

DADS/DSHS EXECUTIVE FORMULARY COMMITTEE MINUTES
January 25, 2013

The Executive Formulary Committee convened on Friday, January 25, 2013 in Room 125 - ASH Building 552. The meeting was called to order by Dr. Morgan, Acting Chair at 9:40 a.m.

Mary Bowers RN, BSN	√	Valerie Kipfer, MSN, RN (non-voting)	√
Catherine Hall, Pharm.D.	√	Lilani Muthali, M.D. (non-voting)	√
Jeanna Heidel, Pharm.D.	√	Nina Muse, M.D. (non-voting)	Absent
Marla Knight, Pharm.D., CGP, FASCP	√	Jay Norwood, MSN, RN (non-voting)	Absent
Jeff Matthews, M.D. (via phone)	√	Peggy Perry (non-voting)	Absent
Connie Millhollon, RN	√	Joe Vesowate (non-voting)	Absent
Victoria Morgan, M.D.	√	Mike Maples (non-voting)	Absent
Kenda Pittman, Pharm.D.	√	Kerry Raymond (non-voting)	Absent
Tran Quan, D.O.	√	Vacant Medical Director Position	
Ann L. Richards, Pharm.D.	√	Vacant Center Position	
Robert L. Ward, D.O. (via phone)	√	Vacant Center Position	
Jennifer Wright, M.D.	√		

Guests Present:

Colby Cox, Pharmacy Intern, Lisa Mican, Pharm.D., Assistant Pharmacy Director –ASH, Nancy Chung, Pharm.D. Pharmacy Resident

Introduction and Other Information

Dr. Morgan was introduced as the Acting Chair for the meeting. Dr. Morgan requested volunteers to serve as Chair of the Committee. The Chair is required to be a physician. Dr. Wright volunteered to serve as Chair.

Approval of Minutes of October 19, 2012

On a motion of Ms. Millhollon, seconded by Dr. Hall, the minutes of the October 19th meeting were approved as previously distributed.

Conflict of Interest Disclosure Forms

The Committee members completed their annual statement of disclosure. None of the members physically present had any conflicts of interest. Dr. Matthews reported that some sales representatives presented food during their educational exchanges.

Adverse Drug Reaction Reports

The Executive Formulary Committee discussed only one adverse drug reaction.

A 22-year old female at a state supported living center had routine CBC for clozapine monitoring returned with ANC of 0.2 K/mm³. For the previous 90 days, the ANC has ranged from 2.4-5.3 K/mm³. The individual just went to bi-

monthly CBC monitoring for clozapine monitoring on September 13th. The clozapine was held. The individual was also on acyclovir (Zovirax®) for the treatment of Herpes simplex and only had one dose remaining to finish the course. A review of medications showed that all but one medication has been utilized prior to the last normal CBC on September 13th. The only agent that has recently been utilized is the addition of acyclovir (systemic) for Herpes simplex. Previous H. simplex outbreaks have been treated with topical acyclovir. Leukopenia has been reported in <1% of individuals treated with acyclovir. A review of drug interactions failed to demonstrate any known drug interactions between her medications that could explain the sudden drop in WBCs/ANC. At follow up on October 15th, all CBCs and ANCs were within normal limits. Clozapine has not been restarted as the team evaluates its place in therapy.

Quetiapine (Seroquel®, Seroquel® XR) Purchases

Dr. Richards reviewed the State Hospital purchases and returns of Seroquel® and Seroquel® XR from October through December. The State Supported Living Centers' purchases were not reviewed since these facilities receive Medicare Part D funding for the majority of their residents. The following is a summary of the State Hospitals' Seroquel® and Seroquel® XR purchases:

Facility	October	November	December	Total	# Patients for Quarter
Big Spring	(\$851.48)	0	0	(\$851.48)	0
Rio Grande	\$3,791.40	0	0	\$3,791.40	6
Rusk	\$531.76	0	0	\$531.76	1
Terrell	0	(4,711.74)	0	(4,711.74)	4
North Texas – Vernon	\$1,497.28	\$2,994.56	\$2,994.56	\$7,486.40	5
Total	\$4,968.96	(\$1,717.18)	\$2,994.56	\$6,246.34	16

The facilities that did not purchase or return Seroquel® or Seroquel® XR are not included in the table. All the transactions listed in the table were for Seroquel® XR except for Terrell's return of Seroquel® in November. Dr. Richards reported that the above information was just shared with North Texas State Hospital. The Committee mentioned that Seroquel® XR is a Tier 3 drug and would require clinical director approval. On a motion of Dr. Heidel, seconded by Dr. Wright, it was recommended that the purchases of Seroquel® and Seroquel® XR continue to be monitored and that the patient specific use of Seroquel® XR also be monitored.

Drug Deletions

At the last meeting, the following products were recommended for deletion:

- ticarcillin (Ticar®)
- ticarcillin/clavulanate (Timentin®)
- cefoperazone (Cefobid®)
- mebendazole (Vermox®)
- cloxacillin (Cloxapen®)
- oxacillin (Prostaphlin®)
- erythromycin ethylsuccinate/sulfisoxazole (Pediazole®)
- chloroquine (Aralen®)
- pyrantel (Antiminth®)

The field did not provide any feedback. On a motion of Dr. Knight, seconded by Dr. Hall, these products were deleted.

New Dosage Strengths

The Committee did not have any new dosage strengths to review.

Dr. Hall provided the review on the agents in the nutritional and nutritional supplements sections. See Attachment A and B. Dr. Hall did not recommend any changes.

For the dementia agents' review, Dr. Hall did not recommend any changes. See Attachment C. Dr. Hall did provide a review of the treatment approaches for Alzheimer's. It was noted that in Alzheimer's one sees the development of amyloid plaques. Current Alzheimer's treatments work at the end of the amyloid cascade hypothesis. Future treatments are attempting to address earlier parts of the amyloid cascade hypothesis. Dr. Hall referenced the following article: Yiannopoulou, K.G. and Papageorgiou, S.G. Current and future treatments for Alzheimer's disease. *Ther Adv Neurol Disord* 2013;6(1):19-33.

