

Annual Review of Antihypertensives - Fiscal Year 2009

Oklahoma HealthCare Authority
April 2010

Current Prior Authorization Criteria

There are 7 categories of antihypertensive medications currently included in the Product Based Prior Authorization program:

1. Calcium Channel Blockers (**CCBs**)
2. Angiotensin I Converting Enzyme Inhibitors (**ACEIs**)
3. **ACE/CCBs** Combination Products
4. ACE inhibitor and hydrochlorothiazide combination products (**ACEI/HCTZs**)
5. Angiotensin II Receptor Blockers (**ARBs**)
6. ARB and hydrochlorothiazide combination products (**ARB/HCTZs**)
7. Direct Renin Inhibitors (**DRIs**) and DRI Combination products

General Criteria for Authorization

To qualify for a Tier 2 medication, there must be one of the following:

- documented inadequate response to two Tier 1 drugs of the same class
- contraindication to all available Tier 1 drugs
- previous stabilization on the Tier 2 drug
- a unique indication for the Tier 2 drug which the Tier 1 drugs lack

To qualify for a Tier 3 medication, there must be one of the following:

- documented inadequate response to two Tier 1 drug of the same class and all available Tier 2 medications
- contraindication to all available Tier 2 drugs
- previous stabilization on the Tier 3 drug
- a unique indication for the Tier 3 drug which the lower tiered drugs lack

Criteria for DRIs Authorization

- FDA approved indication.
- Recent trial, within the previous 6 months and at least 4 weeks in duration, of an ACE Inhibitor (or an ARB if previous trial of an ACEI) and a diuretic, used concomitantly at recommended doses, that did not yield adequate blood pressure control.
- May be used in either monotherapy or combination therapy.

Tier Charts of the Antihypertensive PBPA Category

Calcium Channel Blockers (CCB medications)		
Tier-1	Tier-2	Tier-3
amlodipine (Norvasc®)	diltiazem (Cardizem® LA)	
diltiazem (Cardizem®)	nicardipine (Cardene® SR)	
diltiazem (Tiazac®, Taztia XT®)	verapamil (Covera-HS®)	
diltiazem CD (Cardizem® CD)	nisoldipine (Sular®)	
diltiazem ER (Cartia XT®, Diltia XT®)	amlodipine/atorvastatin (Caduet®)	
diltiazem SR (Cardizem® SR)		
diltiazem XR (Dilacor® XR)		
felodipine (Plendil®)		
isradipine (Dynacirc®, Dynacirc CR®)		
nicardipine (Cardene®)		
nifedipine (Adalat®, Procardia®)		
nifedipine CC (Adalat® CC)		
nifedipine ER		
nifedipine XL (Nifedical XL®, Procardia XL®)		
nimodipine (Nimotop®)		
verapamil (Calan®, Isoptin®, Verelan®)		
verapamil SR (Calan® SR, Isoptin® SR, Verelan® PM)		

ACE and ARB Combination Medications		
Tier-1	Tier-2	Tier-3
<i>Any Tier-1 ACE Inhibitor:</i>	amlodopine / valsartan (Exforge®)	amlodipine / olmesartan (Azor™)
benazepril (Lotensin®)	amlodopine / valsartan (Exforge HCT®)	candesartan (Atacand®)
captopril (Capoten®)	irbesartan (Avapro®)	candesartan / HCTZ (Atacand® HCT)
enalapril (Vasotec®)	irbesartan / HCTZ (Avalide®)	losartan (Cozaar®)
enalaprilat (Vasotec® IV)	telmisartan (Micardis®)	losartan / HCTZ (Hyzaar®)
fosinopril (Monopril®)	telmisartan / HCTZ (Micardis® HCT)	eprosartan (Teveten®)
lisinopril (Prinivil®, Zestril®)	valsartan (Diovan®)	eprosartan / HCTZ (Teveten® HCT)
moexipril (Univasc®)	valsartan / HCTZ (Diovan HCT®)	
quinapril (Accupril®)	olmesartan (Benicar®)	
trandolapril (Mavik®)	olmesartan / HCTZ (Benicar HCT®)	
ramipril (Altace®)		

Direct Renin Inhibitors (DRIs)		
Tier-1	Tier-2	Tier-3
Tier-1 ACE Inhibitor + Diuretic	ARB + Diuretic	Aliskiren (Tekturna®)
		Aliskiren/HCTZ (Tekturna HCT®)
		Aliskiren/valsartan (Valturna®)

