AGENDA
Uniform Formulary Beneficiary Advisory Panel
27 June 2005

0700-0800	Sign-in	Naval Heritage Center Theater, 701 Pennsylvania Ave N.W, Washington, D.C. 20004	
0800-0830	Welcome and Opening Remarks		
	Meeting Rules	• Active participation by Panel only • Private Citizen comments restricted to first 12 sign-ups	
	Selection of Chairperson		
	Meeting Objectives	• Discuss recommendations of the DoD P&T Committee meeting, 17-19 May 05, San Antonio, TX. • Discuss drugs in the topical antifungal and PDE-5 therapeutic classes, Multiple Sclerosis Disease Modifying Drug Class. • Review Committee recommendations, make comments, and forward to the Director, TMA, for final decision to approve, disapprove, or modify the recommendations. • Entertain Private Citizen comments from 0830-0930. • Minutes of this meeting are being recorded and will be reduced to writing. All comments made here today are for the record and will be published.	
0830-0930	Private Citizen Comments	• Up to twelve people who may have signed up to address the panel will be given a maximum of 5 minutes each using the microphone. Time limit will be strictly enforced. • This time is set aside for public comment only and product endorsements, presentations of marketing strategies, or comments from industry are not appropriate. • Any comments or questions during other times will not be acknowledged.	
0930-1000	Break		
1000-1130	Present PDE-5 Inhibitor Drug Class Review		CAPT Don Nichols
	BAP Discussion of PDE-5 Inhibitors and Comments		MAJ Travis Watson
1130-1230	Lunch		
1230-1400	Present Topical Antifungal Drug Class Review		Maj Wade Tiller
	BAP Discussion of Topical Antifungals and Comments		MAJ Travis Watson
1400-1415	Break		
1415-1500	Present MS-DMD Drug Class Review		CAPT(sel) Denise Graham
	BAP Discussion of MS-DMDs and Comments		MAJ Travis Watson
1500-1530	BAP Deliberations		
1530-1600	Wrap Up and Adjournment	• Next meeting • Minutes process • What's next?	

*If any agenda item uses less than its allotted time, the remaining topics may be moved ahead of their scheduled time.

0800-0830

1. **Convene**
The Department of Defense (DoD) Beneficiary Advisory Panel (BAP) will convene at 0800 hours on 27 June 2005 at the Naval Heritage Center Theater, 701 Pennsylvania Ave N.W, Washington, D.C. 20004.

2. **Opening Remarks and welcome to panel members and audience**
   - Exits from the meeting room
   - Restroom facilities
   - Be courteous to your neighbor
   - Lunch options on your own

3. **Explanation of rules under which the BAP meeting will be conducted**
   - Only the Panel will actively participate in today's meeting
   - Only the Panel will address questions to any briefer
   - All audience comments and interaction will be confined to the 0830 – 0930 allotted time and then only to those designated and approved to address the panel as private citizens
   - Private citizen comments submitted in writing

4. **Introduction of voting members**
   Deborah Fryar
   Sydney Hickey
   Rance Hutchings
   Lisa LeGette
   Jeffrey Lenow
   Charles Partridge
   Jan Prasad
   Robert Washington
   Marshall Hanson

5. **Chairperson selection**

6. **Meeting objectives**

0830 – 0930

7. **Private citizen comments**

0930 - 1000

8. **Break**

1000 – 1130

9. **Presentation of PDE-5 Inhibitors drug class review (CAPT Don Nichols)**
   - Relative Clinical Effectiveness
   - Relative Cost Effectiveness
   - UF Implementation Plan

10. **BAP discussion of PDE-5 Inhibitors and comments (MAJ Watson)**

1130 – 1230

11. **Lunch**

1230 - 1400

12. **Presentation of Topical Antifungals drug class review (Maj Wade Tiller)**
   - Relative Clinical Effectiveness
   - Relative Cost Effectiveness
   - UF Implementation Plan

13. **BAP discussions of Topical Antifungals and comments (MAJ Watson)**

1400 - 1415

14. **Break**

1415 – 1500

15. **Multiple Sclerosis – Disease Modifying Drugs (MS-DMD)**
   - Relative Clinical Effectiveness
   - Relative Cost Effectiveness
   - UF Implementation Plan