Dr. Hall provided a review of the migraine agents. See attachment D. Dr. Hall noted that topiramate (Topamax®) has an FDA indication for the prevention of migraines. Therefore, she recommended that topiramate be added to the list of agents in the migraine section. On a motion of Dr. Heidel, seconded by Dr. Matthews, this recommendation was approved.

New Drug Application

(Please refer to Attachment E for the monograph and application that were considered when determining action by the committee.)

Ketotifen (Zaditor®) - presented by Dr. Chung

Ketotifen is a selective, non-competitive histamine antagonist (at the H₁-receptor) and mast cell stabilizer, inhibiting the release of mediators from cells involved in hypersensitivity reactions. Efficacy in allergic conjunctivitis is likely due to a combination of anti-inflammatory and antihistaminergic actions including interference with chemokine-induced migration of eosinophils into inflamed conjunctiva. The action of ketotifen occurs rapidly with an effect seen almost immediately after administration. Ketotifen is essentially unabsorbed systemically when administered in the eye. The onset of action is within minutes and the duration is 8 to 12 hours. Ketotifen is available over-the-counter.

Following discussion, on motion of Dr. Ward, seconded by Dr. Wright, the request to add ketotifen to the formulary was approved. The Formulary Drug Check List was completed.

Zolpidem (Ambien®)

The recommended dosing of zolpidem has changed for women. The new recommendation is being made because new data shows that blood levels in some patients may be high enough the morning after to impair activities that require alertness, including driving. It appears that women are more susceptible to this risk because they eliminate zolpidem from their bodies more slowly than men. The recommended dose is now 5 mg for the immediate-release products and 6.25 mg for extended-release products. The dosing for Intermezzo® has not changed as the label already had the recommended lower dosage for women. This information was distributed to the field (both DADS and DSHS) via email. It was recommended that the field review their patients on zolpidem and make changes as appropriate. In addition, a note was added in WORx so that when zolpidem is verified or added as an order, the pharmacist will be notified that the dose in females is 5 mg.

2013 Drug formulary

The 2013 Drug Formulary was presented to the Committee for approval. Prior to approval of the Drug formulary, a couple of changes needed to be made in the anxiolytic and sedative/hypnotic dosing tables. The current anxiolytic table shows the dose of clonazepam (Klonopin®) to be 20 mg in the under 65 year group and 10 mg in the over 65 year group. This was based on the maximum daily dose for use in epilepsy. The recommended dose for the treatment of anxiety is up to 4 mg/day. In reviewing patients in San Antonio, Dr. Richards noted that 12% of the individuals at the Living Center are on doses greater than 4 mg/day for a non-seizure diagnosis. Only 5% at the Hospital are on doses over 4 mg/day for a non-seizure diagnosis and none of the patients at TCID are on doses above 4 mg/day. After much

discussion, on a motion of Dr. Heidel, seconded by Dr. Ward, the recommendation to change the maximum dose to 4 mg/day for anxiety was approved. The 4 mg daily dose will be applicable to both the geriatric and non-geriatric population. It was also recommended that a note be added to indicate that the maximum dose for a seizure disorder is 20 mg/day.

The other dosing change was made to zolpidem as previously discussed. The recommended maximum dose is 5 mg for females and 10 mg for males. On a motion of Dr. Heidel, seconded by Ms. Millhollon the maximum doses for zolpidem were approved.

The 2013 Drug Formulary will be updated with these changes. On a motion of Dr. Ward, seconded by Dr. Hall, the 2013 Drug Formulary was approved. The Formulary will be submitted for publication on our website.

Psychotropic Audit Criteria & Guidelines - Antidepressants

The Antidepressant Audit Criteria and Guidelines have not been reviewed.

Psychotropic Audit Criteria & Guidelines – Chemical Dependence Adjunct

The Chemical Dependence Adjunct Audit Criteria and Guidelines have not been developed.

Issues from the Clinical Directors’ Meeting

Due to the vacant position, no information was presented regarding the Clinical Director’s meeting.

FDA Drug Safety Communications

The FDA has issued the following safety communications that may have impact on our facilities.

The FDA has notified the public of new information about zolpidem (Ambien®), a widely prescribed insomnia drug. The FDA recommends that the bedtime dose be lowered because new data show that blood levels in some patients may be high enough the morning after use to impair activities that require alertness, including driving. In addition, the FDA reminded the public that all drugs taken for insomnia can impair driving and activities that require alertness the morning after use. Drowsiness is already listed as a common side effect in the drug labels of all insomnia drugs, along with warnings that patients may still feel drowsy the day after taking these products. Patients who take insomnia drugs can experience impairment of mental alertness the morning after use, even if they feel fully awake. For zolpidem products, data show the risk for next-morning impairment is highest for patients taking the extended-release forms of these drugs (Ambien® CR and generics). Women appear to be more susceptible to this risk because they eliminate zolpidem from their bodies more slowly than men. Because use of lower doses of zolpidem will result in lower blood levels in the morning, the FDA is requiring the manufacturers of zolpidem to lower the recommended dose. The FDA continues to evaluate the risk of impaired mental alertness with other insomnia drugs, including over-the-counter (OTC) drugs available without a prescription. The FDA urges health care professionals to caution all patients (men and women) who use these products about the risks of next-morning impairment for activities that require complete mental alertness, including driving.

