACE inhibitor; avoid aliskiren
NSAID/RAAS renal injury	NSAIDs, COX-2 inhibitors	ARNI, ACE inhibitor, ARB, MRA, diuretics	Worsening renal function/ AKI (especially if elderly, volume- depleted, or on diuretics); blunted diuretic and antihypertensive effect	Avoid NSAIDs; if unavoidable, monitor renal function and volume; counsel on OTC NSAID products

INTERACTION	INTERACTING AGENTS* ^{1,20}	HF DRUG AFFECTED* ^{1,19}	CLINICAL EFFECT*	PCP RESPONSE* ^{1,19,21}
Lithium toxicity	Lithium	ARNI, ACE inhibitor, ARB, MRA/diuretics	Reduced lithium clearance → elevated levels and toxicity	Monitor serum lithium levels during concomitant use
CYP3A4 inhibition (eplerenone)	Strong CYP3A inhibitors (clarithromycin, ketoconazole, itraconazole, ritonavir, nefazodone)	Eplerenone	Increased eplerenone exposure → hyperkalemia	Eplerenone is contraindicated with strong CYP3A inhibitors ; choose an alternative antimicrobial or MRA
Additive bradycardia/ AV block	Nondihydropyridine CCBs (verapamil, diltiazem), digoxin, amiodarone, other rate-slowing agents	Beta-blocker, ivabradine	Symptomatic bradycardia or high-grade AV block	Avoid nondihydropyridine CCBs with beta-blockers in HFrEF ; assess rhythm and reduce/hold rate-slowing agents
Additive hypotension	Other antihypertensives, alpha-blockers, nitrates, PDE5 inhibitors, volume depletion	ARNI, ACE inhibitor/ARB, beta-blocker, diuretic	Symptomatic hypotension, dizziness , falls in older adults	Correct volume depletion ; reduce nonessential BP-lowering drugs before down-titrating GDMT
Enhanced diuresis/ volume depletion	Loop or thiazide diuretics	SGLT2 inhibitor	Additive natriuresis/ diuresis → hypovolemia, hypotension, prerenal azotemia	Anticipate and consider reducing loop diuretic dose at SGLT2 inhibitor initiation; monitor volume status and renal function
Digoxin assay interference	Digoxin (lab monitoring)	Spironolactone	Falsely elevated digoxin radioimmunoassay levels	Use a digoxin assay that does not cross-react with spironolactone
Reduced diuretic/ antihypertensive efficacy	Sympathomimetics (pseudoephedrine), venlafaxine	Any HF antihypertensive /diuretic	Attenuated BP-lowering and diuretic effect via sodium retention	Avoid OTC decongestants ; counsel patients and choose alternatives

INTERACTION	INTERACTING AGENTS* ^{1,20}	HF DRUG AFFECTED* ^{1,19}	CLINICAL EFFECT*	PCP RESPONSE* ^{1,19,21}
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ABBREVIATIONS: CTPA = CT pulmonary angiography; CT = computed tomography; DVT = deep vein thrombosis; PE = pulmonary embolism; RV = right ventricular; V/Q = ventilation/perfusion; SPECT = single-photon emission computed tomography; TTE = transthoracic echocardiography; LV = left ventricular; TAPSE = tricuspid annular plane systolic excursion; PERC = Pulmonary Embolism Rule-Out Criteria; HR = heart rate; SpO₂ = peripheral oxygen saturation; VTE = venous thromboembolism; ED = emergency department; BNP = B-type natriuretic peptide; NT-proBNP = N-terminal pro-B-type natriuretic peptide; sPESI = simplified Pulmonary Embolism Severity Index

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CLINICAL PEARL: ESSENTIAL PCP PRE-TREATMENT CHECKS

Before initiating or switching HF therapy:

- **Confirm phenotype and stability:** Document LVEF, NYHA class, congestion, blood pressure including orthostasis, heart rate/rhythm, and recent hospitalization^{1,4,22}
- **Obtain safety data:** Basic metabolic panel, eGFR, potassium, and relevant liver testing; check hemoglobin, ferritin, and transferrin saturation when iron deficiency is suspected^{1,2}
- **Reconcile medications:** Identify NSAIDs, potassium supplements, duplicate RAAS blockers, nondihydropyridine calcium channel blockers in HFrEF, thiazolidinediones, and **excessive vasodilator or diuretic burden**^{1,23,24}
- **Confirm access and follow-up:** Choose **covered agents**, arrange **laboratory monitoring**, provide sick-day instructions, and **schedule titration** rather than issuing an open-ended prescription^{2,4}

DOSE RECOMMENDATIONS AND RAPID OPTIMIZATION

HFrEF Initiation and Titration Framework

TRIGGER	ACTION* ^{1,2,4,19,25}
New, stable HFrEF	Start low doses of all four foundational classes as rapidly as clinically feasible, often within 2-4 weeks
Congestion present	Start or adjust loop diuretic first or concurrently ; reassess weight, symptoms, renal function, and electrolytes
Stable after ARNI/ACE inhibitor/ARB start	Recheck blood pressure, creatinine/eGFR , and potassium in approximately 1-2 weeks; titrate every 2-4 weeks as tolerated

TRIGGER	ACTION* ^{1,2,4,19,25}
Stable after beta-blocker start	Increase every 2 weeks as tolerated; do not titrate during worsening congestion, shock, or symptomatic bradycardia
MRA initiation	Use only when potassium <5.0 mEq/L and eGFR >30 ; recheck potassium and renal function at about 3 days, 1 week, monthly for 3 months, then every 3-6 months
SGLT2 inhibitor initiation	Start the evidence-based fixed dose ; review volume status and sick-day/perioperative holding instructions; no titration required
Symptomatic hypotension	Confirm orthostasis and volume status ; reduce nonessential antihypertensives, nitrates without a compelling indication, or excessive diuresis before stopping foundational therapy
Modest early eGFR decline	Reassess volume, NSAID exposure, and potassium; a small expected change alone should not trigger automatic discontinuation
Persistent hyperkalemia	Stop potassium and interacting drugs , review diet and renal function, adjust MRA/RAAS therapy, and consider potassium-lowering strategies when appropriate
Improved LVEF above 40%	Continue HFrEF GDMT because withdrawal increases relapse risk

ABBREVIATIONS: HFrEF = heart failure with reduced ejection fraction; ARNI = angiotensin receptor-neprilysin inhibitor; ACE = angiotensin-converting enzyme; ARB = angiotensin receptor blocker; eGFR = estimated glomerular filtration rate; MRA = mineralocorticoid receptor antagonist; SGLT2 = sodium-glucose cotransporter 2; NSAID = nonsteroidal anti-inflammatory drug; RAAS = renin-angiotensin-aldosterone system; LVEF = left ventricular ejection fraction; GDMT = guideline-directed medical therapy

