



Outcome Report on MHQAC Edits

Classes Under Review:
Analysis:

**Atypical Antipsychotics, SSRIs, SNRIs, Antianxietals, Hypnotics, and Drugs to Treat ADD/ADHD
Utilization and Cost Trends: Pre and Post Implementation**

Executive Summary

Request: Report requested for the Indiana Medicaid DUR Board and the Indiana Mental Health Quality Advisory Committee. Information in the report will identify utilization patterns and cost impact of MHQAC clinical and utilization edits that were implemented in 2007.

Overview: On January 1, 2007, MDwise implemented clinical edits to address poly-pharmacy situations involving behavioral health medications. The purpose of these edits was to prevent drug regimens that were considered to be unwarranted. The following clinical edits included:

- An edit preventing drug regimens containing 2 or more tricyclic antidepressant medications.
- An edit preventing drug regimens containing 2 or more typical antipsychotic medications.
- An edit preventing drug regimens containing 3 or more atypical antipsychotic medications.
- An edit preventing drug regimens containing 3 or more antipsychotic medications.
- An edit preventing drug regimens containing 3 or more benzodiazepine medications.
- An edit preventing drug regimens containing 3 or more antidepressant medications, excluding trazadone.

On June 19, 2007, MDwise also implemented utilization edits that addressed opportunities to optimize dosing to more cost effective drug regimens. The utilization edits set a limit on the quantity of medication allowed per day, and encouraged prescribers to utilize fewer quantities of higher-strength dosage forms to deliver the daily regimen prescribed.

Outcome:

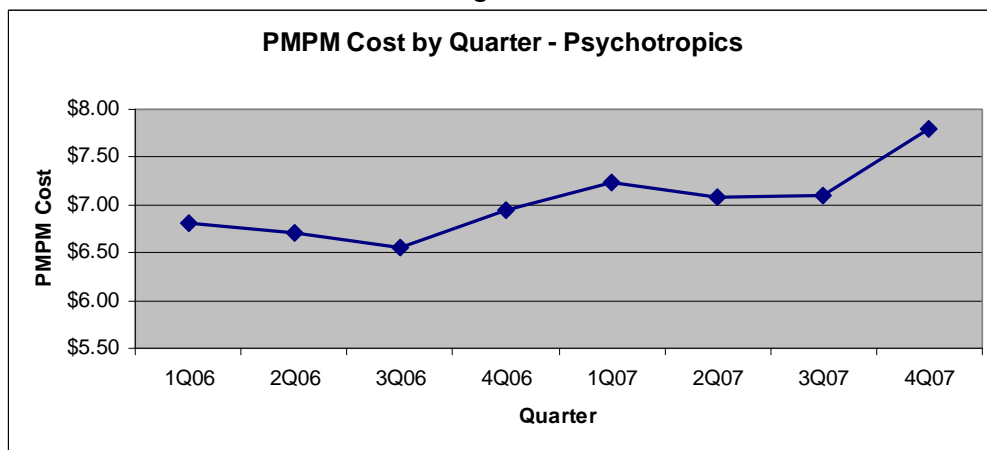
The utilization and financial impact of the clinical edits that were implemented on January 1, 2007 requires analysis of paid claims from 2006, to compare against utilization in 2007. Because 2006 and 2007 existed in separate contracting periods, there are possible variances between normal utilization patterns between 2006 and 2007 that may not be attributed to the clinical edits that were implemented on 1-1-2007.

Analysis focused on trends recorded in the cost per-member-per-month (\$PMPM) and the claims per-member-per-month (RxPMPM) for behavioral health medications and their classes. For the purpose of this report, MDwise chose to focus analysis on specific behavioral health drug classes that include; atypical antipsychotic agents, selective serotonin reuptake inhibitors (SSRI), serotonin/norepinephrine reuptake inhibitors (SNRI), antianxiety agents (benzodiazepines), hypnotic agents, agents used to treat ADD/ADHD (stimulants) and Strattera.

Program Impact of Clinical Edits:

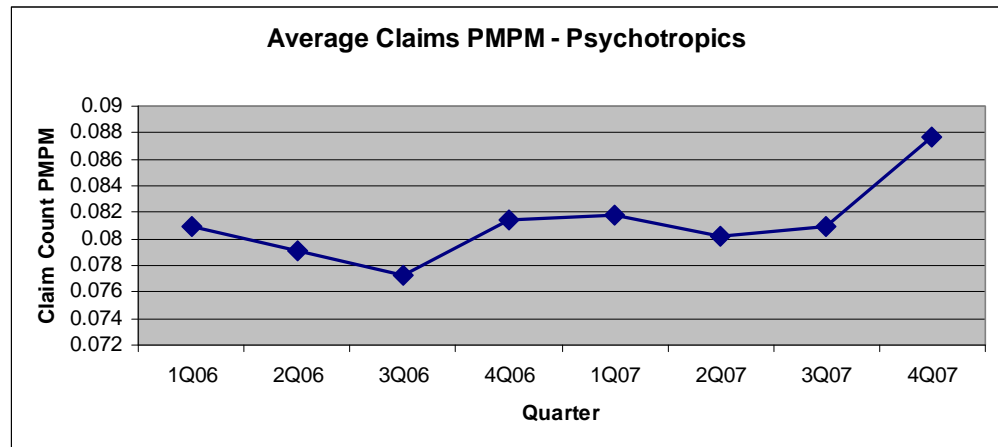
Overall \$PMPM changes between the quarters of 2006 and the quarters of 2007 demonstrate an increasing trend in cost (see figure 1). Through the first three quarters of 2006, \$PMPM were trending down. 4Q2006, however, showed an increase in \$PMPM that coincided with the MCO PDL changes of that quarter which removed existing restrictions on behavioral health medications for the purpose of establishing compliance to the mandates of HEA1325. Year-to-year comparison reveals an 8% increase in the average PMPM cost of the psychotropic medications annualized, which calculates to a \$0.55 PMPM increase.

Figure 1



A review of claim activity trends for psychotropics may offer a partial answer to the \$PMPM increase observed in 2007 with psychotropic drug product use increasing through the number of prescription claims per-member-per-month (RxPMPM). The average RxPMPM for 2006 was 80 prescription claims for psychotropic medications per 1,000 members per month. In 2007, the average RxPMPM grew 4% to 83 prescription claims per 1,000 members per month (see figure 2).

Figure 2



As in figure 1, the RxPMPM appeared to be trending downward for the first three quarters of 2006. 4Q2006 exhibits the start of an increasing trend in the RxPMPM that happens at the same time as the removal of restrictions for behavioral health medications occurs in the MCO PDLs.

The remainder of this report will attempt to identify utilization and cost trends among the various drug classes that make up behavioral health medications.

