

**DUR Board Meeting
March 2, 2009
Heritage Center**

1pm



**North Dakota Medicaid
DUR Board Meeting
Agenda
Heritage Center
March 2, 2009
1pm**

1. Administrative items
 - Travel vouchers
 - Board members sign in

2. Old business
 - Review and approval of minutes of 12/01/08 meeting
 - Budget update
 - Implementation of tablet splitting
 - Yearly PA review
 - Antihistamines
 - PPIs
 - COX-II/NSAIDs
 - Revatio
 - Actoplus met
 - Azasite/Quixin

3. New business
 - Legislative update
 - Review of Strattera and stimulants in combination
 - Review of Aczone
 - Criteria recommendations
 - Upcoming meeting date/agenda
 - Adjourn to Executive Session to discuss patient profiles

4. Adjourn

Chairman
Brendan
Brendan
HID

Brendan
HID
HID
Brendan
Chairman
Chairman

Chairman

**Please remember to turn all cellular phones and pagers
to silent mode during the meeting.**

Drug Utilization Review (DUR) Meeting Minutes December 1, 2008

Members Present: Patricia Churchill, Norman Byers, Carrie Sorenson, Greg Pfister, Steve Irsfeld, Kim Krohn, Jeffrey Hostetter, John Savageau, Scott Setzepfandt, Leeann Ness, Carlotta McCleary and Todd Twogood.

Members Absent: Cheryl Huber

Medicaid Pharmacy Department: Brendan Joyce, Gary Betting

HID Staff Present: Candace Rieth

Chair, C. Sorenson called the meeting to order at 1:05pm. C. Sorenson introduced the new DUR Board member, Steve Irsfeld. Steve will replace Bob Treitline as a pharmacist member of the Board. Chair, C. Sorenson asked for a motion to approve the minutes from the September meeting. N. Byers moved that the minutes be approved and J. Hostetter seconded the motion. Chair, C. Sorenson called for a voice vote to approve the minutes. The motion passed.

Budget Update

B. Joyce gave the budget update. In state fiscal year 2006-2007, the net drug spend was 20.2 million dollars. In 2007-2008 the net drug spend was 19.3 million dollars. This was a decrease of approximately 4.5%. Prior to Part-D, rebate collections were approximately 20-24% of drug expenditures. After Part-D, rebate collections are approximately 30-36%. Both the trend of the drug spends and the trend of rebates is consistent with other states.

Second Review of Triptans

At the September meeting, N. Byers made a motion to make Imitrex first line for North Dakota Medicaid recipients. J. Kelloway, representing GSK, spoke on behalf of Treximet. C. Knutson, a provider from Fargo, spoke regarding the treatment of migraines. J. Hostetter made a motion to amend the original motion to include two points. Once a patient obtains a prior authorization for a triptan, all triptans in the class will be allowed for that patient without an additional prior authorization and patients will be grandfathered for life on current therapy. Chair, C. Sorenson called for a voice vote on the amendment with no audible dissent. Chair, C. Sorenson called for a voice vote to approve the original motion. The motion passed with one audible dissent.

Update on Smoking Cessation Program

Michelle Walker spoke on behalf of the North Dakota Department of Health. Michelle updated the Board on the smoking cessation program. Once a patient enrolls with the Quit Line, a recommendation for treatment will be sent to the patient. Smoking cessation medications will be allowed once a prior authorization has been requested. The process is very close to implementation.

Review of Vusion

At the September DUR meeting, T. Twogood made a motion to prior authorize Vusion. This will be the second review of this topic. There was no public comment. Chair, C. Sorenson called for a voice vote. The motion passed with no audible dissent.

Review of Statins

B. Joyce reviewed statin utilization with the Board. R. Oatfield, a provider from Bismarck, spoke regarding treatment with statins. After much discussion, the review of statins was tabled.

Yearly PA Review

The Board reviews products annually that have previously been placed on prior authorization. This allows the Board a chance to update the prior authorization forms and criteria. Solodyn, Oracea, Oxycontin, Short Acting Beta Agonists, Zanaflex capsules and Ketek were reviewed. No changes were made to the forms and criteria for these agents.

Criteria Recommendations

The recommended RDUR criteria enclosed in the packet were developed from product information provided by the manufacturers and usually are consistent with new indications, new drugs added, new warnings, etc. These proposed criteria will be added to the current set of criteria, and will be used in future DUR cycles. P. Churchill moved to approve the new criteria and G. Pfister seconded the motion. Chair, C. Sorenson called for a voice vote. The motion passed.

The next DUR board meeting will be held March 2, 2009. J. Hostetter made a motion to adjourn the meeting and J. Savageau seconded. Chair C. Sorenson adjourned the meeting at 3:25 pm.

Tablet Splitting Initiative

In March 2007, the DUR Board voted to implement a mandatory tablet splitting program that would be phased in slowly with the Board updated on a regular basis. Tablet splitting will be implemented with quantity limits on Lexapro and Lipitor.

Potential Cost Savings-Tablet Splitting 08/01/2008 – 10/31/2008

Name of Drug	Number of Rxs	Avg Cost/Rx	Total Reim	Potential Savings
Lexapro 5mg	4	\$82.30	\$ 335.12	
Lexapro 10mg	4	\$41.15	\$ 164.60	\$ 170.52
Lexapro 10mg	498	\$ 82.30	\$40,984.58	
Lexapro 20mg (1/2 tab)	498	\$ 43.68	\$21,752.64	\$19,231.04
Lipitor 10mg	332	\$ 76.36	\$25,351.03	
Lipitor 20mg (1/2 tab)	332	\$ 54.06	\$17,946.26	\$ 7,404.77
Lipitor 20mg	234	\$ 108.11	\$28,729.02	
Lipitor 40mg (1/2 tab)	234	\$ 58.13	\$13,602.42	\$15,126.60

Annualized Potential Cost Savings

Lexapro	\$77,606.24
Lipitor	<u>\$90,125.48</u>
Total	\$167,731.72



ACTOplus met Prior Authorization

Fax Completed Form to:
866-254-0761
For questions regarding this
Prior authorization, call
866-773-0695

Prior Authorization Vendor for ND Medicaid

ND Medicaid requires that patients receive Actos and Metformin separately.

***Note:**

- **Actos does not require PA**
- **Metformin does not require PA**
- **Patients must fail therapy on Actos and Metformin separately before a PA may be granted**

Part I: TO BE COMPLETED BY PHYSICIAN

Recipient Name	Recipient Date of Birth	Recipient Medicaid ID Number	
Physician Name			
Physician Medicaid Provider Number	Telephone Number	Fax Number	
Address	City	State	Zip Code
Requested Drug and Dosage: <input type="checkbox"/> ACTOplus met	Diagnosis for this request:		
Qualifications for coverage:			
<input type="checkbox"/> Failed both drugs separately	Start Date:	Dose:	
	End Date:	Frequency:	
Physician Signature		Date	

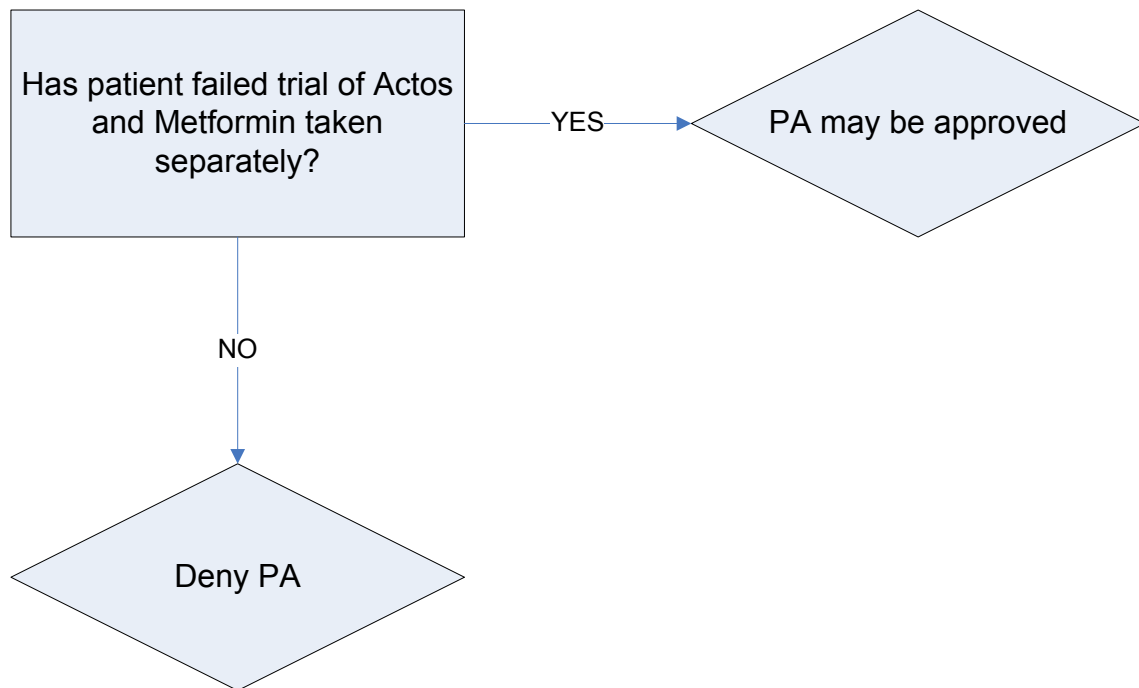
Part II: TO BE COMPLETED BY PHARMACY

PHARMACY NAME:			ND MEDICAID PROVIDER NUMBER:
PHONE NUMBER	FAX NUMBER	DRUG	NDC #

Part III: FOR OFFICIAL USE ONLY

Date Received	Initials:
Approved - Effective dates of PA: From: / / To: / /	Approved by:
Denied: (Reasons)	

North Dakota Department of Human Services
ACTOplus met Authorization Algorithm





Antihistamine PA Form

Fax Completed Form to:
866-254-0761
For questions regarding this
Prior authorization, call
866-773-0695

Prior Authorization Vendor for ND Medicaid

ND Medicaid requires that patients receiving antihistamines must use loratadine (Claritin® generic) and cetirizine (Zyrtec® generic) as step therapy.