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CLINICAL PEARL: AGING RESHAPES HF TREATMENT

Older adults remain candidates for disease-modifying therapy, but frailty, orthostasis, CKD, cognitive impairment, and competing medications often **determine tolerability**.^{4,10}

Biological reserve should guide pacing, **not whether treatment is offered**.^{10,26} Start low, **add classes early**, and titrate with shorter feedback loops.^{2,4} A fall or low office blood pressure should **prompt evaluation of:** dehydration, autonomic dysfunction, sedatives, alpha-blockers, and unnecessary antihypertensives **before foundational HF therapy is abandoned**.^{10,27}

Duration of Therapy

HF therapy is long-term.^{1,28} Patients whose LVEF improves after treatment have HF with improved ejection fraction, **not a cured cardiomyopathy**.^{1,29} Continue HFrEF GDMT **unless a specific contraindication emerges**.^{1,22,29} Diuretic dose may be **reduced when euvoemia is sustained**, but disease-modifying therapy should **not be withdrawn** solely because symptoms or LVEF improve.

Recommended Initial Regimens

CLINICAL SCENARIO	PREFERRED MEDICATION APPROACH* ^{1,4,30}	KEY NOTES* ^{1,4,27,30}
Stable HFrEF	ARNI + evidence-based beta-blocker + MRA + SGLT2 inhibitor	Establish all four early ; titrate in parallel
HFrEF with congestion	Four pillars plus loop diuretic	Decongestion is urgent, but diuretic therapy does not replace GDMT
HFrEF with low BP	Prioritize SGLT2 inhibitor and MRA when eligible; use low-dose beta-blocker and RAAS therapy as tolerated	Remove nonessential BP-lowering agents and avoid overdiuresis
HFrEF with CKD	Use SGLT2 inhibitor and RAAS therapy with laboratory surveillance ; MRA only when eligible	Expect some hemodynamic eGFR change ; monitor rather than reflexively stop
HFmrEF	SGLT2 inhibitor ; consider HFrEF classes, especially when EF is near 40%	Individualize by BP, rhythm, CKD, and prior LVEF
HFpEF	SGLT2 inhibitor + diuretic for congestion; treat hypertension and comorbidities	Consider MRA/ARNI/ARB selectively , particularly at lower EF

ABBREVIATIONS: HFrEF = heart failure with reduced ejection fraction; ARNI = angiotensin receptor-neprilysin inhibitor; MRA = mineralocorticoid receptor antagonist; SGLT2 = sodium-glucose cotransporter 2; GDMT = guideline-directed medical therapy; BP = blood pressure; RAAS = renin-angiotensin-aldosterone system; CKD = chronic kidney disease; eGFR = estimated glomerular filtration rate; HFmrEF = heart failure with mildly reduced ejection fraction; EF = ejection fraction; LVEF = left ventricular ejection fraction; HFpEF = heart failure with preserved ejection fraction; ARB = angiotensin receptor blocker

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Regimen Optimization and Treatment Failure

Optimization in Stable Patients

- Confirm the patient is receiving **all eligible foundational classes** before focusing only on target doses^{3,4}
- Convert ACE inhibitor or ARB therapy to **sacubitril/valsartan when appropriate** and affordable, using the **required washout** after an ACE inhibitor^{1,18}
- Use only **carvedilol**, **metoprolol succinate**, or **bisoprolol** for the HFrEF mortality indication^{1,2}
- **Reduce loop-diuretic dose** when euvoemia and orthostasis permit, but retain access to a written adjustment plan^{1,31}

- Continue therapy **after LVEF improves**, because improvement reflects **remission, not cure**, and withdrawal causes **relapse in ~40% within 6 months**¹
- Recheck **coverage and out-of-pocket cost** before switching; an unaffordable prescription is **not an effective regimen**^{4,10,12}

Managing Apparent Treatment Failure

SCENARIO	ACTION* ^{1,10,19,32,33}
Persistent dyspnea	Assess: congestion, ischemia, atrial fibrillation, anemia/iron deficiency, lung disease, obesity, sleep apnea, and deconditioning before escalating diuretics
Recurrent congestion	Review: sodium intake, adherence, NSAID use, renal function, diuretic absorption, and dose timing; consider loop-diuretic intensification or specialist-directed sequential nephron blockade
Rising creatinine during decongestion	Interpret with volume status and response; persistent congestion may be more dangerous than a modest transient creatinine rise
Symptomatic hypotension	Check orthostasis and reduce non-HF BP medications or excess diuretic first; seek HF input if foundational therapy remains limited
Bradycardia	Review: beta-blocker, digoxin, amiodarone, ivabradine, and conduction disease; adjust rate-slowing therapy
Hyperkalemia	Remove: potassium, NSAIDs, trimethoprim, and duplicate RAAS therapy; repeat labs and individualize MRA/RAAS adjustment
Worsening HF despite four pillars	Confirm adherence and dosing; consider hydralazine/isosorbide dinitrate, ivabradine, vericiguat, digoxin, intravenous iron, devices, or advanced HF referral according to phenotype
Cardiogenic shock or escalating hypoperfusion	Emergency evaluation and specialist management; do not attempt routine outpatient titration

ABBREVIATIONS: NSAID = nonsteroidal anti-inflammatory drug; HF = heart failure; BP = blood pressure; RAAS = renin-angiotensin-aldosterone system; MRA = mineralocorticoid receptor antagonist

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On-Treatment Monitoring Schedule

MEASURE	TIMING AND PURPOSE*
Weight, edema, orthopnea, dyspnea	At every contact; daily home weight for patients able to act on a defined plan
Blood pressure and orthostasis	At initiation, every titration, and whenever dizziness or falls occur

MEASURE	TIMING AND PURPOSE*
Heart rate and rhythm	At every visit; ECG when bradycardia, palpitations, syncope, or interacting rate-slowing therapy is present
Creatinine/eGFR and potassium	Baseline and about 1-2 weeks after RAAS therapy changes; more intensive schedule after MRA initiation
Volume status and loop-diuretic need	At every visit and within days after a major dose change or discharge
SGLT2 safety	Review: volume depletion, genital infection symptoms, ketoacidosis warning signs, and sick-day/perioperative holding instructions
Symptoms and function	NYHA class and preferably KCCQ-12 at baseline and follow-up
Medication access/adherence	Every visit; use refill data, teach-back, and patient-specific benefit checks
LVEF	Repeat after an appropriate interval of optimized GDMT when recovery would affect device or other management decisions