Atypical Antipsychotics:

The \$PMPM related to atypical antipsychotic agents is reported to have increased approximately 13% from 2006 to 2007 (see figure 3). The first three quarters of 2006 demonstrated a relative stable cost trend related to prescription service costs involving atypical antipsychotics. However, an increasing trend was observed to have started in 4Q06 and continued to 2Q07, correlating to the HEA1325 removals of all behavioral health medication restrictions, and the rollout of new memberships associated with the new contract. A slight dip was observed in 3Q07 that may correlate to the time the utilization edits were implemented in June 07.

Figure 4 demonstrates the number of prescription drug claims of MDwise members for atypical antipsychotics. Comparing 2006 to 2007, the number of prescriptions written for atypical antipsychotics increased 5%, from 13.8 prescriptions per 1,000 members per month to 14.4 prescriptions per 1,000 members per month.

In 2007, the average paid amount per atypical drug product claim throughout all delivery systems in the MDwise plan increased from \$223.04 in January 2007 to \$232.09 in November 2007 (see figure 5). The number of units per claim, however, decreased over the year (see figure 6), peaking at nearly 42 units per claim in February 2007, but trending downward to near 38 units per claim in November.

Figure 3

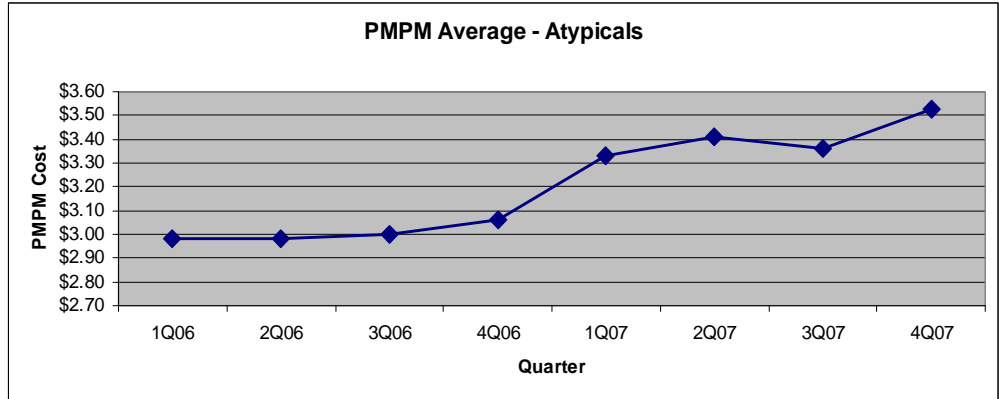


Figure 4

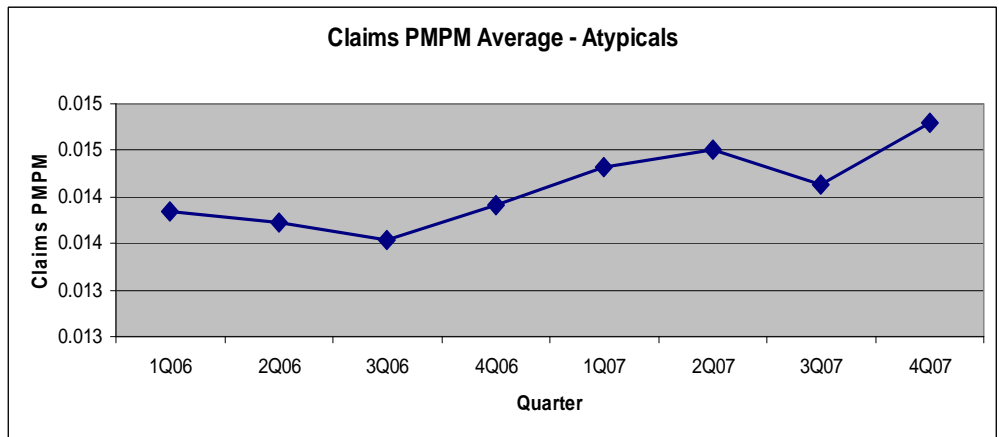


Figure 5

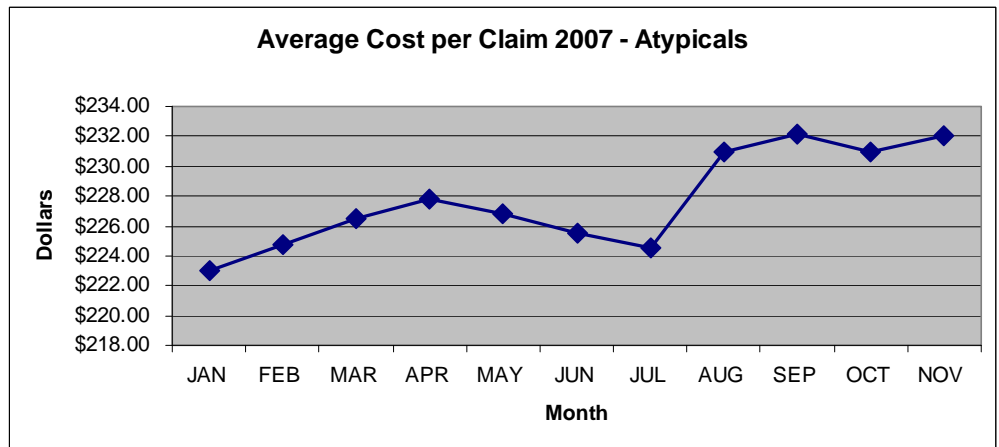
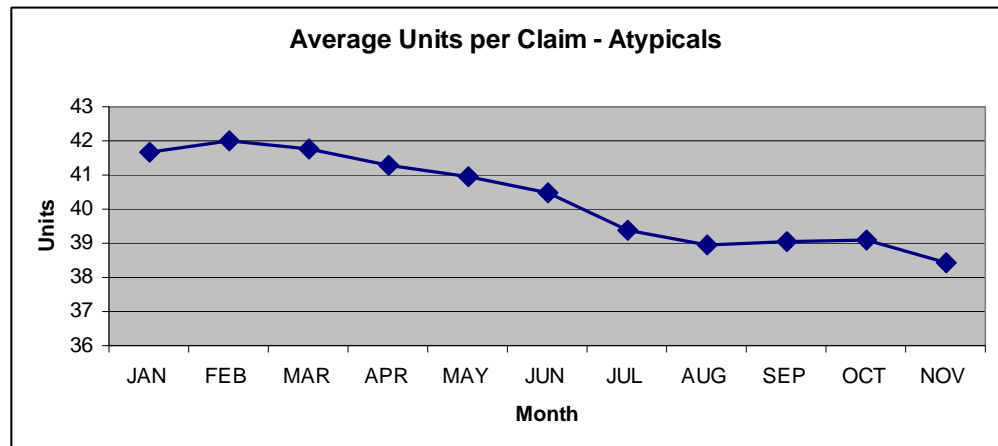


Figure 6



Within the MDwise program and its membership, the changes observed in the utilization and cost of atypical antipsychotics include the following:

- \$PMPM increased by approximately \$0.40, or \$1.3 M annually throughout the MDwise plan, year-to-year.
- The number of claims for atypical antipsychotic agents PMPM has grown 5% from the previous year.
- The average cost per claim increased 4% in 2007, while the number of units dispensed per claim appears to be trending downward.