***Note:**

- Loratadine OTC and cetirizine OTC (or prescription generic) may be prescribed **WITHOUT** prior authorization. Loratadine OTC and cetirizine OTC are covered by Medicaid when prescribed by a physician.
- Patients must use loratadine or cetirizine for a minimum of 14 days for the trial to be considered a failure. Patient preference does not constitute a failure. Patients must use fexofenadine as step 2 after loratadine or cetirizine failure.
- Net cost to Medicaid: Loratadine = cetirizine << Allegra (generic) << Clarinex = Xyzal

Part I: TO BE COMPLETED BY PHYSICIAN

RECIPIENT NAME:		RECIPIENT MEDICAID ID NUMBER:	
Recipient Date of birth: / /			
PHYSICIAN NAME:		PHYSICIAN MEDICAID ID NUMBER:	
Address:		Phone: ()	
City:		FAX: ()	
State:	Zip:		
REQUESTED DRUG: <input type="checkbox"/> Allegra (generic) <input type="checkbox"/> Clarinex <input type="checkbox"/> Xyzal		Requested Dosage: (must be completed) Diagnosis for this request:	
Qualifications for coverage:			
<input type="checkbox"/> Failed loratadine or cetirizine		Start Date:	Dose:
		End Date:	Frequency:
<input type="checkbox"/> Failed Allegra (generic) Step 2		Start Date:	Dose:
		End Date:	Frequency:
<input type="checkbox"/> Adverse reaction (attach FDA Medwatch form) to loratadine and cetirizine.			
<input type="checkbox"/> I confirm that I have considered a generic or other alternative and that the requested drug is expected to result in the successful medical management of the recipient.			
Physician Signature:		Date:	

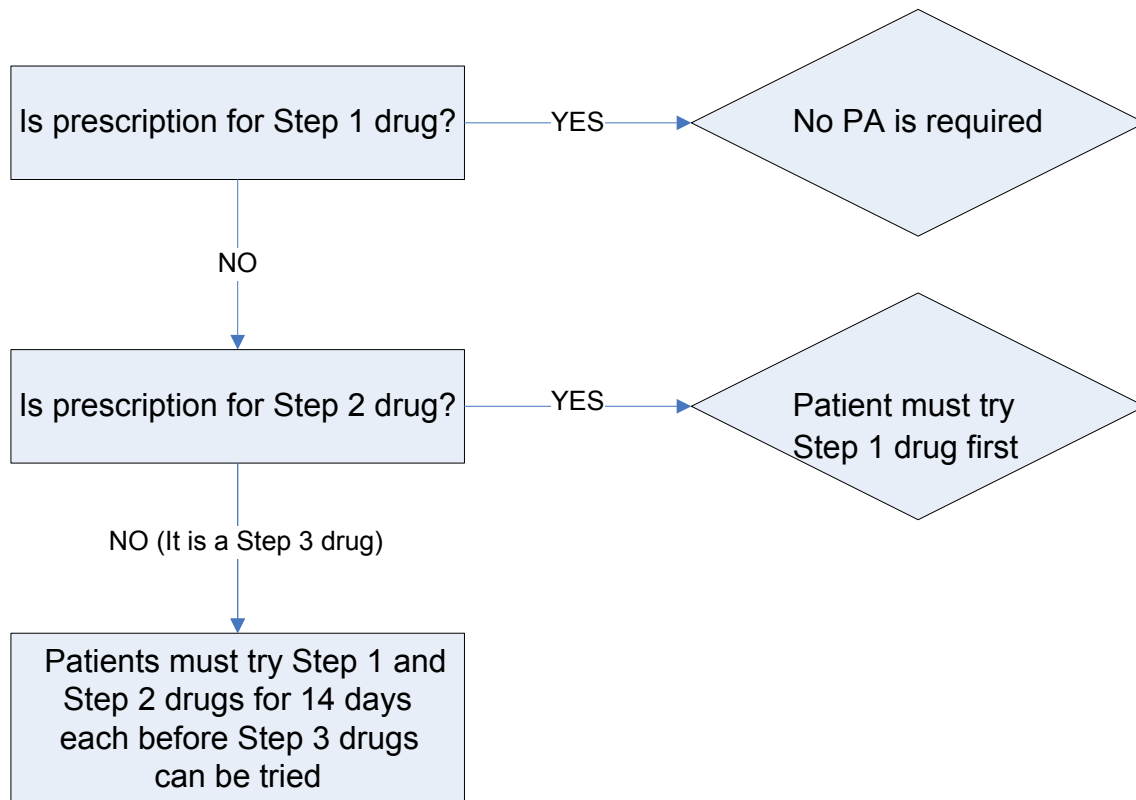
Part II: TO BE COMPLETED BY PHARMACY

PHARMACY NAME:	ND MEDICAID PROVIDER NUMBER:
Phone:	FAX:
Drug:	NDC#:

Part III: FOR OFFICIAL USE ONLY

Date: / /	Initials: _____
Approved -	
Effective dates of PA: From: / /	To: / /
Denied: (Reasons)	

North Dakota Department of Human Services Antihistamine Authorization Criteria Algorithm



Please Note:

Step 1 drug is defined as Loratadine OTC or Cetirizine

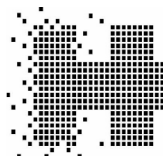
Step 2 drug is defined as Allegra (generic)

Step 3 drug is defined as Clarinex or Xyzal-must try Step 1 and Step 2 drugs before trying Step 3.

Net cost to Medicaid: Loratadine = cetirizine << Allegra (generic) << Clarinex = Xyzal

NORTH DAKOTA MEDICAID
Percentage Market Share Within Sub-Classes
Antihistamine

	FEB 04	OCT 08
All Antihistamine(No Subclass)		
ALLEGRA	25.95	0.00
ALLEGRA-D	0.00	0.00
ALLEGRA-D 12 HOUR	8.65	0.00
ALLEGRA-D 24 HOUR	0.00	0.00
CETIRIZINE HCL	0.00	29.79
CLARINEX	6.51	0.42
CLARINEX-D 24 HOUR	0.00	0.00
CLARITIN	0.84	0.63
CLARITIN-D 12 HOUR	0.37	0.00
CLARITIN-D 24 HOUR	0.09	0.00
FEXOFENADINE HCL	0.00	8.96
LORATADINE	9.58	57.29
LORATADINE D	0.00	0.00
LORATADINE-D	0.00	0.00
XYZAL	0.00	0.63
ZYRTEC	42.42	2.29
ZYRTEC-D	5.58	0.00



Prior Authorization Vendor for ND Medicaid

Note: ND Medicaid will not pay for Azasite or Quixin without documented failure of a first line antibiotic ophthalmic agent.

- First line agents include: sulfacetamide (Bleph10, etc.), erythromycin, bacitracin-polymyxin B (Polysporin), polymyxin B-neomycin-gramicidin (Neosporin), trimethoprim-polymyxin B (Polytrim) and gentamicin (Garamycin, etc.).

Part I: TO BE COMPLETED BY PHYSICIAN

RECIPIENT NAME:		RECIPIENT MEDICAID ID NUMBER:
Recipient Date of birth:		
PHYSICIAN NAME:		PHYSICIAN MEDICAID ID NUMBER:
Address:		Phone:
City:		FAX:
State:	Zip:	
REQUESTED DRUG:		Indication:
<input type="checkbox"/> Azasite <input type="checkbox"/> Quixin		<input type="checkbox"/> Deep penetrating wound <input type="checkbox"/> Pre/Post Cataract Surgery <input type="checkbox"/> Corneal ulcer
Physician Signature:		Date:

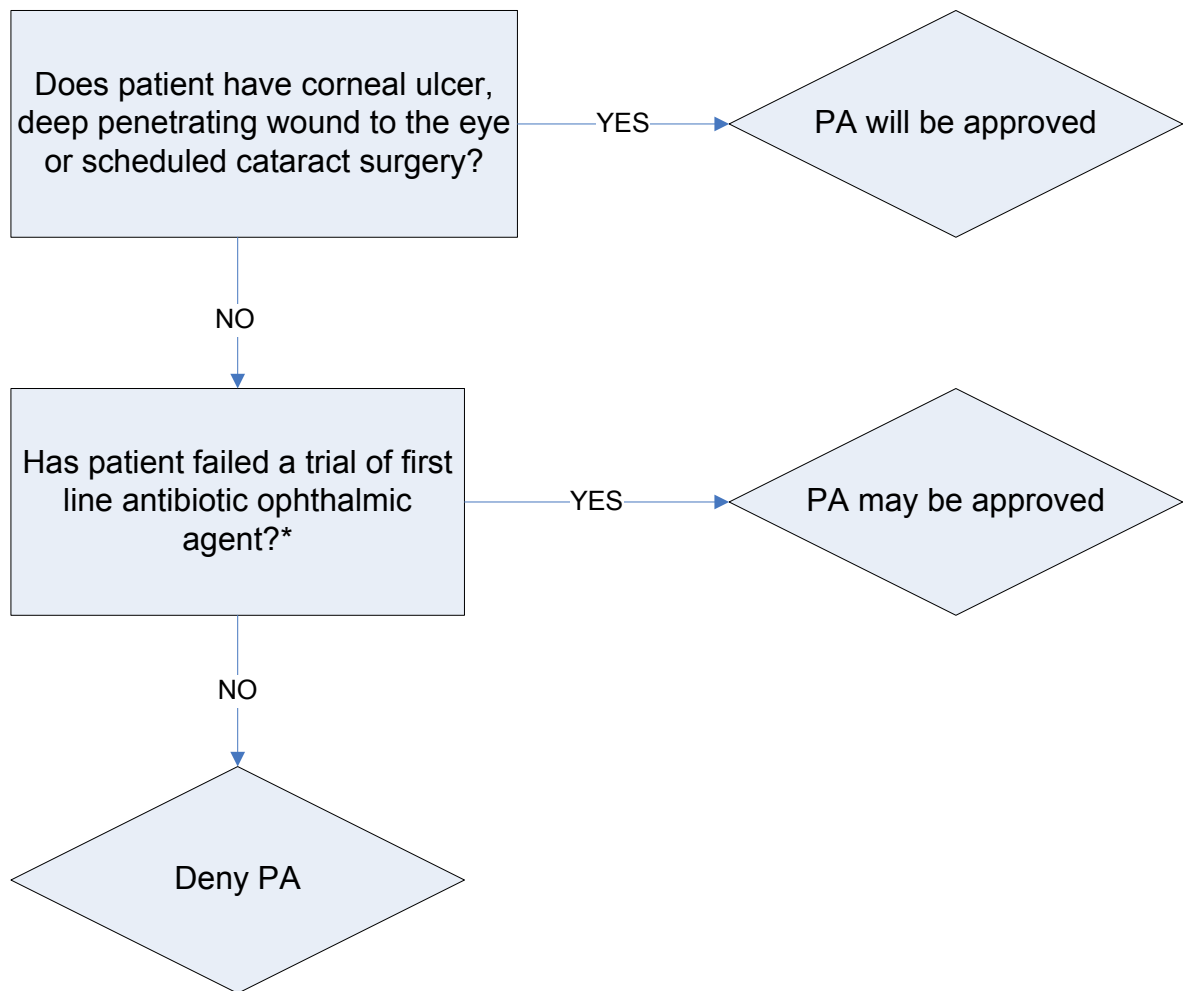
Part II: TO BE COMPLETED BY PHARMACY

PHARMACY NAME:	ND MEDICAID PROVIDER NUMBER:
Phone:	FAX:
Drug:	NDC#:

Part III: FOR OFFICIAL USE ONLY

Date: / /	Initials: _____
Approved - Effective dates of PA: From: / /	To: / /
Denied: (Reasons)	

North Dakota Department of Human Services Ophthalmic Anti-infective Authorization Algorithm



*First line agents include: sulfacetamide (Bleph 10, etc.), erythromycin, bacitracin-polymyxin B (Polysporin), polymyxin B-neomycin-gramicidin (Neosporin), trimethoprim-polymyxin B (Polytrim), gentamicin (Garamycin, etc.), ofloxacin (Ocuflox), and ciprofloxacin (Ciloxan).