- The recommended dose of zolpidem for women should be lowered from 10 mg to 5 mg for immediate-release products (Ambien®, Edluar®, and Zolpimist®) and from 12.5 mg to 6.25 mg for extended-release products (Ambien® CR).
- For zolpidem and other insomnia drugs, prescribe the lowest dose that treats the patient’s symptoms.
- Inform patients that impairment from sleep drugs can be present despite feeling fully awake.
- The recommended doses of Intermezzo®, a lower dose zolpidem product approved for middle-of-the-night awakenings, are not changing. At the time of Intermezzo’s approval in November 2011, the label already recommended a lower dosage for women than for men.

The FDA informed the public about the results of a large, combined analysis (called a meta-analysis) of clinical trials that compared patients who received the smoking cessation drug varenicline (Chantix®) to patients who received a placebo (an inactive treatment). A higher occurrence of major adverse cardiovascular events (a combined outcome of cardiovascular-related death, nonfatal heart attack, and nonfatal stroke) was observed in patients using varenicline compared to placebo. These events were uncommon in both the varenicline and placebo groups, and the increased risk was not statistically significant, which means it is uncertain whether the excess risk for the varenicline group was due to the drug or due to chance. The FDA first notified the public about a possible increased risk of cardiovascular adverse events with varenicline in its June 2011 Drug Safety Communication (DSC). The FDA required the manufacturer of varenicline to conduct the meta-analysis to further evaluate the cardiovascular safety of the drug, and believes it is important to let health care professionals and patients know about the results of this study. The meta-analysis findings of cardiovascular risk are similar to the findings in the smoking cessation clinical trial of patients with stable cardiovascular disease that was described in FDA's June 16, 2011 DSC. The Warnings and Precautions section of the varenicline label has been updated to include the results of the meta-analysis. Health care professionals are advised to weigh the risks of varenicline against the benefits of its use. It is important to note that smoking is a major risk factor for cardiovascular disease, and varenicline is effective in helping patients to quit smoking and abstain from it for as long as one year. The health benefits of quitting smoking are immediate and substantial.

The FDA is notifying health care professionals, caregivers, and patients about a change to the container and carton labels for heparin products. This label change will require manufacturers of Heparin Lock Flush Solution, USP and Heparin Sodium Injection, USP to clearly state the strength of the entire container of the medication followed by how much of the medication is in 1 milliliter (mL). These modifications will eliminate the need for health care professionals to calculate the total amount of heparin medication in a product containing more than 1 mL, thereby reducing the risk of miscalculations that may result in medication errors. Health care professionals, caregivers, and patients should be aware that there will be a transition period before and after the official implementation date on May 1, 2013, during which both the current heparin container labels and the revised heparin container labels will be available in the marketplace. To minimize the potential for medication errors, users should consider separating the supplies of "current" and "revised" labeled heparin, and use all of the supplies of the "current" heparin before using products with the "revised" container label.

Quarterly Non-Formulary Drug Justification Report

For the first quarter of fiscal year 2013, all facilities reported use of non-formulary agents. The following were the top non-formulary agents that were prescribed:

Calmoseptine® ointment
Insulin detemir (Levemir®)

The Committee suggested that insulin detemir be considered for Formulary. Dr. Pittman noted that calmoseptine is used as a protectant and could be obtained from the warehouse. Since most of the requests were from Living Centers, Dr. Pittman will notify the facilities of the alternate source for this product. Dr. Morgan reported some good results with the use of clobazam (Onfi®) for the treatment of individuals with seizure disorders at Brenham State Supported Living Center.

Sectional Review for Next Meeting

The following sections will be reviewed at the next meeting:

Respiratory
Antihistamines
Antiemetics/Antivertigo

Other Issues

The following information was shared with the Committee members:

According to WebMD (10/25), the FDA has approved perampanel (Fycompa®) to treat “partial onset seizures among epilepsy patients aged 12 and older.” The FDA’s Center for Drug Evaluation and Research, Division of Neurology Products, Director Russell Katz, MD, explained, “Some people with epilepsy do not achieve satisfactory seizure control from treatments they are currently using” and therefore, “it is important to have a variety of treatment options available.” Notably, in “three clinical trials, Fycompa significantly reduced the frequency of partial seizures compared to placebo.” However, WebMD points out that the drug's labeling will include a boxed warning on potential “serious, possibly life-threatening neuropsychiatric side effects,” such as paranoia, irritability, aggression, anxiety and euphoria.

Based on information from its Adverse Event Report System (AERS), the FDA has listed several drugs as having potential signals of serious risks or perhaps requiring new safety information. The listing of the drug does not mean that the FDA has concluded that the drug has the listed risk, but rather that the FDA has identified a potential safety issue. The list does not indicate that any changes should be made in the prescribing or use of the drug, nor does it mean that the FDA has identified a causal relationship between the drug and the listed risk. The Agency will evaluate each product and issue further guidance as appropriate. Products and potential signals of a serious risk or new safety information include:

- Cetirizine HCL - Oculogyric crisis - Under FDA evaluation
- Codeine sulfate - Respiratory depression or arrest in children who are CYP2D6-ultra-rapid metabolizers. Under ongoing evaluation
- Docetaxel - Interaction with dronedarone HCL leading to death - No action necessary at this time
- Fluroquinolone products - Retinal detachment - Under FDA evaluation
- Levetiracetam - Potential for drug abuse - Under FDA evaluation
- Mefloquine HCl - Vestibular disorder - Under FDA evaluation
- Olmesartan medoxomil - Malabsorption leading to sever diarrhea and weight loss - Under FDA evaluation
- Proton Pump Inhibitors - Pneumonia - Under FDA evaluation

The New York Times (11/1) reports, “The Food and Drug Administration said it was looking more closely at the way generic companies made extended-release drugs after it found one such medicine failed to work as well as its brand-name counterpart.” That “is a rare departure for the agency, which for years has insisted that generic drugs are just as effective as their brand-name versions.” So far, “regulators have said the episode

appears to be limited to one dosage level of a single drug,” that is “a 300-milligram dose of bupropion manufactured by Impax Laboratories.” Dr. Gregory P. Geba, director of the FDA’s Office of Generic Drugs, said, “This has actually prompted us to change our policy.” The change “has provided fodder to some longtime critics, who say the FDA and generic drug companies have been reluctant to acknowledge that sometimes generics don’t work as well as the brand-name originals.”