ABBREVIATIONS: ECG = electrocardiogram; eGFR = estimated glomerular filtration rate; RAAS = renin-angiotensin-aldosterone system; MRA = mineralocorticoid receptor antagonist; SGLT2 = sodium-glucose cotransporter 2; NYHA = New York Heart Association; KCCQ-12 = Kansas City Cardiomyopathy Questionnaire-12; LVEF = left ventricular ejection fraction; GDMT = guideline-directed medical therapy

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Closed-Loop HF Medication Pathway for PCPs

- **Identify:** Use EHR triggers for LVEF $\leq 40\%$, HF hospitalization, loop-diuretic escalation, rising natriuretic peptide, or an **eligible patient missing a foundational class**^{1,4}
- **Confirm:** Document HF phenotype, LVEF, NYHA class, congestion, blood pressure, rhythm, kidney function, potassium, and precipitating cause^{1,4}
- **Initiate:** Establish **four-pillar HFrEF therapy rapidly at low doses;** use an SGLT2 inhibitor and congestion management across the EF spectrum when appropriate⁴
- **Monitor: Pre-order laboratories,** check symptoms and home weights, and titrate every 2-4 weeks until target or maximally tolerated doses are reached¹
- **Close the loop:** After discharge, **complete medication reconciliation,** confirm fills and lab completion, contact within 48-72 hours, and arrange an early clinical visit¹
- **Escalate: Refer for** refractory congestion, recurrent hospitalization, severe valvular disease, suspected infiltrative/genetic cardiomyopathy, device candidacy, inotrope dependence, or advanced HF evaluation⁴

PCP and Specialist Responsibilities

CARE FUNCTION	PRIMARY CARE ^{1,3,4}	CARDIOLOGY/HF TEAM/ PHARMACIST ^{4,34-36}
Diagnosis and phenotype	Recognize HF, order baseline testing, document LVEF and congestion	Clarify complex etiology, imaging, hemodynamics, and advanced phenotype
Foundational therapy	Initiate and titrate eligible GDMT; monitor labs and access	Resolve intolerance, advanced CKD/hyperkalemia, refractory hypotension, and complex titration
Congestion	Adjust routine oral diuretic therapy and written action plan	Manage diuretic resistance, outpatient IV therapy, ultrafiltration, or recurrent admissions
Comorbidities	Manage hypertension, diabetes, CKD, obesity, COPD, sleep apnea, and medication harms	Coordinate rhythm control, valve intervention, ischemia evaluation, and advanced therapies
Devices/advanced HF	Identify possible candidates and refer	Evaluate ICD/CRT, LVAD, transplant, palliative inotropes, and advanced-care planning

ABBREVIATIONS: HF = heart failure; LVEF = left ventricular ejection fraction; GDMT = guideline-directed medical therapy; CKD = chronic kidney disease; IV = intravenous; COPD = chronic obstructive pulmonary disease; ICD = implantable cardioverter-defibrillator; CRT = cardiac resynchronization therapy; LVAD = left ventricular assist device
***Consult FDA labels for the most up-to-date dosage and duration information, contraindications, and drug-drug interactions**

COST-SMART PRESCRIBING

Cost strategy should protect class coverage. Generic carvedilol, metoprolol succinate, bisoprolol, lisinopril, losartan, spironolactone, furosemide, torsemide, and bumetanide provide **low-cost foundations**.^{37,38} **Sacubitril/valsartan** and **SGLT2 inhibitors** may carry **higher out-of-pocket costs**, so clinicians should check the patient-specific formulary, prior-authorization requirements, deductible phase, and 90-day pricing **before prescribing**.^{37,38} Use real-time benefit tools, Medicare Part D payment options (including **Extra Help**), manufacturer assistance when available, and pharmacist navigation.

BRAND OR HIGHER-COST OPTION	GENERIC/ ALTERNATIVE (EST. COST)*	EST. SAVINGS + COST-SMART TIP* ^{1,37,39-41}
Brand sacubitril/ valsartan (Entresto) (~\$590-\$700/mo WAC Medicare OOP ~\$42-\$47/mo)	Generic ACE inhibitor (lisinopril ~\$1-\$12/mo) or ARB (losartan ~\$3-\$27/mo)	Saves ~\$550-\$680/mo WAC (~\$40-\$45/mo Medicare OOP) ARNI preferred (Class 1); higher Rx cost offset by ~\$790/yr lower inpatient spending; IRA-negotiated Part D price effective 2026; Co-pay card (\$10/mo) for commercial; if unaffordable, use generic ACEi/ARB, not no RAAS therapy
Sacubitril/valsartan vs generic valsartan (~\$16/mo) or enalapril (~\$15/mo)	Generic valsartan or enalapril at target dose	Saves ~\$550-\$680/mo WAC Total healthcare spending roughly cost-neutral (higher Rx offset by fewer hospitalizations); patient OOP ~\$109/yr higher with ARNI; complete 36-hour ACEi washout before switching
Eplerenone (~\$125-\$137/mo WAC Medicare OOP ~\$30-\$47/mo)	Generic spironolactone (~\$2-\$19/mo)	Saves ~\$100-\$130/mo Spironolactone is first-line MRA ; reserve eplerenone for gynecomastia or endocrine side effects ; both start at 25 mg daily
Brand empagliflozin (Jardiance) (~\$658/mo WAC; Medicare OOP ~\$42-\$47/mo)	Brand dapagliflozin (Farxiga) (~\$639/mo WAC; Medicare OOP ~\$42-\$47/mo)	Minimal WAC difference Both FDA-approved for HF (Class 1); compare formulary status and net patient cost ; IRA Part D prices effective 2026; manufacturer savings cards available; never substitute a non-evidence-based SGLT2i
Brand beta-blocker (~\$45-\$49/mo uninsured)	Generic carvedilol, metoprolol succinate, or bisoprolol (~\$4-\$36/mo)	Minimal; already low-cost Confirm one of three HFrEF-proven beta-blockers; metoprolol tartrate is not interchangeable with metoprolol succinate ; all three are high-value generics
Brand or higher-cost loop diuretic (e.g., brand torsemide)	Generic furosemide (~\$4-\$10/mo) or bumetanide (~\$10-\$15/mo)	Variable; generics very inexpensive TRANSFORM-HF showed no mortality difference between torsemide and furosemide; choose by clinical response and absorption