NORTH DAKOTA MEDICAID
Percentage Market Share Within Sub-Classes
Ophthalmic Agents

	FEB 04	OCT 06	OCT 08
All Ophthalmic Agents(No Subclass)			
AK-CHLOR	0.00	0.00	0.00
AK-POLY-BAC	0.00	0.00	0.00
AK-SPORE	0.00	0.00	0.00
AK-SULF	0.00	0.00	0.00
AK-TRACIN	0.00	0.00	0.00
AKTOB	0.23	0.69	0.00
ALBA-3	0.00	0.00	0.00
AZASITE	0.00	0.00	0.00
BACITRACIN	1.62	0.34	0.60
BACITRACIN-POLYMYXIN	2.54	0.34	0.00
BACITRACIN/POLYMYXIN	0.00	0.00	0.00
BACITRACIN/POLYMYXIN B	0.00	0.00	0.00
CETAMIDE	0.00	0.00	0.00
CHLORAMPHENICOL	0.00	0.00	0.00
CHLOROMYCETIN	0.00	0.00	0.00
CILOXAN	20.09	1.72	0.90
CIPROFLOXACIN HCL	0.00	4.83	12.35
ERYTHROMYCIN	13.63	7.93	10.54
GARAMYCIN	0.00	0.00	0.00
GENTAK	5.31	6.90	1.51
GENTAMICIN SULFATE	23.79	26.55	33.43
GENTASOL	0.00	0.00	0.00
INFA-3	0.00	0.00	0.00
INFA-CHLOR	0.00	0.00	0.00
INFA-GEN	0.00	0.00	0.00
INFA-SULF	0.00	0.00	0.00
NEOCIDIN	0.00	0.00	0.00
NEOCIN-PG	0.00	0.00	0.00
NEOMYCIN/BACITRACIN/POLYMYXIN	0.00	0.00	0.00
NEOMYCIN/POLYMYXIN/GRAMICIDIN	0.00	0.00	0.00
NEOPOLYGRAM	0.00	0.00	0.00
NEOPTIC	0.00	0.00	0.00
NEOSPORIN	0.00	0.00	0.00
OCUFLOX	3.23	0.00	0.00
OFLOXACIN	0.00	0.69	1.51
P.N.	0.00	0.00	0.00
POLYCIDIN	0.00	0.00	0.00
POLYMYXIN B SUL/TRIMETHOPRIM	0.00	0.00	0.00
POLYTRACIN	0.00	0.00	0.00
QUIXIN	0.46	0.34	0.00
SODIUM SULAMYD	0.00	0.00	0.00
SPECTRO-BACITRACIN	0.00	0.00	0.00
SPECTRO-CHLOR	0.00	0.00	0.00
SPECTRO-GENTA	0.00	0.00	0.00
SPECTRO-POLYTRACIN	0.00	0.00	0.00
SPECTRO-SPORIN	0.00	0.00	0.00

SPECTRO-SULF	0.00	0.00	0.00
SULFACETAMIDE SODIUM	9.01	10.69	7.23
SULFAMIDE	0.00	0.00	0.00
TOBRAMYCIN SULFATE	7.62	6.21	11.45
TOBREX	0.92	1.03	0.30
TOMYCINE	0.00	0.00	0.00
TRI-BIOTIC	0.00	0.00	0.00
TRIBIOTIC	0.00	0.00	0.00
TRIPLE ANTIBIOTIC	0.00	0.00	0.00
VIGAMOX	7.85	30.00	17.77
ZYMAR	3.70	1.72	2.41



BRAND NAME NSAID/COX-II PA FORM

Fax Completed Form to:
866-254-0761
For questions regarding this
Prior authorization, call
866-773-0695

Prior Authorization Vendor for ND Medicaid

ND Medicaid requires that patients using brand name NSAIDs or COX-II drugs must use a generic NSAID as first line.

***Note: The PA will be approved if one of the following criteria is met:**

- Failed two trials of prescribed NSAID
- Recipient is on warfarin or corticosteroid therapy
- Recipient has history of gastric or duodenal ulcer or has comorbidities of GI bleed, perforation or obstruction
- Recipient has history of endoscopically documented NSAID induced gastritis with GI bleed

Part I: TO BE COMPLETED BY PHYSICIAN

Recipient Name		Recipient Date of Birth		Recipient Medicaid ID Number	
Physician Name					
Physician Medicaid Provider Number		Telephone Number		Fax Number	
Address		City		State	Zip Code
Requested Drug: <input type="checkbox"/> Celebrex <input type="checkbox"/> Other _____	Requested Dosage:	Diagnosis for this request: <input type="checkbox"/> Warfarin/Corticosteroid therapy <input type="checkbox"/> Gastric or duodenal ulcer <input type="checkbox"/> GI Bleed, perforation or obstruction <input type="checkbox"/> Endoscopically documented NSAID gastritis with GI Bleed			
Qualifications for coverage:					
<input type="checkbox"/> Failed NSAID therapy	Start Date	End Date	Dose	Frequency	
<input type="checkbox"/> Failed NSAID therapy	Start Date	End Date	Dose	Frequency	
<input type="checkbox"/> I confirm that I have considered a generic or other alternative and that the requested drug is expected to result in the successful medical management of the recipient.					
Physician Signature				Date	

Part II: TO BE COMPLETED BY PHARMACY

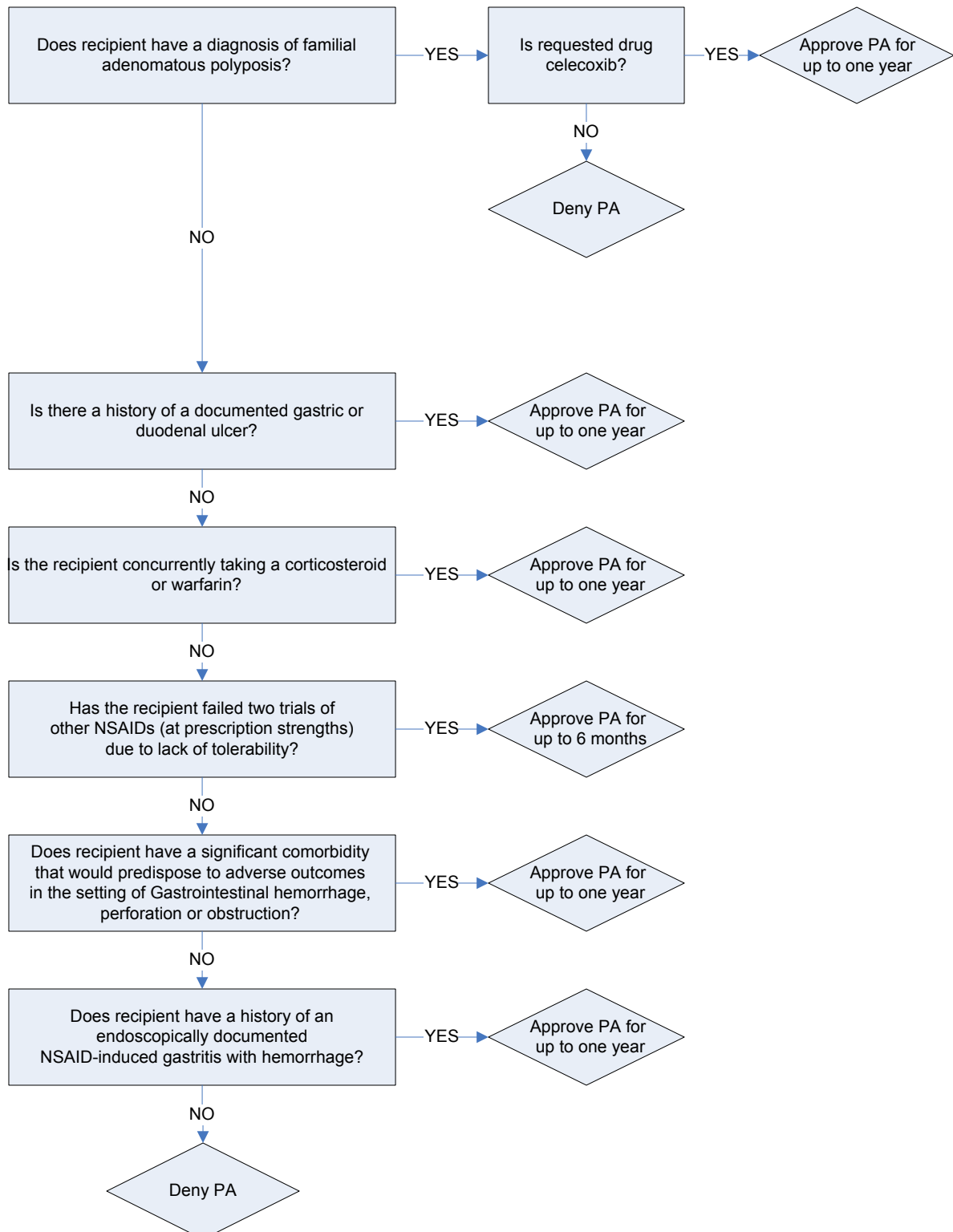
PHARMACY NAME:			ND MEDICAID PROVIDER NUMBER:
TELEPHONE NUMBER	FAX NUMBER	DRUG	NDC #

Part III: FOR OFFICIAL USE ONLY

Date Received	Initials:
Approved - Effective dates of PA: From: / / To: / /	Approved by:
Denied: (Reasons)	

North Dakota Department of Human Services

Name Brand NSAID/COX-II Authorization Algorithm



NORTH DAKOTA MEDICAID
Percentage Market Share Within Sub-Classes
NSAIDS/COXII

	FEB 04	FEB 05	OCT 08
All NSAIDS/COXII (No Subclass)			
ARTHROTEC 50	0.68	0.84	0.10
ARTHROTEC 75	0.47	0.74	0.10
BEXTRA	13.95	15.05	0.00
CELEBREX	30.08	28.61	4.45
CLINORIL	0.00	0.00	0.00
DICLOFENAC POTASSIUM	0.64	1.29	4.06
DICLOFENAC SODIUM	0.77	1.88	3.66
DIFLUNISAL	0.04	0.20	0.00
DOLOBID	0.00	0.00	0.00
EC-NAPROSYN	0.00	0.00	0.00
ETODOLAC	0.60	1.39	1.88
FELDENE	0.00	0.00	0.00
FENOPROFEN CALCIUM	0.00	0.00	0.00
FLECTOR	0.00	0.00	0.00
FLURBIPROFEN	0.09	0.74	0.20
FLURBIPROFEN SODIUM	0.00	0.00	0.00
HYDROCODONE BIT-IBUPROFEN	3.00	3.42	6.23
IBUPROFEN	16.99	23.61	38.48
IBUPROFEN CHILD	0.00	0.00	0.00
IBUPROFEN IB	0.00	0.00	0.00
IBUPROFEN M	0.00	0.00	0.00
IBUPROFEN PMR	0.00	0.00	0.00
INDOCIN	0.00	0.00	0.00
INDOCIN SR	0.00	0.00	0.00
INDOMETHACIN	1.41	1.68	2.57
KETOPROFEN	1.67	1.83	3.96
KETOROLAC TROMETHAMINE	2.05	1.73	2.27
LODINE	0.00	0.00	0.00
LODINE XL	0.00	0.00	0.00
MECLOFENAMATE SODIUM	0.04	0.20	0.00
MECLOMEN	0.00	0.00	0.00
MELOXICAM	0.00	0.00	6.13
MOBIC	0.86	3.22	0.00
MOTRIN	0.81	0.45	1.58
MOTRIN IB	0.00	0.00	0.00
MOTRIN MIGRAINE	0.00	0.00	0.00
NABUMETONE	1.63	3.02	2.37
NAPRELAN	0.00	0.00	0.00
NAPROSYN	0.17	0.10	0.00
NAPROXEN	5.13	6.53	15.83
NAPROXEN SODIUM	0.94	1.04	1.38
OXAPROZIN	0.39	0.50	1.38
PIROXICAM	0.26	0.84	2.67
PONSTEL	0.04	0.10	0.10
RELAFEN	0.04	0.00	0.00
SOLARAZE	0.00	0.00	0.00

SULINDAC	0.56	0.54	0.49
TOLECTIN 200	0.00	0.00	0.00
TOLECTIN 600	0.00	0.00	0.00
TOLECTIN DS	0.00	0.00	0.00
TOLMETIN SODIUM	0.17	0.05	0.00
TORADOL	0.00	0.00	0.00
VICOPROFEN	0.34	0.10	0.00
VIOXX	15.92	0.00	0.00
VOLTAREN	0.26	0.30	0.10
VOLTAREN-XR	0.00	0.00	0.00



Proton Pump Inhibitor PA Form

Fax Completed Form to:
866-254-0761
For questions regarding this prior
authorization, call:
866-773-0695

Prior Authorization Vendor for ND Medicaid

North Dakota Medicaid requires that patients receiving proton pump inhibitors must use **Prilosec OTC*** as first line.