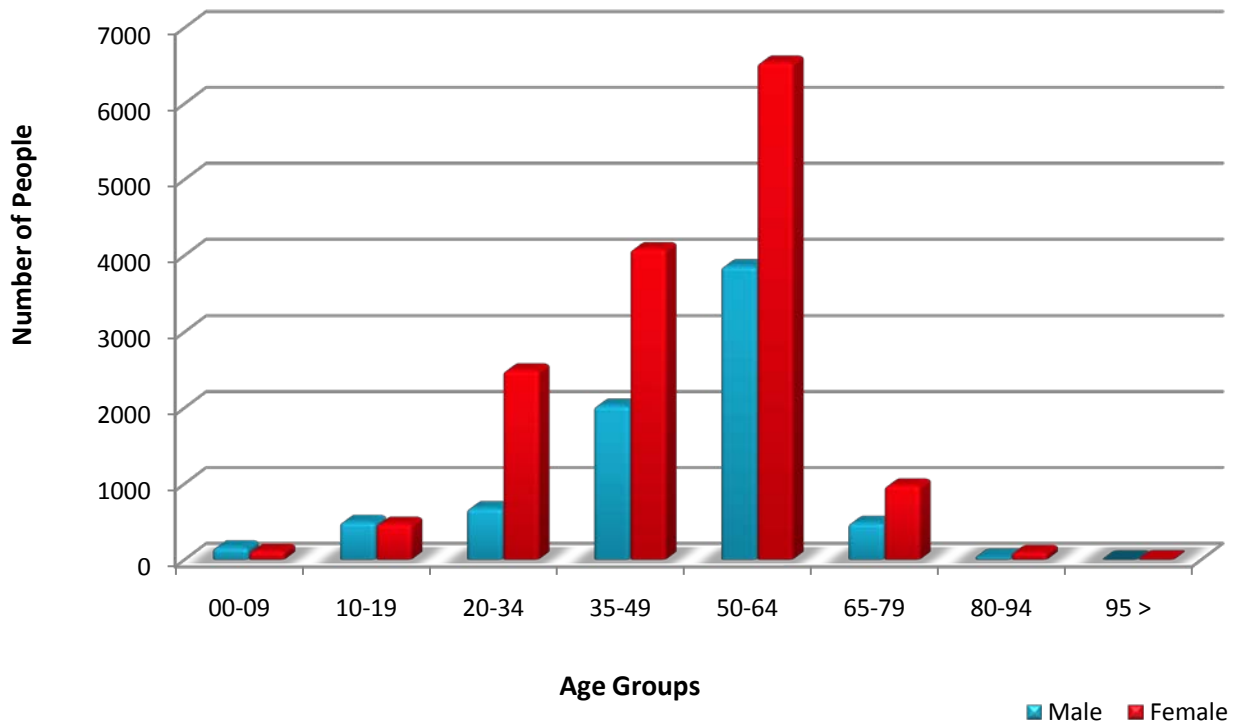
ACE Inhibitors		
Tier-1	Tier-2	Tier-3
<i>Any Tier-1 ACE Inhibitor:</i>		perindopril erbumine (Aceaon®)
benazepril (Lotensin®)		
captopril (Capoten®)		
enalapril (Vasotec®)		
enalaprilat (Vasotec® IV)		
fosinopril (Monopril®)		
lisinopril (Prinivil®, Zestril®)		
moexipril (Univasc®)		
quinapril (Accupril®)		
trandolapril (Mavik®)		
ramipril (Altace®)		
ACE Inhibitor / CCB Combinations		
Tier-1	Tier-1	Tier-1
Tier-1 ACE + Tier 1 CCB	trandolapril / verapamil (Tarka®)	
	benazepril / amlodipine (Lotrel®)	
	enalapril / felodipine (Lexxel®)	
ACE Inhibitor / HCTZ Combinations		
Tier-1	Tier-1	Tier-1
benazepril/HCTZ (Lotensin® HCT)		
captopril/HCTZ (Capozide®)		
enalapril/HCTZ (Vasoretic®)		
fosinopril/HCTZ (Monopril-HCT®)		
lisinopril/HCTZ (Prinzide®, Zestoretic®)		
moexipril/HCTZ (Uniretic®)		
quinapril/HCTZ (Accuretic®)		