Bloomberg News (11/1) reports, “Sanofi (SAN)’s lotion Sklice [ivermectin lotion], which as a tablet treated worms, wiped out head lice in a single application in a study that suggests the drug may offer a better approach than existing medications, researchers said.” In fact, one “day after treatment, 95 percent of those in the Sklice group were lice free, compared with 31 percent given a placebo, according to” a study published online Oct. 31 in the *New England Journal of Medicine*

Medscape (11/8) reports, “Olanzapine monotherapy is effective in the acute treatment of bipolar depression, with a safety profile similar to that already known for the antipsychotic,” according to the results of a 343-patient study published in the November issue of the *British Journal of Psychiatry*. Researchers “found that a largely East Asian cohort of patients with bipolar I depression randomly assigned to olanzapine therapy had improvements in depression as measured by multiple assessment tools at the end of six weeks of treatment.” However, “the most commonly reported adverse events in the active therapy arm were somnolence, increased appetite and weight, and sedation,” as well as “unfavorable changes in fasting cholesterol, triglycerides, and glucose levels.”

HealthDay (11/9) reports that a study including 9,200 people presented at the American Heart Association annual meeting found that “selective serotonin reuptake inhibitors (SSRIs) may raise the risk for major bleeding in patients also taking warfarin.” Nevertheless, “because depression is such a tough-to-treat illness, experts say the finding is no reason for patients on warfarin to immediately drop their SSRI” antidepressants.

Medscape (11/9) reports, “Cannabis use causes a temporary cognitive breakdown in nonpsychotic individuals, leading to long-term psychosis,” according to a study published in the October issue of *Frontiers in Psychiatry*. In an imaging study involving 26 patient, researchers “found a different brain activity pattern in schizophrenia patients who had a history of cannabis use compared with schizophrenia patients who had never used cannabis.”

Bipolar disorder is associated with increased risks for adverse pregnancy outcomes, regardless of treatment, according to a *BMJ* study. Using Swedish national health registries, researchers studied over 330,000 women who gave birth during a 4-year period, including roughly 300 with bipolar disorder who were treated with mood stabilizers (e.g., lithium, antipsychotics) during their pregnancies and 600 with untreated bipolar disorder. After multivariable adjustment, women with bipolar disorder (treated or untreated) had increased risks for cesarean delivery, instrumental delivery, nonspontaneous start to labor, and preterm delivery, compared with women without mental illness. In addition, untreated women were more likely to have infants with neonatal hypoglycemia and microcephaly. An editorialist cautions that “it is important to remember the potential consequences of bipolar relapse” during and after pregnancy. He concludes that all pregnant women with the disorder should receive prophylactic psychotropic treatment.

Medscape (11/15) reports Teva Pharmaceuticals’ “narcolepsy and sleep-related disorders” treatment, Nuvigil® (armodafinil), “shows efficacy and high tolerance as an adjunctive treatment for breakthrough depressive symptoms associated with bipolar 1 disorder,” according to research presented at Psych Congress 2012: US Psychiatric and Mental Health Congress. “In an eight-week, phase 3 randomized placebo-controlled trial” involving 201 patients, the study team “found that when given as an adjunctive treatment with mood

stabilizers, at seven to eight weeks, armodafinil significantly improved symptoms of depression in this patient population with few adverse events.”

MedPage Today (11/21) reports, “Older hypertensive patients may be at risk for hip fracture after initiation of blood pressure-lowering therapy,” according to a study published online in the Archives of Internal Medicine. “The risk for hip fracture was a relative 43% greater in the month-and-a-half after starting on any antihypertensive compared with other time periods (incidence rate ratio 1.43, 95% CI 1.19 to 1.72),” the study found. “That finding is consistent with prior observational studies evaluating the relationship between initiation of antihypertensive treatment and falling, a primary risk factor in more than 90% of hip fractures, the researchers reported.”

The AP (11/22) reported, “The use of medication to treat attention-deficit/hyperactivity disorder [AD/HD] is linked to a lower likelihood of crime,” according to a study published Nov. 22 in the New England Journal of Medicine. “Using Swedish national registers, researchers studied about 16,000 men and 10,000 women ages 15 and older who had been diagnosed with AD/HD.” Next, “court and prison records were used to track convictions from 2006 through 2009 and see whether patients were taking AD/HD drugs when their crimes were committed.”

Reuters (11/28) reports that according to a study published online Nov 27 in the Journal of the American Medical Association, children who were not vaccinated against pertussis had up to a nine fold increased chance of getting the illness, also known as whooping cough. What's more, the NBC News (11/27) “Vitals” blog reports, “Children's risk of contracting whooping cough increases over the years following their final scheduled vaccination.” Even though “the vaccine protects 98 out of 100 children in the first year after the final shot in the five-injection series, protection drops to 71 out of 100 children five years later, according to the study, which included cases from the 2010 California outbreak of whooping cough.” Put another way, “the vaccine's effectiveness declines by about 30 percent within five years of the final dose, the researchers said.”

MedPage Today (11/28) reports, “Atypical antipsychotics may not work in older patients, and they carry a high risk of adverse events,” according to a study published online Nov. 27 in the Journal of Clinical Psychiatry. “In a randomized trial, there was a lack of significant improvement in psychopathology and a high cumulative incidence of metabolic syndrome (36.5% in one year) and of serious and nonserious adverse events (23.7% and 50.8%, respectively),” researchers reported. “The median time to discontinuation for any of the four main atypical antipsychotics was 26 weeks,” the study found.