*Note:

- **Prilosec OTC may be prescribed WITHOUT prior authorization. Prilosec OTC is covered by Medicaid when prescribed by a physician.**
- **Prior Authorization is NOT required for patients < 13 years of age.**
- **Patients must use Prilosec OTC for a minimum of 14 days for the trial to be considered a failure. Patient preference does not constitute a failure.**
- **Net cost to Medicaid: Prilosec OTC <<< Protonix < Prevacid < Omeprazole << Aciphex < Prilosec RX << Nexium.**

Part I: TO BE COMPLETED BY PHYSICIAN

Recipient Name	Recipient Date of Birth	Recipient Medicaid ID Number	
Physician Name			
			Zip Code
Requested Drug:	Requested Dosage (must be completed)		
	Diagnosis for this request		

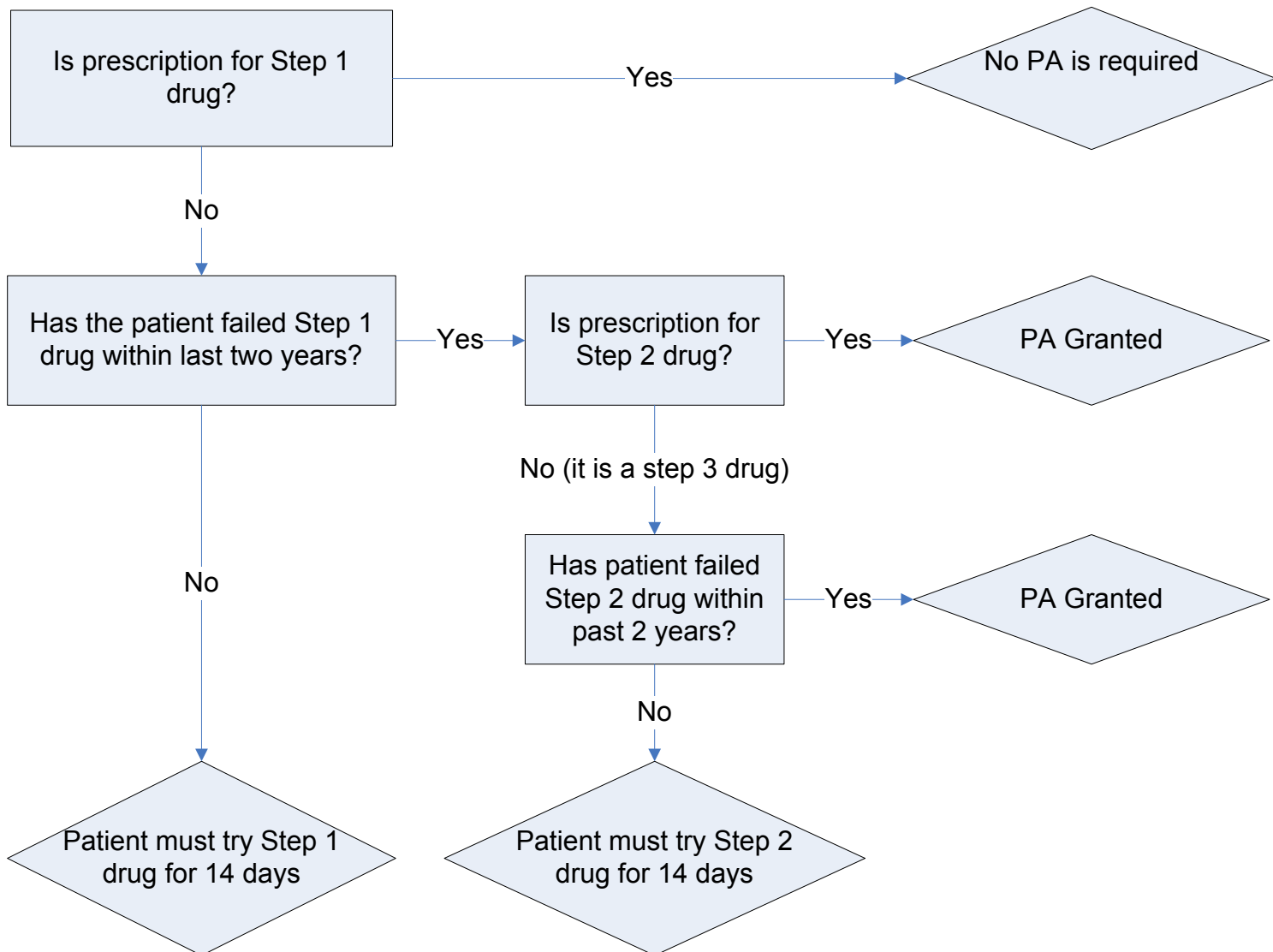
Qualifications for coverage:

Part II: TO BE COMPLETED BY PHARMACY - COMPLETE PART II AND FAX TO NUMBER AT TOP OF PAGE

Part III: FOR STATE USE ONLY

Date Received	Initials
Approved - Effective dates of PA From: / / To: / /	Approved By
Denied (Reasons)	

North Dakota Department of Human Services Proton Pump Inhibitor Authorization Criteria Algorithm



Please Note:

Step 1 drug is defined as Prilosec OTC

Step 2 drug is defined as Protonix, Prevacid (which is 3 times more expensive)

Step 3 drug is defined as Nexium, Aciphex (which is 5-8 times more expensive)

NORTH DAKOTA MEDICAID
Percentage Market Share Within Sub-Classes
Proton Pump Inhibitors

	FEB 04	OCT 08
All Proton Pump Inhibitors(No Subclass)		
ACIPHEX	4.93	1.01
NEXIUM	12.23	2.52
NEXIUM I.V.	0.00	0.00
OMEPRAZOLE	8.29	58.87
PANTOPRAZOLE SODIUM	0.00	6.45
PREVACID	23.88	15.32
PREVACID IV	0.00	0.00
PRILOSEC	2.06	0.10
PRILOSEC OTC	20.88	14.72
PROTONIX	27.73	1.01
PROTONIX IV	0.00	0.00



Revatio Prior Authorization Form

Fax Completed Form to:
866-254-0761
For questions regarding this
Prior authorization, call
866-773-0695

Prior Authorization Vendor for ND Medicaid

ND Medicaid requires that patients receiving Revatio must have a diagnosis of Pulmonary Arterial Hypertension based on WHO (Group I) Classification for Pulmonary Hypertension.

***Note:**

- *Patients taking Bosentan, Nitrates or Viagra/Levitra/Cialis will not receive a PA*

Part I: TO BE COMPLETED BY PHYSICIAN

Recipient Name	Recipient Date of Birth	Recipient Medicaid ID Number	
Physician Name			
Physician Medicaid Provider Number	Telephone Number	Fax Number	
Address	City	State	Zip Code
Requested Drug and Dosage: <input type="checkbox"/> Revatio	Diagnosis for this request:		
Qualifications for coverage: <input type="checkbox"/> Indication for the treatment of Pulmonary Arterial Hypertension (WHO Group I Classification)			
Physician Signature		Date	

Part II: TO BE COMPLETED BY PHARMACY

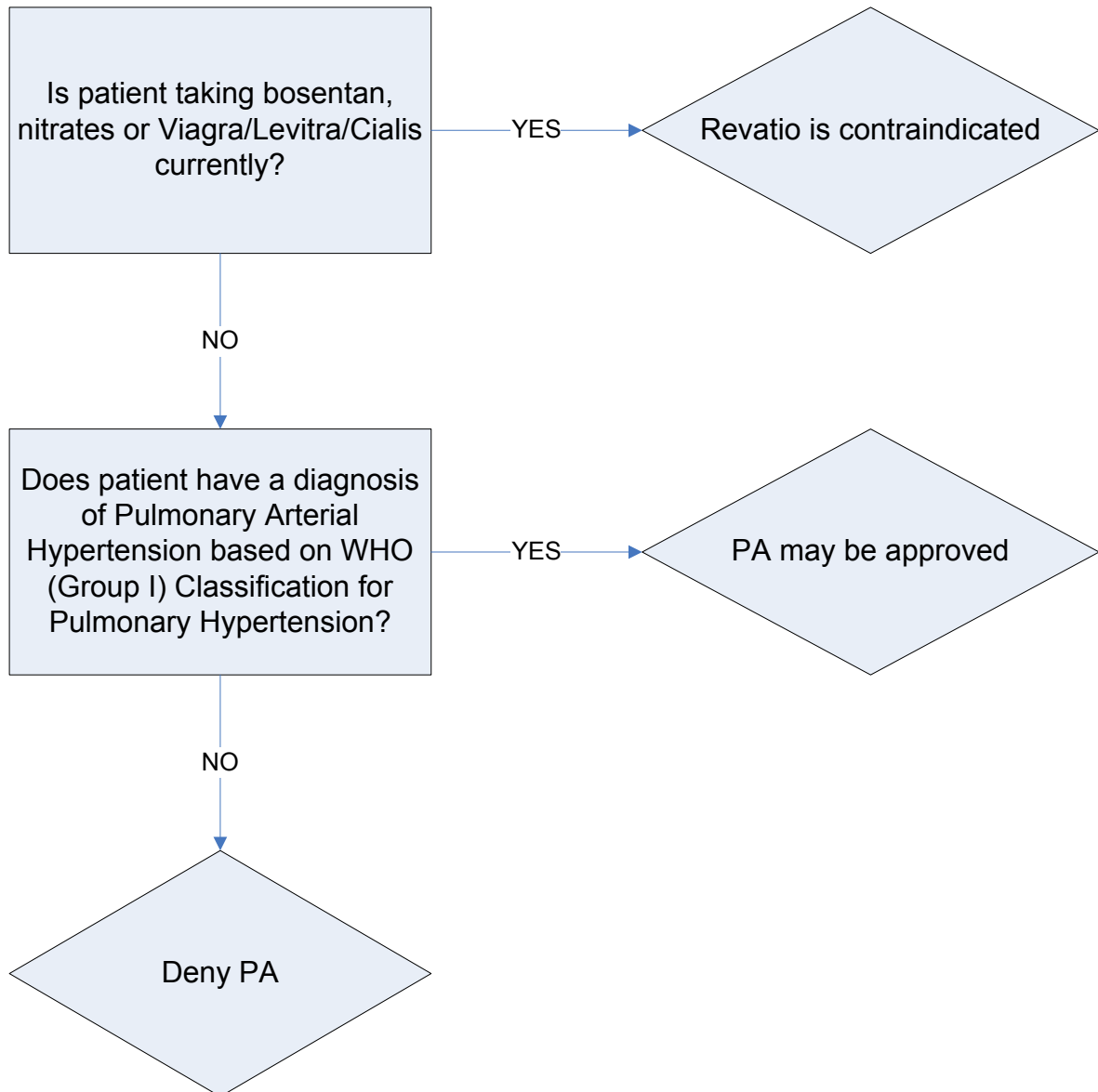
PHARMACY NAME:			ND MEDICAID PROVIDER NUMBER:
PHONE NUMBER	FAX NUMBER	DRUG	NDC #