16. **BAP discussions of MS-DMD and comments (MAJ Watson)**

1500 – 1530

17. **BAP deliberations regarding the day's activities**

1530 - 1600

18. **Wrap up and adjournment**

DOD PHARMACY AND THERAPEUTICS COMMITTEE RECOMMENDATIONS INFORMATION FOR THE DOD BENEFICIARY ADVISORY PANEL

I. Uniform Formulary Review Process

Under 10 U.S.C. § 1074g, as implemented by 32 C.F.R. 199.21, the DoD P&T Committee is responsible for developing the Uniform Formulary (UF). Recommendations to the Director, TMA, on formulary status, pre-authorizations, and the effective date for a drug's change from formulary to non-formulary status must be reviewed by the Beneficiary Advisory Panel (BAP) before the Director may make a final decision.

II. PDE-5 Inhibitor Drug Class Review

P&T Comments

A. Relative Clinical Effectiveness: The P&T Committee evaluated the relative clinical effectiveness of all the FDA-approved phosphodiesterase-5 inhibitors (PDE-5s) available in the U.S. The PDE-5 therapeutic class was defined as sildenafil (Viagra), vardenafil (Levitra), and tadalafil (Cialis). The clinical review included consideration of pertinent information from a variety of sources determined by the P&T Committee to be relevant and reliable, including but not limited to sources of information listed in 32 C.F.R. 199.21(e)(1). The P&T Committee was advised that there is a statutory presumption that pharmaceutical agents in a therapeutic class are clinically effective and should be included on the UF unless the P&T Committee finds by a majority vote that a pharmaceutical agent does not have a significant, clinically meaningful therapeutic advantage in terms of safety, effectiveness, or clinical outcome over the other pharmaceutical agents included on the UF in that therapeutic class.

The P&T Committee agreed that in the Military Health System (MHS), PDE-5s are considered to be the gold standard for the treatment of erectile dysfunction. During a twelve month period ending 31 January 2005, 142,333 patients were prescribed a PDE-5 Inhibitor. This class is now ranked 46th in MHS drug class expenditures.

Efficacy: All PDE-5 inhibitors have FDA approved indications for the treatment of erectile dysfunction. There are no head-to-head trials comparing the three PDE-5 inhibitors. The available placebo controlled trials and meta-analyses were reviewed. Although all PDE-5s were found to be clinically effective when compared to placebo, variability in study design, demographics, and outcome measures precluded the ability to designate one PDE-5 as clinically superior. A difference in duration of action exists among these agents. There is no evidence to suggest clinical superiority based on these differences. In addition to its FDA-approved indication for ED, sildenafil has also been proven safe and effective for

the treatment of PPH. Another off-label use of sildenafil is in the setting of radical prostatectomy, but there is not currently reliable evidence supporting its effectiveness for this indication.

Safety/Tolerability: The P&T Committee found that the PDE-5s were not significantly different with respect to major contraindications, drug interactions, and adverse drug reactions. As of May 2005 all agents have similar alpha-blocker warnings and nitrate contraindications. Vardenafil has a drug interaction warning associated with patients taking Class IA or Class III antiarrhythmics. Sildenafil is associated with more visual side effects where tadalafil is associated with more back pain.

COMMITTEE ACTION: The P&T Committee voted that for the purposes of the Uniform Formulary clinical review, none of the PDE-5 inhibitors have a significant clinically meaningful therapeutic advantage in terms of safety, effectiveness, or clinical outcome over the other PDE-5 inhibitors

B. Relative Cost Effectiveness: In considering the relative cost-effectiveness of pharmaceutical agents in this class, the P&T Committee evaluated the costs of the agents in relation to the safety, effectiveness, and clinical outcomes of the other agents in the class. Information considered by the P&T Committee included, but was not limited to, sources of information listed in 32 C.F.R. 199.21(e)(2). Several analyses were used to determine the relative cost-effectiveness of agents within the PDE-5 Inhibitor therapeutic class. A pharmacoeconomic analysis using cost-minimization techniques was used based on the clinical review conclusion that the efficacy, safety, and tolerability between all agents were roughly equivalent. A series of cost-effectiveness analyses were then conducted to confirm the results of the cost-minimization analysis. Cost-effectiveness analyses were also used to evaluate differences in the duration of action between the agents.