BRAND OR HIGHER-COST OPTION	GENERIC/ ALTERNATIVE (EST. COST)*	EST. SAVINGS + COST-SMART TIP* ^{1,37,39-41}
Ivabradine (generic available since Jan 2026)	Generic ivabradine	Substantial vs prior brand (~\$590/mo) Brand Corlanor discontinued Jan 2026; generic now available; only for: HFrEF with LVEF ≤35%, sinus rhythm, HR ≥70 on max beta-blocker
Preventable HF hospitalization (~\$17,000-\$25,000/admission)	Rapid quadruple GDMT + monitoring + early outreach	~\$9,780/yr per patient in reduced hospitalization cost Quadruple GDMT reduces HF hospitalizations ~87% ; generic regimen (~\$100/mo) yields ~\$8,556/yr net savings; always weigh medication cost against avoided acute-care spending

ABBREVIATIONS: WAC = wholesale acquisition cost; OOP = out-of-pocket; ARNI = angiotensin receptor-neprilysin inhibitor; ACE = angiotensin-converting enzyme; ARB = angiotensin receptor blocker; IRA = Inflation Reduction Act; Rx = prescription; ACEi = angiotensin-converting enzyme inhibitor; RAAS = renin-angiotensin-aldosterone system; MRA = mineralocorticoid receptor antagonist; FDA = US Food and Drug Administration; SGLT2i = sodium-glucose cotransporter 2 inhibitor; HFrEF = heart failure with reduced ejection fraction; LVEF = left ventricular ejection fraction; HR = heart rate; GDMT = guideline-directed medical therapy; HF = heart failure

***Consult FDA labels for the most up-to-date dosage and duration information, contraindications, and drug-drug interactions**

Do not use copay cards for Medicare or other federal-program beneficiaries when prohibited. Verify **current plan** and **assistance-program rules**.

NON-PHARMACOLOGICAL AND PATIENT-CENTERED CARE

Nonpharmacological measures complement guideline-directed medical therapy **across the full trajectory of heart failure**, from reducing incident risk in at-risk older adults to lessening symptom burden and hospitalizations after diagnosis. The strongest evidence supports **regular physical activity** and **cardiac rehabilitation**, structured self-care with daily monitoring, and multidisciplinary follow-up, all of which **improve functional status** and **reduce hospitalizations**, while sodium and fluid measures should be individualized rather than aggressively restricted.^{1,22} **In older patients**, tailor each intervention to **frailty, comorbidities, cognition, and functional capacity** so that recommendations remain safe and achievable.^{1,22}

INTERVENTION	RECOMMENDATION ^{1,24,42-44}
Sodium and fluid	Individualize ; avoid indiscriminate extreme restriction, but identify high-sodium foods and excessive fluid intake in congestion; reasonable targets : sodium ~1.5-2.3 g/day (ESC advises <5 g/day) and fluid 1.5-2 L/day only in selected congested patients

INTERVENTION	RECOMMENDATION ^{1,24,42-44}
Alcohol	Advise abstinence in suspected alcohol-related cardiomyopathy ; otherwise limit to ≤1 drink/day (women) or ≤2 drinks/day (men); heavy use (≥15/8 drinks/wk men/women) and ≥21 drinks/wk raise HF risk and progression
Physical activity/cardiac rehabilitation	Encourage activity and rehabilitation appropriate to stability, function, and frailty ; general target ~150 min/wk moderate activity (or ~30 min, 5 days/wk) plus resistance training twice weekly ; refer eligible NYHA II-IV, LVEF ≤35% patients to cardiac rehab
Daily monitoring	Use weight and symptom trends with a written threshold-based action plan (e.g., alert for ~≥2 lb/day or ~≥5 lb/week gain); avoid data collection without a response pathway
Vaccination	Keep influenza, COVID-19, pneumococcal, RSV, and other age-appropriate vaccines current
Sleep and breathing disorders	Evaluate obstructive sleep apnea and pulmonary disease when symptoms persist despite euvoemia ; confirm predominant apnea type (obstructive vs central) with a sleep study before PAP ; for OSA, offer CPAP (bilevel or nocturnal oxygen as alternatives); moderate-severe OSA is AHI ≥15/h ; in HFrEF with predominant central sleep apnea, adaptive servo-ventilation is contraindicated
Nutrition and frailty	Monitor : unintentional weight loss, sarcopenia, obesity, appetite, and functional decline; flag unintentional edema-free weight loss ≥5% over 6-12 months (cachexia) and target protein intake ~1.1-1.5 g/kg/day with resistance training
Goals of care	Integrate prognosis, palliative symptom management, and advance-care planning throughout serious illness, not only at end of life

ABBREVIATIONS: RSV = respiratory syncytial virus



CLINICAL PEARL: LEVERAGING MODIFIABLE NONPHARMACOLOGICAL CARE TO PREVENT HF READMISSIONS IN OLDER ADULTS

Nonpharmacological measures are among the most modifiable, high-value levers for keeping diagnosed heart failure patients out of the hospital and slowing disease progression—often at minimal cost. Structured self-care with **daily weight** and **symptom tracking** tied to a written action plan enables **early detection of congestion before decompensation**, and **exercise-based cardiac rehabilitation** improves functional capacity and **reduces hospitalizations**.^{1,42,45} Individualized sodium and fluid guidance, alcohol moderation or abstinence, current vaccinations, and evaluation of sleep-disordered breathing further reduce avoidable admissions.^{1,43,44,46} Because a single preventable HF hospitalization costs roughly **\$17,000–\$25,000**, consistent reinforcement of these adjustable behaviors, ideally through **multidisciplinary, team-based follow-up**, delivers substantial value **alongside guideline-directed medical therapy**.^{1,42} For older adults, tailoring each intervention to frailty, cognition, and functional status **keeps recommendations both safe and achievable**, maximizing adherence and durable benefit.¹⁰

Patient-Centered Conversation Framework

- **Purpose:** Explain that some medications **prolong life** and **prevent hospitalization** even when the patient **does not feel an immediate effect**; diuretics mainly **relieve fluid symptoms**.^{2,4}
- **Teach-back:** Ask the patient to **identify each medicine, its purpose**, and **what to do** if dizziness, vomiting, poor intake, rapid weight gain, or worsening breathlessness occurs.^{4,47}
- **Action plan:** Specify the **usual weight range**, diuretic instructions, whom to call, and emergency symptoms such as severe dyspnea at rest, chest pain, syncope, confusion, or cyanosis.^{2,16}
- **Adherence:** Ask directly about cost, refill gaps, urinary frequency, sexual or genital adverse effects, fatigue, and fear of kidney injury.^{1,4}
- **Transitions:** After hospitalization, **compare the discharge list** with the **preadmission regimen** and explicitly document every continued, stopped, and restarted medication.^{1,16}

HCC and Quality Alignment

Accurate ICD-10 coding for HF encounters is essential for **risk adjustment, care coordination, and continuity** — from initial diagnosis through GDMT optimization, decompensation management, and comorbidity care. **At each encounter, document the HF phenotype with:** LVEF, NYHA class, congestion status, current GDMT, and any acute decompensation or associated conditions, as this drives HCC mapping and downstream care planning. HF codes span multiple HCC categories (**HCC 226** for chronic HF, **HCC 224** for acute on chronic, **HCC 222** for end-stage) with substantially different RAF weights, so phenotype and acuity specificity directly affect risk adjustment. **Each diagnosis must be reaffirmed annually** with MEAT (monitor, evaluate, assess, treat) criteria. The following table outlines the relevant ICD-10 codes for HF encounters.