Part III: FOR OFFICIAL USE ONLY

Date Received	Initials:
Approved - Effective dates of PA: From: / / To: / /	Approved by:
Denied: (Reasons)	

North Dakota Department of Human Services

Revatio Authorization Algorithm



North Dakota Department of Human Services
Pharmacotherapy Review
Strattera[®]
March 2, 2009

I. Overview

Most medications for ADHD are CNS stimulants, which are thought to work by blocking reuptake of norepinephrine and dopamine in the presynaptic neurons and increasing release of these neurotransmitters into the extraneural space. There is one non-stimulant medication for ADHD, atomoxetine (Strattera[®]), which is thought to work by a different mechanism. Atomoxetine is classified as a norepinephrine reuptake inhibitor and works by selectively inhibiting presynaptic norepinephrine transporters.¹

ADHD is a pervasive childhood problem, affecting approximately 3 to 5% of school age children. This amounts to about 2 million children. To put that in perspective, in a class of 25 to 30 children, it is likely that at least one child will be affected by ADHD.^{2,3} Children with ADHD are usually diagnosed between the ages of 6 to 12, as it is hard to diagnose much earlier than that. A diagnosis of ADHD is subjective in nature, with the provider looking for symptoms of inattention, hyperactivity, and impulsivity; symptoms that are frequent and severe enough to interfere with the child's and often, the family's ability to lead a normal life. These children, left undiagnosed or untreated, are at higher risk of self-injury, depression, low self-esteem, and a host of other societal disorders.³⁻⁵

Pharmacotherapy, along with behavior therapy and counseling, can certainly help those patients diagnosed with ADHD lead a normal and productive life.³ For many years, CNS stimulants have been considered first-line therapy for the treatment of ADHD. With the approval of atomoxetine in late 2002, patients now have another treatment option.⁶

II. Current Treatment Guidelines for ADHD

In October 2006, the American Academy of Child and Adolescent Psychiatry (AACAP) issued a new, multi-tiered treatment plan for the assessment and treatment of children and adolescents with Attention-Deficit/Hyperactivity Disorder:⁷

- 1) Develop a treatment plan that involves psychopharmacological and/or behavioral therapy and involves parents, teachers and caregivers. It is also important to recognize that ADHD is a chronic condition.
- 2) Medication selection:
 - a. The following medications are approved by the U.S. Food and Drug Administration (FDA) for the treatment of ADHD: dextroamphetamine (DEX), D- and D, L-methylphenidate (MPH), mixed salts amphetamine, and atomoxetine.
 - b. The American Academy of Pediatrics (2001) and the Texas Children's Medication Project (Pliska et al., 2006a) have recommended stimulants as the first line treatment for ADHD, particularly when no comorbidities are present.
 - c. CNS stimulants are highly efficacious in the treatment of ADHD. In double-blind placebo-controlled trials in both children and adults, 65% to 75% of subjects with ADHD have been determined to be clinical responders.
 - d. Evidence suggests the two stimulant types (MPH and amphetamine) are equally efficacious in the treatment of ADHD.
 - e. Long-acting forms of MPH are equally efficacious as the immediate-release forms and physicians may use long-acting forms as initial treatment; there is no need to titrate to the appropriate dose on short-acting forms.
 - f. Short-acting stimulants are often used as initial treatment in small children for whom there are no long-acting forms in a sufficiently low dose.

- g. Consider atomoxetine as the first medication for ADHD in individuals with an active substance abuse problem, comorbid anxiety, or tics.
- h. Atomoxetine is preferred if the patient experiences severe side effects to stimulants.
- i. If a patient fails to respond to trials of all of the above agents after an adequate length of time at appropriate doses for the agent, then the clinician should undertake a review of the patient's diagnosis of ADHD.
- j. Tricyclic antidepressants, bupropion, guanfacine and clonidine are used in the treatment of ADHD even though they are not approved by the FDA for this purpose. These agents are considered second line therapy, to be used only after behavior therapy in combination with stimulants or atomoxetine.⁸
- k. Patients should be assessed periodically to determine whether there is continued need for treatment or if symptoms have remitted.

III. Indication

Strattera is a selective norepinephrine reuptake inhibitor indicated for the treatment of Attention-Deficit/Hyperactivity Disorder (ADHD).⁹

IV. Pharmacokinetic Parameters

Atomoxetine is metabolized by the CYP2D6 system and dosing adjustments must be made in moderate to severe hepatic impairment. Table 1 summarizes the pharmacokinetic parameters for Strattera.

Table 1. Pharmacokinetic Parameters of Strattera

	(C _{max})	Metabolizing mechanism	Effects of hepatic/renal impairment
Strattera [†]	1 to 2 hours	98% protein bound; metabolized through the CYP2D6 system	Dosage adjustment recommended for patients with moderate to severe hepatic insufficiency.*

[†]Takes 4 to 6 weeks to reach optimal therapeutic efficacy.

*Dosing guidelines for hepatic impairment included in prescribing information.

V. Drug Interactions

- With other drugs that affect brain monoamine concentrations, there have been reports of serious, sometimes fatal reactions when taken with a monoamine oxidase inhibitor (MAOI). Strattera should not be taken with an MAOI, or within 2 weeks after discontinuing an MAOI.
- Paroxetine, fluoxetine, and quinidine are all CYP2D6 inhibitors; dosing of atomoxetine may need to be adjusted when given with any of these medications.
- Because of possible effects on blood pressure, Strattera should be used cautiously with pressor agents (e.g., dopamine, dobutamine).
- Strattera should be administered with caution to patients being treated with systemically-administered (oral or intravenous) albuterol (or other beta₂ agonists) because the action of albuterol on the cardiovascular system can be potentiated resulting in increases in heart rate and blood pressure.

VI. Warnings and Precautions

Serious Cardiovascular Events

Sudden death has been reported in association with atomoxetine treatment at usual doses in children and adolescents with structural cardiac abnormalities or other serious heart problems. Although some serious heart problems alone carry an increased risk of sudden death, atomoxetine generally should not be used in children or adolescents with known serious structural cardiac abnormalities, cardiomyopathy, serious heart rhythm abnormalities, or other serious cardiac problems that may place them at increased vulnerability to the noradrenergic effects of atomoxetine.

Children, adolescents, or adults who are being considered for treatment with atomoxetine should have a careful history (including assessment for a family history of sudden death or ventricular arrhythmia) and physical exam to assess for the presence of cardiac disease, and should receive further cardiac evaluation if findings suggest such disease. Patients who develop symptoms such as exertional chest pain, unexplained syncope, or other symptoms suggestive of cardiac disease during atomoxetine treatment should undergo a prompt cardiac evaluation.

Suicidal Ideation

Patients started on atomoxetine should be monitored for suicidal thinking and behavior, clinical worsening of symptoms, and unusual changes in behavior. The average risk of suicidal ideation in patients taking atomoxetine was 0.4% (5/1357 patients) versus none (0/851) in the placebo arm. There was 1 suicide attempt among these approximately 2200 patients, occurring in a patient treated with atomoxetine. Families and caregivers of pediatric patients being treated with atomoxetine should be alerted about the need to monitor patients for the emergence of suicidality, and to report such symptoms immediately to healthcare providers.

Severe Liver Injury

Postmarketing reports indicate that atomoxetine can cause severe liver injury in rare instances. Although no evidence of liver injury was detected in clinical trials of about 6,000 patients, there have been rare cases of clinically significant liver injury that were considered probably or possibly related to atomoxetine use. Strattera should be discontinued in patients with jaundice or laboratory evidence of liver injury, and should not be restarted.

Effects on Blood Pressure and Heart Rate

Atomoxetine should be used with caution in patients with hypertension, tachycardia, or cardiovascular or cerebrovascular disease because it can increase blood pressure and heart rate. Pulse and blood pressure should be measured at baseline, following atomoxetine dose increases, and periodically while on therapy.

Orthostatic hypotension and syncope have been reported in patients taking atomoxetine. Atomoxetine should be used with caution in any condition that may predispose patients to hypotension, or conditions associated with abrupt heart rate or blood pressure changes.

There have been spontaneous postmarketing reports of Raynaud's phenomenon (new onset and exacerbation of preexisting condition).

Emergence of New Psychotic or Manic Symptoms

Treatment emergent psychotic or manic symptoms, (e.g., hallucinations, delusional thinking, or mania) in children and adolescents without a prior history of psychotic illness or mania can be caused by atomoxetine at usual doses. If such symptoms occur, consideration should be given to a possible causal role of atomoxetine, and discontinuation of treatment.

Screening Patients for Bipolar Disorder

Particular care should be taken in treating ADHD in patients with comorbid bipolar disorder because of concern for possible induction of mixed/manic episodes. Prior to initiating treatment with atomoxetine, patients with comorbid depressive symptoms should be adequately screened to determine if they are at risk for bipolar disorder; such screening should include a detailed psychiatric history, including a family history of suicide, bipolar disorder, and depression.

Aggressive Behavior or Hostility

Patients beginning treatment for ADHD should be monitored for the appearance or worsening of aggressive behavior or hostility.

Allergic Events

Although uncommon, allergic reactions, including angioneurotic edema, urticaria, and rash, have been reported in patients taking atomoxetine.

Effects on Urine Outflow from the Bladder

A complaint of urinary retention or urinary hesitancy should be considered potentially related to atomoxetine.

Priapism

Rare postmarketing cases of priapism have been reported for pediatric and adult patients treated with atomoxetine. Prompt medical attention is required in the event of suspected priapism.

VII. Adverse Reactions

Table 2. Adverse Reactions (%) with the Use of Atomoxetine in Acute Trials

	Abdominal Pain	Vomiting	Nausea	Fatigue	Irritability	Decreased Appetite	Headache	Somnolence
Children	18	11	10	8	6	16	19	11
Adults	7	3	21	9	N/L	11	3	4

N/L = percentage results not listed in prescribing information.

VIII. Dosing and Administration

Table 3. Dosing & Administration

Brand Name	Dosage Form	Typical Starting Dose (daily)	FDA max/day	Comments
<i>Strattera</i>	10, 18, 25, 40, 60, 80, 100 mg capsule	Children and adolescents up to 70 kg: Initial dose 0.5mg/kg; target dose 1.2 mg/kg. Children and adolescents over 70 kg and adults: Initial dose 40 mg; target dose 80 mg.	Lesser of 1.4mg/kg or 100 mg	*Not a scheduled medication. *Do <u>not</u> open capsule and sprinkle. *May give qd or divided bid.

IX. Effectiveness

Table 4. Comparative Clinical Trials

Study	Method & Sample	Duration	Results
Atomoxetine, osmotically released MPH or placebo ¹⁰	Placebo-controlled, double-blind study, patients aged 6-16 with ADHD (any subtype) Atomoxetine (0.8-1.8mg/kg/day) n=222 MPH (18-54mg/day) n=220	6 weeks	<ul style="list-style-type: none">Response rates for both atomoxetine (45%) and MPH (56%) were markedly superior to that for placebo (24%).Response to osmotically released MPH was superior to that for atomoxetine.

