



# Indiana Medicaid Drug Utilization Review Board Newsletter

Volume 11 Issue 4

March 2009

## Indiana Medicaid DUR Board

Room W382

Indiana State Government

Center, South

402 West Washington  
Street

Indianapolis, Indiana 46204

---

### DUR Board Members

Brian W. Musial, RPh (Chair)

John J. Wernert, MD (Vice-chair)

William J. Brown, MS, RPh

Philip N. Eskew, Jr., MD

Terry Lindstrom, PhD

Kent Summers, RPh, PhD

Patricia A. Treadwell, MD

---

### Inside this Issue

- **Smoking Cessation:  
Update in Pharmacologic  
Therapy**
- **Program Assistance and  
PDL Listing Information**
- **Top 20 Drugs for 3Q2008**

## Tobacco Cessation: Update in Pharmacologic Therapy

**T**obacco use is one of the leading causes of illness and preventable death in the United States, accounting for more than 435,000 deaths each year.<sup>1</sup>

These deaths are not only the result of active smoking, but may also be the result of secondhand smoke on non-smokers. Tobacco use has been known to cause many chronic diseases, but the majority of the mortality is due to lung cancer, ischemic heart disease, and chronic obstructive pulmonary disease (COPD).<sup>2</sup>

Despite an overall decline in smoking rates, approximately 21% of the adult US population (45 million) and 1/3 of the Medicaid population continue to smoke.<sup>1,3</sup> Aside from the morbidity and mortality associated with tobacco use, it is responsible for approximately \$193 billion dollars in health-related costs and lost productivity each year.<sup>1</sup>

### Using Tobacco During Pregnancy

Using tobacco during pregnancy causes health problems for both mothers and babies including pregnancy complications, premature birth, low birth-weight infants, stillbirth, and sudden infant death syndrome (SIDS). Women who quit using tobacco before or early in pregnancy significantly reduce these risks.<sup>4</sup>

### Tobacco and Women's Health

In addition, tobacco use increases the risk of serious cardiovascular side effects with use of combined oral contraceptives. This risk increases with age and with heavy tobacco use (15 or more cigarettes per day) and is quite marked in women over 35 years of age. Women who use combined oral contraceptives should be strongly advised not to use tobacco.<sup>5</sup>

### Updated Guidelines

In May 2008, the United States Department of Health and Human Services published an

update to their clinical practice guidelines for treating tobacco use and dependence. This update incorporated new treatment options and data that had become available since the 2000 guidelines were published. The underlying goal of the guidelines is for clinicians to strongly recommend the use of effective tobacco dependence counseling and medication treatments to patients who use tobacco. Seventy percent of smokers report wanting to quit smoking and most smokers cite a physician's advice to quit as an important motivator for attempting to quit smoking. Studies have also shown that advice delivered by any type of healthcare provider increases abstinence rates.<sup>1</sup>

### Policy Direction

A rule-change is underway to amend **405 IAC 5-37** (Rule 37) to be in alignment with the recently updated guidelines. It is being proposed that the reimbursement for tobacco cessation services (counseling and cessation products) will be increased to "up to 24 weeks" per 12-month rolling period, in accordance with the standards of practice.

### Indiana Tobacco Quitline

In response to the new guidelines, Indiana has taken action. Two state agencies, the Indiana State Department of Health (ISDH) and the Indiana Tobacco Prevention and Cessation Agency (ITPC), in collaboration with a variety of public and private stakeholders (including the Office of Medicaid Policy and Planning (OMPP)), developed strategies Indiana should employ in order to implement a statewide tobacco control plan. One such strategy to encourage health care providers to more fully use the state and local tobacco cessation resources was the promotion of the Indiana Tobacco Quitline, toll-free 1-800-QUIT-NOW (784-8669). Information is also available at

<http://www.indianatobaccoquitline.net/>.

Continued from page 1

The Quitline offers a Fax Referral Program designed to assist health care providers in supporting smoking cessation among their patients and includes feedback to the provider for the patient's medical record.