↔ MAKING CONNECTIONS

For additional context on **HF coding**, please consult the [AAVBC HF QRG](#).

Key HEDIS/MIPs/PQA Measures

Several HF-specific HEDIS and MIPS measures are active in MY2026:

- **HEDIS MAH:** Medication Adherence for Hypertension RAS Antagonists
- **HEDIS PBH:** Persistence of Beta-Blocker Treatment After a Heart Attack
- **HEDIS SPC-E:** Statin Therapy for Patients with Cardiovascular Disease
- **MIPS #492:** Risk-Standardized Acute Cardiovascular-Related Hospital Admission Rates for Patients with Heart Failure
- **MIPS #377:** Functional Status Assessments for Heart Failure
- **MIPS #317:** Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented
- **MIPS #243:** Cardiac Rehabilitation Patient Referral from an Outpatient Setting
- **MIPS #008:** Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)
- **MIPS #005:** HF: ACE Inhibitor or ARB or ARNI Therapy for LVSD

2026 MEASURE	STANDARD	HF APPLICABILITY*1,11,24,48,49
MIPS #005: HF — ACE Inhibitor/ARB/ARNI Therapy for LVSD	Denominator: patients ≥ 18 with HF diagnosis and current or prior LVEF $\leq 40\%$ with ≥ 2 outpatient visits or 1 inpatient discharge during measurement year; Numerator: prescribed ACE inhibitor, ARB, or ARNI; Exclusions: heart transplant, LVAD, documented intolerance or patient refusal	Core HF process measure; document: LVEF, active prescription, and medical reason for any exception; aligns with ACC/AHA PM-5

2026 MEASURE	STANDARD	HF APPLICABILITY*1,11,24,48,49
MIPS #008: HF — Beta-Blocker Therapy for LVSD	Denominator: patients ≥ 18 with HF and current or prior LVEF $\leq 40\%$ with ≥ 2 outpatient visits or 1 inpatient discharge; Numerator: prescribed evidence-based beta-blocker (carvedilol, metoprolol succinate, or bisoprolol); Exclusions: heart transplant, LVAD, documented intolerance or patient refusal	Must be an evidence-based beta-blocker , not any beta-blocker; document specific agent and LVEF ; aligns with ACC/AHA PM-4
MIPS #377: Functional Status Assessment for HF	Denominator: patients ≥ 18 with HF and ≥ 2 outpatient visits during measurement year; Numerator: patient-reported outcome tool (e.g., KCCQ-12) administered $\geq 1\times$ during measurement year; Exclusions: none	Use a validated instrument (KCCQ-12 preferred); tracks symptom burden and response to therapy ; aligns with ACC/AHA QM-2
MIPS #492: Risk-Standardized Acute CV-Related Admission Rates for HF	Denominator: Medicare FFS patients ≥ 65 with HF; Numerator: risk-standardized rate of acute CV-related inpatient admissions within measurement year (outcome measure — lower is better); Exclusions: ESRD	Population-level outcome measure ; driven by GDMT optimization , congestion management, post-discharge follow-up, and comorbidity control
MIPS #243: Cardiac Rehabilitation Patient Referral from Outpatient Setting	Denominator: patients ≥ 18 with qualifying CV diagnosis (HF with LVEF $\leq 35\%$, MI, CABG, PCI, valve surgery) seen in outpatient setting; Numerator: referred to outpatient cardiac rehabilitation program; Exclusions: documented medical or patient reason precluding referral	Referral requires documented communication and order ; HFpEF patients with LVEF $\leq 35\%$ are eligible; aligns with ACC/AHA Rehab PM-4
MIPS #317: Preventive Care — Screening for High BP and Follow-Up	Denominator: patients ≥ 18 with ≥ 1 outpatient visit; Numerator : BP recorded and, if elevated, documented follow-up plan; Exclusions: none	HFpEF is closely linked to hypertension ; BP documentation supports both HF management and the 2024 ACC/AHA HFpEF BP control performance measure
HEDIS MAH: Medication Adherence — RAS Antagonists	Denominator: patients 18–85 with ≥ 2 fills of ACE inhibitor, ARB, or ARNI during measurement year; Numerator: PDC $\geq 80\%$ during measurement year; Exclusions: ESRD, kidney transplant, hospice	Pharmacy claims-based ; captures RAAS therapy persistence in HF patients; suboptimal PDC predicts HF hospitalization

2026 MEASURE	STANDARD	HF APPLICABILITY*1,11,24,48,49
HEDIS PBH: Persistence of Beta-Blocker After Heart Attack	Denominator: patients ≥ 18 hospitalized for AMI with beta-blocker at discharge; Numerator: ≥ 180 days' supply of beta-blocker in 180 days post-discharge; Exclusions: asthma, LVAD, heart transplant	Overlaps with MIPS #008 when post-MI patients have LVEF $\leq 40\%$; emerging evidence questions long-term beta-blocker benefit in preserved EF post-MI
HEDIS SPC-E: Statin Therapy for Patients With CVD	Denominator: patients with clinical ASCVD (MI, CABG, PCI, stroke/TIA, PAD) and ≥ 1 statin fill; Numerator: PDC $\geq 80\%$ for high-intensity or moderate-intensity statin; Exclusions: ESRD, hospice, cirrhosis, rhabdomyolysis	Most HF patients with ischemic etiology qualify; statin adherence reduces recurrent CV events independent of HF therapy