Results of the cost-minimization and cost-effectiveness analyses (CMA/CEA) showed vardenafil to be the most cost-effective PDE-5 inhibitor across all points of service (MTF, Retail, Mail). This was true even when taking into consideration differences in the duration of action between the agents.

The results of the above analyses were then incorporated into a Budget Impact Analysis (BIA), which accounted for other factors and costs associated with a potential decision regarding formulary status of PDE-5 inhibitors within the UF. These factors included: market share migration, cost reduction associated with non-formulary cost shares, medical necessity processing fees, and switch costs. The results of the budget impact analysis further confirmed the results of the CMA/CEA. Sildenafil and tadalafil were found not to be cost effective relative to vardenafil.

COMMITTEE ACTION: The P&T Committee agreed with the relative cost-effectiveness analysis of the PDE-5 inhibitors presented. The P&T Committee, based upon its collective professional judgment, voted to recommend non-formulary status on the Uniform Formulary for sildenafil and

tadalafil, with vardenafil maintaining formulary status on the Uniform Formulary at the formulary cost share.

C. **Implementation Plan:** Because a substantial number of patients are currently receiving either sildenafil or tadalafil from one of the three MHS pharmacy points of service (128,007 patients, 90 % of all patients receiving PDE-5 inhibitors) the P&T Committee proposed a 90-day transition period for implementation of the decision to change sildenafil and tadalafil to non-formulary drugs on the UF. Patients wishing to fill prescriptions for sildenafil or vardenafil at retail network pharmacies or the TMOP would then have to pay the non-formulary cost share, unless medical necessity for these agents are established by the beneficiary or their provider.

   MTFs will not be allowed to have sildenafil or tadalafil on their local formularies. MTFs will be able to fill non-formulary requests for these agents only if both of the following conditions are met: 1) the prescription must be written by a MTF provider, and 2) the beneficiary provider must establish medical necessity for these agents. MTFs may (but are not required to) fill a prescription for sildenafil or tadalafil written by a non-MTF provider to whom the patient was referred, as long as medical necessity has been established.

   COMMITTEE ACTION: The P&T Committee recommended an effective date no later than the first Wednesday following a 90 day implementation period. The implementation period will begin immediately following the approval by the Director, TMA.

III. PDE-5 Inhibitor Drug Class Review (cont.)

BAP Comments

A. **Relative Clinical Effectiveness***:* The P&T Committee concluded that all PDE-5s have similar relative clinical effectiveness for treating erectile dysfunction. All three PDE-5s have similar safety and tolerability profiles.

B. **Relative Cost Effectiveness:** The P&T Committee, based upon its collective professional judgment, voted to recommend non-formulary status on the Uniform Formulary for sildenafil and tadalafil, with vardenafil maintaining formulary status on the Uniform Formulary at the formulary cost share.

C. **Uniform Formulary Recommendation:** Considering the conclusions from the relative clinical effectiveness and relative cost effectiveness determinations of the PDE-5 Inhibitors, and other relevant factors, the P&T Committee recommended that sildenafil and tadalafil status be changed from formulary to non-formulary, with vardenafil maintaining formulary status with the formulary cost share under the Uniform Formulary as stated in 1A and 1B above.

BAP Comment:	☐ Concur ☐ Non-concur Additional Comments and Dissentions:

D. Implementation Plan: The P&T Committee proposed a 90-day transition period for implementation of the decision to change sildenafil and tadalafil to non-formulary drugs on the UF.