The Indiana Tobacco Quitline is FREE to Indiana residents, staffed by professionally trained smoking cessation Quit Coaches and designed so health care providers can ASK, ADVISE, and REFER patients to the Quitline. Referring to the Quitline and incorporating the Fax Referral Program into the Provider's practice is an easy way to provide ongoing coaching and support. A meta-analysis of six studies released in the new guidelines, demonstrates the increased quit rate when the tobacco cessation treatment regimen includes telephone quit-line counseling (8.5% self-help vs. 12.7% with quit-line counseling; 23.2% medication alone vs. 28.1% medication with quit-line counseling). For a complete list of local and statewide tobacco cessation resources, refer to [www.itpc.in.gov](http://www.itpc.in.gov).

### Recommended Therapy

Who should receive medication for tobacco cessation? All tobacco users who are trying to quit, unless contraindications exist. Unlike other sets of clinical practice guidelines, there was not one therapy identified as first line, rather seven first-line therapies that reliably increase long-term tobacco abstinence rates. These include: Zyban® (bupropion sustained-release), Nicotine replacement therapies (lozenge, patch, inhaler, nasal spray, gum) and Chantix® (varenicline). Equal weight was given to the different therapies since the authors thought it was important not to limit choices, but to identify effective treatments so they could choose the most appropriate therapy given patient specific variables (cost, co-morbid conditions, patient preference, prior experience etc.). Second-line therapies include nortriptyline and clonidine. These drugs are currently not FDA approved for tobacco cessation, and typically have more adverse effects associated with their use.<sup>1</sup>

### Combination Therapy

Combination therapy is also recommended in the recent guidelines as being effective, since studies have shown lower nicotine withdrawal symptoms may occur in patients compared to monotherapy.

Effective combinations include:

- Nicotine patch + Bupropion sustained release (SR)
- Nicotine patch + Nicotine inhaler
- Nicotine patch (>14 weeks) + Nicotine replacement products (gum, nasal spray, lozenges)

\* FDA approved combination

Because of its nicotine antagonist effects, varenicline is not recommended to be used in combination with any form

of nicotine replacement therapy. Patients who have used this combination have reported increased adverse effects.<sup>1</sup>

### Therapies Not Recommended

Various medications have been studied in clinical trials to assess their effectiveness for tobacco cessation. The following medications have either been found ineffective or there is no evidence for their use in tobacco cessation and are not recommended: selective serotonin re-uptake inhibitors, anxiolytics, benzodiazepines, beta-blockers, or meclizine.<sup>1</sup>

### Varenicline

Chantix® (varenicline) is the newest tobacco cessation product and was approved by the Food and Drug Administration (FDA) on May 11, 2006. Unlike nicotine replacement products and bupropion, varenicline is a partial agonist selective for the  $\alpha_4\beta_2$  nicotinic acetylcholine receptor. Efficacy in smoking cessation is hypothesized to be the result of its binding having partial agonist activity, which can diminish withdrawal symptoms by promoting a low level release of dopamine, while at the same time preventing the binding of nicotine to the  $\alpha_4\beta_2$  nicotinic acetylcholine receptor.<sup>6</sup> Therefore, varenicline is believed to not only stop the reward from smoking, but also reduce nicotine withdrawal symptoms.<sup>7</sup>

Compared to both placebo and bupropion SR, varenicline 1mg twice daily given for 12 weeks was more efficacious than either treatment.<sup>8,9</sup> When varenicline was administered for an additional 12 weeks to smokers who previously were abstinent after 12 weeks of therapy, long-term abstinence rates were increased compared to placebo (43.6% vs. 36.9%,  $p=0.02$ ).<sup>10</sup> It is important to note that patients less than 18 years of age and those with a history of serious psychiatric illness were excluded from the trials. Nausea, which occurred in 30% of patients, was the most commonly reported adverse effect in clinical trials. The incidence was greater with the higher dose (1mg twice daily), but was lessened with a slower titration period. Other reported adverse effects included insomnia (18%), headache (15%), and abnormal dreams (13%).<sup>6,7</sup>