SSRIs:

The \$PMPM related to SSRI agents has demonstrated a steady downward trend through 2007, decreasing nearly 40% from the averages reported in 2006 (see figure 7). This decrease is likely due to the release of the generic version of a popular SSRI in the late 2006 and early 2007.

Figure 8 demonstrates the number of prescriptions written for MDwise members for SSRIs. Comparing 2006 to 2007, the number of prescriptions written for SSRIs has increased 3%. This number is misleading, however, as a downward trend in the first 3 quarters of 2006 was reversed with a significant increase in the number of prescriptions for SSRIs in 4Q06 that leveled off in subsequent quarters, only to begin trending upwards again in the second half of 2007.

In 2007, the average paid amount per SSRI prescription throughout all delivery systems in the MDwise plan has remained constant after a sharp drop in January and February (see figure 9). The number of units per claim, however, has decreased over the year (see figure 10), peaking at 33.6 units per claim in April 2007, but trending downward to near 32.3 units per claim by September. This decrease may be attributed to the utilization edits that were implemented for this class in June 2007.

Figure 7

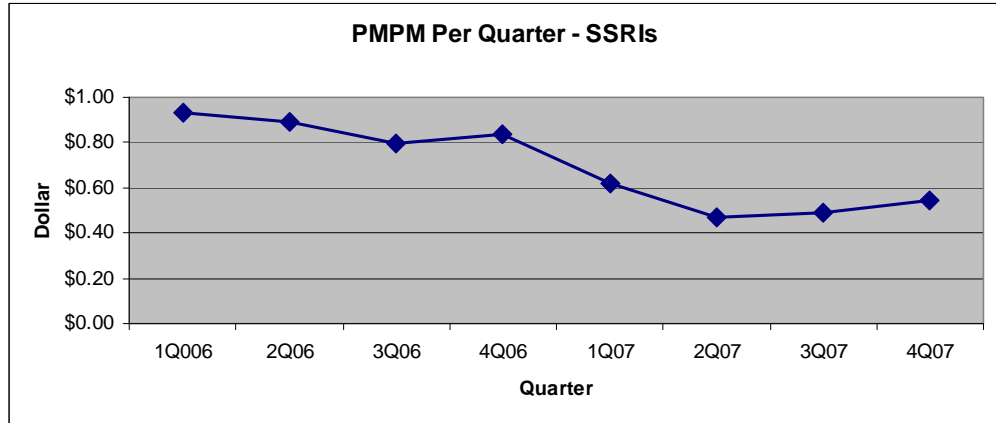


Figure 8

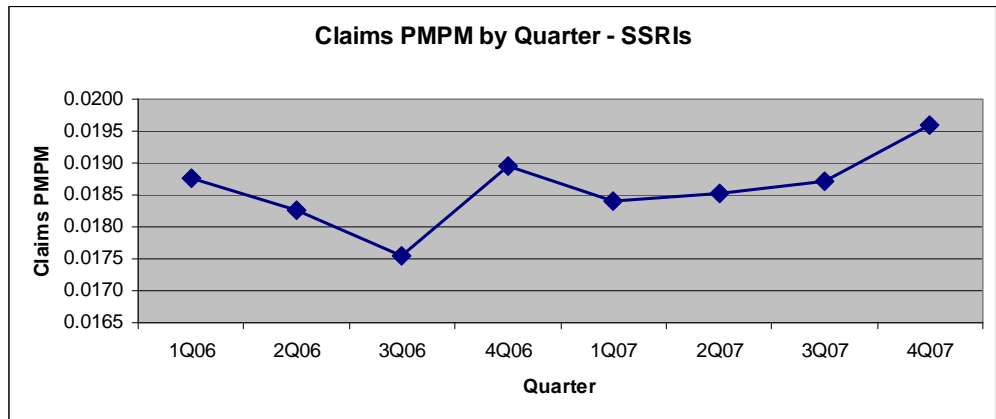


Figure 9

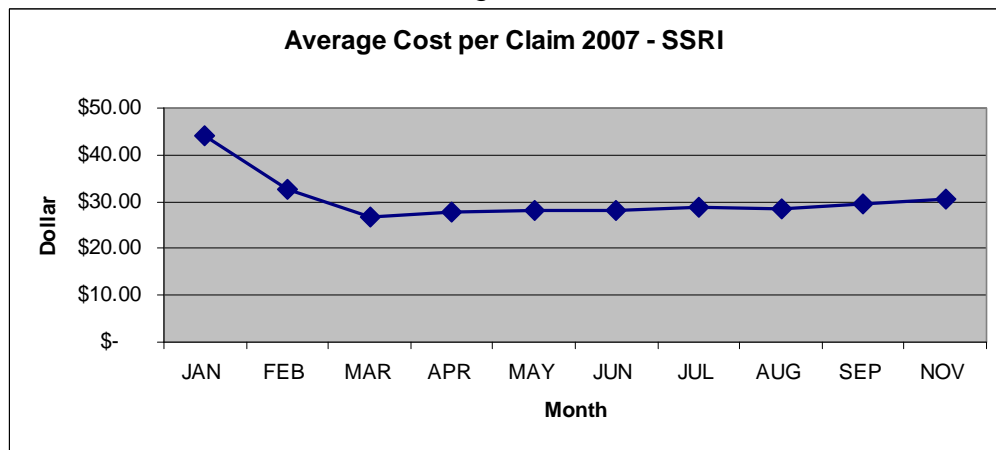
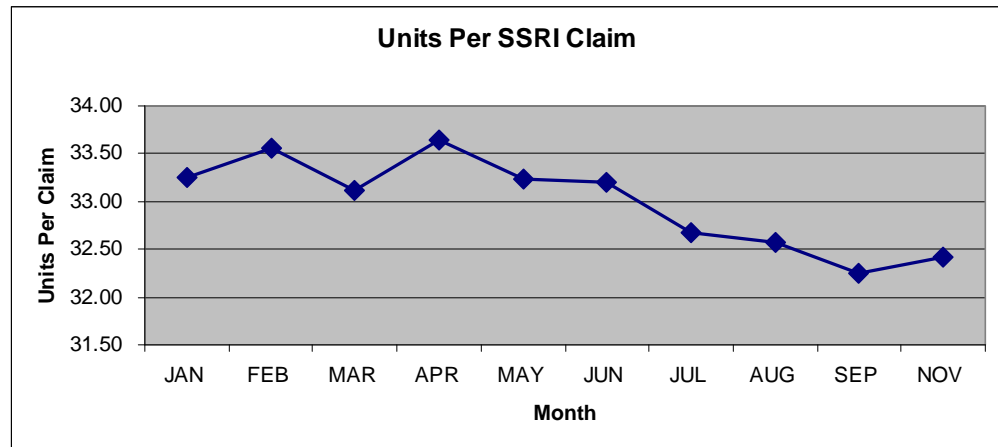


Figure 10



Within the MDwise program and its membership, the changes observed in the utilization and cost of SSRIs include the following:

- \$PMPM decreased by approximately \$0.33, or \$1.1 M annually throughout the MDwise plan.
- The number of claims for SSRI agents PMPM has grown 3% from the previous year.
- The average cost per claim has decreased 32% in 2007.
- The number of units dispensed per claim shows a decreasing trend as well.