Reuters (11/29) reports Budapest, Hungary-based Gedeon Richter Plc and New York-based Forest Laboratories issued a joint statement, announcing that Forest has submitted a new drug application to the Food and Drug Administration for their antipsychotic medication, Cariprazine (RGH-188). The companies are seeking approval for Cariprazine as a treatment for schizophrenia and for manic or mixed episodes associated with bipolar I disorder. If the FDA approves the NDA, Forest expects to launch Cariprazine in the US within the first two quarters of 2014. The companies are also seeking European approval for Cariprazine, which was developed by Richter and is licensed to Forest in the US and Canada.

Reuters (12/13) reports H. Lundbeck A/S announced Wednesday that the US Food and Drug Administration has accepted a new drug application for its Brintellix (vortioxetine) as a treatment for major depressive disorder in adult patients. The Copenhagen, Denmark-based pharmaceutical group said the FDA has determined that the NDA that Lundbeck, along with its Japanese partner Takeda Pharmaceutical Co., filed in October, contains sufficient information to enable the agency to conduct a substantive review. Reuters points

out that upon the FDA's acceptance of the NDA, Takeda had agreed to pay Lundbeck a milestone payment of \$50 million.

Acadia Pharmaceuticals, Inc. has announced its experimental antipsychotic drug showed significant improvement in patients with Parkinson's disease psychosis in a late-stage trial. Patients receiving the drug, pimavanserin, had symptoms like hallucinations and delusions of jealousy reduced by more than a third, compared with a reduction of 18.5% in those receiving a placebo. An additional Phase III trial is anticipated to confirm the results before applying for regulatory approval. The drug had failed to meet its primary objective in a previous late-stage study in 2009, but with an altered study design the product produced better results. As many as 60% of patients with Parkinson's will develop psychosis at some point in the progression of the disease, which leads to increase institutionalization and mortality risk.

The Milwaukee Journal Sentinel (12/19) reports, "Doctors with financial ties to drug companies have heavily influenced treatment guidelines recommending the most lucrative drugs in American medicine, an analysis by the Milwaukee Journal Sentinel and MedPage Today has found." The Journal Sentinel says the findings "offer the latest glimpse into how pharmaceutical companies, with billions in sales at stake, exert a powerful but often unrecognized influence over the practice of American medicine." The pieces notes that whereas critics "say the financial relationships have corrupted medicine, resulting in cases where guidelines make dangerous or ineffective recommendations," pharmaceutical companies and some physicians "counter that those with conflicts are often top experts in their field." The analysis reviewed "20 clinical practice guidelines for conditions treated by the 25 top-selling drugs" in the US.

Reuters (12/22) reported Alexa Pharmaceuticals announced that Adasuve (loxapine), a treatment for bipolar and schizophrenia, has been approved by the FDA. According to Medscape (12/26), Alexa said the FDA "based its approval on clinical data involving more than 1600 patients and control participants. In 2 phase III trials - 1 in schizophrenia and 1 in bipolar 1 disorder - loxapine inhalation powder 10 mg met the primary efficacy endpoint, demonstrating statistically significant reductions in agitation compared with placebo 2 hours post dosing." The Mountain View, California-based pharmaceutical company said Adasuve combines "loxapine, an antipsychotic, with the company's propriety Staccato delivery system." CEO Thomas King noted that it is the "first approved noninjectable therapy for the acute treatment of agitation in adults with schizophrenia and bipolar disorder."

The Washington Post (12/27) reports, "In what some prominent critics have called a bonanza for the drug companies, the American Psychiatric Association this month voted to drop the old warning against diagnosing depression in the bereaved, opening the way for more of them to be diagnosed with major depression - and thus, treated with antidepressants. The change in the handbook," the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), "which could have significant financial implications for the \$10 billion US antidepressant market, was developed in large part by people affiliated with the pharmaceutical industry, an examination of financial disclosures shows." In fact, "the financial ties between the creators of the APA handbook and the industry far exceed limits recommended in 2009 by the Institute of Medicine."

Medscape (12/29) reported, "Admissions to substance abuse treatment programs by patients using a combination of benzodiazepines (benzos) and pain relievers have risen drastically over the past decade, according to a new report from the Substance Abuse and Mental Health Services Administration." That report, the "Treatment Episode Data Set (TEDS) Report for December 13, examined national records on annual admissions for substance use treatment." It indicated "that between the years 2000 and 2010, admissions for those abusing both benzos and narcotic pain relievers increased more than 500% - whereas admissions for all other substances decreased by almost 10%."

Reuters (1/2) reports on a study that appeared online Dec. 11, 2012 in the journal *Addiction*, which found that adding the antidepressant nortriptyline to smoking-cessation therapy did not raise the likelihood of long-term success among prison inmates. The study included 425 male prisoners in Australia. The prisoners in the study were given 10 weeks of smoking-cessation therapy, which consisted of behavioral counseling and nicotine patches. One group of prisoners were given nortriptyline, while another group was given a dummy pill. After one year, both groups had an abstinence rate of 11%.

WebMD (1/2) reported that use of selective serotonin re-uptake inhibitor (SSRI) antidepressants during pregnancy appears not to be associated “with a higher overall risk of stillbirth and newborn death,” according to a study published Jan. 2 in the *Journal of the American Medical Association*. Investigators examined data on some “1.6 million births in five Nordic countries.” Researcher Olof Stephansson, MD, PhD, of the Karolinska Institutet in Stockholm, said, “After taking maternal characteristics such as smoking and maternal age into account, as well as previous hospitalization for psychiatric disease there was no association between SSRI (antidepressants) and stillbirth and infant [death].”

Medwire (1/11) reports that a study (1/11) published online Jan. 2 in *The Lancet Neurology* “has dashed hopes” that Namenda (memantine) “therapy could benefit patients with frontotemporal dementia (FTD).” After recruiting “81 patients who had characteristic brain atrophy and behavioral variant FTD according to Nearsy criteria (n=64) or semantic dementia (n=17),” the researchers found that “during 26 weeks of treatment, memantine had no significant effect on patients' neuropsychiatric inventory (NPI) scores or their clinical global impression of change (CGIC) scores, relative to placebo.”