ABBREVIATIONS: MIPS = Merit-based Incentive Payment System; HF = heart failure; ACE = angiotensin-converting enzyme; ARB = angiotensin receptor blocker; ARNI = angiotensin receptor-neprilysin inhibitor; LVSD = left ventricular systolic dysfunction; LVEF = left ventricular ejection fraction; LVAD = left ventricular assist device; ACC/AHA = American College of Cardiology/American Heart Association; PM = performance measure; QM = quality measure; KCCQ-12 = Kansas City Cardiomyopathy Questionnaire-12; CV = cardiovascular; FFS = fee-for-service; ESRD = end-stage renal disease; GDMT = guideline-directed medical therapy; MI = myocardial infarction; CABG = coronary artery bypass grafting; PCI = percutaneous coronary intervention; HFrEF = heart failure with reduced ejection fraction; BP = blood pressure; HFpEF = heart failure with preserved ejection fraction; HEDIS = Healthcare Effectiveness Data and Information Set; MAH = Medication Adherence for Hypertension; RAS = renin-angiotensin system; PDC = proportion of days covered; RAAS = renin-angiotensin-aldosterone system; PBH = Persistence of Beta-Blocker After Heart Attack; AMI = acute myocardial infarction; EF = ejection fraction; SPC-E = Statin Therapy for Patients with Cardiovascular Disease — Adherence; ASCVD = atherosclerotic cardiovascular disease; TIA = transient ischemic attack; PAD = peripheral artery disease

*Consult FDA labels for the most up-to-date dosage information, contraindications, and drug-drug interactions

TEN KEY TAKEAWAYS FOR HEART FAILURE PHARMACOTHERAPY

1 Four-pillar HFrEF therapy is the default, not the finish line

Eligible patients should receive **ARNI/ACE inhibitor/ARB**, evidence-based **beta-blocker**, **MRA**, and **SGLT2 inhibitor**.^{1,4}

2 Start classes early rather than titrating sequentially for months

Low doses of all four classes generally provide **broadier benefit** than maximizing only one or two.^{4,32}

3 Diuretics treat congestion, not the underlying mortality risk

Use the **lowest dose** that **maintains euvolemia** while **preserving disease-modifying therapy**.^{1,4}

4 SGLT2 inhibitors benefit HF patients with and without diabetes

They **reduce HF events** across the EF spectrum when clinically appropriate.^{1,50}

5 A modest creatinine rise is not automatic treatment failure

Reassess **volume, potassium, NSAIDs, and clinical response** before discontinuing therapy.^{4,51}

6 Low blood pressure requires diagnosis, not reflexive deprescribing

Address **orthostasis, overdiuresis, and nonessential BP-lowering drugs first**.^{4,52}

7 Continue GDMT when LVEF improves

Recovery often reflects treatment response, and **withdrawal can precipitate relapse**.^{1,53}

8 Medication reconciliation after hospitalization is a high-value intervention

Confirm **access, laboratories, fills, and early follow-up**.^{4,54}

9 Avoid drugs that worsen HF

NSAIDs, thiazolidinediones, harmful nondihydropyridine calcium channel blockers in HFrEF, and duplicate RAAS blockade **create preventable risk**.¹

10 Affordability is part of clinical effectiveness

Use **generics, formulary checks, benefit tools, pharmacist support, and assistance pathways** to maintain evidence-based coverage.¹²

AAVBC SUMMARY AND CONCLUSION

Value-based HF medication management begins with early phenotype recognition and rapid delivery of the therapies **most likely to prevent hospitalization and death**.⁴ For HFrEF, **PCPs should help establish all four foundational GDMT classes within weeks**, titrate them using planned laboratory and clinical follow-up, and **avoid allowing a single low blood pressure reading or modest creatinine change to permanently derail care**.^{4,32} For HFpEF and HFmrEF,

SGLT2 inhibition, careful congestion management, and aggressive treatment of comorbidities **form the practical medication foundation**.^{1,50}

The PCP role extends beyond prescribing. Closed-loop care requires: Medication reconciliation after hospitalization, identification of drugs that worsen HF, monitoring of potassium and renal function, teach-back, symptom and weight action plans, and explicit resolution of affordability barriers.⁴ The highest-value regimen is **not simply the least expensive prescription**. It is the **safest evidence-based regimen the patient can obtain, understand, tolerate, and continue**, with a care team prepared to respond before congestion becomes another hospitalization.^{10,12}

REFERENCES

1. Heidenreich P, Bozkurt B, Aguilar D. 2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure. *J Am Coll Cardiol*. 2022;79(17):e263-e421. doi:10.1016/j.jacc.2021.12.012
2. Murphy SP, Ibrahim NE, Januzzi JL Jr. Heart Failure With Reduced Ejection Fraction: A Review. *JAMA*. 2020;324(5):488-504. doi:10.1001/jama.2020.10262
3. Patolia H, Khan MS, Fonarow GC, Butler J, Greene SJ. Implementing Guideline-Directed Medical Therapy for Heart Failure: JACC Focus Seminar 1/3. *J Am Coll Cardiol*. 2023;82(6):529-543. doi:10.1016/j.jacc.2023.03.430
4. Maddox Thomas M., Januzzi James L., Allen Larry A., et al. 2024 ACC Expert Consensus Decision Pathway for Treatment of Heart Failure With Reduced Ejection Fraction. *JACC*. 2024;83(15):1444-1488. doi:10.1016/j.jacc.2023.12.024
5. Cannata A, Crespo-Leiro MG, Bromage DI, Ruschitzka F, McDonagh TA. Heart failure with reduced ejection fraction. *Lancet Lond Engl*. 2026;407(10527):529-542. doi:10.1016/S0140-6736(25)01851-3
6. WRITING COMMITTEE MEMBERS, Fonarow GC, Ahmad FS, et al. HF STATS 2025: Heart Failure Epidemiology and Outcomes Statistics An Updated 2025 Report from the Heart Failure Society of America. *J Card Fail*. 2026;32(2):439-498. doi:10.1016/j.cardfail.2025.07.007
7. Campbell P, Rutten FH, Lee MM, Hawkins NM, Petrie MC. Heart failure with preserved ejection fraction: everything the clinician needs to know. *Lancet Lond Engl*. 2024;403(10431):1083-1092. doi:10.1016/S0140-6736(23)02756-3
8. Redfield MM, Borlaug BA. Heart Failure With Preserved Ejection Fraction: A Review. *JAMA*. 2023;329(10):827-838. doi:10.1001/jama.2023.2020
9. Borlaug BA, Sharma K, Shah SJ, Ho JE. Heart Failure With Preserved Ejection Fraction: JACC Scientific Statement. *J Am Coll Cardiol*. 2023;81(18):1810-1834. doi:10.1016/j.jacc.2023.01.049
10. Lewsey SC, Martyn T, Blumer V, et al. Strategies for Optimizing Heart Failure Care in the Older Adult: A Scientific Statement From the American Heart Association. *Circulation*. 2026;154(5):e206-e230. doi:10.1161/CIR.0000000000001437
11. Kittleson MM, Panjrath GS, Amancherla K, et al. 2023 ACC Expert Consensus Decision Pathway on Management of Heart Failure With Preserved Ejection Fraction: A Report of the American College of Cardiology Solution Set Oversight Committee. *J Am Coll Cardiol*. 2023;81(18):1835-1878. doi:10.1016/j.jacc.2023.03.393