SNRIs:

The \$PMPM related to SNRI agents has trended upwards of nearly 20% in 2007 from averages reported in 2006 (see figure 11). There does not appear to be any correlation between the increases observed in SNRI cost to actions undertaken by MCOs as a result of HEA1325.

Figure 12 reports the number of prescription claims paid by MDwise for SNRIs. Comparing 2006 to 2007, the number of prescription claims paid for SNRIs had increased 12%. While the prescription claim count for these products remained unchanged from 2Q06 to 4Q06, a steady increase is evident in the claim counts for SNRIs in subsequent quarters, resulting in claim counts that were 11% higher in 4Q07 than they were for 4Q06.

In 2007, the average paid amount per SNRI prescription throughout all delivery systems in the MDwise plan dropped 4.4% (see figure 13). This is likely attributed to the decrease in the average number of units per claim values that were observed after the implementation of utilization edits in June. The average number of units per claim dropped 7.7% to 33.5 units per prescription after the utilization edits governing Effexor and Cymbalta were in place (see figure 14).

Figure 11

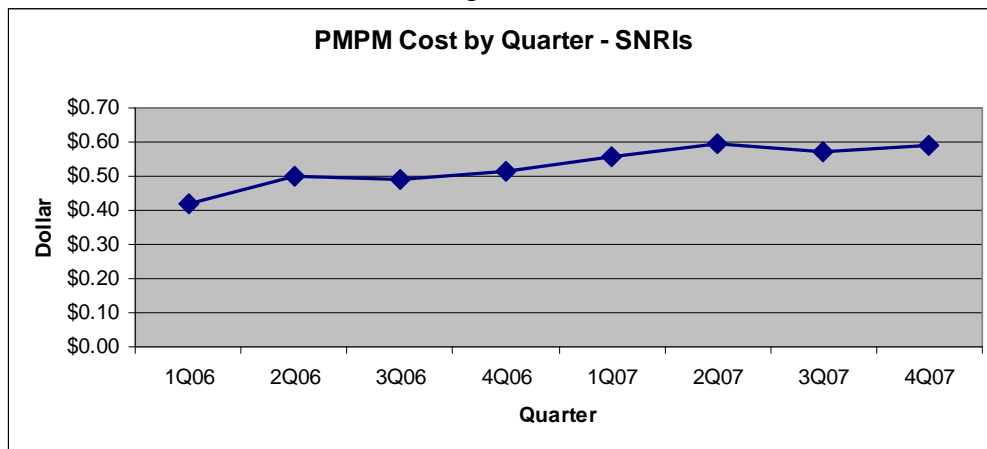


Figure 12

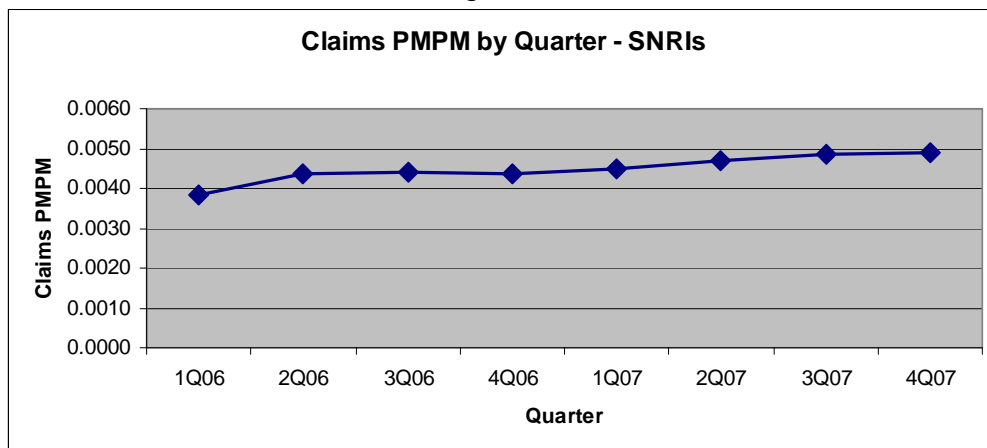


Figure 13

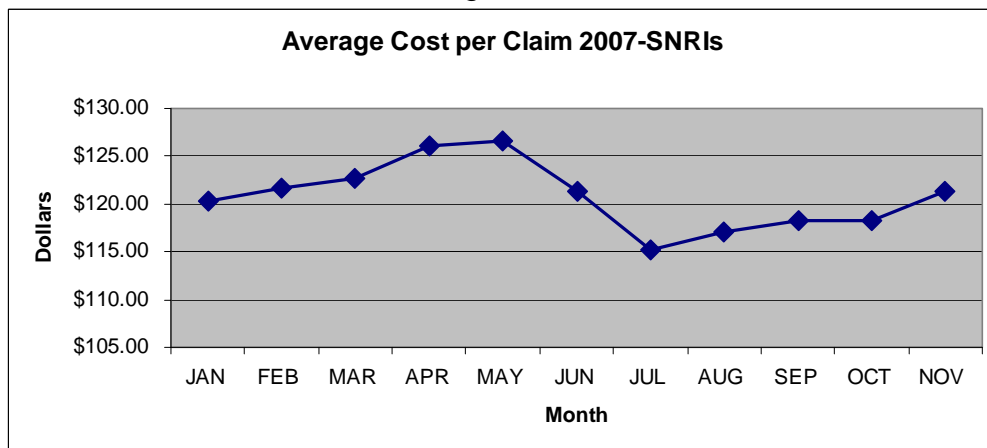
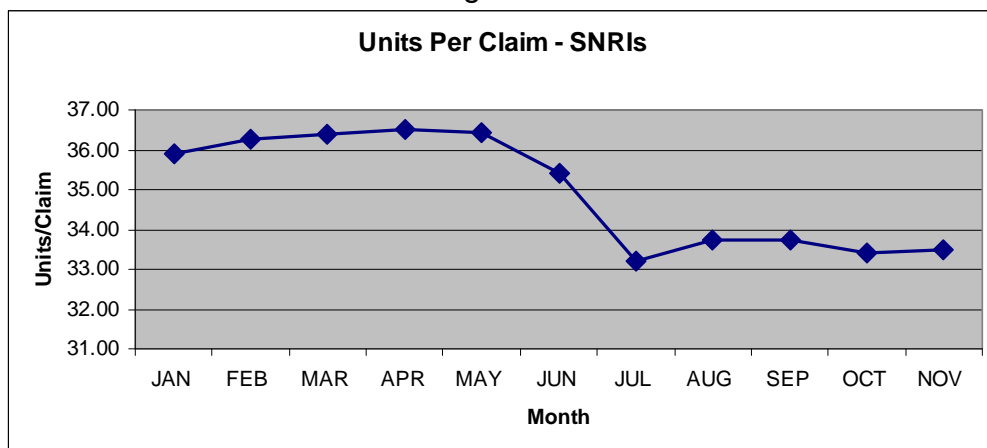


