

MEDICATION COVERAGE POLICY

PHARMACY AND THERAPEUTICS ADVISORY COMMITTEE

POLICY:	Congestive Heart Failure	P&T DATE:	9/12/2017
CLASS:	Cardiovascular Disorders	REVIEW HISTORY:	9/16, 9/15
LOB:	MCL	(month/year)	

This policy has been developed through review of medical literature, consideration of medical necessity, generally accepted medical practice standards, and approved by the HPSJ Pharmacy and Therapeutic Advisory Committee.

OVERVIEW

Table 1: Formulary CHF Agents:

Therapeutic Class	Generic Name (Brand Name)	Available Strengths	Formulary Limits	Average Cost/Month	Notes
Loop Diuretics	Furosemide (Lasix)	Oral Solution			
		10 Mg/ml	--	\$6.50	--
		40 Mg/ml	--	\$1.47	--
		Tablets			
		20 mg	--	\$0.57	--
		40 mg	--	\$0.72	--
	Bumetanide (Bumex)	80 mg	--	\$2.99	--
		Tablets			
		0.5 mg	--	\$17.26	--
		1 mg	--	\$14.93	--
	Torsemide (Demadex)	2 mg	NF	\$61.88	Formulary alternative= Bumetanide 1mg
		Tablets			
		5 mg	--	--	--
		10 mg	--	\$6.23	--
		20 mg	--	\$21.71	--
Ethacrynic Acid (Edecrin)	100 mg	--	\$28.93	--	
	Tablets				
	25 mg	PA	--	Reserved for patients with Sulfa-allergy or failed 3 formulary loop diuretics	
Thiazide Diuretics	Chlorothiazide	Injection (IV)		--	--
		500 mg	NF	--	--
		Oral Suspension			
		250 mg/5 ml	NF	--	--
		Tablets			
		250 mg	NF	\$8.70	--
	Chlorthalidone	500 mg	NF	--	--
		Tablets			
		25 mg	QL	\$23.78	Limit of 1 tablet per day
	50 mg	QL	\$26.65		
Hydrochlorothiazide	Capsules				
	12.5 mg	--	\$1.63	--	
	Tablets				

		12.5 mg	--	\$6.46	--	
		25 mg	--	\$0.56	--	
		50 mg	--	\$1.35	--	
	Indapamide	Tablets				
		1.25 mg	NF	--	--	
		2.5 mg	NF	--	--	
	Metolazone (Zaroxolyn)	Tablets				
		2.5 mg		\$26.01	--	
		5 mg	--	\$36.12	--	
10 mg		--	\$40.04	--		
Potassium Sparing Diuretics	Amiloride (Midamor)	Tablets				
		5 mg	NF	\$32.36	--	
	Spirolactone (Aldactone)	Tablets				
		25 mg	--	\$5.72	--	
		50 mg	--	\$13.40	--	
	Triamterene (Dyrenium)	Capsules				
		50 mg	--	--	--	
		100 mg	--	--	--	
	ACEIs	Captopril (Capoten)	Tablets			
12.5 mg			NF	\$28.85	Formulary Alternative = Enalapril, Lisinopril, Quinapril, Ramipril	
25 mg			NF	\$32.31		
50 mg			NF	\$69.41		
100 mg		NF	\$71.23			
Enalapril (Vasotec)		Tablets				
		2.5 mg	--	\$4.13	--	
		5 mg	--	\$6.21	--	
		10 mg	--	\$6.74	--	
Enalapril (Epaned)		Oral Solution				
		1 mg/ml	NF	\$40.00	--	
Epaned (Vasotec)		Injection (IV)				
		1mg/ml	NF	--	--	
Fosinopril		Tablets				
		10 mg	NF	--	--	
		20 mg	NF	\$7.83	--	
Lisinopril (Qrelis)		Tablets				
		40 mg	NF	\$8.17	--	
		Oral Solution				
Lisinopril (Prinivil, Zestril)		1 mg/ml	NF	--	--	
	Tablets					
	2.5 mg	--	\$0.35	--		
	5 mg	--	\$0.32	--		
	10 mg	--	\$0.47	--		
	20 mg	--	\$0.78	--		
	30 mg	--	\$1.56	--		
Perindopril (Aceon)	Tablets					
	2 mg	NF	--	--		
	4 mg	NF	--	--		