Utilization of Medication or Class

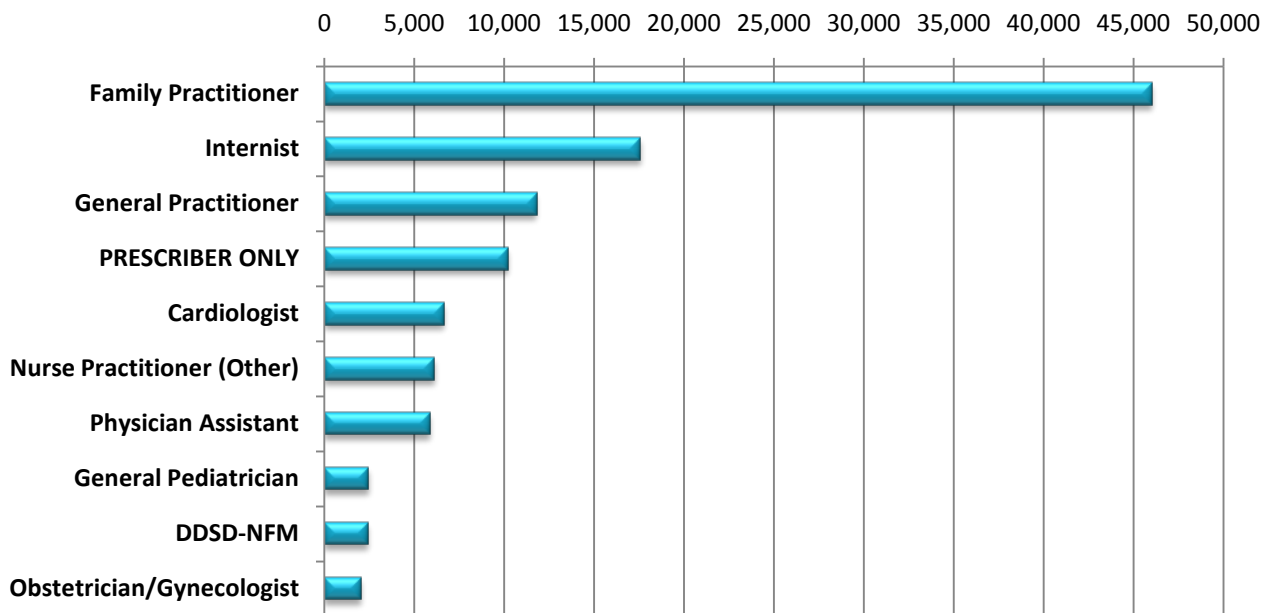
Trends in Utilization of Antihypertensives

Fiscal Year	Members	Claims	Paid	Paid/Claim	Perdiem	Units	Days
2008	20,869	114,714	\$3,773,131.38	\$32.89	\$0.85	5,335,159	4,450,731
2009	22,682	120,354	\$3,245,475.97	\$26.97	\$0.70	5,694,594	4,611,357
% Change	8.70%	4.90%	-14.00%	-18.00%	-17.60%	6.70%	3.60%
Change	1,813	5,640	-\$527,655.41	-\$5.92	-\$0.15	359,435	160,626

Demographics of Members Utilizing Antihypertensives: FY 2009



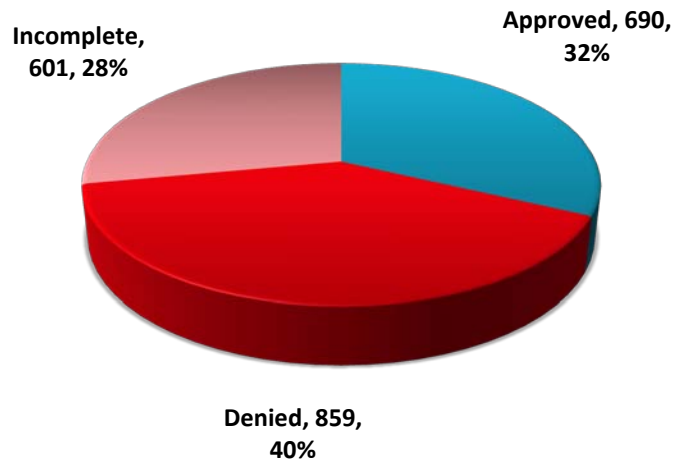
Top Prescribers of Antihypertensives by Number of Claims: FY 2009



Prior Authorization of Antihypertensives

There were a total of 2,150 petitions submitted for this PBPA category during fiscal year 2009. Please note that for this PBPA category the system will automatically search Tier 1 medications in member's claims history within a certain timeframe and if detected, the member can automatically get the Tier 2 medication without submitting a prior authorization form. The bottom chart shows the details of the petition submitted.

Status of Petitions for Antihypertensives: FY 2009



Market News and Update

- **Exforge HCT[®]** (amlodipine, valsartan, hydrochlorothiazide)ⁱ was approved April 30, 2009, and has been added to the ARB Combination category as a Tier 3 medication. However, the manufacturer has participated in the supplemental rebate program so this agent is currently available as a Tier 2 agent. The existing criteria for that category apply.
- **Cleviprex[®]** (clevidipine)ⁱⁱ was approved August 1, 2008
 - Cleviprex[®] is an intravenous, very short acting calcium channel blocker for severely elevated blood pressure in the hospital setting when oral medication cannot be taken.
 - Supplied as 0.5 mg/mL injection in 50 and 100mL single use vials.
 - Dosing should start at 1-2mg/hr and increase by 1-2mg/hr every 90 seconds. The interval to increase should be lengthened as the maximum rate is approached. The maximum rate is 16mg/hr. No dose adjustment is needed for patients with renal or hepatic impairment.
 - The patient has to be transferred to another hypertension treatment to prevent rebound hypertension.
 - Side effects include atrial fibrillation, headache, and nausea.
 - Pregnancy Category C.

Conclusion and Recommendations

The College of Pharmacy recommends continued monitoring of this class of medications and re-evaluation if warranted after the new JNC-VIII Guidelines are made available by the National Institutes of Health.

ⁱ Exforge HCT monograph. [Lexi-Comp ONLINE](#). Hudson, OH: 2009.

ⁱⁱ Clevidipine monograph. [E-Facts and comparisons](#). Indianapolis, IN: October 2008.