Figure 14



Within the MDwise program and its membership, the changes observed in the utilization and cost of SNRIs include the following:

- \$PMPM increased by approximately \$0.10, or \$330,000 annually throughout the MDwise plan.
- The number of claims for SNRI agents PMPM has grown 12% from the previous year.
- The average cost per claim decreased 4.4% in 2007.
- The number of units dispensed per claim shows a decreasing trend of 7.7% in 2007; mostly occurring at the time that the utilization edits were implemented.

Antianxiety Agents:

The \$PMPM related to antianxiety agents has trended downwards by nearly 19% in 2007 from averages reported from 2006 (see figure 15). While the cost for antianxiety agents appears to have dropped, starting the first quarter of 2007. The decrease also correlates to a 6.7% reduction in the number of antianxiety claims over the same period (see figure 16). It cannot be determined whether the decrease in drug cost and claims are a result of the actions undertaken from HEA1325.

Figure 15

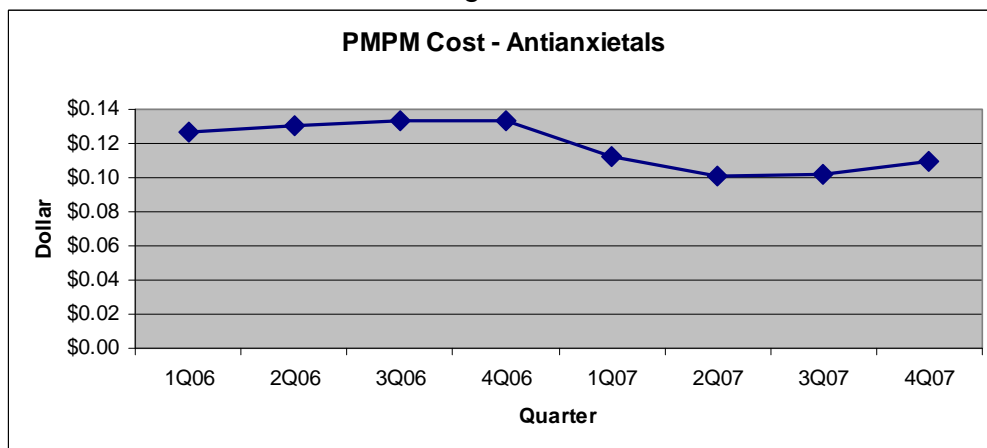
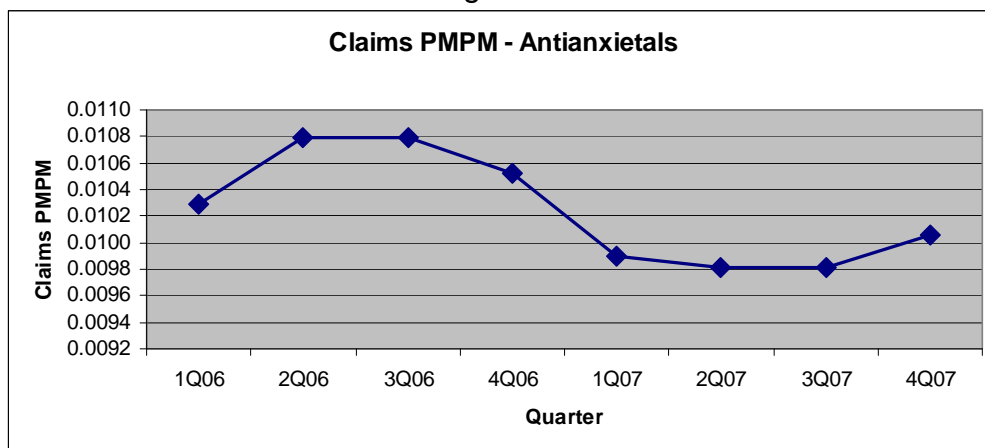


Figure 16



Within the MDwise program and its membership, the changes observed in the utilization and cost of antianxiety agents include the following:

- \$PMPM decreased by approximately \$0.025, or a calculated reduction of \$80,000 annually throughout the MDwise plan.
- The number of claims for antianxiety agents PMPM decreased 6.7% from the previous year.
- There appears to be a potential correlation among the cost and utilization of antianxiety agents and the action undertaken to remove restrictions to behavioral health medications in compliance to HEA1325.

Hypnotic Agents:

The \$PMPM related to hypnotic agents has trended upwards by more than 200% in 2007 from averages reported from 2006 (see figure 17). While the first three quarters of 2006 shows a flat growth in the \$PMPM for these products, the trend marking the increase begins in 4Q06, at the same period that actions were undertaken by MCOs as a result of HEA1325.

Figure 17

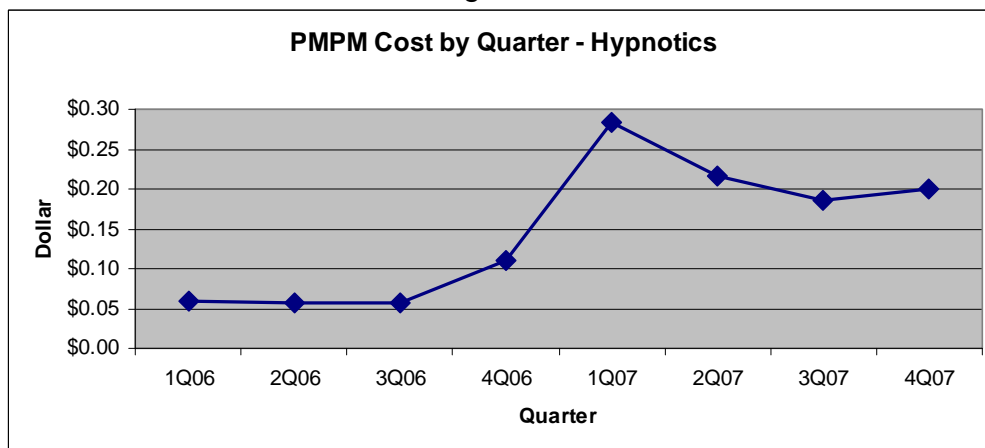
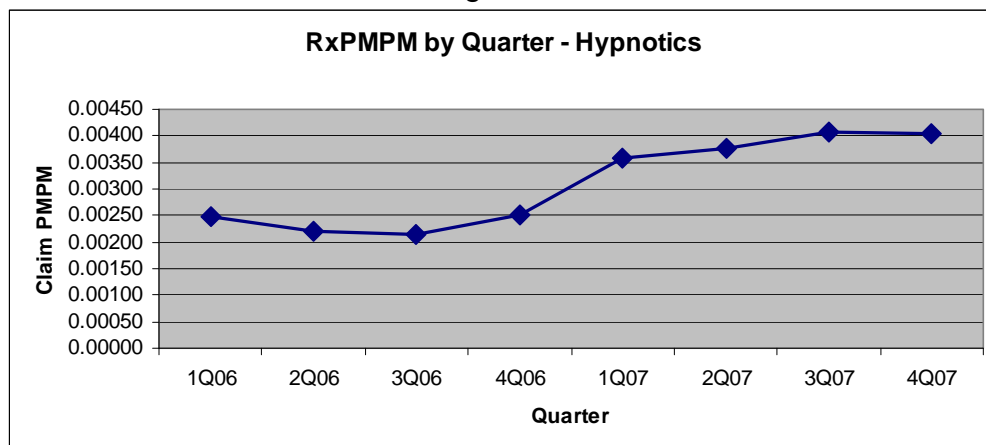