Within the past year, the FDA started to receive reports of serious neuropsychiatric events including changes in behavior, agitation, depressed mood, suicidal ideation, and suicide in patients currently on varenicline or who had discontinued therapy. Some of these patients had quit smoking, while others continued to smoke. As a result, a warning section and a patient medication guide were added to the package insert to reflect the information gathered from this ongoing research conducted by the FDA. It is recommended that all patients receiving varenicline be observed for these neuropsychiatric symptoms and/or exacerbation of pre-existing psychiatric illness (specifically schizophrenia, bipolar disorder, and major depressive disorder). If patients do experience any of these symptoms or any behavior out of the ordinary, they should stop taking the drug immediately and contact their healthcare provider.<sup>6,11</sup>

Continued from page 2

### Unanswered Questions

Despite all of the research that has been done on tobacco cessation and the various therapies used, there are still many unanswered questions. There has yet to be one treatment that has been identified as the most efficacious, and since there are many reasons that people use tobacco, no one treatment will work for everyone. There is a lack of evidence in the literature regarding treatment strategies in populations such as young adults, minorities, and in patients with substance abuse and psychiatric conditions. More research is needed to clearly define the role and benefits of combination and extended duration therapy. One thing, however, is certain: tobacco dependence is a chronic condition that requires ongoing assessment and repeated interventions. Healthcare providers should continue to encourage tobacco cessation to all tobacco users and recommend effective tobacco cessation therapies, both pharmacologic and non-pharmacologic, if they are willing to attempt quitting. For more details regarding tobacco cessation and for patient education materials please visit the following websites:

- Centers for Disease Control and Prevention [www.cdc.gov/tobacco](http://www.cdc.gov/tobacco)
- American Academy of Family Physicians [www.familydoctor.org](http://www.familydoctor.org)
- American Heart Association [www.americanheart.org](http://www.americanheart.org)
- U.S. Department of Health and Human Services [www.surgeongeneral.gov/tobacco](http://www.surgeongeneral.gov/tobacco)

### References:

1. Fiore MC, Jaén CR, Baker TB, et al. Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service. May 2008.
2. CDC. Annual Smoking-Attributable Mortality, Years of Potential Life Lost, and Productivity Losses---United States, 1997--2001. *MMWR* 2005;54:625-8.
3. State Medicaid Coverage for Tobacco-Dependence Treatments---United States, 2006. *MMWR* 2008;57:117-122.
4. Centers for Disease Control and Prevention. [homepage on the internet] Tobacco Use and Pregnancy. [cited 2009 Mar 26]. Available from [www.cdc.gov](http://www.cdc.gov).
5. U.S. Food and Drug Administration [homepage on the Internet] Guidance for Industry; Combined Oral Contraceptives-- Labeling for Healthcare Providers and Patients [cited 2009 Mar 26]. Available from: [www.fda.gov](http://www.fda.gov).
6. Pfizer Labs. Chantix<sup>®</sup> (varenicline) package insert. New York, NY; May 2008.
7. Zierler-Brown SL and Kyle JA. Oral varenicline for smoking cessation. *Ann Pharmacother* 2007;41:95-9.
8. Jorenby DE, Hays JT, Rigotti NA, et al. Efficacy of varenicline, an alpha4beta2 nicotinic acetylcholine receptor partial agonist, vs placebo or sustained-release bupropion for smoking cessation. *JAMA* 2006;296:56-63.
9. Gonzales D, Rennard SI, Nides M, et al. Varenicline, an alpha4beta2 nicotinic acetylcholine receptor partial agonist, vs sustained-release bupropion and placebo for smoking cessation: a randomized controlled clinical trial. *JAMA* 2006;296:47-55.
10. Tonstad S, Tonnesen P, Hajek P, et al. Effect of maintenance with varenicline on smoking cessation: a randomized controlled trial. *JAMA* 2006;296:64-71.
11. Information for Healthcare Professionals. Varenicline (marketed as Chantix) Information. U.S. Food and Drug Administration. Center for Drug Evaluation and Research. Available at: <http://www.fda.gov/cder/drug/InfoSheets/HCP/vareniclineHCP.htm>. Accessed on July, 30, 2008.