Dr. Muthali noted that some of the physicians within the Living Centers were ordering slit lamps for using quetiapine (Seroquel®). The Committee discussed that the ocular evaluations were implemented to detect cataracts and that this could be accomplished by a direct ophthalmoscope. After much discussion, the Committee stated that the interpretation of an ocular evaluation is: “Examination of the lens by methods adequate to detect cataracts.” On a motion of Dr. Wright, seconded by Dr. Hall, this interpretation was approved.

Dr. Richards presented information on the generic version of Fazaclo® [(clozapine oral disintegrating tablet (ODT)]. Teva has been approved as a generic supplier of clozapine ODT. Currently, Teva has 25 mg and 100 mg tablets on the market in both bulk and unit dose packaging. Both these products have the exact same identifying markings as Fazaclo®. Teva has a separate registry for their ODT versus their regular tablets. Some of the facilities are in the process of switching to the generic version of the ODT.

Dr. Quan reported a recent issue in which an individual was transferred to her facility from a state hospital on a medically needed drug and her facility did not have that medication. The question arose as to how much drug supply is sent for a facility transfer. Normally if the Pharmacy knows that if a transfer is occurring, some form of communication occurs at the Pharmacy level or the transferring facility will check to see if the receiving facility shows stock of that medication in WORx™. It was recommended that the Pharmacy get involved in transfers from one facility to another.

Dr. Heidel noted that recently her facility has seen an increase in ammonia associated with divalproex (Depakote®) use. Some cases have even required evaluations at the local hospital. It was noted that ammonia levels are not routinely monitored and are usually obtained based on clinical symptoms.

Next Meeting Date

The next meeting was scheduled for April 5, 2013.

Adjourn

There being no further business, the meeting was adjourned at 12:15 p.m.

Approved: *Victoria Morgan, MD*
Victoria Morgan, M.D., Acting Chairman

Attachments

- Attachment A – Nutritional Agents Sectional Review
- Attachment B – Nutritional Supplements Sectional Review
- Attachment C – Dementia/Miscellaneous CNS Sectional Review
- Attachment D – Migraine Agents Sectional Review
- Attachment E – New Drug Applications

Minutes Prepared by:
Ann L. Richards, Pharm.D., BCPP

MEMORANDUM

To: Executive Formulary Committee
From: Catherine S. Hall, Pharm.D., BCPP
Through: Ann L. Richards, Pharm.D., BCPP
Subject: Class Review, Nutritional Agents
Date: January 25, 2013

Recommendation: No changes

Nutritional Agents

Vitamins

Ascorbic Acid (Vitamin C)	\$ - \$
Cyanocobalamin (Vitamin B ₁₂)	\$ - \$\$\$\$\$\$\$
Folic Acid (Folvite)	\$ - \$\$\$\$
Leucovorin (Wellcovorin)	\$\$ - \$\$\$\$
Niacin/Nicotinamide (Nicobid)	\$
Phytonadione (Vitamin K ₁ , Mephyton, Konaktion)	\$\$ - \$\$\$
Pyridoxine (Vitamin B ₆)	\$ - \$\$
Thiamine (Vitamin B ₁)	\$ - \$
Vitamin A (Aquasol A)	\$ - \$\$\$\$\$\$\$
Vitamin D (Ergocalciferol, Calciferol, Drisdol)	\$ \$
Vitamin E (Aquasol E)	\$ - \$\$\$\$\$\$\$

Minerals Trace Elements and Electrolytes

Calcium Carbonate (Os-Cal, Titalac) - 40% elemental calcium	\$
Calcium (Citracal)	\$
Calcium Glubionate (Neo-Calglucon) - 6% elemental calcium	\$ - \$\$
Calcium Gluconate - 9% elemental calcium	\$\$
Ferrous Fumarate/Docusate Sodium (Ferro-Sequels) - 33% elemental iron	\$\$
Ferrous Sulfate (Feosol, Fer-In-Sol) -20% elemental iron	\$
Potassium Phosphate (Neutra-Phos-K)	\$\$ - \$\$\$
Zinc Sulfate	\$ - \$\$

Combination Products

Calcium Carbonate/Vitamin D (Oscal + D)	\$
Calcium Citrate/Vitamin D (Citrical+D)	\$
Iron salts with or without vitamins and/or minerals (HemocYTE Plus, Niferex, Niferex-150, Niferex-150 Forte)	\$ - \$\$\$\$
Multivitamin (Unicap, Hexavitamins)	\$ - \$
Multivitamin/Minerals	\$ - \$
Multivitamins, Pediatric (Poly-Vi-Sol)	\$\$
Multivitamins, Prenatal (Filibon)	\$
Vitamin B Complex	
Vitamin B Complex/Vitamin C (Stresscaps, Allbee with C Nephrocaps, Nephro-vite)	\$-\$
Vitamin B Complex/Vitamin C/Zinc	\$

Ascorbic Acid (Vitamin C)

Solution, oral: 100 mg/mL
 Tablet: 250 mg, 500 mg, 1000mg
 Tablet, chewable: 250 mg, 500 mg

Cyanocobalamin (Vitamin B₁₂)

Injection: 1000 mcg/mL
 Tablet: 100 mcg, 250 mcg, 500 mcg, 1000 mcg

Folic Acid (Folvite)

Tablet: 0.4 mg, 0.8 mg, 1 mg

Leucovorin (Wellcovorin)

Injection: 3 mg/mL
 Powder for injection: 25 mg, 50 mg, 100 mg, 350 mg
 Tablet: 5 mg, 10 mg, 15 mg, 25 mg

Niacin/Nicotinamide (Nicobid)