Study	Method & Sample	Duration	Results
	Placebo n=74		<ul style="list-style-type: none"> Of the 70 subjects who did not respond to MPH, 30 (43%) responded to atomoxetine. Of the 29 (42%) of the 69 patients who did not respond to atomoxetine had previously responded to osmotically released MPH.
Meta-analysis comparing atomoxetine with psychostimulants in the treatment of ADHD. ¹¹	5 head-to-head trials	MEDLINE search (1966-December 2005)	<ul style="list-style-type: none"> Based on available evidence, psychostimulants are regarded as first-line pharmacologic treatment. Efficacy and safety of psychostimulants well established. Adverse effects and abuse potential have led to the search for new treatments. Atomoxetine represents an alternative treatment. Long-term safety data are need to establish atomoxetine's place in therapy.
Augmentation of atomoxetine (ATX) with extended-release methylphenidate (MPH). ¹⁵	<p>Ages 6 – 12</p> <p>Children with ADHD and prior stimulant treatment n=25</p> <p>Received atomoxetine (1.2mg/kg/day) plus placebo.</p>	<p>10 weeks</p> <p>After 4 weeks, responders (n=4) continued on atomoxetine/placebo</p> <p>Remaining patients randomly assigned to either methylphenidate (ATX/MPH) (1.1 mg/kg/day) or placebo augmentation (ATX/PBO) for another 6 weeks.</p>	<ul style="list-style-type: none"> Categorical increases in vital signs occurred for 5 patients (3 patients in ATX/MPH, 2 patients in ATX/PBO) Sixteen percent discontinued the study due to adverse effects, but no difference between augmentation groups. Atomoxetine treatment was efficacious on outcome measures, but methylphenidate did not enhance response. Conclusions limited by small sample size.

X. Conclusion

Atomoxetine is a relatively new, nonstimulant medication that is classified as a norepinephrine reuptake inhibitor and works by selectively inhibiting presynaptic norepinephrine transporters. Recently, there has been increasing interest in combining nonstimulant therapies with stimulants to further enhance treatment effects.¹² Atomoxetine is not FDA approved for use in combination with a stimulant. Because there is virtually no research to establish safety and effectiveness of combined pharmacotherapy with these agents, careful monitoring is needed.¹³ Clinicians should also be aware of emergent dyskinesias when combining atomoxetine with dopaminergic, noradrenergic, or serotonergic medications.¹⁴

References

1. Wolters Kluwer Health, Inc, ed. Drug Facts & Comparisons. St. Louis, MO. 2008.
2. Dulcan M, Benson RS. Summary of the Practice Parameters for the Assessment and Treatment of Children, Adolescents, and Adults with ADHD. Adopted March 1997. Accessed at www.aacap.org.
3. Children Who Can't Pay Attention: Facts For Families. AACAP. July 2004.
4. Committee on Quality Improvement, Subcommittee on ADHD (2000), Clinical Practice Guideline: Diagnosis and Evaluation of the Child with ADHD. Pediatrics 105: 1158-1170.
5. ICSI Health Care Guideline: Diagnosis and Management of ADHD in Primary Care for School Age Children and Adolescents. 6th Ed. January 2005. Accessed at www.icsi.org.
6. LoBuono C. Nonstimulant New First-Line Option for ADHD. Drug Topics. June 2004;148:36.
7. American Academy of Child and Adolescent Psychiatry (2007), Practice Parameter for the Assessment and Treatment of Children and Adolescents with Attention-Deficit/Hyperactivity Disorder. J Am Acad Child Adolesc Psychiatry 2007;46 (7):894-921.
8. American Academy of Pediatrics (AAP): Subcommittee on ADHD and Committee on Quality Improvement. Clinical Practice Guideline: Treatment of School-Aged Children with ADHD. Pediatrics Vol 108 No. 4 October 2001, pp. 1033-44.
9. Strattera[®] [prescribing information]. Indianapolis, IN: Eli Lilly and Company; September 2008.
10. Newcorn J. Atomoxetine and Osmotically Released Methylphenidate for the Treatment of Attention Deficit Hyperactivity Disorder: Acute Comparison and Differential Response. Am J Psychiatry 2008;165:721-730.
11. Gibson AP. Atomoxetine versus stimulants for treatment of attention deficit/hyperactivity disorder. Ann Pharmacother. 2006Jun;40(6):1134-42.
12. Waxmonsky J. Nonstimulant therapies for attention-deficit hyperactivity disorder in children and adults. Ess Psychopharm. 6(5):262-76, 2005.
13. Brown T. Atomoxetine and stimulants in combination for treatment of attention deficit hyperactivity disorder: four case reports. J Child & Adolesc Psychopharm. 14(1):129-36, 2004.
14. Bond G. Dyskinesias associated with atomoxetine in combination with other psychoactive drugs. Clin Tox. 45(2):182-5, 2007.
15. Carlson G. A pilot study for augmenting atomoxetine with methylphenidate: safety of concomitant therapy in children with attention-deficit/hyperactivity disorder. Available online www.capmh.com/. Accessed January 17, 2009.

**North Dakota Medicaid
Strattera Utilization
11/01/2007 – 10/31/2008**

Label Name	Rx Num	Total Reimb Amt	Recipients
STRATTERA	2465	\$303,138.76	435 recipients

**Extended Release Products
Used to treat ADHD
Utilization
11/01/2007 – 10/31/2008**

Label Name	Rx Num	Total Reimb Amt
ADDERALL XR 10 MG CAPSULE	685	\$82,504.74
ADDERALL XR 15 MG CAPSULE	669	\$78,287.80
ADDERALL XR 20 MG CAPSULE	1420	\$211,489.82
ADDERALL XR 25 MG CAPSULE	546	\$69,036.78
ADDERALL XR 30 MG CAPSULE	1431	\$200,505.03
ADDERALL XR 5 MG CAPSULE	315	\$37,290.88
CONCERTA 18 MG TABLET SA	839	\$81,135.94
CONCERTA 27 MG TABLET SA	905	\$86,152.70
CONCERTA 36 MG TABLET SA	2727	\$352,129.59
CONCERTA 54 MG TABLET SA	2324	\$260,109.01
DAYTRANA 10 MG/9 HR PATCH	150	\$16,899.01
DAYTRANA 15 MG/9 HR PATCH	119	\$14,722.63
DAYTRANA 20 MG/9 HOUR PATCH	167	\$19,912.88
DAYTRANA 30 MG/9 HOUR PATCH	221	\$26,862.31
FOCALIN XR 10 MG CAPSULE	579	\$58,953.72
FOCALIN XR 15 MG CAPSULE	278	\$29,904.48
FOCALIN XR 20 MG CAPSULE	771	\$84,192.50
FOCALIN XR 5 MG CAPSULE	238	\$23,704.52
METADATE CD 10 MG CAPSULE	253	\$23,043.50
METADATE CD 20 MG CAPSULE	603	\$56,690.50
METADATE CD 30 MG CAPSULE	454	\$45,091.57
METADATE CD 40 MG CAPSULE	310	\$37,150.62
METADATE CD 50 MG CAPSULE	62	\$9,647.73
METADATE CD 60 MG CAPSULE	28	\$4,679.90
METADATE ER 20 MG TABLET SA	7	\$172.83
METHYLIN ER 10 MG TABLET SA	117	\$2,909.79
METHYLIN ER 20 MG TABLET SA	228	\$6,570.69
METHYLPHENIDATE 20 MG TAB SR	71	\$1,929.03
METHYLPHENIDATE ER 20 MG TAB	24	\$582.36
RITALIN LA 10 MG CAPSULE	94	\$11,318.58
RITALIN LA 20 MG CAPSULE	287	\$25,648.32

Label Name	Rx Num	Total Reimb Amt
RITALIN LA 30 MG CAPSULE	304	\$26,901.22
RITALIN LA 40 MG CAPSULE	360	\$34,493.72
STRATTERA 10 MG CAPSULE	211	\$26,038.39
STRATTERA 100 MG CAPSULE	50	\$6,630.86
STRATTERA 18 MG CAPSULE	198	\$22,658.48
STRATTERA 25 MG CAPSULE	541	\$67,136.52
STRATTERA 40 MG CAPSULE	880	\$110,608.90
STRATTERA 60 MG CAPSULE	428	\$49,304.80
STRATTERA 80 MG CAPSULE	157	\$20,760.81
VYVANSE 20 MG CAPSULE	34	\$3,192.83
VYVANSE 30 MG CAPSULE	467	\$46,924.61
VYVANSE 40 MG CAPSULE	36	\$3,498.87
VYVANSE 50 MG CAPSULE	494	\$51,631.60
VYVANSE 60 MG CAPSULE	14	\$1,269.74
VYVANSE 70 MG CAPSULE	401	\$43,136.67
3023 Recipients	21498	\$2,473,449.77

**Extended Release Products
By Total Reimbursed Amount
11/01/2007 – 10/31/2008**

Label Name	Rx Num	Total Reimb Amt
CONCERTA 36 MG TABLET SA	2727	\$352,129.59
CONCERTA 54 MG TABLET SA	2324	\$260,109.01
ADDERALL XR 20 MG CAPSULE	1420	\$211,489.82
ADDERALL XR 30 MG CAPSULE	1431	\$200,505.03
STRATTERA 40 MG CAPSULE	880	\$110,608.90
CONCERTA 27 MG TABLET SA	905	\$86,152.70
FOCALIN XR 20 MG CAPSULE	771	\$84,192.50
ADDERALL XR 10 MG CAPSULE	685	\$82,504.74
CONCERTA 18 MG TABLET SA	839	\$81,135.94
ADDERALL XR 15 MG CAPSULE	669	\$78,287.80
ADDERALL XR 25 MG CAPSULE	546	\$69,036.78
STRATTERA 25 MG CAPSULE	541	\$67,136.52
FOCALIN XR 10 MG CAPSULE	579	\$58,953.72
METADATE CD 20 MG CAPSULE	603	\$56,690.50
VYVANSE 50 MG CAPSULE	494	\$51,631.60
STRATTERA 60 MG CAPSULE	428	\$49,304.80
VYVANSE 30 MG CAPSULE	467	\$46,924.61
METADATE CD 30 MG CAPSULE	454	\$45,091.57
VYVANSE 70 MG CAPSULE	401	\$43,136.67
ADDERALL XR 5 MG CAPSULE	315	\$37,290.88

Label Name	Rx Num	Total Reimb Amt
METADATE CD 40 MG CAPSULE	310	\$37,150.62
RITALIN LA 40 MG CAPSULE	360	\$34,493.72
FOCALIN XR 15 MG CAPSULE	278	\$29,904.48
RITALIN LA 30 MG CAPSULE	304	\$26,901.22
DAYTRANA 30 MG/9 HOUR PATCH	221	\$26,862.31
STRATTERA 10 MG CAPSULE	211	\$26,038.39
RITALIN LA 20 MG CAPSULE	287	\$25,648.32
FOCALIN XR 5 MG CAPSULE	238	\$23,704.52
METADATE CD 10 MG CAPSULE	253	\$23,043.50
STRATTERA 18 MG CAPSULE	198	\$22,658.48
STRATTERA 80 MG CAPSULE	157	\$20,760.81
DAYTRANA 20 MG/9 HOUR PATCH	167	\$19,912.88
DAYTRANA 10 MG/9 HR PATCH	150	\$16,899.01
DAYTRANA 15 MG/9 HR PATCH	119	\$14,722.63
RITALIN LA 10 MG CAPSULE	94	\$11,318.58
METADATE CD 50 MG CAPSULE	62	\$9,647.73
STRATTERA 100 MG CAPSULE	50	\$6,630.86
METHYLIN ER 20 MG TABLET SA	228	\$6,570.69
METADATE CD 60 MG CAPSULE	28	\$4,679.90
VYVANSE 40 MG CAPSULE	36	\$3,498.87
VYVANSE 20 MG CAPSULE	34	\$3,192.83
METHYLIN ER 10 MG TABLET SA	117	\$2,909.79
METHYLPHENIDATE 20 MG TAB SR	71	\$1,929.03
VYVANSE 60 MG CAPSULE	14	\$1,269.74
METHYLPHENIDATE ER 20 MG TAB	24	\$582.36
METADATE ER 20 MG TABLET SA	7	\$172.83
3,023 Recipients	21498	\$2,473,449.77