BAP Comment:	☐ Concur ☐ Non-concur Additional Comments and Dissentions:

IV. Topical Antifungal Drug Class Review

P&T Comments

***A.* Relative Clinical Effectiveness:** The P&T Committee evaluated the relative clinical effectiveness of the 11 dermatological topical antifungals marketed in the US by considering information regarding their safety, tolerability, effectiveness, and other factors, including marketed formulations, generic availability, chemical structures, existing MHS utilization patterns, and FDA-approved labeling. The dermatological topical antifungal class was defined as the "azoles" clotrimazole (various generics), econazole (various generics), ketoconazole (various generics), miconazole (various generics), oxiconazole (Oxistat), sertaconazole (Ertaczo), and sulconazole (Exelderm); the "allylamines" butenafine (Mentax), and naftifine (Naftin); the "substituted pyridone" ciclopirox (Loprox), and the "polyene" nystatin. The topical formulation of terbinafine (Lamisil) was specifically excluded from the class, as it is now solely available in a non-prescription product. The clinical review included consideration of pertinent information from a variety of sources determined by the P&T Committee to be relevant and reliable, including, but not limited to, sources of information listed in 32 C.F.R. 199.21(e)(1). The P&T Committee was advised that there is a statutory presumption that pharmaceutical agents in a therapeutic class are clinically effective and should be included on the Uniform Formulary unless the P&T Committee finds by a majority vote that a pharmaceutical agent does not have a significant, clinically meaningful therapeutic advantage in terms of safety, effectiveness, or clinical outcome over the other pharmaceutical agents included on the UF in that therapeutic class.

1.) *Other Factors: Structure/Mechanism of action:* The Committee agreed that it would be advantageous to include on the Uniform Formulary products that are available in more than one formulation, those that have differing mechanisms of action (e.g., an allylamine and an azole), those that have a wide number of FDA approved indications, and those that are approved for use in the pediatric population.

2.) *Efficacy for tinea pedis:* A Cochrane systematic review for treatment of tinea

pedis infections reported that allylamines were slightly more efficacious than the azoles, however, there was a language bias present, and the overall cure rates were similar (80% cure rates with the allylamines vs 73% with the azoles). Ciclopirox showed similar efficacy as clotrimazole. There was no difference in cure rates when azoles were compared to azoles, or when allylamines were compared to allylamines. Three topical antifungals were not included in the Cochrane review, ketoconazole, oxiconazole and sertaconazole. The cure rates reported in clinical trials with use of ketoconazole for tinea pedis are similar to those reported with the other azoles. Head to head trials comparing ketoconazole shampoo vs. ciclopirox shampoo for treating seborrheic dermatitis reported no differences in efficacy. Head to head trials of oxiconazole vs naftifine and terbinafine show similar efficacy. Cure rates reported with sertaconazole were low (30%) in the clinical trials used to gain FDA approval; however, the FDA now has more stringent requirements for definitions of mycological cure than were used previously. Overall, there is no evidence to support that one individual topical antifungal agent is superior to another for treating tinea pedis.

3.) *Efficacy for tinea cruris, tinea corporis, or pityriasis versicolor*: There are no systematic reviews and no head-to-head trials of individual topical antifungal agents for treating tinea cruris, tinea corporis or pityriasis versicolor. There is no evidence that any one topical antifungal agent is superior to another for treating these conditions.

4.) *Efficacy for cutaneous candidiasis*: There are no systematic reviews for the treatment of cutaneous candidiasis. Two head–to-head trials comparing nystatin to miconazole, and nystatin to tolnaftate showed similar efficacy. There is no evidence that any one topical antifungal agent is superior to another for treating cutaneous candidiasis.

5.) *Safety/Tolerability*: The topical antifungals are recognized as safe therapeutic agents. Several of the products (clotrimazole, miconazole, butenafine) are available without a prescription in the same concentration and dosage form as the prescription product. Hypersensitivity is the only contraindication listed in the package inserts of the topical antifungals. Adverse reactions reported most commonly with the topical antifungals include itching, burning, and erythema, which are the common symptoms of fungal infections. Adverse event rates listed in the individual agents' product labeling range from 1-3%. Products containing propylene glycol may cause burning, but this varies with the dosage form and type of infection being treated.