Continued from page 3

**Program Assistance**

All prior authorization requests or questions regarding the PDL should be directed to the ACS Clinical Call Center at 1-866-879-0106.

**PDL Listing**

The fee-for-service PDL listing may be found at the following Web site:  
<http://www.indianapbm.com/>

**Top 20 Drugs for 3Q 2008**

| Top 20 Drugs 3 <sup>rd</sup> Quarter 2008<br>Ranked by Total Amount Paid |              |                |
|--|--------------|----------------|
| Drug   | Total Claims | Total Paid     |
| Aripiprazole   | 9,474        | \$3,557,631.05 |
| Risperidone  | 14,124       | \$3,353,030.85 |
| Quetiapine Fumarate  | 12,048       | \$3,337,109.31 |
| Olanzapine   | 6,499        | \$3,171,198.72 |
| Antihemophilic.Factor Hum Rec  | 73           | \$2,254,949.91 |
| Antihemophilic FVIII Plas/Alb Free                                       | 74           | \$2,025,372.53 |
| Divalproex Sodium  | 10,923       | \$1,869,645.83 |
| Topiramate   | 6,301        | \$1,711,399.51 |
| Lamotrigine  | 7,233        | \$1,582,217.83 |
| Insulin  | 9,896        | \$1,483,324.28 |
| Ziprasidone HCL  | 4,537        | \$1,391,963.75 |
| Oxycodone HCL  | 5,481        | \$1,357,021.37 |
| Levetiracetam  | 4,771        | \$1,354,088.70 |
| Fluticasone/Salmeterol   | 5,374        | \$1,056,150.83 |
| Duloxetine HCL   | 7,148        | \$953,171.26   |
| Fentanyl   | 3,813        | \$948,638.61   |
| Atorvastatin Calcium   | 8,451        | \$942,270.71   |
| Clopidogrel Bisulfate  | 5,966        | \$824,081.77   |
| Methylphenidate HCL  | 8,244        | \$813,901.39   |
| Oxcarbazepine  | 4,600        | \$774,423.87   |

| Top 20 Drugs 3 <sup>rd</sup> Quarter 2008<br>Ranked by Total Claims Paid |              |                |
|--|--------------|----------------|
| Drug   | Total Claims | Total Paid     |
| Hydrocodone/APAP   | 45,499       | \$372,874.16   |
| Aspirin  | 40,046       | \$35,593.85    |
| Docusate Sodium  | 36,693       | \$80,432.99    |
| Alprazolam   | 33,939       | \$205,863.69   |
| Calcium Carb/Vit D   | 32,217       | \$64,085.50    |
| Acetaminophen  | 31,223       | \$81,141.06    |
| Multivitamins  | 27,228       | \$36,171.13    |
| Loratadine   | 26,545       | \$249,512.83   |
| Clonazepam   | 23,668       | \$110,791.90   |
| Lorazepam  | 21,190       | \$116,599.16   |
| Albuterol  | 18,191       | \$441,738.95   |
| Multivitamins with Minerals  | 14,576       | \$42,558.27    |
| Risperidone  | 14,124       | \$3,353,030.85 |
| Levothyroxine Sodium   | 13,747       | \$95,411.59    |
| Lisinopril   | 13,681       | \$52,807.09    |
| Omeprazole Magnesium   | 13,221       | \$383,306.62   |
| Ferrous Sulfate  | 12,810       | \$11,319.58    |
| Diazepam   | 12,629       | \$287,295.36   |
| Quetiapine Fumarate  | 12,048       | \$3,337,109.31 |
| Omeprazole   | 11,086       | \$218,674.88   |