		8 mg	NF	--	--	
	Quinapril (Accupril)	Tablets				
		5 mg		\$8.64		
		10 mg	--	\$6.05	--	
		20 mg	--	\$8.10	--	
		40 mg	--	\$6.37	--	
	Ramipril (Altace)	Capsules				
		1.25 mg	QL	\$5.26	Limit of 1 capsule per day	
		2.5 mg	QL	\$6.07		
		5 mg	QL	\$6.47		
		10 mg	QL	\$8.85	Limit of 2 capsules per day	
	Trandolapril (Mavik)	Capsules				
		1 mg	NF	--	--	
		2 mg	NF	--	--	
		4 mg	NF	--	--	
ARBs	Candesartan (Atacand)	Tablets				
		4 mg	NF	--	--	
		8 mg	NF	\$93.23	--	
		16 mg	NF	--	--	
		32 mg	NF	--	--	
	Losartan (Cozaar)	Tablets				
		25 mg	--	\$1.57	--	
		50 mg	--	\$2.11	--	
		100 mg	--	\$2.45	--	
	Valsartan (Diovan)	Tablets				
		40 mg	PA	\$24.16	Reserved for patients with heart failure, intolerant to ACEIs	
		80 mg	PA	\$21.60		
		160 mg	PA	\$33.40		
320 mg		PA	\$27.79			
ARNIs	Sacubitril/Valsartan (Entresto)	Tablets				
		24 mg/26 mg	PA	\$407.15	Reserved for patients with (1) EF<35%, (2) receiving max dose of beta blockers, aldosterone antagonist AND (3) have tried at least 1 ACEI or 1 ARB	
		49 mg/51 mg	PA	\$414.34		
		97mg/103mg	PA	\$409.98		
Beta Blockers	Bisoprolol (Zebeta)	Tablets				
		5 mg	--	\$19.90	--	
		10 mg	--	\$12.17	--	
	Carvedilol (Coreg)	Tablets				
		3.125 mg	QL	\$1.79	Limit of 2 tablets per day	
		6.25 mg	QL	\$1.56		
		12.5 mg	QL	\$1.38		
		25 mg	QL	\$3.81	Limit of 4 tablets per day	
	Carvedilol (Coreg CR)	Capsules				
		10 mg	NF	--	--	

		20 mg	NF	\$249.41	--	
		40 mg	NF	--	--	
		80 mg	NF	--	--	
	Metoprolol Succinate ER (Toprol XL)	Tablets				
		25 mg	--	\$12.85	--	
		50 mg	--	\$13.10	--	
		100 mg	--	\$34.54	--	
		200 mg	--	\$47.77	--	
ARAs	Spirolactone (Aldactone)	Tablets				
		25 mg	--	\$5.72	--	
		50 mg	--	\$13.40	--	
		100 mg	--	\$23.03	--	
	Eplerenone (Inspra)	Tablets				
		25 mg	NF	\$100.14	--	
50 mg		NF	--	--		
Vasodilators	Hydralazine (Apresoline)	Tablets				
		10 mg	--	\$10.60	--	
		25 mg	--	\$12.23	--	
		50 mg	--	\$16.61	--	
		100 mg	--	\$33.58	--	
	Hydralazine/Isosorbide dinitrate (BiDil)	Tablets				
		20 mg/37.5 mg	NF	--	--	
	Isosorbide (Isordil Titrados)	Tablets				
		5 mg	--	\$50.45	--	
		10 mg	--	\$43.53	--	
		20 mg	--	\$53.17	--	
30 mg		--	\$30.22	--		
Digitalis	Digoxin (Digitek, Digox, Lanoxin)	Oral Solution				
		0.05 mg/ml	--	\$56.27		
		Tablets				
		0.125mg	--	\$34.86	--	
		0.25 mg	--	\$27.15	--	
Funny Channel Inhibitors	Ivabradine (Corlanor)	Tablets				
		5 mg	PA	\$417.63	Reserved for patients with LVEF<35%, NYHA Stage II-IV, Resting HR>70 bpm, use of dose-optimized beta blocker, ACEI/ARB, and aldosterone antagonist	
		7.5mg	PA	--		

F = Formulary, NF = Non-formulary, QL = Quantity Limit, ST = Step Therapy, PA = Prior Authorization Required. Average Costs based on utilization data from 8/2016-7/2017

EVALUATION CRITERIA FOR APPROVAL/EXCEPTION CONSIDERATION

Below are the coverage criteria and required information for each agent. These coverage criteria have been reviewed approved by the HPSJ Pharmacy & Therapeutics (P&T) Advisory Committee. For conditions not

covered under this Coverage Policy, HPSJ will make the determination based on Medical Necessity as described in HSPJ Medical Review Guidelines (UM06).

