

Wyoming Drug Utilization Review

Smoking Cessation

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Cigarette smoking is an enormous national health problem and healthcare providers are not doing enough to help people to quit smoking.¹ Approximately one-quarter of the U.S. population smoked cigarettes in 2005.² The money spent on smoking-related illness is astonishing: \$75 billion dollars annually on direct medical costs, and \$80 billion associated with lost productivity. Nearly 14% of all Medicaid expenditures are attributable to smoking-related illnesses.¹ 440,000 people die annually from

smoking related causes, and many others develop chronic diseases.³ Second-hand smoke can also have profound effects on nonsmokers and the unborn children of pregnant mothers.^{1,3}

Nicotine is a stimulant with cholinergic effects that are highly dependent on dose and include central and peripheral nervous system stimulation and depression, respiratory stimulation, skeletal muscle relaxation, catecholamine release, and peripheral vasoconstriction.^{1,4} Stimulation of nicotinic receptors can increase blood pressure, heart rate, cardiac output, and oxygen consumption.¹ While not everyone who smokes will become addicted to nicotine, approximately 77-92% will.⁵

Updated guidelines for smoking cessation stress the importance of cessation counseling and increased use of seven first-line medications, five of which are nicotine replacement therapy (NRT) products.⁶ There is no difference in efficacy between the NRT products, and 1 year cessation rates are approximately 15%; however, as with all smoking cessation

medications, higher cessation rates are achieved when NRT is used in combination with a counseling program.⁶ Nicotine gum and nicotine lozenges have a similar pharmacokinetic profile; however, there are some key differences between them. Dosing for the gum is based on the amount of cigarettes smoked per day, whereas dosing for the lozenge is based on time until first cigarette of the day.^{4,6} The gum is chewed and parked, whereas the lozenge is allowed to dissolve in the mouth.⁴ This difference is pertinent to patients who may have difficulty chewing.

The nicotine patch is available OTC as a 24 hour patch, and by prescription as a 16 hour patch. Both formulations are of comparable efficacy.¹ The 16 hour patch is removed before bedtime; however, those using the 24 hour patch may remove it at bedtime if experiencing nicotine related adverse effects.^{1,4} Patients should also be instructed to remove patches prior to MRI procedures to prevent serious burns.

Nicotine nasal spray and the nicotine inhaler are available by prescription only. Patients using the nasal spray should be counseled not to sniff, swallow, or inhale through the nose while administering doses, as this may increase irritating effects.¹ With the inhaler, nicotine is deposited in the mouth and throat where it is absorbed through the oral mucosa; similar to the gum and lozenge.^{1,4} The nicotine inhaler has the added benefit of keeping one's hands busy and simulates the act of smoking.

NRT should be discontinued if signs of nicotine toxicity occur, and is contraindicated in patients with certain cardiac abnormalities.⁴ Drug interactions with nicotine are rare.

Bupropion is an aminoketone antidepressant whose effects have been attributed to inhibition of neuronal uptake of norepinephrine and dopamine.¹ Although seizures are associated with bupropion when it is used as an antidepressant, they typically aren't seen in patients using bupropion for smoking cessation.¹ However, development of seizure activity should still be monitored as a precaution. Bupropion holds many contraindications and warnings, and interacts with many medications.⁴ The package insert should be consulted when prescribing this medication.

Varenicline is the newest agent for smoking cessation whose efficacy has been demonstrated in many randomized, controlled trials.^{1,6} Varenicline is hypothesized to aid smoking cessation in two ways: by reducing the symptoms

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P & T Committee Meeting Update

Effective January 1, 2010, the Drug Utilization Review (DUR) Board and the Preferred Drug List Advisory Committee (PDLAC) merged to form a new Pharmacy and Therapeutics (P&T) Committee. This combined group will meet quarterly in Cheyenne and will continue to complete the responsibilities of both groups.

The P&T Committee met for its bimonthly business meeting on February 18, 2010. Highlights of this meeting include the following.

1. The following criteria were approved:

Intuniv

Intuniv will be approved with the following criteria:

- **ADHD Diagnosis required, AND**
- **Must be at least 5 years of age, AND**
- **14 day trial and benefit of guanfacine, AND**
- **14 day trial of stimulant OR 30 day trial of Strattera.**

OR

- **Contraindication to ADHD medications (including stimulants and nonstimulants)**
- **Tic disorder associated with stimulants (trial of nonstimulant required)**

Stelara: 60 day trial of one TNF agent.

Actemra: 60 day trial of methotrexate and one TNF agent.

Lysteda

A 90 day trial and failure of NSAIDs AND oral contraceptives will be required prior to use of Lysteda.

Ampyra

Diagnosis of gait disorder associated with MS required.

Initial use will be allowed for eight weeks. After eight weeks, the prescriber will have to certify that the drug is effective for the patient for continued therapy.

2. Synagis prior authorization criteria will be more detailed for the season beginning fall 2010. Criteria will be posted by September 1, 2010.
3. Nuvigil: For use in ADHD, a stimulant must be tried at max dose before use of Nuvigil. Exceptions will be made for those with intolerable adverse effects with use of stimulants.
4. Antipsychotics will require a prior authorization for doses over 150% of max. A chart with the affected medications and drugs can be found at www.uwyo.edu/DUR.
5. All proposed prior authorization criteria will be posted for public comment at www.uwyo.edu/DUR. Comments may be sent by email to alewis13@uwyo.edu or by mail to: Wyoming Drug Utilization Review Board, Dept. 3375, 1000 E. University Avenue, Laramie, WY 82071.