Figure 18 reports the number of prescription claims paid by MDwise for members taking hypnotic medications. Comparing 2006 to 2007, the number of prescription claims paid for hypnotic agents had increased 65%. Just as with the flat growth in \$PMPM observed in 1Q06 through 3Q06, little change in utilization is observed in RxPMPM for hypnotic agents in these quarters. The increasing trend starts in 4Q06 and continues to rise in subsequent quarters.

Figure 18



Within the MDwise program and its membership, the changes observed in the utilization and cost of hypnotic agents include the following:

- \$PMPM increased by approximately \$0.15, or a calculated increase of nearly \$500,000 annually throughout the MDwise plan. Cost increases of 1200-1500% were associated with branded hypnotic agents.
- The number of claims for hypnotic agents PMPM increased 65% from the previous year.
- There appears to be a potential correlation among the cost and utilization of hypnotic agents and the action undertaken to remove restrictions to behavioral health medications in compliance to HEA1325.

Stimulants for ADD/ADHD:

The \$PMPM related to stimulant agents used to treat ADD/ADHD has trended upward by nearly 20% in 2007, or \$0.50 PMPM, from averages reported in 2006 (see figure 19). While the first three quarters of 2006 shows a slight decrease in the \$PMPM for these products, the trend marking the increase begins in 4Q06, at the same period that actions were undertaken by MCOs as a result of HEA1325.

Figure 20 reports the number of prescription claims paid by MDwise for members taking stimulant medications. Comparing 2006 to 2007, the number of prescription claims paid for stimulants had increased 9.4%. Just as with the decreasing trend in \$PMPM observed in 1Q06 through 3Q06, a decreasing trend is observed in RxPMPM for stimulants in these quarters. The increasing trend starts in 4Q06 and continues to rise in subsequent quarters.

Figure 19

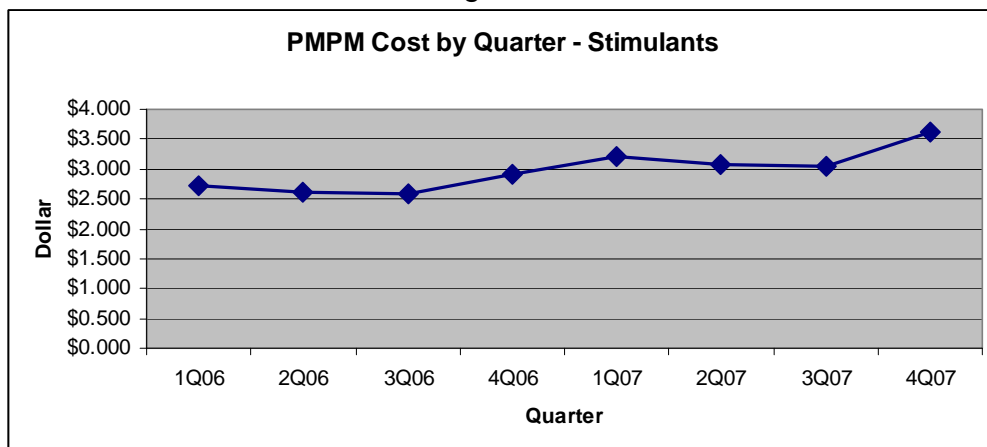
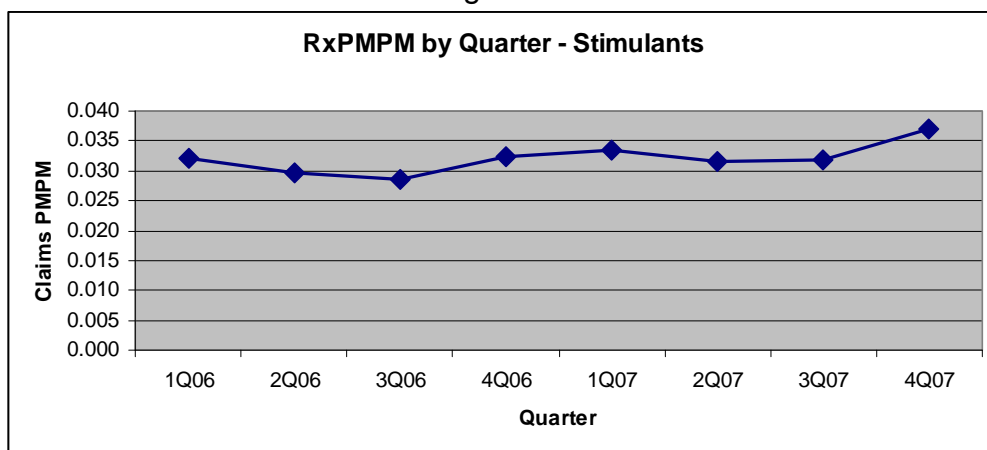


Figure 20



In 2007, the \$PMPM for stimulant agents used to treat ADD/ADHD has trended upward (see figure 21), with average \$PMPM for the second half of 2007 reported at being 4% higher than the average \$PMPM for the first half of 2007.

The claim count PMPM for stimulant agents has also trended upward in 2007 (see figure 22), with average RxPMPM for the second half of 2007 reported being at 5% higher than the average RxPMPM for the first half of 2007.

There was a significant drop in the average cost per stimulant claim that occurred at about the same time that the utilization edits were implemented in June (see figure 23). The impact of the utilization edits are also likely responsible for the changes observed in the average units/claim values (see figure 24).