**Extended Release Products
Market Share**

Label Name	%
ADDERALL XR	23.56
CONCERTA	31.61
DAYTRANA	3.06
FOCALIN	8.68
METADATE	7.99
METHYLPHENIDATE	2.05
RITALIN	4.86
STRATTERA	11.47
VYVANSE	6.73

Strattera and Stimulant Consecutive Duplication**05/01/08 to 10/31/08****Overlapping Timeframe: 30 days****Total Days Supply: 30****Number of Therapies: 2 or more**

Patient	Drug Name	2nd Drug Name	3rd Drug Name
1	ADDERALL XR	STRATTERA	
	ADDERALL XR	STRATTERA	
2	METADATE CD	STRATTERA	
	METADATE CD	STRATTERA	
3	ADDERALL XR	STRATTERA	
	ADDERALL XR	STRATTERA	
4	CONCERTA	STRATTERA	
	CONCERTA	STRATTERA	
5	ADDERALL XR	STRATTERA	
	ADDERALL XR	STRATTERA	
6	DAYTRANA	STRATTERA	
	DAYTRANA	STRATTERA	
7	STRATTERA	VYVANSE	
	STRATTERA	VYVANSE	
8	ADDERALL XR	STRATTERA	
	ADDERALL XR	STRATTERA	
	ADDERALL XR	STRATTERA	
9	CONCERTA	STRATTERA	
	CONCERTA	STRATTERA	
	CONCERTA	STRATTERA	
10	CONCERTA	STRATTERA	
	CONCERTA	STRATTERA	
	CONCERTA	STRATTERA	
	CONCERTA	STRATTERA	
11	DAYTRANA	RITALIN LA	STRATTERA
	DAYTRANA	RITALIN LA	STRATTERA
12	METADATE CD	STRATTERA	
	METADATE CD	STRATTERA	
	METADATE CD	STRATTERA	

Patient	Drug Name	2nd Drug Name	3rd Drug Name
13	METADATE CD	STRATTERA	
	METADATE CD	STRATTERA	
14	CONCERTA	STRATTERA	
	CONCERTA	STRATTERA	
15	CONCERTA	STRATTERA	
	CONCERTA	STRATTERA	
16	CONCERTA	STRATTERA	
	CONCERTA	STRATTERA	
	CONCERTA	STRATTERA	
17	STRATTERA	VYVANSE	
	STRATTERA	VYVANSE	
18	CONCERTA	FOCALIN XR	STRATTERA
	CONCERTA	FOCALIN XR	STRATTERA
	CONCERTA	FOCALIN XR	STRATTERA
19	ADDERALL XR	STRATTERA	
	ADDERALL XR	STRATTERA	
20	CONCERTA	STRATTERA	
	CONCERTA	STRATTERA	
	CONCERTA	STRATTERA	
21	CONCERTA	STRATTERA	
	CONCERTA	STRATTERA	
22	FOCALIN XR	STRATTERA	
	FOCALIN XR	STRATTERA	
23	STRATTERA	VYVANSE	
	STRATTERA	VYVANSE	
	STRATTERA	VYVANSE	
24	ADDERALL XR	STRATTERA	
	ADDERALL XR	STRATTERA	
	ADDERALL XR	STRATTERA	
	ADDERALL XR	STRATTERA	

North Dakota Department of Human Services
Pharmacotherapy Review
Aczone® (Dapsone) Gel 5%
March 2, 2009

I. Overview

Aczone gel 5% is a topical formulation of dapsone approved for the treatment of acne vulgaris.²

II. Current Treatment Guidelines for Acne Management

In 2006 a work group of recognized experts was convened in the field of acne, to develop guidelines for the treatment of acne vulgaris.³

- Topical therapy is a standard of care in acne treatment.
- Topical retinoids are important in acne treatment.
- Benzoyl peroxide and combinations with erythromycin or clindamycin are effective acne treatments.
- Topical antibiotics (e.g., erythromycin and clindamycin) are effective acne treatments. However, the use of these agents alone can be associated with the development of bacterial resistance.
- Salicylic acid is moderately effective in the treatment of acne.
- Azelaic acid has been shown to be effective in clinical trials, but its clinical use, compared to other agents, has limited efficacy according to experts.
- Data from peer-reviewed literature regarding the efficacy of sulfur, resorcinol, sodium sulfacetamide, aluminum chloride, and zinc are limited.
- Employing multiple topical agents that affect different aspects of acne pathogenesis can be useful. However, it is the opinion of the work group that such agents not be applied simultaneously unless they are known to be compatible.

In 2003, an international committee of physicians and researchers in the field of acne, working together as the Global Alliance to Improve Outcomes in Acne, developed consensus guidelines for the treatment of acne.⁴

- A topical retinoid should be the foundation of treatment for most patients with acne, because retinoids target the microcomedo, the precursor to all acne lesions. Retinoids also are comedolytic and have intrinsic anti-inflammatory effects, thus targeting 2 pathogenic factors in acne.
- Combining a topical retinoid with an antimicrobial agent targets 3 pathogenic factors, and clinical trials have shown that combination therapy results in significantly faster and greater clearing as opposed to antimicrobial therapy alone.
- Oral antibiotics should be used only in moderate-to-severe acne, should not be used as monotherapy, and should be discontinued as soon as possible (usually within 8-12 weeks).
- Because of their effect on the microcomedo, topical retinoids also are recommended as an important facet of maintenance therapy.

III. Pharmacology

The mechanism of action of dapsone gel in treating acne vulgaris is not known.

IV. Warnings/Precautions

If signs and symptoms suggestive of hemolytic anemia occur, Aczone should be discontinued.

Oral dapsone treatment has produced dose-related hemolysis and hemolytic anemia. Individuals with glucose-6-phosphate dehydrogenase (G6PD) deficiency are more prone to hemolysis with the use of certain drugs. There was no evidence of clinically relevant hemolysis or anemia in patients treated with Aczone, including those with G6PD deficiency. Some patients with G6PD deficiency using Aczone developed laboratory changes suggestive of hemolysis. Combining Aczone with trimethoprim /sulfamethoxazole may increase the likelihood of hemolysis in patients with G6PD deficiency.

Avoid use in patients taking oral dapsone or antimalarial medications because of the potential for hemolytic reactions.

Peripheral neuropathy has been reported with oral dapsone treatment. However, no events of peripheral neuropathy were observed in clinical trials with Aczone treatment.

Skin reactions (toxic epidermal necrolysis, erythema multiforme, morbilliform and scarlatiniform reactions, bullous and exfoliative dermatitis, erythema nodosum, and urticaria) have been reported with oral dapsone treatment. These types of skin reactions were not observed in clinical trials with Aczone treatment.

V. Drug Interactions

Topical benzoyl peroxide used at the same time as Aczone may result in temporary local yellow or orange discoloration of the skin and facial hair.

Concomitant use of double-strength trimethoprim/sulfamethoxazole (TMP/SMX) and Aczone increases the systemic level of dapsone and its metabolites. Exposure from the proposed topical dose is about 1% of that from the 100mg oral dose, even when co-administered with TMP/SMX.

VI. Adverse Reactions

Serious adverse reactions reported in patients treated with Aczone during clinical trials included but were not limited to the following:

- Nervous system/Psychiatric - Suicide attempt, tonic clonic movements.
- Gastrointestinal - Abdominal pain, severe vomiting, pancreatitis.
- Other - Severe pharyngitis

Aczone was evaluated for 12 weeks in four controlled studies for local cutaneous events in 1819 patients. The most common events reported from these studies include oiliness/peeling, dryness, and erythema.

VII. Dosage and Administration

- Apply twice daily.
- Apply approximately a pea-sized amount in a thin layer to the acne affected area.
- If there is no improvement after 12 weeks, treatment should be reassessed.

VIII. Cost Comparisons

Aczone[®] 5% gel is available in a 30 gram tube. Average wholesale price (AWP) is \$148.75.

IX. Efficacy

Two 12 week, randomized, double blind, vehicle controlled, clinical studies were conducted to evaluate Aczone for the treatment of patients with acne vulgaris. Aczone was shown to be modestly more effective than vehicle control in terms of Global Acne Assessment Scale and the mean percentage reduction in inflammatory, noninflammatory, and total lesion counts at week 12. The percent reductions in lesions from baseline to week 12 in the two studies are as follows:

	Study 1		Study 2	
	Aczone N=745	Placebo N=740	Aczone N=761	Placebo N=764
Inflammatory	46%	42%	48%	40%
Noninflammatory	31%	24%	30%	21%
Total	38%	32%	37%	29%

X. Conclusion

Aczone gel is a topical formulation of dapsone. It is modestly more effective than placebo in reducing acne lesions. It has not been directly compared to other topical acne agents (e.g., tretinoin, etc.) in clinical trials. Guidelines recommend the use of topical retinoids, benzoyl peroxide and antibiotics for mild to moderate acne. Aczone gel should be reserved for those patients who cannot tolerate other therapies.

References:

1. Wolters Kluwer Health, Inc. Drug Facts and Comparisons. St. Louis, MO. 2008.
2. Aczone[®] [package insert]. Irvine, CA: Allergan, Inc.; September 2008.
3. Strauss J. Guidelines of care for acne vulgaris management. J Am Acad Dermatol 2007; 56(4):651-663. Available online at <http://www.aad.org>. Accessed January 2009.
4. Zaenglein A. Expert Committee Recommendations for Acne Management. Pediatrics 2006; 118:1188-1199. Available online at <http://www.pediatrics.org>. Accessed January 2009.
5. New drug: Aczone (dapson) 5% gel. Pharmacist's Letter/Prescriber's Letter 2009;25(1):250112.

Aczone Gel PA FORM



Fax Completed Form to:
866-254-0761
For questions regarding this
Prior authorization, call
866-773-0695

Prior Authorization Vendor for ND Medicaid

ND Medicaid requires that patients receiving a new prescription for Aczone gel must try other topical acne agents as first line therapy.