The next P&T Committee meeting will be held May 20, 2010 in Cheyenne. An agenda will be posted at www.uwyo.edu/DUR approximately two weeks prior to the meeting.

2010 P & T Committee Meetings Dates

May 20
August 19
November 18

Meetings are from 9 am – 3 pm and are held in Cheyenne. The location and agenda (available approximately 2 weeks prior to meeting date) are available at the DUR website www.uwyo.edu/DUR.

Preferred Drug List for Diabetic Meters

Effective April 1, 2010 a preferred drug list will be implemented for diabetic meters. The preferred meters and mechanisms for obtaining them are listed in the table below. Testing strips will continue to be available through the pharmacy. A new prescription will need to be issued for the strips.

In addition, the manufacturers of the preferred meters, Abbott and Lifescan, may provide sample meters directly to your office for distribution to your Medicaid patients. Please contact them at the phone number in the table below for details.

Claims for non-preferred products will be allowed through March 31, 2010. One Touch® Basic®, One Touch® Profile®, One Touch® Fasttake® and One Touch® SureStep® meters are being discontinued by the manufacturer. Clients can obtain the test strips without prior authorization as long as the strips are available on the market. When the strips are no longer available, clients can switch to a preferred meter without prior authorization.

The preferred drug list for glucose meters and supplies does not apply to claims submitted through the Durable Medical Equipment (DME) program.

If you have any questions, please contact the provider hotline at (877) 207-1126.

Manufacturer: Abbott	Manufacturer: Lifescan, Inc
Meters: FreeStyle Lite, FreeStyle Freedom Lite, Precision Xtra	Meters: One Touch® Ultra®, One Touch® Ultra 2®, One Touch® UltraSmart®, One Touch® Ultra Mini®
Phone Number: 1-866-224-8892 Hours: 6 am – 8 pm, Monday - Friday All orders shipped FedEx overnight. Orders received by 12 pm CST will be received the next day.	Phone Number: 1-888-437-7522 Account Code: 552SWY001 Call Center is open 24 hours/day, 7 days/week.
Website: www.Meters.AbbottDiabetesCare.com	Website: www.onetouch.orderpoints.com
Email: orderfulfillment@abbottcustomer-care.com	Email: N/A

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of nicotine withdrawal and by reducing the rewarding aspects of cigarette smoking.⁴ Although there are no contraindications listed within the manufacturer's labeling, the increasing occurrence of psychiatric related adverse events have been reported.⁷ The risks of giving varenicline to patients with preexisting psychiatric disorders should be given serious consideration.

Second-line agents include clonidine and nortriptyline. These drugs are not FDA approved and should be reserved for refractory patients.^{1,4,6}

None of the first-line agents are recommended over any of the others.⁶ Patient preference, previous experience with the drugs, and medical conditions should guide the choice among the first line drugs.⁶ The use of smoking cessation counseling, whether used alone or in combination with medication, has been shown to dramatically increase successful long-term abstinence, and is recommended in all patients attempting to stop smoking.⁶

Nicotine dependence is a disease, and as such, it must be correctly identified by all healthcare providers and treated appropriately. All seven of the first-line agents have shown significant results, especially when combined with counseling services. Most patients will not be successful on their first quit attempt and healthcare providers must

be vigilant in their continued efforts to help these patients with their quit attempts. With encouragement & support, smoking-related morbidity and mortality will continue to decline.

References:

1. Doering PL, Kennedy WK, Boothby LA. Substance-related disorders: alcohol, nicotine, and caffeine. In: DiPiro JT, Talbert RL, Hayes PE, Yee GC, Matzke GR, Posey LM, editors. Pharmacotherapy: a Pathophysiologic Approach. 7th ed. online. New York (NY): McGraw-Hill; 2008. Available from: <http://www.accesspharmacy.com>. Accessed: April 25, 2009.
2. Office of Applied Studies. Results from the 2005 national survey on drug use and health: national findings. Office of Applied Studies Web site. Available from: <http://www.oas.samhsa.gov/nsduh/2k5nsduh/2k5Results.htm#Ch3>. Accessed: April 25, 2009.
3. U.S. Department of Health and Human Services. Healthy People 2010: Understanding and Improving Health. 2nd ed. Washington, DC: U.S. Government Printing Office; 2000.
4. Lexi-Drugs Online™. Lexi-Comp Online™. Hudson (OH): Lexi-Comp Inc.; 2009. Available from: <http://online.lexi.com>. Accessed: April 25, 2009.
5. Balfour DJ. Neuroplasticity within the mesoaccumbens dopamine system and its role in tobacco dependence. *Curr Drug Targets CNS Neurol Disord*. 2002;1:413-421.
6. 2008 PHS Guideline Update Panel, Liaisons, and Staff. Treating tobacco use and dependence: 2008 update U.S. Public Health Service Clinical Practice Guideline executive summary. *Resp Care*. 2008;53:1217-1222.
7. U.S. Food and Drug Administration Center for Drug Evaluation and Research. Varenicline (marketed as Chantix) information (2/1/2008). U.S. Food and Drug Administration Center for Drug Evaluation and Research Web site. Available from: <http://www.fda.gov/cder/drug/infopage/varenicline/default.htm>. Accessed: April 29, 2009.

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