COMMITTEE ACTION: The Committee voted to recommend that none of the topical antifungals have significant, clinically meaningful therapeutic advantage in terms of safety, tolerability, effectiveness, or clinical outcome over the other topical antifungals. The Uniform Formulary recommendation can be based on cost, current utilization patterns, available formulations, pediatric indications, and dosing duration. The Committee also recommended having agents with differing mechanisms of action (azoles and allylamines) on the UF. The FDA-approved

indications, clinical use, and dosing duration of ciclopirox is more similar to that of the azoles, rather then the allylamines; thus, for cost effectiveness determinations, ciclopirox will be considered along with the azoles.

B.* Relative Cost Effectiveness*: The P&T Committee evaluated the relative cost-effectiveness of the agents within the topical antifungal class in relation to safety,,effectiveness, and clinical outcomes of the other agents in the class. Information considered by the P&T Committee included, but was not limited to, sources of information listed in 32 C.F.R. 199.21(e)(2). To determine the relative cost-effectiveness of the agents within the topical antifungal therapeutic class, two separate economic analyses were performed: a pharmacoeconomic analysis and budget impact analysis (BIA). From the preceding relative clinical effectiveness evaluation, the P&T Committee agreed that there was no compelling evidence to support clear superiority of one agent over another in terms of safety, effectiveness or clinical outcomes. For the Uniform Formulary, it would be advantageous to include products with differing mechanisms of action (e.g., an allylamine and an azole), those available in multiple dosage formulation, those approved for use in the pediatric setting, and those with existing high utilization in the MHS. The clinical characteristics of the substituted pyridone ciclopirox are more closely related to the azole topical antifungals than the allyalmines. For the purposes of the relative clinical effectiveness evaluation, topical antifungals with the azole and substituted pyridone (ciclopirox) structure were analyzed collectively; those agents with an allylamine structure were also analyzed separately from the azoles/substituted pyridone.

Given this conclusion, two cost-minimization analyses (CMA) were conducted for each sub-class using two different measures of cost: the weighted average cost per gram, and the weighted average annual cost of treatment per unique user. In general, the results of the CMAs revealed: miconazole was the most cost-effective agent in the azole/substituted pyridone sub-class; naftifine and butenafine were similar in relative cost-effectiveness in the allylamine sub-class; and nystatin was the most cost-effective agent relative to all topical antifungals. More specifically, within the allylamine sub-class, naftifine was more cost-effective relative to butenafine at the MTF and TMOP point of service (POS), whereas butenafine was more cost-effective relative to naftifine at the TRRx POS. Examination of the cost continuum further suggested that a cluster of agents (nystatin, miconazole, clotrimazole, and ketoconazole) were more cost-effective relative to the other agents within the therapeutic class (butenafine, ciclopirox, econazole, naftifine, oxiconazole, sertaconazole, and sulconazole). The results of the CMA were subsequently incorporated into a BIA. A BIA accounts for other factors and costs associated with a potential decision to recommend that the status of one or more topical antifungals be changed from formulary to non-formulary such as: market share migration, cost reduction associated with non-formulary cost shares, and medical necessity processing fees. The goal of the BIA was to identify a group of antifungal agents to be included on the UF which best met the majority of the clinical needs of the DoD population at the lowest cost to the MHS, given the DoD P&T Committee's

decision to include at least one-agent from the azole/substituted pyridone sub-class, one agent from the allylamine sub-class, and nystatin on the Uniform Formulary. The BIA results revealed that a group of topical antifungals that included nystatin, miconazole, clotrimazole, ketoconazole, butenafine, and naftifine best achieved this goal when compared to other combination groups of antifungals, and thus were determined to be more cost-effective relative to other combination groups. The P&T Committee concluded that econazole, sulconazole, ciclopirox, oxiconazole, and sertaconazole were not cost-effective relative to the other topical antifungals.

COMMITTEE ACTION: The P&T Committee agreed with the relative cost-effectiveness analysis of the Topical Antifungal agents presented. The P&T Committee, based upon its collective professional judgment, voted to recommend formulary status for nystatin, miconazole, clotrimazole, ketoconazole, butenafine and naftifine, and non-formulary status for econazole, sulconazole, ciclopirox, oxiconazole andsertaconazole under the UF.

C. **Implementation Plan***:* The Committee voted to recommend an effective date of the first Wednesday after 30 days from the final decision date (the date that DoD P&T Committee minutes are signed by the Director, TMA, approving the Committee's recommendation). A 30-day implementation period is recommended, since the topical antifungal products are used to treat acute, rather than chronic infections; thus, patients are unlikely to require a change in existing therapy.

