

UNIVERSITY OF ARKANSAS
FOR MEDICAL SCIENCES
COLLEGE OF PHARMACY

ARKANSAS MEDICAID EVIDENCE-BASED PRESCRIPTION DRUG PROGRAM (EBR_x)

QUARTERLY REPORT – FIRST QUARTER 2008



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INTRODUCTION

OVERVIEW OF THE EVIDENCE-BASED PRESCRIPTION DRUG PROGRAM

The Evidence-Based Prescription Drug Program (EBRx) came into existence in November 2004. The program is a collaboration between the University of Arkansas for Medical Sciences (UAMS) College of Pharmacy and the Arkansas Department of Health and Human Services (DHHS) Medicaid Program, with the support and input of the Arkansas Medical Society and the Arkansas Pharmacist's Association. The primary role of EBRx for DHHS is to facilitate development of an Evidence-based Preferred Drug List and provide related Prior Authorization review services for Medicaid and ARKids recipients.

Medicaid is an entitlement program for individuals and families with low-income or disabilities. Prior to January 1, 2006, the Medicaid program provided prescription benefits for qualifying elderly patients whose primary insurance was through the Federal Medicare program. With the availability of Medicare Part D prescription drug coverage, the Arkansas Medicaid enrollee population is now predominantly children. In fact Arkansas' Medicaid and ARKids programs are estimated to provide healthcare coverage to approximately half of all Arkansas children.

In the years before development of the Evidence-based Preferred Drug List, medication cost growth was a major contributor to increased costs of the Arkansas Medicaid program. In the nine years before EBRx began, Medicaid prescription drug spending grew at a compound annual growth rate exceeding 16 percent. This growth was due to increases in the costs of medications as well as increases in the numbers of enrollees. The largest contributor to the increase in total medication expenditures was increases in average medication costs. The rate of medication cost growth far exceeds state revenue growth, and jeopardizes continuation of the optional Medicaid drug benefit, or other benefits at current levels.

The goals of the EBRx program are to: identify differences between medication options; recommend inclusion on the PDL of superior medications, if they exist; enhance predictability and reduce costs of medications whenever possible; and to provide access to medications not on the PDL through Prior Authorization Call Center activities. These efforts are hoped to ensure the continued ability of the state to provide appropriate medical coverage for Arkansas' Medicaid and ARKids recipients.

Preferred Drug List Summary

PDL CATEGORIES, SELECTIONS, RATIONALE, AND SPECIAL CONSIDERATIONS

Medication Class	Medicaid Preferred Agents (Brand Name Agents in Bold)	Drug Review Committee Recommendation Summary	Special Considerations
Less Sedating Antihistamines	loratadine	No difference in patient total symptom scores	Patients under age 2 years
Proton Pump Inhibitors	Prevacid capsules Nexium capsules Prevacid Solutabs	No difference in outcomes with equipotent dosing	Patients under age 7 years, Patients with feeding tubes
HMG-CoA Reductase Inhibitors (statins)	Zocor (generic now available)	Three agents superior to others based on prevention of heart attacks	Need for more potent agent
Calcium Channel Blockers	diltiazem ER capsules (equiv to Dilacor XR) Dynacirc CR Norvasc nifedipine ER tablets verapamil SR tablets	Diltiazem, verapamil, amlodipine and at least one other dihydropyridine should be available.	Dosage strengths of extended release diltiazem not available as Dilacor XR
Beta Blockers	atenolol metoprolol tartrate propranolol IR bisoprolol (only for CHF) Toprol XL (only for CHF) (generic now available) carvedilol (only for CHF)	No significant differences among the agents for most indications although there are differences in approved indications and data supporting use of specific products in specific conditions. 3 agents superior for treatment of congestive heart failure.	Diagnosis of Congestive Heart Failure
Long-Acting Opioids	methadone morphine sulfate ER tablets	No clinical advantage for one agent over another for treatment of chronic pain.	Terminal cancer diagnosis, Patients with long-term care eligibility, Patients unable to swallow pills
Angiotensin-Converting Enzyme (ACE) Inhibitors	Altace (generic now available) benazepril lisinopril captopril benazepril/amlodipine	No significant differences among the agents for most indications although there are differences in approved indications and data supporting use of specific products in specific conditions.	Patients under age 18 years
Medication Class	Medicaid Preferred Agents (Brand Name Agents in Bold)	Drug Review Committee Recommendation Summary	Special Considerations