Loop diuretics

Bumetanide (Bumex), Ethacrynic Acid, Furosemide (Lasix), Torsemide (Demadex)

Bumetanide (0.5mg, 1 mg), Ethacrynic Acid, Furosemide, Torsemide:

- Coverage Criteria:**
 - Ethacrynic Acid is restricted to patients with sulfa allergy or treatment failure to 3 formulary loop diuretics
- Limits:** N/A
- Required Information for Approval:**
 - Ethacrynic Acid – Clinical documentations of sulfa allergy and previous history of utilization of 3 formulary loop diuretics with treatment failure
- Non-Formulary:** Bumetanide 2 mg

Thiazide Diuretics

Hydrochlorothiazide; Indapamide; Metolazone (Zaroxolyn); Chlorthalidone; Chlorthiazide

Chlorthalidone, Hydrochlorothiazide capsules and tablets, Metolazone:

- Coverage Criteria:** NONE
- Limits:** Chlorthalidone – Limit 1 tablet per day
- Required Information for Approval:** NONE
- Non-Formulary:** Chlorthiazide, Indapamide

Potassium Sparing Diuretics

Amiloride (Midador), Triamterene (Dyrenium), Spironolactone (Aldactone)

Spironolactone, Triamterene:

- Coverage Criteria:** None
- Limits:** None
- Required Information for Approval:** None
- Non-Formulary:** Amiloride

ACEIs (Angiotensin-converting Enzyme Inhibitors)

Captopril (Capoten); Enalapril (Vasotec, Epaned oral solution); Enalaprilat (Vasotec IV); Fosinopril; Lisinopril (Prinivil, Zestril, Orelis – oral solution); Perindopril (Aceon); Quinapril (Accupril); Ramipril (Altace); Trandolapril (Mavik)

Enalapril, Lisinopril, Quinapril, Ramipril:

- Coverage Criteria:** None
- Limits:**
 - Ramipril 1.25 mg 2.5 mg, 5 mg capsules – Limit 1 capsule per day
 - Ramipril 10 mg – Limit 2 capsules per day
- Required Information for Approval:** NONE
- Non-Formulary:** Captopril, Enalapril (Epaned) oral solution, Enalaprilat (Vasotec IV), Fosinopril, Lisinopril (Orelis) oral solution, Trandolapril (Mavik)

ARBs (Angiotensin Receptor Blockers)

Candesartan (Atacand), Losartan (Cozaar), Valsartan (Diovan)

Losartan, Valsartan:

- Coverage Criteria:**
 - Valsartan is restricted to patients with heart failure and intolerant to ACE inhibitors (ACEIs)
- Limits:** None
- Required Information for Approval:**
 - Valsartan - Clinical documentation of adverse reaction and severity to ACEI (if applicable)
- Non-Formulary:** Candesartan

ARNIs (Angiotensin Receptor Antagonist/Neprilysin Inhibitor)

Sacubitril/Valsartan (Entresto)

Sacubitril/Valsartan:

- Coverage Criteria:** Entresto is restricted to patients with (1) EF < 35% (2) receiving maximum dose of beta blockers and aldosterone antagonist therapy, **AND** (3) tried at least 1 ACEI or 1 ARB

- Limits:** None
- Required Information for Approval:**
 - Echocardiogram, evidence of compliance to beta blockers and ACEI/ARB, and aldosterone antagonist.
 - For extension of therapy: ECHO at 3 months after initial approval is required.

Beta Blockers
<i>Bisoprolol (Zebeta), Carvedilol (Coreg, Coreg CR), Metoprolol Succinate ER (Toprol XL)</i>

Bisoprolol, Carvedilol, Metoprolol Succinate:

- Coverage Criteria:** None
- Limits:**
 - Carvedilol 3.125 mg, 6.25 mg, 12.5 mg tablets – Limit 2 tablets per day
 - Carvedilol 25 mg tablets – Limit 4 tablets per day
- Required Information for Approval:** N/A
- Non-Formulary:** Coreg CR

ARAs (Angiotensin Receptor Antagonist)
<i>Spirolactone (Aldactone), Eplerenone (Inspra)</i>

Spirolactone:

- Coverage Criteria:** None
- Limits:** None
- Required Information for Approval:** N/A
- Non-Formulary:** Eplerenone

Vasodilators
<i>Hydralazine (Apresoline), Isosorbide (Isordil Titrados), Hydralazine/Isosorbide dinitrate (BiDil)</i>

Hydralazine, Isosorbide dinitrate

- Coverage Criteria:** None
- Limits:** None
- Required Information for Approval:** N/A
- Note:** Hydralazine and Isosorbide are on HPSJ formulary with no restrictions. Hydralazine and Isosorbide **COMBINATION** is indicated in heart failure in Black patients
- Non-Formulary:** BiDil

Digitalis
<i>Digoxin (Digitek, Digox, Lanoxin)</i>

Digoxin:

- Coverage Criteria:** None
- Limits:** None
- Required Information for Approval:** None

Funny Channel Inhibitors
<i>Ivabradine (Corlanor)</i>

Ivabradine:

- Coverage Criteria:** Corlanor is restricted to patients with LVEF<35%, NYHA Stage II-IV, resting HR > 70bpm, and history of compliant use or contraindication to use of optimized dose of beta blocker, ACEI/ARB, and aldosterone antagonist
- Limits:** None
- Required Information for Approval:**
 - Echocardiogram, documentation of the patient’s resting heart rate, NYHA Stage, and evidence of compliance to beta blockers, ACEI/ARB, and aldosterone antagonist.

Clinical Justification:

Current Guidelines on heart failure recommends therapy initiation and optimal dose utilization with ACEI or ARB, and Beta Blockers. Diuretics are used for symptomatic relief and along with beta blockers in patient with history of fluid retention. Only 3 beta blockers, Bisoprolol, metoprolol succinate, and carvedilol, have been shown to reduce risk of death in heart failure. Aldosterone Antagonists are strongly recommended

in patients who are already on ACEI or ARB and Beta Blockers to reduce morbidity and mortality, unless contraindicated.⁷

Hydralazine and Isosorbide Dinitrate combination is recommended in African American patients with NYHA class III-IV HFrEF who are on optimal therapy with ACEI, Beta Blockers, and Aldosterone Antagonist therapy who remain symptomatic. Although BiDil is not on HPSJ formulary, Hydralazine and Isosorbide dinitrate medications are on formulary without any restrictions. ACC/AHA Guideline states the importance of administering both medications at least three times a day.⁷

Ivabradine and Sacubitril/Valsartan are two new agents, which add new mechanisms of action used to reduce poor outcomes in patients with CHF. When considering use of these novel agents, it is important to remember the fundamental treatment options for the condition, such as Beta-Blockers, and ACE inhibitors—which have proven mortality benefits over many patient-years of use.

Use of Ivabradine and Sacubitril/Valsartan should be considered in a very select patient population. Potentially eligible patients will have tried standard therapy and have failed, or have maximized the available benefit from conventional agents. 2017 ACC/AHA/HFSA guideline lists these agents under step 3 of the treatment process after optimizing therapy with ACEI or ARB **AND** Beta Blockers along with diuretics.⁴

Triage:

- **Provider Specialty**
- **Current CHF drugs**
- **Resting Heart Rate**

REFERENCES

1. Yancy CW, Jessup M, Bozkurt B, et al. 2016 ACC/AHA/HFSA Focused Update on New Pharmacological Therapy for Heart Failure: An Update of the 2013 ACCF/AHA Guideline for the Management of Heart Failure. *Journal of the American College of Cardiology*. Sep 2016, 68 (13) 1476-1488.
2. Ponikowski P, Voors AA, Anker SD, et al. 2016 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure. *European Heart Journal*. May 2016.
3. [Laur M.G.MeemsMD, PhD](#)[John C.BurnettJr.MD](#). Innovative Therapeutics: Designer Natriuretic Peptides. *The Journal of the American College of Cardiology*. 2016;1(7):557-567.
4. Yancy CW, Jessup M, Bozkurt B. et al. 2017 ACC/AHA/HFSA Focused Update of the 2013 ACCF/AHA Guideline for the Management of Heart Failure: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines and the Heart Failure Society of America. *J Am Coll Cardiol* 2017:Apr28
5. [Gavino Casu, Pierluigi Merella](#). Diuretic Therapy in Heart Failure-Current Approaches. *European Cardiology Review* 2015;10(1):42-7
6. Curt D. Furberg, Bertram Pitt. Are all angiotensin-converting enzyme inhibitors interchangeable? *Journal of the American College of Cardiology*. April 2001;37(5) DOI: 10.1016/S0735-1097(01)01161-5
7. Yancy CW, Jessup M, Bozkurt B, et al. 2013 ACC/AHA Guideline for the Management of Heart Failure. *Circulation*.2013: 128e240-e327

REVIEW & EDIT HISTORY

Document Changes	Reference	Date	P&T Chairman
Creation of Policy	CHF Coverage Policy	9/2015	Jonathan Szkotak, PharmD BCACP
Update to Policy	HPSJ Coverage Policy – Cardiovascular – Congestive Heart Failure 09-2016.docx	9/2016	Johnathan Yeh, PharmD
Update to Policy	HPSJ Coverage Policy – Cardiovascular – Congestive Heart Failure 09-2017.docx	9/2017	Johnathan Yeh, PharmD

Note: All changes are approved by the HPSJ P&T Committee before incorporation into the utilization policy