COMMITTEE ACTION: The Committee voted to recommend an effective date of the first Wednesday after 30 days from the final decision date (the date that DoD P&T Committee minutes are signed by the Director, TMA, approving the Committee's recommendation)

V. Topical Antifungal Drug Class Review (cont.)

BAP Comments

A. **Relative Clinical Effectiveness***:* The Committee concluded that the topical antifungals have similar safety and tolerability profiles. The individual topical antifungal agents appear to have similar efficacy and clinical outcomes for treating tinea pedis, tinea corporis, tinea cruris, pityriasis versicolor, and cutaneous candidiasis infections. Differences do exist in such factors as existing MHS utilization, available formulations, FDA approved indications, pediatric labeling, and dosing duration.

B. Relative Cost Effectiveness: Taking into consideration the conclusions from the relative clinical effectiveness and relative cost effectiveness determinations of the topical antifungals, the P&T Committee recommended that the status of econazole, sulconazole, ciclopirox, oxiconazole, and sertaconazole be changed from formulary to non-formulary, with butenafine, clotrimazole, ketoconazole,

miconazole, naftifine, and nystatin maintaining formulary status with the formulary cost share.

C. **Uniform Formulary Recommendation:** Considering the conclusions from the relative clinical effectiveness and relative cost effectiveness determinations of the topical antifungals, and other relevant factors, the P&T Committee recommended that econazole, sulconazole, ciclopirox, oxiconazole, and sertaconazole status be changed from formulary to non-formulary, with butenafine, clotrimazole, ketoconazole, miconazole, naftifine, and nystatin maintaining formulary status with the formulary cost share under the Uniform Formulary as stated in 1A and 1B above.

BAP Comment:	☐ Concur ☐ Non-concur Additional Comments and Dissentions:

D. **Implementation Plan:** Topical antifungal products are used to treat acute, rather than chronic infections, patients are unlikely to require a change in existing therapy. The P&T Committee proposed a 30-day transition period for implementation of the decision to change econazole, sulconazole, ciclopirox, oxiconazole, and sertaconazole to non-formulary drugs on the UF.

BAP Comment:	☐ Concur ☐ Non-concur Additional Comments and Dissentions:

VI. Multiple Sclerosis Disease Modifying Drugs Class Review

P&T Comments

A. **Relative Clinical Effectiveness:** The P&T Committee evaluated the relative clinical effectiveness of the four Multiple Sclerosis Disease Modifying Drugs (MS-DMDs) available in the US by considering information regarding their safety, effectiveness, and clinical outcomes. Currently, DMDs have been approved for the treatment of relapsing-remitting (RR) MS. The therapeutic class includes three interferons (IFN): -intramuscular (IM) IFN beta-1a (Avonex), subcutaneous (SC) IFN beta-1a (Rebif), SC IFN beta-1b (Betaseron), and one subcutaneous (SC) polypeptide mixture, glatiramer acetate (Copaxone). The clinical review included consideration of pertinent information from a variety of sources determined by the P&T Committee to be relevant and reliable, including, but not

limited to, sources of information listed in 32 C.F.R. 199.21(e)(1). The P&T Committee was advised that there is a statutory presumption that pharmaceutical agents in a therapeutic class are clinically effective and should be included on the Uniform Formulary unless the P&T Committee finds by a majority vote that a pharmaceutical agent does not have a significant, clinically meaningful therapeutic advantage in terms of safety, effectiveness, or clinical outcome over the other pharmaceutical agents included on the UF in that therapeutic class.

MS-DMDs have been available for the past 12 years, and the class is currently ranked 33rd in Military Health System (MHS) drug class expenditures. During the twelve-month period ending January 31, 2005, approximately 6,500 patients were prescribed a MS-DMD. In most cases, MS-DMDs are prescribed by sub-specialists (neurologists).