Capsule, extended release: 250 mg, 500 mg
 Tablet: 50 mg, 100 mg, 250 mg, 500 mg
 Tablet, extended release: 250 mg, 500 mg, 750 mg, 1000 mg

Phytonadione (Vitamin K₁, Mephyton, Konakion)

Injection, aqueous colloidal: 2 mg/mL, 10 mg/mL
 Injection, aqueous (IM only): 2 mg/mL, 10 mg/mL
 Tablet: 5 mg

Pyridoxine (Vitamin B₆)

Injection: 100 mg/mL
 Tablet: 25 mg, 50 mg, 100 mg

Thiamine (Vitamin B₁)

Injection: 100 mg/mL, 200 mg/mL
 Tablet: 50 mg, 100 mg, 250 mg, 500 mg

Vitamin A (Aquasol A)

Capsule: 8,000 units, 10,000 units, 25,000 units, 50,000 units

Injection: 50,000 units/mL

Tablet: 5000 units

Vitamin D (Ergocalciferol, Calciferol, Drisdol)

Capsule: 0.25 mcg, 0.5 mcg, 400 units, 2,000 units, 10,000 units, 50,000 units

Drops, oral: 200 units/drop

Tablet: 400 units, 2,000 units

Vitamin E (Aquasol E)

Capsule: 100 units, 200 units, 400 units, 1,000 units

Tablet: 200 units, 400 units, 2,000 units

Calcium Carbonate (Os-Cal, Titalac) [40% elemental calcium]

Liquid, oral: 500 mg/5 mL, 1000 mg/5 mL

Tablet: 600 mg, 1250 mg, 1500 mg

Tablet, chewable: 350 mg, 500 mg, 550 mg, 750 mg, 850 mg, 1000 mg

Calcium Citrate (Citracal) [21% elemental calcium]

Tablet: 200 mg, 250 mg, 315 mg, 950 mg

Calcium Glubionate (Neo-Calglucon) [6% elemental calcium]

Syrup: 1.8 g/5 mL

Calcium Gluconate [9% elemental calcium]

Injection: 10% [100 mg/mL]

Tablet: 500 mg, 650 mg, 975 mg, 1g

Ferrous Fumarate/Docusate Sodium (Ferro-Sequels)[contains 33% elemental iron]

Tablet, timed released: Ferrous fumarate 150 mg [50 mg]/Docusate Sodium 100 mg

Ferrous Sulfate (Feosol, Fer-In-Sol) [contains 20% elemental iron]

Elixir with 5% alcohol: 220 mg/5 mL [18 mg/5 mL]

Tablet: 160 mg [32mg], 300 mg [60 mg], 325 mg [65 mg]

Potassium Phosphate (Neutra-Phos-K)

Powder for oral solution: 250 mg elemental phosphours/14.2 mEq potassium per packet

Zinc Sulfate

Capsule: 220 mg [50 mg zinc]

Injection: 1 mg/mL, 5 mg/mL

Calcium Carbonate/Vitamin D (Oscal + D, Os-Cal chewable)

Tablet: Calcium 250 mg/Vitamin D 125 IU

Calcium 315mg/Vitamin D 200IU

Calcium 500 mg/Vitamin D 125 IU

Calcium 600mg/Vitamin D 200IU

Tablet, chewable: Calcium 500mg/Vitamin D 600iu

Calcium Citrate/Vitamin D (Citrical+D)

Tablet: Calcium 315mg/Vitamin D 200IU

Calcium 600mg/Vitamin D 200IU

Iron salts with or without vitamins and/or minerals (Hemocyte Plus, Niferex, Niferex-150, Niferex-150 Forte)

Capsule

Solution, oral

Tablet

Multivitamin (Unicap, Hexavitamins)

Liquid, oral: each solution contains a minimum of USDA requirements

Tablet: each tablet contains a minimum of USDA requirements

Tablet, chew: each tablet contains a minimum of USDA requirements

Multivitamin/Minerals

Liquid, oral: each solution contains a minimum of USDA requirements

Tablet: each tablet contains a minimum of USDA requirements

Tablet, chew: each tablet contains a minimum of USDA requirements

Multivitamins, Pediatric (Poly-Vi-Sol)

Liquid, oral: each solution contains a minimum of USDA requirements

Multivitamin, Prenatal (Filibon)

Tablet: each tablet contains a minimum of USDA requirements

Vitamin B Complex/Vitamin C (Stresscaps, Allbee with CNephrocaps, Nephro-vite)

Capsule: each capsule contains a minimum of USDA requirements

Tablet: each tablet contains a minimum of USDA requirements

Vitamin B Complex/Vitamin C/Zinc

Tablet: each tablet contains a minimum of USDA requirements

MEMORANDUM

To: Executive Formulary Committee
From: Catherine S. Hall, Pharm.D., BCPP
Through: Ann L. Richards, Pharm.D., BCPP
Subject: Class Review, Nutritional Supplements
Date: January 25, 2013

Recommendation: *No changes*

Nutritional Supplements

Fish Oil (Nature Made Fish Oil) \$
Glucosamine \$\$

Fish Oil (Nature Made Fish Oil)

Capsules: 1200mg
Nutritional Supplement

Glucosamine

Capsule: 500 mg, 1000 mg
Tablet: 500 mg, 1000 mg, 1500 mg

MEMORANDUM

To: Executive Formulary Committee
From: Catherine S. Hall, Pharm.D., BCPP
Through: Ann L. Richards, Pharm.D., BCPP
Subject: *Class Review – Dementia Agents*
Date: January 25, 2013

Recommendation: *No changes*

Dementia Agents

Donepezil (Aricept)	\$\$\$-\$\$\$\$
Galantamine (Razadyne)	\$\$ - \$\$\$
Memantine (Namenda)	\$\$ - \$\$\$
Rivastigmine (Exelon, Exelon Patches)	\$\$\$-\$\$\$\$

Donepezil (Aricept)

Tablet: 5 mg, 10 mg, 23 mg
 Tablet, oral disintegrating: 5 mg, 10 mg

Galantamine (Razadyne)

Capsule, 24hr: 8 mg, 16 mg, 24 mg
 Solution, oral: 4 mg/mL
 Tablet, film coated: 4 mg, 8 mg, 12 mg

Memantine (Namenda)

Tablet: 5 mg, 10 mg

Rivastigmine (Exelon)

Capsule: 1.5 mg, 3 mg, 4.5 mg, 6 mg
 Patch, transdermal: 4.6 mg/24 hours, 9.5 mg/24 hours

MEMORANDUM

To: Executive Formulary Committee
From: Catherine S. Hall, Pharm.D., BCPP
Through: Ann L. Richards, Pharm.D., BCPP
Subject: **Class Review, Agents for migraine**
Date: January 25, 2013

Recommendation: No changes

Agents for Migraine

Aspirin/Acetaminophen/Caffeine (Excedrine Migraine)	\$
Atenolol (Tenormin)	\$
Divalproex (Divalproex ER, Depakote, Depakote ER- RESERVE USE)	\$\$\$ - \$\$\$\$\$
Fluoxetine (Prozac)	\$
Metoprolol (Lopressor, Toprol XL)	\$ - \$\$
Nadolol (Corgard)	\$ - \$\$\$
Naproxen (Naprosyn)	\$\$
Propranolol (Inderal)	\$ - \$\$\$
Sumatriptan (Imitrex)	\$\$\$\$\$ - \$\$\$\$\$\$\$
Timolol	\$\$ - \$
Valproate (Depakene)	\$ - \$\$\$\$
Verapamil (Calan, Isoptin)	\$ - \$\$

Aspirin/Acetaminophen/Caffeine (Excedrine Migraine)

Tablet: Aspirin 250 mg/Acetaminophen 250 mg/Caffeine 65 mg

Atenolol (Tenormin)

Tablet: 25 mg, 50 mg, 100 mg

Divalproex (Depakote, Depakote ER, Divalproex ER)

Capsule, sprinkles: 125 mg

Tablet, delayed release: 125 mg, 250 mg, 500 mg

Tablet, extended release: 250 mg, 500 mg - **RESERVE USE**

Fluoxetine (Prozac)

Capsule: 10 mg, 20 mg

Liquid, oral: 20 mg/5 mL

Tablet: 10 mg, 20 mg

Metoprolol (Lopressor, Toprol XL)

Tablet: 25 mg, 50 mg, 100 mg

Tablet, extended release: 25 mg, 50 mg, 100 mg, 200 mg

Nadolol (Corgard)

Tablet: 20 mg, 40 mg, 80 mg, 120 mg, 160 mg

Naproxen (Naprosyn)

Tablet: 220 mg, 250 mg, 275 mg, 375 mg, 500 mg, 550 mg

Tablet, controlled release: 500 mg

Propranolol (Inderal)

Capsule, sustained release: 60 mg, 80 mg, 120 mg, 160 mg

Injection: 1 mg/mL

Solution, oral: 4 mg/mL, 8 mg/mL, 80 mg/mL

Tablet: 10 mg, 20 mg, 40 mg, 60 mg, 80 mg

Sumatriptan (Imitrex)

Injection: 12 mg/mL

Nasal Spray: 5 mg, 20 mg

Tablet: 25 mg, 50 mg, 100 mg

Timolol (Timoptic)

Gel, ophthalmic: 0.25%, 0.5%

Solution, as maleate, ophthalmic: 0.25%, 0.5%

Solution, as maleate, ophthalmic, preservative free, single use: 0.25%, 0.5%

Tablet: 5 mg, 10 mg, 20 mg

Valproic Acid/Valproate (Depakene)

Capsule: 250 mg

Syrup: 250 mg/5 mL

Verapamil (Calan, Isoptin)

Capsule, sustained release: 100mg, 120 mg, 180 mg, 240 mg, 360 mg

Injection: 2.5 mg/mL

Tablet: 40 mg, 80 mg, 120 mg

Tablet, sustained release: 120 mg, 180 mg, 240 mg

APPENDIX 1: NEW DRUG APPLICATION FORM

TEXAS DEPARTMENT OF MENTAL HEALTH AND MENTAL RETARDATION

NEW DRUG APPLICATION(for inclusion in the *DSHS/DADS Drug Formulary*)

** (THE NEW DRUG APPLICATION PROCESS IS DESCRIBED ON THE BACK OF THIS FORM.) **

Date: 9/27/12

Name of practitioner submitting the application: Dr. BaylissName of entity with which the practitioner is associated by employment or contract (i.e., state hospital, state school, state center, or local authority (state-operated community services (SOCS) or community MHMR center)):
Austin State Hospital

Information regarding new drug:

Therapeutic Classification	Ophthalmic agent/Antihistamine
Generic Name	Ketotifen fumarate ophthalmic solution
Trade Name(s)	Zaditor
Manufacturer(s)	Alcon
Dosage Form(s)	0.025% ophthalmic solution

Explain the pharmacological action or use of this drug: Ketotifen has antihistaminic activity as well as some mast cell stabilization properties and is advantageous for the treatment of allergic conjunctivitis

Explain the advantages of this drug over those listed in the formulary: This is a relatively inexpensive agent compared to other ophthalmic products for allergies. Most of the agents on the formulary for allergies are just for redness/vasoconstrictors. The only agent currently on the formulary for ocular allergies that affects mast cells or has antihistaminic properties is olopatadine and it is much more expensive than ketotifen.

State which drugs this new drug would replace or supplement: olopatadine

 application is approved


signature of chairman of facility pharmacy and therapeutics committee

OR

 application is appropriate and complete

signature of clinical/medical director or designee