12. Sukumar S, Wasfy JH, Januzzi JL, Peppercorn J, Chino F, Warraich HJ. Financial Toxicity of Medical Management of Heart Failure: JACC Review Topic of the Week. *J Am Coll Cardiol*. 2023;81(20):2043-2055. doi:10.1016/j.jacc.2023.03.402
13. Van der Linden L, Hias J, Walgraeve K, et al. Guideline-Directed Medical Therapies for Heart Failure with a Reduced Ejection Fraction in Older Adults: A Narrative Review on Efficacy, Safety and Timeliness. *Drugs Aging*. 2023;40(8):691-702. doi:10.1007/s40266-023-01046-0
14. DiDomenico RJ, Marrs JC, Bress AP, et al. Deprescribing in Patients With Cardiovascular Disease Experiencing Polypharmacy: A Scientific Statement From the American Heart Association. *Circulation*. 0(0). doi:10.1161/CIR.0000000000001459
15. Khan MS, Singh S, Segar MW, et al. Polypharmacy and Optimization of Guideline-Directed Medical Therapy in Heart Failure: The GUIDE-IT Trial. *JACC Heart Fail*. 2023;11(11):1507-1517. doi:10.1016/j.jchf.2023.03.007
16. Hollenberg Steven M., Stevenson Lynne Warner, Ahmad Tariq, et al. 2024 ACC Expert Consensus Decision Pathway on Clinical Assessment, Management, and Trajectory of Patients Hospitalized With Heart Failure Focused Update. *JACC*. 2024;84(13):1241-1267. doi:10.1016/j.jacc.2024.06.002
17. Das SR, Everett BM, Birtcher KK, et al. 2020 Expert Consensus Decision Pathway on Novel Therapies for Cardiovascular Risk Reduction in Patients With Type 2 Diabetes: A Report of the American College of Cardiology Solution Set Oversight Committee. *J Am Coll Cardiol*. 2020;76(9):1117-1145. doi:10.1016/j.jacc.2020.05.037
18. Yancy Clyde W., Januzzi James L., Allen Larry A., et al. 2017 ACC Expert Consensus Decision Pathway for Optimization of Heart Failure Treatment: Answers to 10 Pivotal Issues About Heart Failure With Reduced Ejection Fraction. *JACC*. 2018;71(2):201-230. doi:10.1016/j.jacc.2017.11.025
19. Ferreira JP, Butler J, Rossignol P, et al. Abnormalities of Potassium in Heart Failure: JACC State-of-the-Art Review. *J Am Coll Cardiol*. 2020;75(22):2836-2850. doi:10.1016/j.jacc.2020.04.021
20. Page RL, O'Bryant CL, Cheng D, et al. Drugs That May Cause or Exacerbate Heart Failure. *Circulation*. 2016;134(6):e32-e69. doi:10.1161/CIR.0000000000000426
21. Yancy CW, Januzzi JL, Allen LA, et al. 2017 ACC Expert Consensus Decision Pathway for Optimization of Heart Failure Treatment: Answers to 10 Pivotal Issues About Heart Failure With Reduced Ejection Fraction: A Report of the American College of Cardiology Task Force on Expert Consensus Decision Pathways. *J Am Coll Cardiol*. 2018;71(2):201-230. doi:10.1016/j.jacc.2017.11.025
22. Ford B, Dore M, Bartlett B. Management of Heart Failure: Updated Guidelines From the AHA/ACC. *Am Fam Physician*. 2023;108(3):315-320.
23. Abdin A, Bauersachs J, Abdelhamid M, et al. Pharmacologic pitfalls in heart failure: A guide to drugs that may cause or exacerbate heart failure. A European Journal of Heart Failure expert consensus document. *Eur J Heart Fail*. 2025;27(12):2671-2690. doi:10.1002/ehf.70087
24. Bozkurt B, Aguilar D, Deswal A, et al. Contributory Risk and Management of Comorbidities of Hypertension, Obesity, Diabetes Mellitus, Hyperlipidemia, and Metabolic Syndrome in Chronic Heart Failure: A Scientific Statement From the American Heart Association. *Circulation*. 2016;134(23):e535-e578. doi:10.1161/CIR.0000000000000450
25. Thompson Annemarie, Fleischmann Kirsten E., Smilowitz Nathaniel R., et al. 2024 AHA/ACC/ACS/ASNC/HRS/SCA/SCCT/SCMR/SVM Guideline for Perioperative Cardiovascular Management for Noncardiac Surgery. *JACC*. 2024;84(19):1869-1969. doi:10.1016/j.jacc.2024.06.013