Figure 21

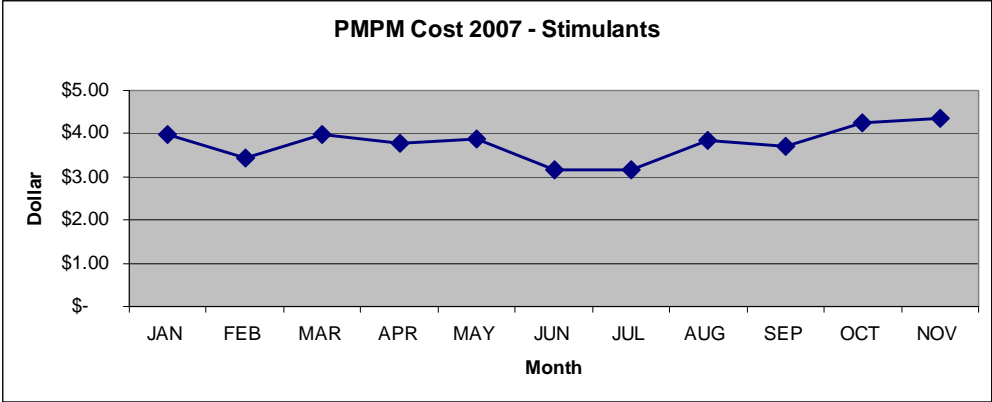


Figure 22

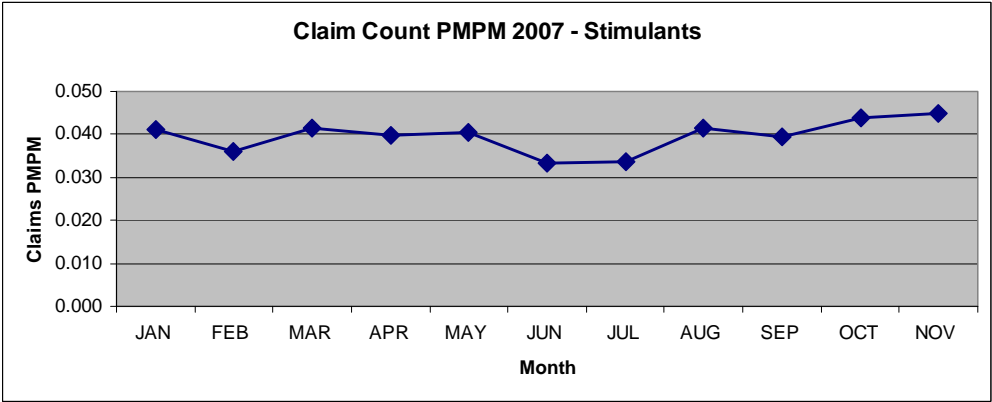


Figure 23

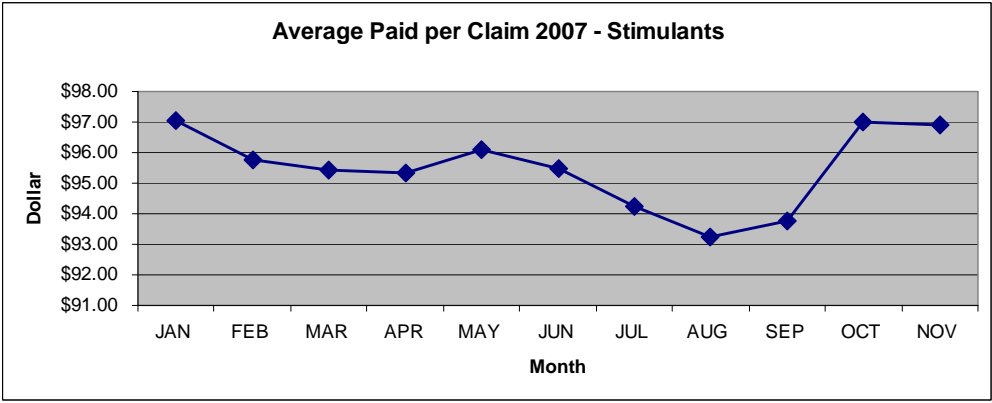
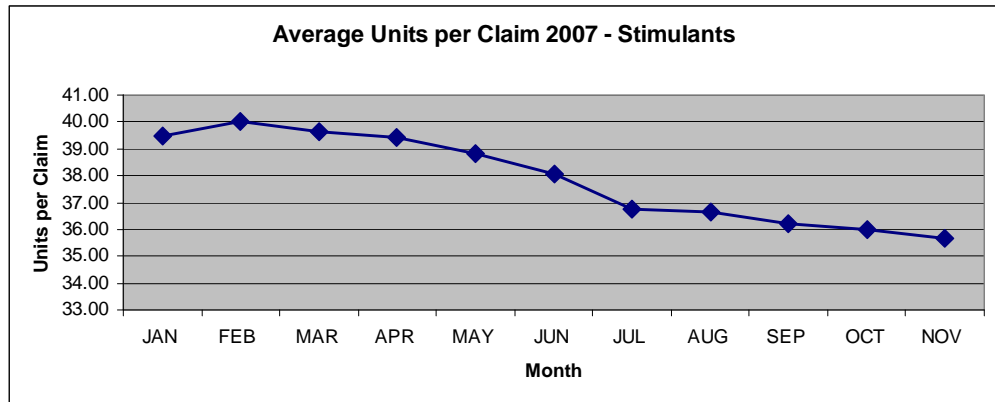


Figure 24



Within the MDwise program and its membership, the changes observed in the utilization and cost of stimulant agents used to treat ADD/ADHD include the following:

- \$PMPM increased by approximately \$0.50, or \$1.65 M annually throughout the MDwise plan.
- The number of claims for stimulant agents PMPM increased 9% from the previous year.
- There appears to be a potential correlation among the increasing cost and utilization of stimulants and the action undertaken to remove restrictions to behavioral health medications in compliance to HEA1325.
- There appears to be a potential correlation among the decrease observed in units per claim values that has been impacted by the utilization edits that were implemented in June. Units per claim were reduced from a February high of 40 units per prescription, to under 36 in November 2007.

Strattera:

In 2007, the \$PMPM for Strattera did not show any signs of increasing or decreasing (see figure 25). The average \$PMPM in 2007 was \$0.58.

There was also no observable changes to the claim count PMPM for Strattera throughout the year of 2007 (see figure 26). Strattera utilization accounted for 4 prescription claims per 1,000 members per month during this period.

Throughout the course of the year, the average cost per Strattera claim fluctuated in a manner that indicated no discernable trend to its cost in the drug benefit (see figure 27). The impact of the utilization edits may have had some responsibility for the changes observed in the average units/claim values (see figure 28). The average units per claim decreased by 7% through the course of the 2007 year.