Serotonin 5-HT1 Receptor Agonists (triptans)	Maxalt Maxalt MLT Imitrex tablets, nasal spray, injection Trexima	No significant difference among the agents that any one agent is clinically superior to another, different dosage forms should be available	Criteria in place for injectable formulation
Angiotensin II Receptor Blockers	Cozaar, Hyzaar Diovan, Diovan HCT	No significant advantage or disadvantage among the agents.	Congestive Heart Failure
Skeletal Muscle Relaxants	chlorzoxazone cyclobenzaprine 10mg methocarbamol baclofen (spasticity only) tizanidine (spasticity only)	Muscle spasms and spasticity disorders have different preferred agents, no advantage of one product over another.	None
Systemic Estrogens	estradiol 0.5mg, 1mg, 2mg estropipate	No difference in the products at equipotent doses. At least one oral and one topical product should be available	None
Non-Benzodiazepine Sedative Hypnotics	Ambien CR Rozerem Sonata zolpidem	No significant differences among the agents.	None
Targeted Immune Modulators	Enbrel Humira Raptiva	No significant differences among the agents for most indications although there are differences in approved indications and data supporting use of specific products in specific conditions.	Subject to DUR clinical edits
Inhaled Corticosteroids	Asmanex Azmacort (removed after contract terminated) Flovent (only to age 12)	No significant differences among the products at equipotent doses	Patients under age of 12 years
Anticholinergics for Overactive Bladder	Detrol LA oxybutinin syrup, 5mg tablet Vesicare	No significant differences among the products at equipotent doses. None particularly effective	Patients under age of 18 years with spina bifida diagnosis
Antiemetics 5-HT3 and NK1 Receptor Antagonists	ondansetron	No significant differences among the products at equipotent doses.	None
Nasal Corticosteroids	Nasacort AQ Nasonex	No significant differences among the agents.	None
Medication Class	Medicaid Preferred Agents (Brand Name Agents in Bold)	Drug Review Committee Recommendation Summary	Special Considerations
Antidiabetics-meglitinides	Starlix	At least one agent from each of the sub-classes of antidiabetics	None

Antidiabetics-First Generation Sulfonylureas	chlorpropamide tolazamide	should be included. No significant differences in efficacy among the agents.	
Antidiabetics-Second Generation Sulfonylureas	glimepiride glipizide glyburide glyburide micronized metformin metformin/glipizide metformin/glyburide		
Antidiabetics-Thiazoladinediones	Actos 30mg, 45mg Actosplus Met Avandamet Avandaryl Avandia		
Antidepressants	bupropion regular release citalopram fluoxetine 10mg,20mg caps, 20mg/5ml solution Lexapro 10mg,20mg mirtazapine 15mg,30mg,45mg paroxetine Pexeva sertraline venlafaxine regular release Wellbutrin XL (generic now available)	No significant differences in efficacy among the agents but at least 3 should be available due to high initial failure rates. Fluoxetine should be available to those<18yo	Patients stable and compliant on non-preferred agents.
Beta ₂ Agonists	Short Acting albuterol 90mcg inhaler albuterol 5mg/ml solution albuterol 0.83mg/ml solution Maxair Autohaler Proair HFA Ventolin HFA Long Acting Serevent Diskus	No significant differences among the agents in regards to efficacy or safety.	Long acting agents still subject to DUR clinical criteria edits.
Medication Class	Medicaid Preferred Agents (Brand Name Agents in Bold)	Drug Review Committee Recommendation Summary	Special Considerations
NSAIDs	ibuprofen suspension and strengths above 200mg indomethacin 25mg ketoprofen 50mg,75mg ketorolac	No significant differences exist among the agents in regards to safety or efficacy. At least 3 agents should be available.	None.

	<p>meloxicam 7.5,15mg naproxen 250mg,375mg,500mg naproxen sodium 275mg,550mg naproxen 375mg, 550mg enteric coated tablets piroxicam salsalate</p>		
ADD/ADHD	<p>amphetamine salts Adderall XR Focalin Focalin XR Concerta Daytrana methylphenidate tablets</p>	<p>At least 1 IR and SR methylphenidate and amphetamine preparation should be available. Absent some co-morbidities, methylphenidate and amphetamines are more likely to be appropriate initial choices than atomoxetine.</p>	<p>Patients compliant on non- preferred agents.</p>

FINANCIAL IMPACT OF PDL SELECTIONS

COST SAVINGS TO THE STATE RESULTING FROM THE PDL

METHOD OF ESTIMATING COSTS AVOIDED/SAVINGS

Products placed on the Preferred Drug List (PDL) represent therapies with proven advantages over other alternatives, or cost-effective selections in categories where no important differences between products can be found. Even though the foundation of the PDL is clinical, it has impacted the net medication costs for Arkansas Medicaid. Estimates of the cost impact of PDL selections are presented in this section. The costs for a medication category could be either increased or decreased as a consequence of the PDL.

Several factors make it likely that medication costs in a drug category will decrease after preferred agents are selected. First, manufacturers of patent-protected, single source products offer supplemental rebates to Arkansas Medicaid in consideration of inclusion on the Preferred Drug List. Selection as a preferred agent has significant impact on product sales and market share, and manufacturers often generate higher sales from Arkansas Medicaid if their products are selected as preferred agents. These supplemental rebate offers ensure Arkansas Medicaid lower net costs than without the PDL. Second, there are situations where no important clinical differences exist among the medications in a category. In many cases there are less expensive, equally effective generic medications available at lower costs than single source agents in a drug category. Where there is the opportunity to gain all important clinical benefits offered by a group of drugs, while using a lower cost agent, these agents are selected for the PDL.

These estimates of medication costs avoided are calculated with estimates of the Medicaid net cost per prescription. Two estimates of net costs are made. One value is based on the weighted average net cost per prescription in a drug category immediately prior to the preferred drug selection. This average net cost per prescription represents the expected Medicaid net cost which would have been incurred without the PDL. It is important to remember that the estimated expected Medicaid net cost is not adjusted for price increases imposed after the PDL effective date for the category. Multiplying the expected net cost per prescription by the total number of prescriptions dispensed in the current period yields the Estimated Expected Costs. The second estimate is based on current Medicaid net costs for preferred agents. These costs are multiplied by the prescription volumes for each preferred drug. The total net costs estimated for each of the non-preferred drugs currently used is added to this result. This estimate is called the Post-PDL Net Cost Estimate. The difference between the Estimated Expected Costs and the Post-PDL Net Cost Estimate is our estimate of costs avoided (or incurred) as a consequence of the PDL.

The reported savings or costs avoided do not consider the impact of PDL decisions on total care costs. There may be either increases or decreases in others categories of Medicaid spending as a result of the PDL. There may also be shifts to or from particular drug categories as a consequence of the PDL recommendations. Along with the EBRx staff, UAMS' College of Pharmacy, Pharmaceutical Evaluation and Policy Division conducts ongoing analyses and reviews of the impact of the PDL on total Medicaid costs.

OVERALL RESULTS

Due to difficulty with obtaining accurate rebate amounts, financial information is not available at this time. An addendum to the quarterly report containing the financial information will be released as soon as it becomes available. There were no significant changes in the most recent quarter, and financial results are expected to be similar to those reported in the prior Quarterly Report.

Prior Authorization Call Center Statistics

P.A. CALL CENTER OPERATIONS AS A RESULT OF THE PDL

“Non-preferred” medications continue to be available to Medicaid recipients, but require prior authorization. Two processes are in place to provide prior authorization. The first is a computer-based system called Smart-PA. If the patient meets predetermined authorization guidelines, Smart-PA can grant an instantaneous prior authorization at the pharmacy counter with no additional effort by the provider or pharmacist. This occurs as a prescription claim is processed at the pharmacy

The second prior authorization process is the PDL Call Center. This center approves or denies prior authorization requests from physicians for products that have been placed in non-preferred status. The approval, denial, and appeal of denials are handled by the clinical pharmacists and medical directors of the EBRx Program. The statistics below represent the call center’s activity for the most recent quarter and the current fiscal year to date.

PA Call Center Statistics	3Q 2007	4Q 2007	1Q 2008	FY 2008 to date
Incoming Calls from Healthcare Professionals	8441	7029	6297	21,767
Number of SmartPA Tickets Created	5766	4382	4915	15,063
Total Number of P.A. Requests at the Call Center	5362	4017	3439	12,818
Total Number of P.A. Requests Approved at the Call Center	3888	2944	2429	9261
Call Center P.A. Approval Percentage	73%	73%	71%	72%
Point of Sale SmartPA Requests	161,037	170,859	172,815	504,711
Point of Sale SmartPA Approvals	126,153	140,288	144,884	411,325
Point of Sale SmartPA Approval Percentage	78%	82%	84%	81%
Average Call Duration	2 min 35 sec	2 min 16 sec	2 min 26 sec	2 min 26 sec

Budget Update

A GENERAL OVERVIEW OF THE PROGRAM BUDGET

The Arkansas Medicaid Evidence-based Prescription Drug Program budget and expenditures to date are presented below. There remain a number of personnel positions initially budgeted but not filled. If needs for additional program personnel arise, the program will work within the existing budget to ensure that service obligations are met. At the end of 1Q 08, the program was approximately \$2,668,000 under budget for the current fiscal year.

	SFY08 Budget	SFY08 Expenditures (to date)
Personnel –(Salary and Fringes, includes DRC stipends)	2,496,381	899,036
Miscellaneous – (Supplies, Travel, etc)	150,750	24,017
Equipment – (computers, phones, furniture, renovation)	13,000	0
Indirect Costs	1,429,451	498,449
TOTAL	4,089,582	1,421,502

Data Evaluation

TRACKING OUTCOMES OF THE PDL DECISIONS

PEP Division Activities

One of the most important aspects of the EBRx program is the evaluation of Medicaid data to determine what the long term ramifications of the PDL decisions are. Through the College of Pharmacy's Pharmaceutical Evaluation and Policy (PEP) Division, the Medicaid claims database is analyzed to determine impacts to the Medicaid program, beyond potential changes in medication costs.

There have been no new analyses generated in the PEP division relating to the Evidence-based Prescription Drug Program. As the year progresses, more PEP division analyses should be forthcoming.

Other EBRx Activities

Work continues on the grant project funded by the Attorney General Consumer and Prescriber Grant Program. This program was funded from the settlement paid by Pfizer/Pharmacia relating to illegal promotion of Neurontin (gabapentin) for uses not approved by the FDA. UAMS College of Pharmacy was awarded \$370,000 over two years to study approaches to influence prescribers of medications for uses which are not approved by the Food and Drug Administration.

The project will focus on uses of antidepressants in Arkansas children. An outline of the educational curriculum has been prepared, and in coming months will be further developed with the assistance of the Arkansas Foundation for Medical Care. The Quality Improvement Organization will also assist in delivering the educational curriculum to Arkansas providers, as a subcontractor to the grant program

Drug Review Committee

Activities

Date: January 17, 2008

Subject: DRC Recommendations to DCC and DHS

To: DHHS, DCC, Dean's Office

From: Henry F. Simmons, Jr., M.D., Ph.D. Chairman DRC

At its 01/17/08 meeting, the Drug Review Committee considered the potential toxicity and therapeutic roles of various proton pump inhibitors and received public input on medications for neuropathic pain.

Indications under consideration

Gastroesophageal reflux disease [GERD], peptic ulcer disease [PUD], NSAID-induced ulcer in adults and children

Agents under consideration

Esomeprazole [Nexium]

Lansoprazole [Prevacid]

Omeprazole [Prilosec]

Omeprazole/sodium bicarbonate [Zegerid]

Pantoprazole [Protonix]

Rabeprazole [Aciphex]

Discussion

After reviewing the conclusions reached at the DRC meeting of 05/17/07 concerning PPIs and its current understanding of the bulk of the best available evidence regarding equivalent doses of the captioned agents for the specified indications, the Committee unanimously decided to leave its recommendations to DCC and DHS unchanged. They follow.

There is insufficient evidence at this time to consider Zegerid as a separate agent.

There is not enough pediatric data at this time to consider treatment in children with the same level of confidence that exists for adults.

None of the agents differ in comparative safety or occurrence of clinically significant adverse events to the degree that one or more should be stricken from further consideration.

The five agents do not differ to a clinically significant degree in their ability to manage symptoms of GERD in most adults.

The five agents do not differ from a clinical standpoint in their ability to manage peptic ulcers in adults.

The five agents do not differ from a clinical standpoint in their ability to manage NSAID-induced ulcers in adults.

The five agents do not differ among adult subgroups based upon demographics, other medications, or comorbidities in terms effectiveness or number of adverse effects.

Solutabs should be available for patients with feeding tubes and for those who cannot swallow tablets or capsules.

Respectfully submitted,

Henry F. Simmons, Jr., MD., Ph.D.
January 17, 2008

Date: February 21, 2008

Subject: DRC Recommendations to DCC and DHS

To: DHHS, DCC, Dean's Office

From: Henry F. Simmons, Jr., M.D., Ph.D. Chairman DRC

At its 02/21/08 meeting, the Drug Review Committee considered the potential toxicity and therapeutic roles of various medications for neuropathic pain and received public input on antihyperlipidemics.

Indications under consideration

Neuropathic pain

Agents under consideration with labeled indications for some kinds of neuropathic pain

Antiepileptics

Gabapentin [Neurontin] for postherpetic neuralgia

Pregabalin [Lyrica] for diabetic neuropathy and postherpetic neuralgia

Carbamazepine [Tegretol, Tegretol XR] for trigeminal neuralgia

SNRI antidepressants

Duloxetine [Cymbalta] for diabetic neuropathy

Topical analgesic

Lidocaine patch 5% for postherpetic neuralgia

Agents under consideration without labeled indications for neuropathic pain syndromes

Antiepileptics

Lamotrigine [Lamictal]

Topiramate [Topamax]

Oxcarbazepine [Trileptal]

Valproic acid/divalproex [Depakote and Depakene respectively]

SNRI antidepressants

Venlafaxin [Effexor and Effexor XR]

Tricyclic antidepressants

Amitriptyline [Elavil]

Desipramine [Norpramin]

Nortriptyline [Pamelo]

Imipramine [Tofranil]

Doxepin [Sinequan]

SSRI antidepressants

Citalopram [Celexa]

Fluoxetine [Prozac]

Paroxetine [Paxil]

Setraline [Zoloft]

Escitalopram [Lexapro]

NMDA receptor antagonists

Dextromethorphan [several brands]

Topical analgesics

Lidocaine ointment [Anestacon, Xylocaine]

Discussion

After discussing the captioned medications and reviewing related issues with Dr. Roger Chou of EPC, the Committee unanimously approved a motion made by Dr. Cowherd and seconded by Dr. Smith to offer DCC and DHS the following recommendations for their consideration:

One or more each of the antiepileptics, serotonin norepinephrine reuptake inhibitors, tricyclic antidepressants and topical lidocaine preparations that are demonstrably effective against placebo should be available.

Specifically,

At least two antiepileptics should be available and if only two, then either gabapentin or pregrabolin and carbamazepine,

At least one serotonin norepinephrine reuptake inhibitor should be available and if only one, then duloxetine

At least two tricyclic antidepressants should be available and if only two, then amitriptyline and nortriptyline.

At least one topical lidocaine preparation should be available.

When indicated, a topical lidocaine preparation should be available for patients who cannot take oral medications.

Carbamazepine should be available for patients with trigeminal neuralgia.

Respectfully submitted,

Henry F. Simmons, Jr., MD., Ph.D.

February 21, 2008

Date: March 20, 2008

Subject: DRC Recommendations to DCC and DHS

To: DHS, DCC, Dean's Office

**From: Henry F. Simmons, Jr., MD, Ph.D.
Chairman DRC**

At its 03/20/08 meeting, the Drug Review Committee considered the potential toxicity and therapeutic roles of atorvastatin, fluvastatin, pravastatin, rosuvastatin, simvastatin and lovastatin. It also considered fixed dose combination products including Advicor, Simcor and Vytorin. Ms. Carson through a recording and Dr. McDonough by telephone conference addressed the Committee telephonically regarding the EPC's views on the individual statins and combination drugs respectively and responded to questions.

The voting members of the Committee made the following formal recommendations based upon their perception of the bulk of the best available evidence with the understanding that comparable doses of each drug are used.

1. None of the six drugs differ significantly in either the incidence or the nature of clinically evident complications in patients of a particular sex, age or race when appropriately dosed.
2. None of the six drugs have been proven more efficacious for patients of a particular sex, age or race.
3. Atorvastatin, simvastatin, pravastatin, fluvastatin and lovastatin all improve some primary health outcomes. However, lovastatin lacks data on intermediate outcomes.
4. Atorvastatin, simvastatin, pravastatin and rosuvastatin are all effective in reducing LDL cholesterol in patients with moderate elevations. Furthermore, all have both primary and intermediate outcome data except rosuvastatin which lacks primary outcome data. At least two of these agents with primary outcome data should be available. [The Committee defines the relative elevations requiring reduction as follows: low < 35%, moderate 35 to 50%, and high > 50%.]
5. Either rosuvastatin or atorvastatin should be available for patients requiring greater than 50% reduction.
6. Atorvastatin, simvastatin, pravastatin and rosuvastatin all increase HDL-c. Of these all have primary outcome data except rosuvastatin.
7. The Committee also offers the following comment: It is not possible to make generic recommendations for individuals having certain co-morbidities, taking potentially interacting drugs or experiencing refractory hyperlipidemias. However, pravastatin is a good potential choice for patients taking cytochrome P450 inhibitors and should be available to such patients. Various other cases will quite possibly need to be addressed in the prior authorization process.
8. The Committee voted to table discussion of the three combination drugs Vytorin, Simcor and Advicor pending receipt of additional information about primary and intermediate outcomes.

Respectfully,

Henry F. Simmons, Jr., MD, Ph.D.