Part I: TO BE COMPLETED BY PHYSICIAN

Recipient Name		Recipient Date of Birth		Recipient Medicaid ID Number	
Physician Name					
Physician Medicaid Provider Number		Telephone Number		Fax Number	
Address		City		State	Zip Code
Requested Drug and Dosage: <input type="checkbox"/> ACZONE GEL		Diagnosis for this request:			
Qualifications for coverage:					
<input type="checkbox"/> Failed acne therapy Name of medication failed: _____	Start Date	End Date	Dose	Frequency	
<input type="checkbox"/> <i>I confirm that I have considered a generic or other alternative and that the requested drug is expected to result in the successful medical management of the recipient.</i>					
Physician Signature				Date	

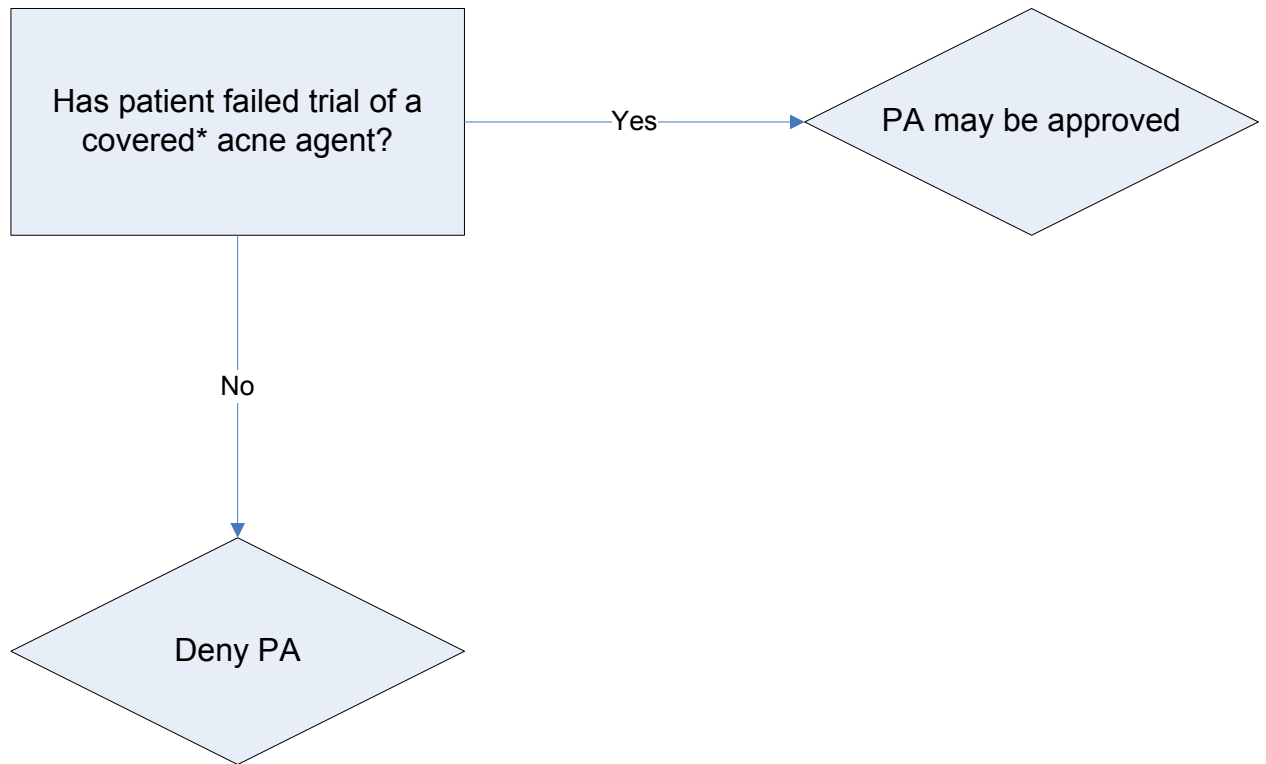
Part II: TO BE COMPLETED BY PHARMACY

PHARMACY NAME:			ND MEDICAID PROVIDER NUMBER:		
TELEPHONE NUMBER	FAX NUMBER	DRUG	NDC #		

Part III: FOR OFFICIAL USE ONLY

Date Received			Initials:		
Approved - Effective dates of PA: From: / / To: / /			Approved by:		
Denied: (Reasons)					

North Dakota Department of Human Services Aczone Authorization Algorithm



*Tretinoin and benzoyl peroxide products do not require a PA

NORTH DAKOTA MEDICAID RETROSPECTIVE DRUG UTILIZATION REVIEW CRITERIA RECOMMENDATIONS 1ST QUARTER 2009

Recommendations

Approved

Rejected

1. Clopidogrel / Proton Pump Inhibitors

Alert Message: Some recent studies suggest a possible interaction if clopidogrel (Plavix) is given concurrently with a proton pump inhibitor (PPI). Coadministration of these agents may cause decreased clopidogrel anti-platelet efficacy which may lead to an increased incidence of adverse cardiovascular events. Monitor these patients closely for loss of clopidogrel efficacy. Current ACC/ACF/AHA guidelines have not changed and a PPI is still recommended for gastroprotection in patients receiving clopidogrel and NSAIDS who are at high risk for GI bleeds.

Conflict Code: DD – Drug/Drug Interaction

Drug/Disease:

Util A

Clopidogrel

Util B

Omeprazole

Esomeprazole

Lansoprazole

Pantoprazole

Rabeprazole

Util C

References:

Aubert RE et al. [Proton pump inhibitors effect on clopidogrel effectiveness: the clopidogrel Medco outcomes study \(abstract 3998\)](#). Circulation. 2008;118:S815.

Dunn SP et al. [Baseline proton pump inhibitor use is associated with increased cardiovascular events with and without use of clopidogrel in the CREDO trial \(abstract 3999\)](#). Circulation. 2008;118:S815.

American Heart Association. [American College of Cardiology \(ACC\)/American College of Gastroenterology \(ACG\)/American Heart Association \(AHA\) Joint Committee on Studies Regarding Possible Interaction of Clopidogrel and Proton Pump Inhibitors](#). Accessed December 22, 2008.

American College of Cardiology (ACC)/American College of Gastroenterology (ACG)/American Heart Association (AHA)

Joint Comment on Studies Regarding Possible Interaction of Clopidogrel and Proton Pump Inhibitors. Available at:

<http://americanheart.mediaroom.com/index.php?s=43&item=611&printable> Accessed January 1, 2009.

[Do proton pump inhibitors decrease clopidogrel activity?](#) Pharmacist Letter/Prescriber's Letter 2008;24(11):241114.

2. Lovastatin / Amiodarone

Alert Message: Concurrent use of amiodarone and lovastatin may increase the risk of myopathy/rhabdomyolysis, particularly with lovastatin doses greater than 40 mg daily. Doses of lovastatin greater than 40 mg per day in patients taking amiodarone should be avoided unless the clinical benefit outweighs the increased risk of myopathy/rhabdomyolysis. Consider using an alternative statin (i.e., pravastatin, fluvastatin, or rosuvastatin) which is not metabolized by CYP3A4.

Conflict Code: DD – Drug/Drug Interaction

Drug/Disease:

Util A

Lovastatin 60 mg

Util B

Amiodarone

Util C

References:

Facts & Comparisons, 2008 Updates.

Micromedex Healthcare Series, DrugDex Drug Evaluations, 2008.

Mevacor Prescribing Information, Sept. 2008, Merck & Co., Inc.

3. Lovastatin / Verapamil

Alert Message: Concurrent use of verapamil and lovastatin may increase the risk of myopathy/rhabdomyolysis, particularly with lovastatin doses greater than 40 mg daily. Doses of lovastatin greater than 40 mg per day in patients taking verapamil should be avoided unless the clinical benefit outweighs the increased risk of myopathy/rhabdomyolysis. Consider using an alternative statin (i.e., pravastatin, fluvastatin, or rosuvastatin) which is not metabolized by CYP3A4.

Conflict Code: DD – Drug/Drug Interaction

Drug/Disease:

Util A

Lovastatin 60 mg

Util B

Verapamil

Util C

References:

Facts & Comparisons, 2008 Updates.

Micromedex Healthcare Series, DrugDex Drug Evaluations, 2008.

Mevacor Prescribing Information, Sept. 2008, Merck & Co., Inc.

4. Atorvastatin / Amiodarone

Alert Message: Concurrent use of amiodarone and atorvastatin may increase the risk of myopathy/rhabdomyolysis due to inhibition, by amiodarone, of CYP3A4-mediated atorvastatin metabolism. Consider using an alternative statin (i.e., pravastatin, fluvastatin, or rosuvastatin) which is not metabolized by CYP3A4. If coadministration cannot be avoided, use the lowest possible dose of atorvastatin.

Conflict Code: DD – Drug/Drug Interaction

Drug/Disease:

Util A

Atorvastatin 20, 40 & 80 mg

Util B

Amiodarone

Util C

References:

Facts & Comparisons, 2008 Updates.

Micromedex Healthcare Series, DrugDex Drug Evaluations, 2008.

Clinical Pharmacology, 2008 Gold Standard Media.

5. Atorvastatin / Verapamil

Alert Message: Concurrent use of verapamil and atorvastatin may increase the risk of myopathy/rhabdomyolysis due to inhibition, by verapamil, of CYP3A4-mediated atorvastatin metabolism. Consider using an alternative statin (i.e., pravastatin, fluvastatin, or rosuvastatin) which is not metabolized by CYP3A4. If coadministration cannot be avoided, use the lowest possible dose of atorvastatin.

Conflict Code: DD – Drug/Drug Interaction

Drug/Disease:

Util A

Atorvastatin 20, 40 & 80 mg

Util B

Verapamil

Util C

References:

Facts & Comparisons, 2008 Updates.

Micromedex Healthcare Series, DrugDex Drug Evaluations, 2008.

Clinical Pharmacology, 2008 Gold Standard Media.

6. Opioids / Constipation / Laxatives & Stool Softeners

Alert Message: Opioid-induced constipation is an almost unavoidable adverse effect of chronic opioid therapy that requires frequent assessment. A continuous bowel maintenance program which uses a stimulant laxative (i.e. senna, bisacodyl, etc.) in combination with a stool softener (docusate) may be necessary to prevent complications.

Conflict Code: TA – Therapeutic Appropriateness

Drug/Disease:

<u>Util A</u>	<u>Util B</u>	<u>Util C (Negating)</u>	
Meperidine		Polycarbophil	Methylnaltrexone
Morphine		Cascara Sagrada	Saline Laxatives
Hydromorphone		Senna	Methylcellulose
Oxymorphone		Bisacodyl	
Codeine		Glycerin	
Hydrocodone		Caster Oil	
Oxycodone		Mineral Oil	
Levorphanol		Docusate	
Methadone		Psyllium	
Fentanyl		Lactulose	
Opium		Polyethylene Glycol	
Pentazocine		Sorbitol Solution	

References:

Swegle JM, Logemann C. Management of Common Opioid-Induced Adverse Effects. Am Fam Physician 2006;74:1347-1354.

Bowel Regimen in Chronic Narcotic Use, Family Medicine Notebook, 2003.

Brookoff D, Hospital Practice: Chronic Pain: 2 The Case for Opioids. McGraw-Hill Companies, 2000.

7. Oxandrolone / Warfarin

Alert Message: Concurrent dosing of oxandrolone, a synthetic derivative of testosterone, and warfarin should be avoided due to a large increase in INR or PT.

When oxandrolone is prescribed to patients being treated with warfarin, doses of warfarin may need to be decreased significantly to maintain a therapeutic INR level and diminish the risk of serious bleeding.

Conflict Code: DD – Drug/Drug Interaction

Drug/Disease:

<u>Util A</u>	<u>Util B</u>	<u>Util C</u>
Oxandrolone	Warfarin	

References:

Facts & Comparisons, 2008 Updates.

Oxandrin Prescribing Information, May 2005, Savient Pharmaceuticals Inc.

Clinical Pharmacology, 2008 Gold Standard Media.