26. Khan MS, Segar MW, Usman MS, et al. Frailty, Guideline-Directed Medical Therapy, and Outcomes in HFrEF: From the GUIDE-IT Trial. *JACC Heart Fail.* 2022;10(4):266-275. doi:10.1016/j.jchf.2021.12.004
27. Cautela J, Tartiere JM, Cohen-Solal A, et al. Management of low blood pressure in ambulatory heart failure with reduced ejection fraction patients. *Eur J Heart Fail.* 2020;22(8):1357-1365. doi:10.1002/ejhf.1835
28. Kodur N, Tang WHW. Management of Heart Failure With Improved Ejection Fraction: Current Evidence and Controversies. *JACC Heart Fail.* 2025;13(4):537-553. doi:10.1016/j.jchf.2025.02.007
29. Wilcox JE, Fang JC, Margulies KB, Mann DL. Heart Failure With Recovered Left Ventricular Ejection Fraction: JACC Scientific Expert Panel. *J Am Coll Cardiol.* 2020;76(6):719-734. doi:10.1016/j.jacc.2020.05.075
30. Lam CSP, Bozkurt B, Cherney DZI, et al. Kidney Disease and Heart Failure: Recent Advances and Current Challenges: Conclusions From a Kidney Disease: Improving Global Outcomes (KDIGO) Controversies Conference. *JACC Heart Fail.* 2026;14(4):102943. doi:10.1016/j.jchf.2026.102943
31. Rossignol P, Hernandez AF, Solomon SD, Zannad F. Heart failure drug treatment. *Lancet Lond Engl.* 2019;393(10175):1034-1044. doi:10.1016/S0140-6736(18)31808-7
32. Greene SJ, Bauersachs J, Brugts JJ, et al. Management of Worsening Heart Failure With Reduced Ejection Fraction: JACC Focus Seminar 3/3. *J Am Coll Cardiol.* 2023;82(6):559-571. doi:10.1016/j.jacc.2023.04.057
33. Felker GM, Ellison DH, Mullens W, Cox ZL, Testani JM. Diuretic Therapy for Patients With Heart Failure: JACC State-of-the-Art Review. *J Am Coll Cardiol.* 2020;75(10):1178-1195. doi:10.1016/j.jacc.2019.12.059
34. Morris AA, Khazanie P, Drazner MH, et al. Guidance for Timely and Appropriate Referral of Patients With Advanced Heart Failure: A Scientific Statement From the American Heart Association. *Circulation.* 2021;144(15):e238-e250. doi:10.1161/CIR.0000000000001016
35. Zheng J, Mednick T, Heidenreich PA, Sandhu AT. Pharmacist- and Nurse-Led Medical Optimization in Heart Failure: A Systematic Review and Meta-Analysis. *J Card Fail.* 2023;29(7):1000-1013. doi:10.1016/j.cardfail.2023.03.012
36. Spahillari A, Cohen LP, Lin C, et al. Efficacy, Safety and Mechanistic Impact of a Heart Failure Guideline-Directed Medical Therapy Clinic. *JACC Heart Fail.* 2025;13(4):554-568. doi:10.1016/j.jchf.2024.08.017
37. Faridi KF, Dayoub EJ, Ross JS, Dhruva SS, Ahmad T, Desai NR. Medicare Coverage and Out-of-Pocket Costs of Quadruple Drug Therapy for Heart Failure. *J Am Coll Cardiol.* 2022;79(25):2516-2525. doi:10.1016/j.jacc.2022.04.031
38. Lowe EF, Gerasta D, Balser M, et al. Contributors and Solutions to High Out-of-Pocket Costs for Heart Failure Medications: A State-of-the-Art Review. *J Am Coll Cardiol.* 2025;85(4):365-377. doi:10.1016/j.jacc.2024.11.011
39. Hwang CS, Desai RJ, Kesselheim AS, Levin R, Kattinakere Sreedhara S, Rome BN. Health Care Spending After Initiating Sacubitril-Valsartan vs Renin-Angiotensin System Blockers for Heart Failure Treatment. *JAMA Health Forum.* 2025;6(2):e245385-e245385. doi:10.1001/jamahealthforum.2024.5385

40. Bhatt AS, Vaduganathan M, Claggett BL, et al. Health and Economic Evaluation of Sacubitril-Valsartan for Heart Failure Management. *JAMA Cardiol.* 2023;8(11):1041-1048. doi:10.1001/jamacardio.2023.3216
41. Nguyen BN, Mital S, Bugden S, Nguyen HV. Cost-effectiveness of dapagliflozin and empagliflozin for treatment of heart failure with reduced ejection fraction. *Int J Cardiol.* 2023;376:83-89. doi:10.1016/j.ijcard.2023.01.080
42. Ilonze OJ, Forman DE, LeMond L, et al. Beyond Guideline-Directed Medical Therapy: Nonpharmacologic Management for Patients With Heart Failure. *JACC Heart Fail.* 2025;13(2):185-199. doi:10.1016/j.jchf.2024.08.018
43. Yeghiazarians Y, Jneid H, Tietjens JR, et al. Obstructive Sleep Apnea and Cardiovascular Disease: A Scientific Statement From the American Heart Association. *Circulation.* 2021;144(3):e56-e67. doi:10.1161/CIR.0000000000000988
44. Piano MR, Marcus GM, Aycock DM, et al. Alcohol Use and Cardiovascular Disease: A Scientific Statement From the American Heart Association. *Circulation.* 2025;152(1):e7-e21. doi:10.1161/CIR.0000000000001341
45. Bozkurt B, Fonarow GC, Goldberg LR, et al. Cardiac Rehabilitation for Patients With Heart Failure: JACC Expert Panel. *J Am Coll Cardiol.* 2021;77(11):1454-1469. doi:10.1016/j.jacc.2021.01.030
46. Mullens W, Damman K, Dhont S, et al. Dietary sodium and fluid intake in heart failure. A clinical consensus statement of the Heart Failure Association of the ESC. *Eur J Heart Fail.* 2024;26(4):730-741. doi:10.1002/ejhf.3244
47. Oh EG, Lee JY, Lee HJ, Oh S. Effects of discharge education using teach-back methods in patients with heart failure: A randomized controlled trial. *Int J Nurs Stud.* 2023;140:104453. doi:10.1016/j.ijnurstu.2023.104453
48. Bessette LG, Magnani JW, Brooks MM, et al. Initiation, Adherence, and Persistence to Guideline-Directed Medical Therapy After Heart Failure Hospitalization. *JAMA Intern Med.* Published online July 20, 2026. doi:10.1001/jamainternmed.2026.2908
49. Blumenthal RS, Morris PB, Gaudino M, et al. 2026 ACC/AHA/AACVPR/ABC/ACPM/ADA/AGS/APhA/ASPC/NLA/PCNA Guideline on the Management of Dyslipidemia: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. *Circulation.* 2026;153(17):e1154-e1276. doi:10.1161/CIR.0000000000001423
50. Solomon Scott D., McMurray John J.V., Claggett Brian, et al. Dapagliflozin in Heart Failure with Mildly Reduced or Preserved Ejection Fraction. *N Engl J Med.* 2022;387(12):1089-1098. doi:10.1056/NEJMoa2206286
51. Ndumele Chiadi E., Rodriguez Fatima, Dixon Dave L., et al. 2026 AHA/ACC/ADA/ASN Guideline for the Prevention, Detection, Evaluation, and Management of Cardiovascular-Kidney-Metabolic Syndrome. *JACC.* 2026;87(22_Supplement):e1889-e2007. doi:10.1016/j.jacc.2026.03.056
52. Skouri H, Girerd N, Monzo L, et al. Clinical management and therapeutic optimization of patients with heart failure with reduced ejection fraction and low blood pressure. A clinical consensus statement of the Heart Failure Association (HFA) of the ESC. *Eur J Heart Fail.* 2025;27(4):707-722. doi:10.1002/ejhf.3618
53. Belkin MN, Cifu AS, Pinney S. Management of Heart Failure. *JAMA.* 2022;328(13):1346-1347. doi:10.1001/jama.2022.16667

54. Oskouie S, Pandey A, Sauer AJ, et al. From Hospital to Home: Evidence-Based Care for Worsening Heart Failure. *JACC Adv.* 2024;3(9):101131. doi:10.1016/j.jacadv.2024.101131

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