Figure 25

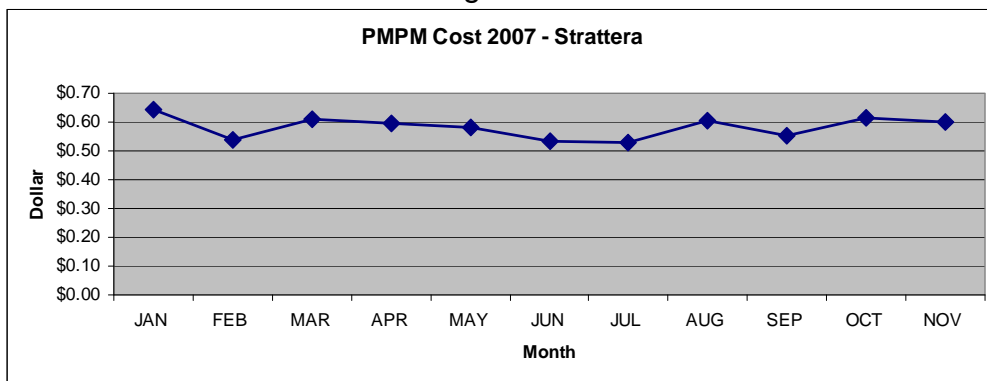


Figure 26

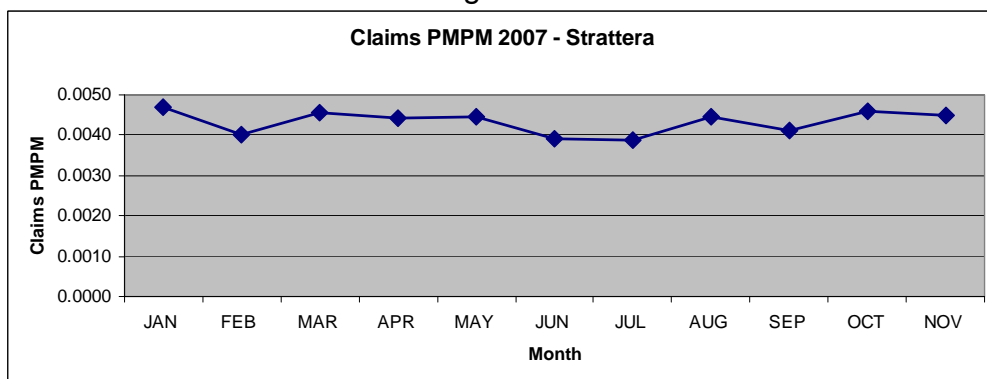


Figure 27

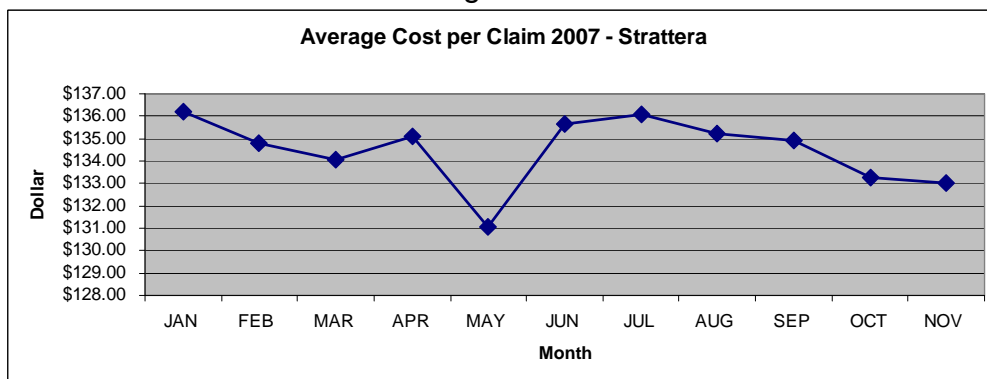
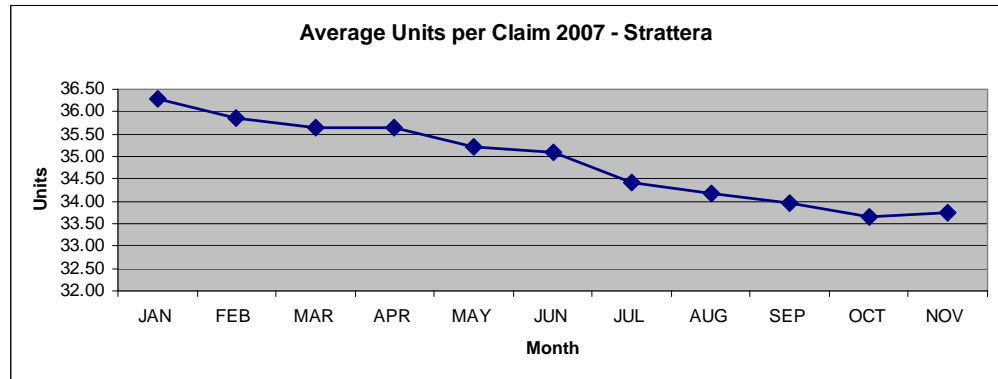


Figure 28



Within the MDwise program and its membership, the changes observed in the utilization and cost of Strattera include the following:

- \$PMPM demonstrated no change throughout the months of 2007.
- The number of claims for Strattera PMPM demonstrated no change throughout the months of 2007.
- There appears to be a potential correlation among the decrease in the units per claim values that has been impacted by the utilization edits that were implemented in June. Units per claim decreased from a January high of 36.3 units per prescription, to under 24 in November.

Conclusion

Cost and utilization data for the calendar quarters of 2006 to 2007, and within the months of 2007, reveal the following trends:

- Atypical antipsychotic agent claims PMPM decreased in the first three quarters of 2006. During the quarter when restrictions were removed on the MCO PDLs (4Q06) and the subsequent quarters of 2007, increases are observed in RxPMPM and \$PMPM for atypical antipsychotic in the MDwise plan. One interesting item to note: MDwise did not have restrictions on atypical antipsychotic agents in its PDL prior to the activities of 4Q06 that removed all restrictions from MCO PDLs.
- Stimulant medication claims PMPM and \$PMPM decreased in the first three quarters of 2006. During the quarter when restrictions were removed on the MCO PDLs (4Q06), and the subsequent quarters of 2007, increases were observed in RxPMPM and \$PMPM for stimulants in the MDwise plan.

- Hypnotic agent claims PMPM and \$PMPM exhibited relatively flat growth in the first three quarters of 2006. During the quarter when restrictions were removed on the MCO PDLs (4Q06), and subsequent quarters of 2007, increases were observed in the RxPMPM and \$PMPM for Hypnotic agents in the MDwise plan. The \$PMPM for branded hypnotic agents increased by 1,200% to 1,500% from 2006 to 2007.

- The implementation of utilization edits in June 2007 resulted in decreasing trends in the units billed per claim for the following drug classes:
 - Atypical antipsychotic agents
 - SSRIs
 - SNRIs
 - Stimulants
 - Strattera

Comparing 2006 to 2007, utilization and cost patterns indicate the evidence of per member per month increases in pharmacy claims for psychotropic drugs at a rate of 4%, year-to-year. The cost for psychotropic drugs also grew at a per member per month rate of 8%, year-to-year; adding approximately \$2 million to the cost of the prescription drug benefit for MDwise.