1.) *Efficacy for RR-MS*: All the IFNs and glatiramer are indicated for the treatment of patients with relapsing forms of MS to decrease the frequency of clinical exacerbations. Avonex and Rebif also claim to delay accumulation of physical disability. A Cochrane Systematic Review of all the available trials through 2000 found only a modest reduction in exacerbations and disability following treatment of RR-MS with INFs. A Cochrane Systematic Review of trials available through 2003 concluded that glatiramer had a modest reduction in exacerbations; however, no beneficial effect on disease progression. A decrease in exacerbations does not necessarily correlate to the progression of disease. There is no compelling evidence to support superiority of one agent over another. All Beta IFNs and glatiramer have been shown to have a modest protective effect on disease exacerbations. IFN beta-1a agents (Rebif and Avonex) have shown to have a modest protective effect on disease disability; therefore, they may have a marginal benefit over glatiramer.

2.) *Safety/Tolerability:* The P&T Committee agreed that there is no evidence that any one MS-DMD is preferable to the others with respect to safety or tolerability. These medications are generally well-tolerated and adverse events are dose-related. The most common side effects were local injection site reactions for the SQ drugs and flu-like symptoms for the IM drugs. Additionally, a self-limiting allergic-type reaction may be seen with glatiramer. All the MS-DMDs have similar safety and tolerability profiles with only rare incidences of true serious adverse effects.

COMMITTEE ACTION: The P&T Committee, based upon its collective professional judgment, voted to accept the conclusion that none of the MS-DMDs have a significant clinically meaningful therapeutic advantage in terms of safety, effectiveness, or clinical outcomes over the other MS-DMDs.

B. **Relative Cost Effectiveness*:*** In considering the relative cost effectiveness of pharmaceutical agents in this class, the P&T Committee evaluated the costs of the agents in relation to the safety, effectiveness, and clinical outcomes of the other agents in the class. Information considered by the P&T Committee

included, but was not limited to, sources of information listed in 32 C.F.R. 199.21(e)(2).

Cost-minimization techniques determined that the overall average weighted cost per day of therapy for the MS-DMDs was lowest for Avonex.

COMMITTEE ACTION: The P&T Committee, based upon its collective professional judgment, voted to recommend formulary status for IFN beta-1b (Betaseron), IFN beta-1a (Avonex), INF beta-1a (Rebif), and glatiramer (Copaxone) under the UF.

C. **Implementation Plan*:*** Since no agents were selected for non-formulary status, establishment of an implementation plan is not applicable

COMMITTEE ACTION: Not applicable

VII. Multiple Sclerosis Disease Modifying Drugs Class Review (cont.)

BAP Comments

A. **Relative Clinical Effectiveness*:*** The P&T Committee concluded that there is no compelling evidence to support superiority of one MS-DMD agent over another in the treatment of RR-MS. All MS-DMD agents have shown a modest effect in reducing exacerbations, with IFN beta-1a agents (Rebif and Avonex) demonstrating a modest reduction on disease disability. All the IFNs and glatiramer have similar safety and tolerability profiles.

B. Relative Cost Effectiveness: Taking into consideration the conclusions from the relative clinical effectiveness and relative cost-effectiveness determinations of the MS-DMDs, and other relevant factors (i.e., relative uniqueness of each agent in patient therapy, and the low expectation that patient behavior would be affected by formulary status), the P&T Committee recommended that all MS-DMDs [IFN beta-1a (Avonex), IFN beta-1a (Rebif), IFN beta-1b (Betaseron), and glatiramer acetate (Copaxone)] maintain UF status with the formulary cost share.

C. Uniform Formulary Recommendation: Considering the conclusions from the relative clinical effectiveness and relative cost effectiveness determinations of the MS-DMDs, and other relevant factors, the P&T Committee recommended that all MS-DMDs [IFN beta-1a (Avonex), IFN beta-1a (Rebif), IFN beta-1b (Betaseron), and glatiramer acetate (Copaxone)] maintain formulary status with the formulary cost share under the Uniform Formulary as stated in 1A and 1B above.

BAP Comment:	☐ Concur ☐ Non-concur Additional Comments and Dissentions:

D. Implementation Plan*:* Not applicable.

BAP Comment:	☐ Concur ☐ Non-concur Additional Comments and Dissentions: