Supplement to Report No. 2: Pharmacy Initiatives

Prepared for:
The Washington State Legislature

Prepared by:
The Lewin Group, Inc.

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I. INTRODUCTION

The following is an addendum to Medicaid Cost Containment: Report No. 2, a study The Lewin Group, Inc. (Lewin) produced for the Washington State Legislature in December 2002 to evaluate cost containment initiatives currently underway within the State's Medical Assistance Administration (MAA). The focus of this addendum is an evaluation of the savings associated with the various initiatives MAA has undertaken with respect to the Medicaid pharmacy benefit. In particular, we have concentrated our efforts on the cost savings associated with Therapeutic Consultation Services (TCS), one of Washington's newest and most ambitious initiatives to date.

II. PHARMACY INITIATIVES

In the two most recent state fiscal years (SFYs), MAA has instituted several new cost containment strategies in an attempt to curb the dramatic increases in spending on prescription drugs, while still providing high quality, accessible care. The major new initiative in SFY 2002 was TCS, which is described in more detail below. In SFY 2003, MAA implemented a change in its reimbursement rates – reimbursing pharmacies at a lower percentage of the Average Wholesale Price (AWP). In addition, effective February 2003, Washington will offer Medicaid mail-order pharmacy services statewide, which should realize an additional discount in reimbursement rates for the State.

In examining both the analyses conducted by MAA and by Lewin, it appears that the TCS program, which includes the four-brand and preferred drug list (PDL) edits, has realized significant savings for the State. Table 1 summarizes the savings in SFY 2002 for the TCS program.

Table 1. SFY 2002 Savings from TCS (in millions)

	WA	Lewin	Difference
4-Brand Edit	$4.05	$5.13	$1.09
PDL			
– H2RA drug class (Ranitidine)	$0.37	$0.41	$0.03
– PPI drug class (Protonix)	$3.21	$3.21	$0.00
Loss of Rebates	Not Estimated	($0.90)	($0.90)
ACS Contract Cost	($1.27)	($1.27)	$0.00
Total Savings*	$6.36	$6.58	$0.22

* These figures do not include a reduction related to non-ACS administrative costs, such as staff at MAA.

Preliminary data from SFY 2003 also suggest that as TCS continues to reduce costs by changing utilization patterns, Washington's decision to change its reimbursement levels from 89 percent of AWP to 86 percent for brands and 50 percent for generics with more than four labels has also proved to be a significant cost savings strategy. The following section, in addition to examining the effects of the TCS program, provides a more detailed analysis of the year-to-date (YTD) savings associated with the change in reimbursement levels in SFY 2003.

A. Therapeutic Consultation Services and Reimbursement Changes

MAA instituted TCS in its fee-for-service (FFS) Medicaid program in February 2002. MAA launched TCS with three goals in mind:

1. To promote appropriate utilization of prescription drugs;
2. To improve quality of care and health care outcomes for clients; and
3. To promote cost-effectiveness.[1]

[1] From Medical Assistance Memorandum 01-73, December 1, 2001.

Through TCS, clinical pharmacists review patient prescription drug profiles if the claims submitted on behalf of the patient hit a designated TCS point-of-sale (POS) edit. The edits alert the pharmacy when the patient may be receiving more than four brand name drugs in a month, or if the patient is prescribed a drug other than the State's preferred drug for that therapeutic drug class. At present, preferred drugs have been established for two drug classes, and plans are underway to add two more drug classes; this is described in more detail below. Once these edits have been triggered, the reviewing pharmacist will interact with the prescribing clinician (or appropriate designee) to discuss the patient's drug profile.

As a result of the consultation with the reviewing pharmacist, the prescribing clinician has several options. If the consultation results in agreement that the preferred drug or generic may be substituted for the one prescribed, the prescriber can authorize the use of the substitute drug. If the prescriber believes there is medical justification for a non-preferred or more expensive alternative, the prescriber can provide that justification to MAA and continue prescribing the original drug. Under Washington's TCS program, the prescribing clinician has the final decision in the prescription the patient eventually receives.

To further support the clinical consultation that results from the four-brand and preferred drug edits, MAA has contracted with Affiliated Computer Services, Inc. (ACS) to provide two additional services: Intensified Benefits Management (IBM) and Therapeutic Academic Service (TAS). Under the IBM program, clinical pharmacists review individual medication regimens and assist providers in prescribing the most appropriate treatment for the client. Each month, the IBM program focuses on different drugs (or combinations of drugs), which reinforces some of the behaviors encouraged as a part of the broader TCS initiative. Washington's TAS program provides prescribing clinicians with evidence-based information on pharmaceutical treatments and provides encouragement for clinicians to follow standard clinical treatment guidelines. Clinicians are approached and counseled on a face-to-face basis and are selected based on their prescription of non-preferred drugs in several therapeutic classes, including those classes on the PDL.

1. Methodological Overview

MAA took a two-tiered approach in evaluating the cost savings associated with TCS. First, they reviewed the overall changes in pharmacy expenditures for the affected categories of eligibility on a per capita basis. There are several factors contributing to the per capita changes in pharmacy expenditures (e.g., price changes, seasonality, quality initiatives), and the specific effect of TCS cannot be distinguished from these other factors. However, they provide support to the overall evaluation in understanding "big picture" pharmacy trends.

MAA also conducted more specific analyses that correspond with the two edits in the TCS program: the PDL and four-brand edits. For each of the two drug classes addressed by the mandatory PDL, H2 Receptor Antagonists (H2RA) and Proton Pump Inhibitors (PPI), MAA calculated the difference in the projected cost of drugs in that class with and without TCS implementation. MAA conducted a similar analysis that calculated savings in total drug costs based on the shift from brand to generic drugs that occurred after the implementation of TCS.

While these analyses provide a fairly solid estimate of the savings associated with the shifts in utilization, one important component of TCS is not entirely captured in MAA's analysis. When

clinical pharmacists review patients' drug regimens, they may suggest more than shifting from brands to generics or from non-preferred to preferred drugs; they may suggest other options that lead to cost savings, such as eliminating duplicative medications or harmful combinations of medications. Potential changes in prescribing patterns like this, which may be instigated by TCS, would not be captured in an analysis merely focused on the PDL and four-brand edits. In short, the introduction of TCS may have resulted in savings that are not directly linked to the PDL or four-brand edits, but nonetheless are the result of the "poly-pharmacy" reviews precipitated by TCS.

The goal of our analysis is to determine how much money the State has saved as a result of instituting TCS, which includes the supporting IBM and TAS programs. To achieve this end, we evaluated the methodology presented to us by MAA staff as they attempted their own evaluation of the savings resulting from TCS. In addition, we have supplemented MAA's work with additional analyses of our own, concentrating most heavily on the provider and client levels. To assist Lewin in better understanding MAA's efforts to evaluate TCS, MAA staff invited us to attend a presentation of their methodology to legislative staff; this session was held on December 12, 2002. (The MAA presentation is included as Appendix A.) In addition, MAA staff provided us with the background data and results of their analysis for use in our evaluation. The following sections outline the results of our analysis.

2. Overall Changes in Pharmacy Expenditures

MAA began their analysis of TCS savings by reviewing the "big picture" changes in per capita pharmacy expenditures for several categories of eligibility, including Aged-Categorically Needy (CN), Disabled-CN, Aged-Medically Needy (MN), Blind & Disabled-MN and General Assistance-Unemployable (GAU). MAA compared the July 2001 to June 2002 per capita pharmacy expenditures, as predicted in the March 2001 forecast, to the actual per capita expenditures realized in that same time period. MAA chose to use the March 2001 forecast as the basis for their comparison because it was the last fiscal forecast that did not include any adjustment for the potential effects of implementing the TCS program.

To supplement this analysis, Lewin developed alternative projections of pharmacy costs, had TCS not been implemented. We developed our projections by calculating the average monthly per capita cost for the 12-month period from February 2001 through January 2002, the month prior to TCS implementation. To project monthly per capita expenditures from February 2002 to June 2002, we developed a monthly trend from the prior year's historical data. The results of our projections, with the exception of the Aged-MN, are similar to those of MAA's analyses.[2] The per capita per month results are displayed below in Figures 1 through 5 by category of eligibility.

[2] The per capita expenditures do not include the effect of pharmacy rebates.

Figure 1. Per Capita Pharmacy Costs for the CN – Aged Population

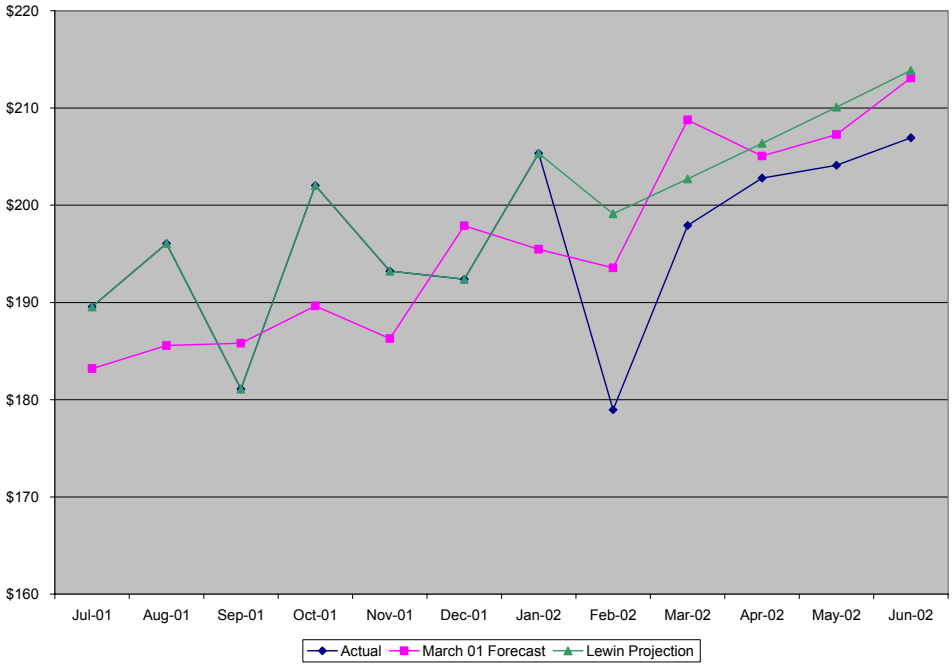


Figure 2. Per Capita Pharmacy Costs for the CN – Disabled Population

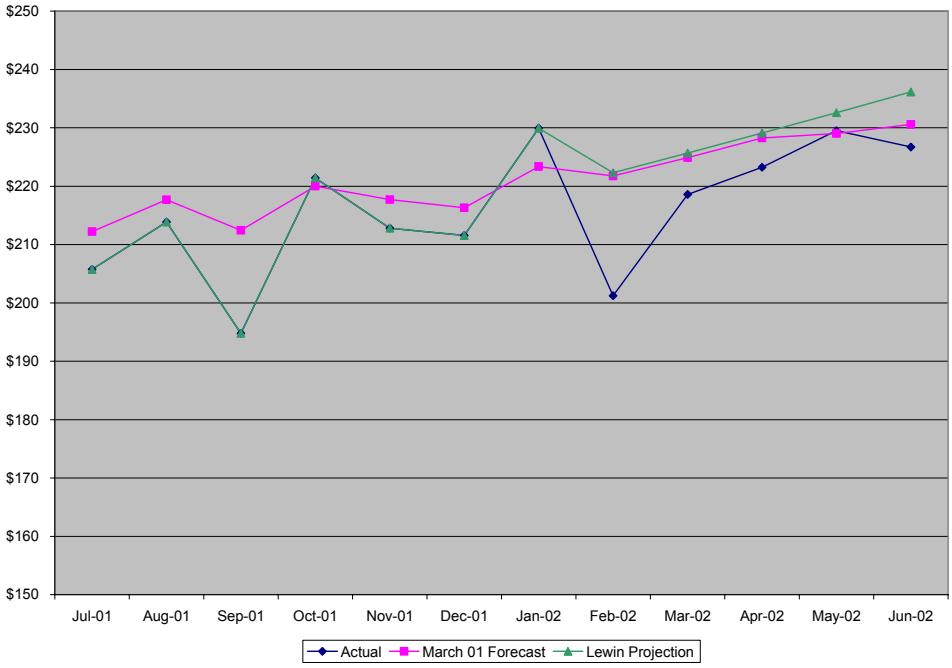


Figure 3. Per Capita Pharmacy Costs for the MN – Aged Population

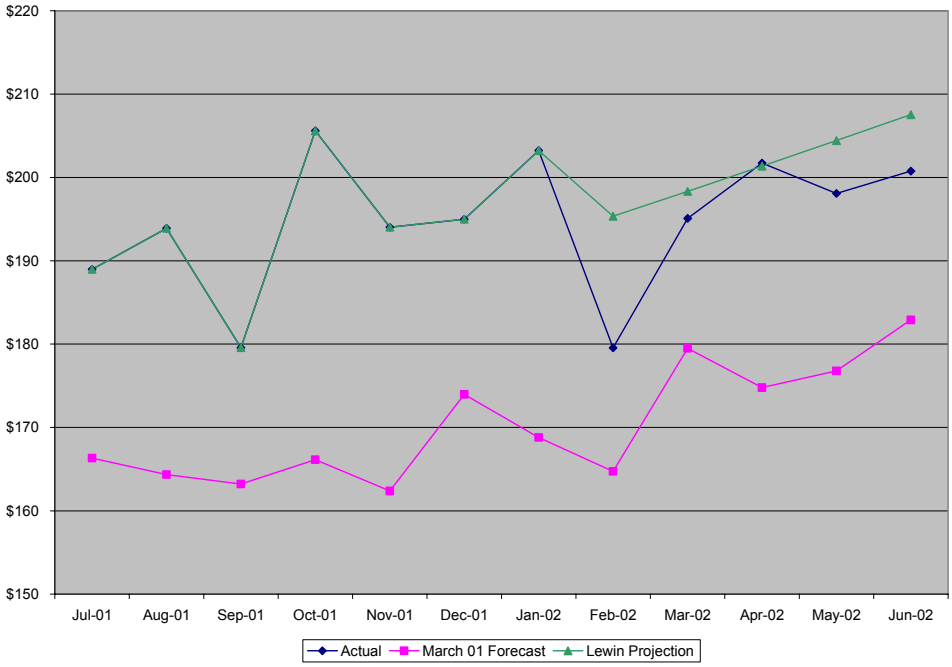


Figure 4. Per Capita Pharmacy Costs for the MN – Blind and Disabled Population

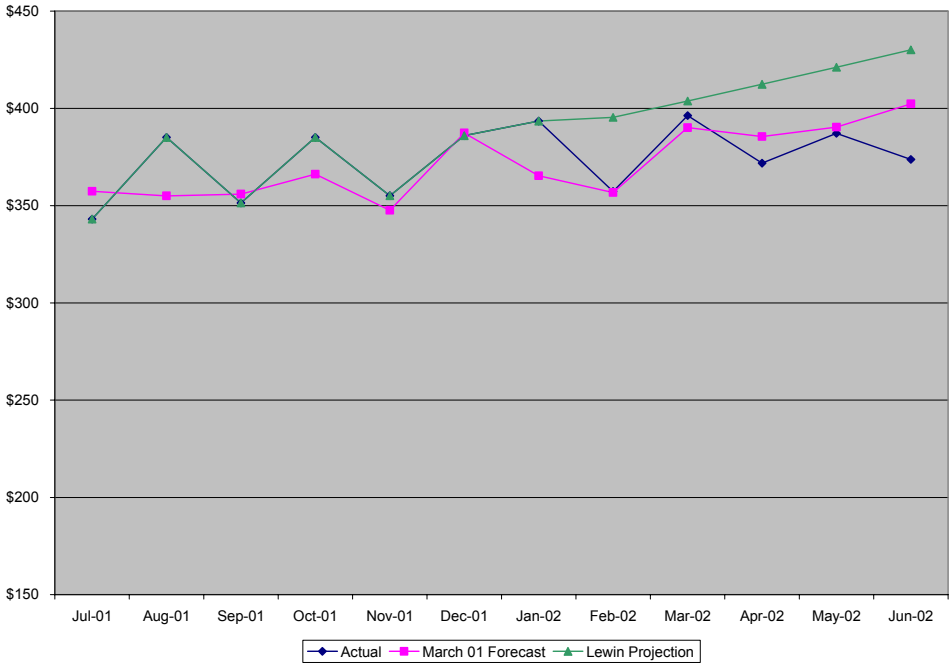
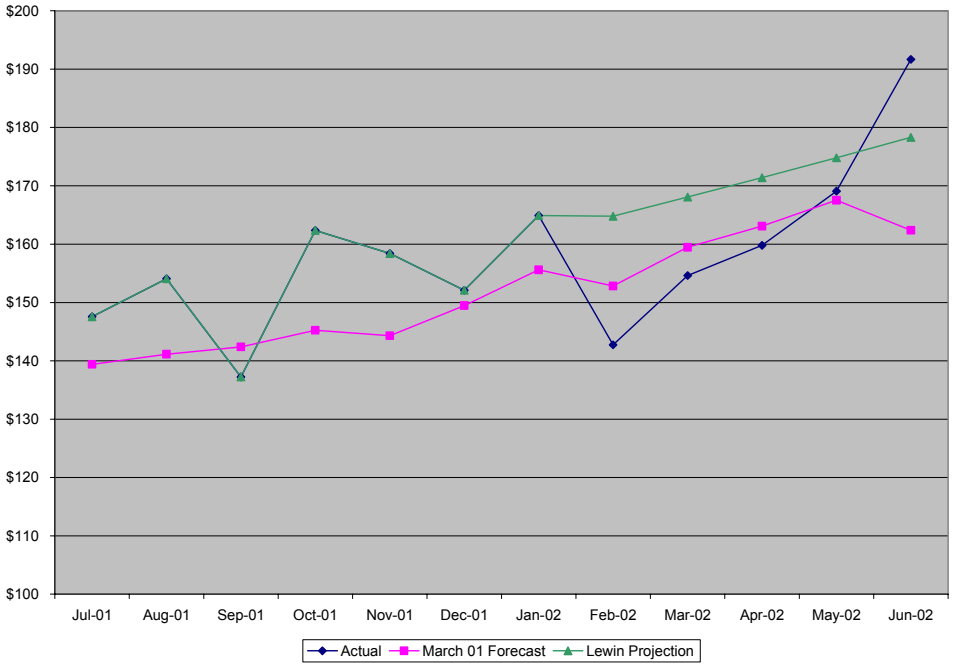


Figure 5. Per Capita Pharmacy Costs for the GAU Population



For all categories of eligibility, except Aged-MN, Lewin's projections of per capita pharmacy expenditures without the implementation of TCS are similar to those projected by MAA in the March 2001 forecast. In those cases, overall per capita expenditures after the implementation of TCS appear to be lower than expected, had TCS not been implemented. However, for the Aged-MN population, the March 2001 forecast appears to be significantly below the per capita amount actually expended. Lewin's projections of pharmacy costs are slightly above the actual results. This suggests that MAA's March 2001 forecast perhaps did not anticipate the higher levels of per capita spending for this category of eligibility. Because Lewin had access to more recent data, our projected per capita costs reflect more recent trends in costs for this eligibility category. Therefore, the fact that actual per capita costs were significantly greater than the March 2001 forecast should not be interpreted as a failure of MAA's pharmacy initiatives to control cost trends.

In each of the above graphs, there is a significant decrease in the per capita pharmacy cost in February 2002, the month in which TCS was implemented. It seems clear that the program's implementation had some effect on per capita costs; however, it is important to consider the other pharmacy initiatives that took place during this time period that also could have affected costs. In MAA's analysis, they provided a list of additional pharmacy initiatives and other factors that may affect per capita pharmacy costs. Lewin agrees that to evaluate savings, we need to consider a wide range of factors that may affect overall pharmacy spending and cannot attribute the above reductions in cost solely to one intervention.

Beyond those identified in MAA's Attachment A (see Appendix A of this report), an additional factor may affect pharmacy expenditures. Outside of MAA's contract with ACS, Quality Review Services (QRS), a unit within MAA, has increased its efforts to review pharmacy service utilization and increase its cost avoidance and recovery as a result of the Utilization and Cost

Containment Initiative (UCCI). Many of QRS's efforts focus on changing the utilization of prescription drugs; therefore, it is difficult to separate the effect of QRS's efforts from the change in utilization that has resulted from TCS when examining aggregated data.

3. Changes in Brand Versus Generic Prescriptions

The second part of MAA's analysis of TCS savings includes a specific review of the two primary components of the TCS POS interventions: the four-brand and the non-PDL edits. To evaluate the effect of the four-brand edit, MAA compared the actual mix of generic versus brand prescriptions to a baseline mix, established with data from the time period prior to TCS implementation. Specifically, MAA assumed that for the month of January 2002, the mix of brand versus generics was representative of the mix prior to TCS implementation, which began the subsequent month. According to MAA, they compared this monthly data point against the prior year's average and were satisfied that the January data point was consistent with the prior year's average. Thus, January 2002 served as MAA's baseline.

Once MAA established a baseline mix of generics versus brands, they developed an average monthly cost per prescription for both generics and brands, based on actual data from the time period from February 2002 to September 2002, which constituted the early months of TCS implementation. They compared the number of actual generic prescriptions by month during this time period to the expected number of prescriptions, had TCS not been implemented. They then calculated savings by multiplying the number of additional generic prescriptions by the difference between the average brand prescription cost and the average generic prescription cost.

Lewin believes this methodology is sound for the purposes of calculating the savings associated with the shift from brand to generic drugs. While it is not possible to attribute the entire savings amount specifically to the TCS edits, this pharmacy initiative is likely to be one of the major factors contributing to the change in prescription patterns.

a. SFY 2002 Analysis

In order to supplement MAA's analysis, we conducted a similar analysis, with a different methodology for developing the generic versus brand mix baseline. First, to avoid overstating TCS's effect in moving brand name prescriptions to generics, we removed the data for all drugs in the two therapeutic classes that include a preferred drug from our base data. (An analysis of the effects of the PDL edits follows.) In addition, instead of establishing January 2002 as the baseline mix, we used the 12 month period from February 2001 to January 2002 to calculate an average mix of brands versus generics. Lewin recognizes MAA's contention that the January 2002 baseline represents the most recent experience and therefore should be the baseline data point. However, Lewin thought it was important to include several data points in order to establish an annual average, as our methodology potentially mitigates other factors, such as seasonality. Table 2 illustrates the difference in results for SFY 2002.

Table 2. Comparison of Savings Due to Generic Utilization Increases in SFY 2002

		MAA	Lewin	Difference
A	Assumed Percentage of Generics Prior to TCS Implementation	50.72%	50.98%	0.26%
B	Number of Predicted Generic Prescriptions from Feb 02 to June 02	2,338,601	2,253,919	(84,682)
C	Number of Actual Generic Prescriptions from Feb 02 to June 02	2,399,071	2,331,974	(67,097)
D	Difference Between Actual and Predicted (C – B)	60,470	78,056	17,586
E	Average Difference Between Generic and Brand Cost per Prescription	$66.91	$65.74	($1.17)
F	Total Savings in Millions (E × D)	$4.05*	$5.13	$1.09

* Total savings do not match the amount shown in MAA's analysis (Appendix A). MAA revised its estimate on December 20, 2002 to match those shown above.

Overall, using the 12-month average generic baseline mix and removing the two classes with PDL drugs, our analysis suggests SFY 2002 savings of approximately $5.13 million, which is $1.09 million more than the $4.05 million calculated by MAA.

In addition to calculating savings for this edit, Lewin estimated the change in rebates associated with the shift towards generic utilization. To calculate the change in rebates, we estimated the amount that would have been rebated to Washington during the February 2002 to June 2002 period, had the shift to higher generic utilization not occurred. We then compared that amount to the amount that is expected to be rebated given the shift in utilization towards generics. Table 3 outlines the results of our analysis.

Table 3. SFY 2002 Changes in Prescription Drug Rebates*

	Brand	Generic	Total
Total Anticipated Pharmacy Expenditure (No Shift in Utilization) (millions)	$183.0	$41.8	$224.8
Rebate Percentage	15.1%	9.0%	N/A
Total Anticipated Rebates (No Shift in Utilization) (millions)	$27.6	$3.8	$31.4
Total Anticipated Pharmacy Expenditure (With Shift in Utilization) (millions)	$176.5	$43.2	$219.7
Rebate Percentage	15.1%	9.0%	N/A
Total Anticipated Rebates (With Shift in Utilization) (millions)	$26.6	$3.9	$30.5
Difference in Rebates (millions)	($1.0)	$0.1	($0.9)

* This does not include rebates associated with H2RAs and PPIs.

Because the rebate percentage for generic drugs is less than that for brand drugs, Washington could receive approximately $900,000 less in pharmaceutical rebates as a result of the shift towards greater generic utilization. However, the reduction in rebates is more than offset by the savings realized through the utilization of lower cost drugs. This is demonstrated in Table 4.

Table 4. Net TCS Savings in SFY 2002, in Millions

	Total
Savings	$5.13
Less Reduced Rebates	($0.90)
Net Savings	$4.23*

* MAA's TCS savings estimate did not include the effect of the rebate changes.

b. SFY 2003 Analysis

In addition to calculating the savings for SFY 2002, we performed an analysis of the data that were available for SFY 2003. To measure the effects of the change in generic utilization in SFY 2003 is more difficult, as MAA instituted a change in reimbursement rates in SFY 2003. Effective August 1, 2002, MAA reimburses pharmacies 86 percent of AWP for brand drugs and 50 percent of AWP for drugs for which there are at least four generic labels, as compared to the 89 percent of AWP that the State reimbursed for both prior to this change. The effect of the change in reimbursement is not easily discerned in aggregated data; however, we have provided an estimate below, along with a suggestion for an alternative approach to calculating savings.

To calculate YTD savings for SFY 2003, we separated the year into two portions. The first portion contains the time period prior to the change in reimbursement rates, while the second portion includes the time period after the change in reimbursement rates. For the time period prior to the change in reimbursement (July 2002), we calculated savings in a similar fashion as above. Table 5 outlines the results of our analysis for July 2002.

Table 5. Comparison of Savings Due to Generic Utilization Increases in July 2002

		MAA	Lewin	Difference
A	Assumed Percentage of Generics Prior to TCS Implementation	50.72%	50.98%	0.26%
B	Number of Predicted Generic Prescriptions in July 02	486,226	468,221	(18,005)
C	Number of Actual Generic Prescriptions in July 02	505,686	492,443	(13,243)
D	Difference Between Actual and Predicted (C – B)	19,460	24,222	4,762
E	Average Difference Between Generic and Brand Cost per Prescription	$71.15	$71.07	($0.08)
F	Total Savings in Millions (E × D)	$1.38	$1.72	$0.34

Overall, using the 12-month average generic baseline mix and removing the PDL drugs from the analysis, our analysis suggests July 2002 savings of approximately $1.72 million, which is $0.34 million more than the $1.38 million calculated by MAA.

Once we calculated the savings for July 2002, we developed an estimate of savings associated with the time period when both TCS and the change in reimbursement were in effect. Because we only had data from the month of August 2002, we conducted this analysis using only this month of data and did not extrapolate from this month to calculate an annualized savings

amount. However, this kind of analysis can be conducted going forward—with addition of more recent data—to allow for an annualized SFY 2003 estimate.

To calculate savings for August 2002, we used historical data to project the cost per claim for both brands and generics for the month of August, had the reimbursement change not taken effect. We also calculated the anticipated number of claims for brands and generics, had the TCS intervention not taken place. We multiplied the projected cost per claim by the number of projected claims to arrive at a projected expenditure for the month, had neither pharmacy intervention taken place. We then compared that amount with the actual expenditures that occurred in August 2002. Table 6 outlines the result of our analysis.

Table 6. Estimated Savings for August 2002

	Brand	Generic	Total
Projected Cost per Claim (No Change in Reimbursement Rates)	$87.32	$19.16	N/A
Projected Number of Claims (No Change in Reimbursement Rates)	432,483	449,824	882,307
Projected Pharmacy Expenditures in Millions (No Change in Reimbursement Rates)	$37.8	$8.6	$46.4
Actual Cost per Claim	$86.72	$16.78	N/A
Actual Number of Claims	399,973	482,334	882,307
Actual Expenditures in Millions	$34.7	$8.1	$42.8
Savings in Millions (Difference Between Projected and Actual Expenditures)	$3.1	$0.5	$3.6

The $3.6 million savings estimate above accounts for both the change in reimbursement and the TCS intervention. However, we did not have data at the level of detail to provide a precise estimate of the breakdown in savings between the two initiatives. To estimate the breakdown, we established a minimum savings level for the reimbursement change by calculating the amount the projected expenditures would have been reduced, had the change in reimbursement been the only change (i.e., TCS had not been implemented). We could not discern from the level of data we had which expenditures would have been reduced from 89 percent of AWP to 86 percent and which would have been reduced from 89 percent to 50 percent of AWP. (Not all generics are reimbursed at the 50 percent of AWP level.) To establish the minimum savings level, we calculated the difference between the anticipated expenditures at 89 percent of AWP and the anticipated expenditures at 86 percent of AWP. The difference between these two amounts is approximately $1.6 million, which is our estimate of the minimum savings related to the change in the AWP discount.

To more precisely determine the effect of each of the initiatives on pharmacy savings, one must examine actual reimbursement amounts at the individual drug level. To determine the effect of the pricing change, one could compare the price of the drug prior to the reimbursement level change to the actual price realized after the reimbursement level change. This analysis would provide a more precise estimate of the savings associated with the change in AWP reimbursement levels. Time did not permit estimating savings using this methodology.

c. Generic Substitutions

In addition to recalculating the savings baseline for this analysis, we conducted additional analyses based on the client and provider-level data provided to us by ACS. The purpose of

our analysis was provide a review of individual level changes that are attributable to TCS implementation. We analyzed utilization and cost data for all clients who generated claims that hit the four-brand edit during the month of May 2002. We aggregated their claims data for two periods, three months prior to the May 2002 edit and three months post. When we looked at the difference of drug mix from the pre- and post- periods, we noted a significant shift in the utilization mix of generics versus brands for the persons with May 2002 edits. Table 7 displays the results of our analysis.

Table 7. Percentage of Brand and Generic Claims Pre and Post May 2002 TCS Edit

	Brand	Generic
3 Months Prior to May 2002 TCS Edit	59.2%	40.8%
3 Months Post to May 2002 TCS Edit	56.5%	43.5%
Change	(2.7%)	2.7%

Based on this sample of utilization for one month, we see a significant shift in the mix of generic versus brand prescriptions. While this change only represents a small subset of Medicaid pharmacy users (those who hit the four-brand edit in May 2002), this kind of utilization change is significant.

As an additional analysis, we calculated the resulting changes in the price per claim for brands and generics three months prior to and three months after the May 2002 edit. Interestingly, the average price per claim on brand drugs increased by 14.2 percent, while the price per claim on generics decreased by 5.1 percent. While there may be many explanations for this kind of change, one possibility is that the drugs for which generic substitutions are being made may be, on average, the lower priced brand drugs. However, we also see a resulting decrease in the average price per claim for generic drugs, suggesting that the prescriptions in the post-May 2002 period were, on average, lower cost prescriptions.

In addition to the analysis above, we also wanted to examine the therapeutic classes that were most likely to prominently affect the shift in utilization and cost associated with generic substitution. We sorted our individual level sample data from the May 2002 edit file by total dollars paid per therapeutic class and examined the top 20 classes. To further support the effects of TCS, we noted that in 19 of the top 20 classes, utilization of generic drugs increased from the pre-May 2002 to the post-May 2002 period. Only for Glucocorticoids did the mix of generics decrease, from 28.8 percent to 27.0 percent generic. The results of our analysis suggest that hitting the TCS POS edits is affecting prescribing patterns, shifting them towards generics.

While this analysis demonstrates that utilization, and presumably prescribing patterns, are changing as a result of the TCS four-brand intervention, it is important to note that the total dollars associated with brands did not necessarily decrease in each therapeutic class from the pre-May 2002 to post-May 2002 period. This is likely due to the changing mix of brand drugs between the pre and post periods. The results of this analysis can be found in Appendix B.

d. *Other Changes in Utilization Patterns*

The TCS four-brand edit, along with IBM and TAS, are designed to promote the most effective and efficient drug therapies for clients. To reach these goals, TCS does more than promote the use of generic alternatives in lieu of brand name drugs. TCS can assist a prescriber in identifying a duplicative therapy, in which case the client may discontinue use of a drug. TCS may also help a prescriber identify an alternative brand name drug that is less expensive, but essentially equal in safety and effectiveness, as the one originally prescribed. Because TCS offers several options, an examination of brand versus generic utilization may not capture the entire effect of the TCS intervention.

We attempted to quantify some of the changes in utilization outside of the movement from brand to generic drugs. We pulled a sample of claims data from our May 2002 TCS database and tried to evaluate changes in utilization by therapeutic class and on an individual basis. Due to some data limitations, we were unable to generate any meaningful analysis. However, we believe this analysis is essential for a comprehensive understanding the overall utilization patterns that may be reducing costs.

In lieu of conducting this kind of analysis, we would like to offer several approaches Washington may consider as it looks to evaluate the different effects of TCS. First, each month, ACS provides a detailed savings report to MAA that tracks the changes in the number of claims, users and dollars by specific drug types for each claim that hits the four-brand edit. It may be possible to further reduce these data to identify specific utilization changes (i.e., from brand to generic, from more expensive brand to less expensive brand, and the discontinuation of a drug). Washington could examine these specific changes in utilization to determine more precisely the kinds of changes that the TCS program may be producing. This level of analysis would be very detailed and time intensive; however, it would provide the State with a more thorough understanding of the individual changes in utilization.

In addition to conducting this analysis, Washington may want to consider conducting a longitudinal analysis of individual clients and providers. Data pulled at a certain point in time may be useful in making some estimates; however, they may also reflect unusual circumstances in some cases. Choosing a sample population of individuals and following their prescription patterns over time, along with noting the points of TCS interventions, may provide valuable information on prescription trends. In addition, MAA may want to consider a prescriber level analysis to determine how TCS is impacting prescribers, who drive many of the choices that lead to particular prescription patterns. For example, for a sample of prescribers, it may be helpful to compare the cost per prescription by drug class prior to and following a TCS intervention, and then continue to follow those patterns over time (adjusting for price inflation). This kind of analysis could indicate whether TCS is having its desired effect on prescribing patterns in the long term.

Overall, we believe that the methodologies outlined in this report will provide a reasonable estimate of the savings generated by TCS. However, detailed analyses of sample data may provide the State with a better understanding of the precise nature of the changes taking place and the strengths and weaknesses of the program over time. We recommend following utilization and prescribing patterns longitudinally to ensure continued cost containment.

4. Changes in the Utilization of Preferred Drugs

In order to calculate the savings associated with a shift in utilization from non-preferred drugs to drugs on the PDL, MAA conducted similar analyses to those they generated to measure the shift from brand to generic utilization. MAA established January 2002 as the baseline for the mix of preferred versus non-preferred drugs for each of the two therapeutic classes included in the PDL and compared it to the monthly mix going forward. For each additional prescription of a preferred drug, MAA multiplied the average monthly difference per prescription and summed these amounts to calculate total savings.

Lewin believes this analysis is a straightforward and sound approach to measuring changes associated with the movement from non-preferred to preferred drug utilization. As with the prior analysis, Lewin calculated an alternative savings amount for each PDL drug by re-establishing the baseline percentage of preferred versus non-preferred from additional historical data provided by MAA. Tables 8 through 10 outline the results of our analysis for the H2RA drug class, for which the preferred drug is Ranitidine. Tables 12 through 14 outline the results of our analysis for the PPI drug class, for which the preferred drug is Protonix.

a. SFY 2002 Analysis of H2RAs

As mentioned above, Lewin employed a similar methodology as did MAA to calculate savings associated with the H2RA class. However, we re-established the baseline using the 12 month period prior to TCS implementation. Table 8 outlines the differences in our results.

Table 8. Comparison of Savings Due to Ranitidine Utilization Increase in SFY 2002*

		MAA Analysis	Lewin Analysis	Difference
A	Assumed Percentage of Ranitidine Prior to TCS Implementation	69.25%	66.94%	(2.31%)
B	Number of Predicted Ranitidine Prescriptions from Feb 02 to June 02	49,223	47,582	(1,641)
C	Number of Actual Generic Prescriptions from Feb 02 to June 02	67,700	67,700	0
D	Difference Between Actual and Predicted (C – B)	18,477	20,118	1,641
E	Average Difference Between Generic and Brand Cost per Prescription	$20.25	$20.25	$0.00
F	Total Savings in Thousands (E × D)	$374	$407	$33

* The numbers presented under the "MAA Analysis" column may not match exactly to the amounts listed in Attachment A due to rounding error.

Overall, using a 12-month average Ranitidine versus non-preferred baseline mix rather than the January 2002 baseline mix, our analysis suggests savings of approximately $407,000, which is $33,000 more than the $374,000 calculated by MAA for SFY 2002. Table 8 outlines the results of our analysis for SFY 2002.

b. SFY 2003 Analysis of H2RAs

Again, to analyze the effects of the TCS edits in SFY 2003 is complicated by the pricing change that took place in August 2002. We have again separated our analysis into two sections, one for the time period prior to the reimbursement changes and one for the time period following the

changes. Table 9 details the results from July 2002, the time period prior to the change in reimbursement levels.

Table 9. Comparison of Savings Due to Ranitidine Utilization Increases for July 2002

		MAA	Lewin	Difference
A	Assumed Percentage of Ranitidine Prior to TCS Implementation	69.25%	66.94%	(2.31%)
B	Number of Predicted Ranitidine Prescriptions in July 02	9,659	9,337	(322)
C	Number of Actual Ranitidine Prescriptions in July 02	13,474	13,474	0
D	Difference Between Actual and Predicted (C – B)	3,815	4,137	322
E	Average Difference Between Ranitidine and Non-Preferred per Prescription	$18.84	$18.84	$0.00
F	Total Savings in Thousands (E × D)	$72	$78	$6

To analyze the effect of both the change in H2RA utilization patterns as well as the change in reimbursement levels, we performed a similar analysis as we conducted in the generic versus brand section. We used historical data to project the cost per claim for both Ranitidine and non-preferred H2RAs for the month of August 2002, had the reimbursement change not taken effect. We also calculated the anticipated number of claims for brands and generics, had the TCS intervention not taken place. We multiplied the projected cost per claim by the number of projected claims to arrive at a projected expenditure for the month, had neither pharmacy intervention taken place. We then compared that amount with the actual expenditures that occurred in August 2002. Table 10 outlines the results of our analysis.

Table 10. Estimated H2RA Savings for August 2002

	Ranitidine	Non-Preferred	Total
Projected Cost per Claim (No Change in Reimbursement Rates)	$14.40	$36.46	N/A
Projected Number of Claims (No Change in Reimbursement Rates)	8,793	4,342	13,135
Projected Pharmacy Expenditures in Thousands (No Change in Reimbursement Rates)	$127	$158	$285
Actual Cost per Claim	$14.78	$26.88	N/A
Actual Number of Claims	12,707	428	13,135
Actual Expenditures in Thousands	$188	$12	$199
Savings in Thousands (Difference Between Projected and Actual Expenditures)	($61)	$147	$86

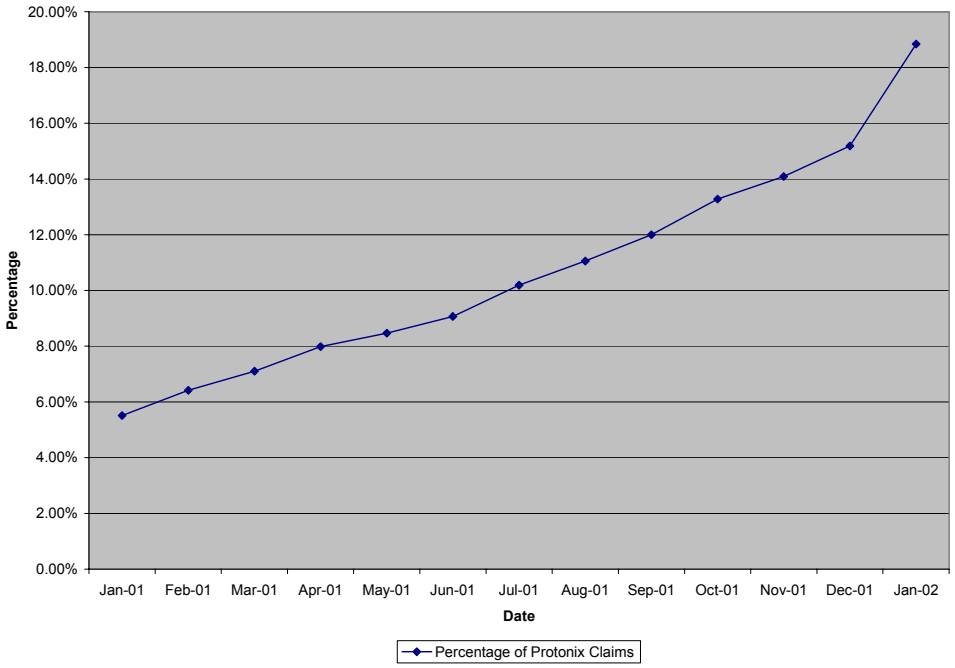
Applying the minimum savings estimate methodology (as described in the brand versus generic section above) we estimate a minimum savings of approximately $10,000, due to the change in reimbursement levels.

c. SFY 2002 Analysis of PPIs

In reviewing the MAA analysis of savings associated with the shift in utilization from non-preferred PPIs to Protonix, we chose not to employ an alternative methodology to the one used by MAA. MAA used a base Protonix penetration rate of 18.84 percent, based on January 2002 data, to estimate the rate of Protonix utilization had TCS not been implemented. In analyzing that assumption, we noted that the rate of Protonix claims versus other PPI claims

increased steadily prior to the implementation of TCS. Figure 6, following, shows the increase in Protonix utilization over the months preceding TCS implementation.

Figure 6. Increase in the Percentage of Protonix Claims vs. Other PPIs



While the penetration rate of Protonix appears to be rising steadily, MAA provided us with additional information from the Oregon Evidence-Based Practice Center's experience that suggests this trend may not continue. As Oregon's preferred PPI, Protonix has reached penetration rates around 21 percent and is remaining steady at that point. Given Oregon's experience and the intense competition in the PPI market, 18.84 percent may have been a leveling-out point for Protonix, had the TCS intervention not taken place.

Therefore, our savings estimates for SFY 2002 match those of MAA. Table 11, following, details the savings MAA originally projected.

Table 11. Estimated SFY 2002 Savings Due to Protonix Utilization Increases

Month	Savings (in millions)
February 2002	$0.61
March 2002	$0.64
April 2002	$0.62
May 2002	$0.69
June 2002	$0.66
Total SFY 2002	$3.21

d. SFY 2003 Analysis of PPIs

Analyzing the effects of the TCS edits in SFY 2003 is complicated by the pricing change that took place in August 2002. We have again separated our analysis into two sections, one for the time period prior to the reimbursement changes and one for the time period following the changes. Table 12 details the results from July 2002, the time period prior to the change in reimbursement levels.

Table 12. Estimated July 2002 Savings Due to Protonix Utilization Increases

Month	Savings (in millions)
July 2002	$0.69

Again, the results in Table 12 match those of MAA. Our estimates for August 2002 differ from MAA's, however. MAA did not include an analysis of the reimbursement level change that took place in August 2002; rather, they measured the changes due to the implementation of TCS exclusively. Therefore, our results for August 2002 are not the same.

To analyze the effect of both the change in PPI utilization patterns as well as the change in reimbursement levels, we performed a similar analysis as we conducted in the generic versus brand and H2RA sections. We used historical data to project the cost per claim for both Protonix and non-preferred PPIs for the month of August 2002, had the reimbursement change not taken effect. We also calculated the anticipated number of claims for brands and generics, had the TCS intervention not taken place. We multiplied the projected cost per claim by the number of projected claims to arrive at a projected expenditure for the month, had neither pharmacy intervention taken place. We then compared that amount with the actual expenditures that occurred in August 2002. Table 13 outlines the result of our analysis.

Table 13. Estimated PPI Savings for August 2002

	Protonix	Non-Preferred	Total
Projected Cost per Claim (No Change in Reimbursement Rates)	$92.30	$134.84	N/A
Projected Number of Claims (No Change in Reimbursement Rates)	4,778	20,582	25,360
Projected Pharmacy Expenditures in Millions (No Change in Reimbursement Rates)	$0.44	$2.78	$3.22
Actual Cost per Claim	$89.19	$130.30	N/A
Actual Number of Claims	21,297	4,063	25,360
Actual Expenditures in Millions	$1.90	$0.53	$2.43
Savings in Millions (Difference Between Projected and Actual Expenditures)	($1.46)	$2.25	$0.79

Applying the minimum savings estimate methodology (as described in the brand versus generic and H2RA sections above), we estimate a minimum savings of approximately $108,000, due to the change in reimbursement levels.

5. *The Cost of TCS*

The final portion of MAA's analysis summarizes the savings generated by each of the TCS edit types and compares those savings to the cost of the ACS contract (which includes reimbursement for TCS, IBM and TAS). In MAA's analysis, all savings are associated with SFY 2003; however, Lewin believes it is more accurate to attribute savings and costs to the SFYs in which they actually occurred. Table 14 outlines the results of MAA and Lewin's analyses for SFYs 2002.

Table 14. Savings Associated with TCS in SFY 2002 (in millions)

	MAA	Lewin	Difference
Generics	$4.05	$5.13	$1.09
Ranitidine	$0.37	$0.41	$0.03
Protonix	$3.21	$3.21	$0.00
ACS Contract Costs	($1.27)	($1.27)	$0.00
Loss of Rebates	Not Estimated	($0.90)	($0.90)
Net Savings	$6.36	$6.58	$0.22

Overall, the Lewin estimate for the savings associated with TCS is approximately $6.58 million for SFY 2002. Sufficient data were not available to project the total savings for SFY 2003; however, when calculating that estimate, one should include an offsetting cost of approximately $0.42 million for the ACS contract in SFY 2003.

Also, please note that in comparing these savings amounts with savings estimates generated in other sections of our Report No. 2 (released separately in December 2002), the savings reported in Table 14, are offset by specific administrative costs associated with operating the TCS program. Therefore, these savings amounts are not on an "apples-to-apples" basis with the savings estimates in the other sections of Report No. 2. The reader should take caution in comparing these figures.

Finally, as MAA considers adding the savings and costs associated with TCS to its tally of total UCCI savings and costs, the appropriate costs for monthly maintenance from ACS and additional state employees' staff time (as indicated in MAA's analysis) should be added to the cost portion.

B. Quality Review Services - Pharmacy

As mentioned earlier, QRS has undertaken additional efforts to control pharmacy costs and utilization as part of UCCI. The extent to which QRS has added to the overall reduction in per capita pharmacy costs is difficult to ascertain and is not possible given the data currently available to us. Therefore, as a review of QRS's role in the reduction in pharmacy savings, Lewin has provided points of consideration for MAA as it attempts to calculate a single savings amount attributable to UCCI.

According to MAA, the QRS pharmacy baseline savings amount of $2.47 million for SFY 2002 was estimated with information known at the time of the initial UCCI report to the Legislature.

With further investigation of data not previously available, MAA realized that through its POS drug alerts, they saved over $2.9 million in SFY 2001, an amount greater than the SFY 2002 baseline. In discussions with MAA, staff plan to adjust the baseline savings amount for SFY 2003 to reflect the additional realized savings from the period prior to UCCI. Lewin believes this adjustment is necessary to most accurately reflect the additional savings that can be attributed to UCCI. Once the savings baseline is adjusted, MAA will be able to more accurately reflect the additional savings associated with UCCI.

As with other sections of Report No. 2, Lewin recommends employing a consistent methodology of 12-months of cost avoidance. For the most part, QRS's pharmacy unit has employed that methodology in its cost avoidance calculations. However, for the "POS Stops" category, QRS has credited cost avoidance for only three months. To ensure consistency within the QRS calculation and with other UCCI initiatives, QRS should book these savings over the 12 month period.

Finally, as mentioned above, it is extremely difficult for Lewin to discern the exact effect QRS has had in lowering the per capita pharmacy costs, as discussed in our TCS analysis above. Clearly, prior to February 2002, the savings associated with QRS do not overlap with TCS. However, it is difficult to distinguish the savings after February 2002 for several reasons. First, TCS targets only some categories of eligibility, while QRS could potentially affect the utilization in all categories of eligibility. It is impossible in the time and scope of this project to parse the QRS savings by category of eligibility, a step necessary to begin the process of attributing savings to QRS or TCS. Secondly, efforts undertaken by QRS – like the pharmacy drug alert and prior authorization – have many of the same goals and utilization management mechanisms as TCS. It is impossible from the aggregate level data to determine precisely what is attributable to QRS and what is attributable to the other programs such as TCS. We recommend that going forward, MAA carefully consider the potential for overlap between the savings estimates for TCS and QRS.

C. Mail Order Pharmacy Services

In September 2002, MAA contracted for mail order pharmacy services to increase access to pharmaceutical services for Medicaid clients in several rural counties. Effective February 1, 2003, MAA will expand mail order pharmacy services on a statewide basis. In its contract with the mail order pharmacy vendor, MAA secured an additional price discount. Rather than the 86 percent of AWP Washington reimburses pharmacies for brand name drugs, MAA will pay the mail order pharmacy vendor 80 percent of AWP for these drugs.

In an analysis provided to us by MAA, the State budgeted a savings of $2.8 million resulting from the implementation of the mail order program for SFY 2003. Specifically, the budget calculation assumed that 15 percent of pharmacy dollars would flow through the mail order program once it was fully implemented in the second half of SFY 2003. We were unable to obtain data to verify this estimate; however, we feel there are several important points to note in projecting future savings due to the implementation of mail order pharmacy.

First, mail order services were anticipated to begin statewide in January 2003; however, the actual implementation date is now February 2003. Therefore, MAA will not realize the additional price discount during the month of January, as was originally projected, thereby

losing one month of savings in SFY 2003. Secondly, there is likely to be a ramp-up period, as people who are eligible for the mail order pharmacy program learn more about it and attempt to use it. This ramp-up period now will take place later than originally anticipated and therefore may reduce the total savings that are achievable in SFY 2003.

In addition, we learned in our discussions with MAA that MAA had paid just $6,000 in mail order pharmacy claims in a seven week period in the fall of 2002, which served as a form of pilot for the larger mail order initiative. While the dollars paid during this period only represent the implementation of mail order services in a limited number of counties, it is important to note that $6,000 is a very small fraction of the $35 to $40 million per month Washington spends on its FFS pharmacy program. There could be many factors influencing the small amount of claims dollars flowing through the limited mail order program that has been established. Uncovering the reasons for the low claims dollars in the established program will aid in more thoroughly understanding the possibilities for savings going forward under the statewide program.

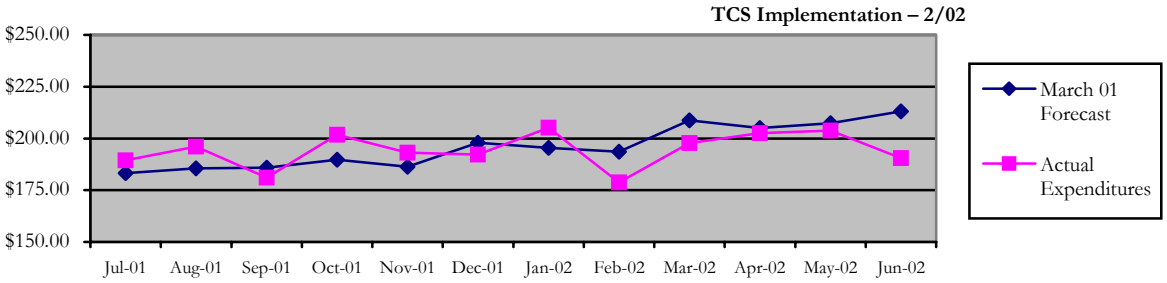
APPENDIX A

DSHS MAA Utilization and Cost Containment Initiative
Therapeutic Consultation Service (TCS) Savings Measurement Workgroup
TCS Measurement

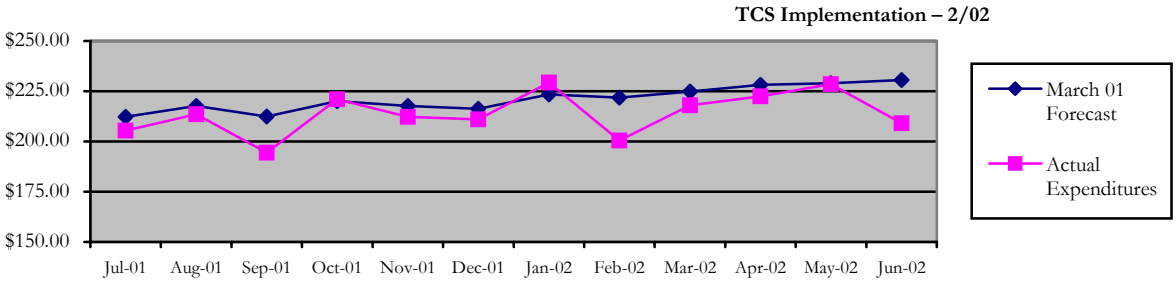
Measurement of TCS savings consists of two components: 1) fiscal impacts; and, 2) TCS impacts/benefits. These components are measured as follows:

I. FISCAL IMPACTS: This measure compares "bottom line" expenditures before and after TCS.
   - The March 2001 MAA Drug Service Budget Forecast numbers (adjusted for auto-opens) is used as a baseline for comparison. Actual MAA Drug Service per capita/per eligible expenditures for months following TCS implementation are compared to the forecast.
   - Comparisons are presented for five eligibility categories: 1020 CN Aged, 1040 CN Disabled, 1080 MN Aged, 1100 MN Disabled, and 1100 GAU

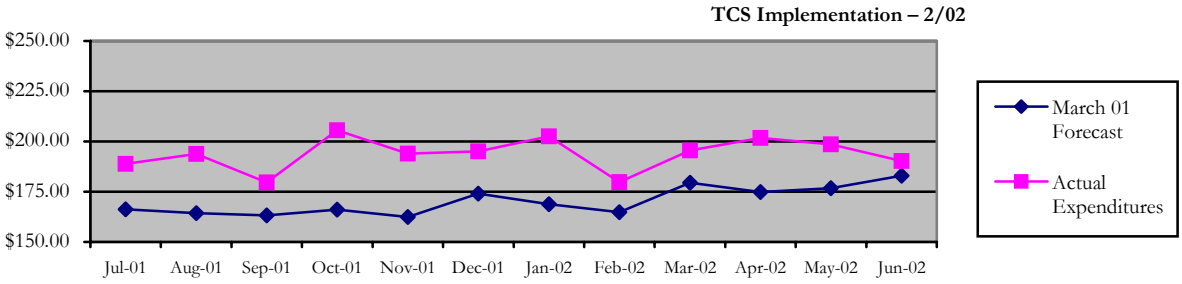
1020 CN Aged: Drug Service Forecast vs. Actual Expenditures



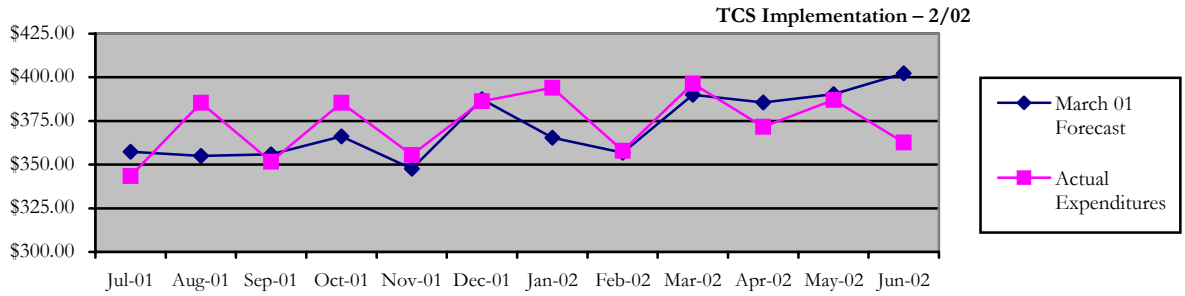
1040 CN Disabled: Drug Service Forecast vs. Actual Expenditures



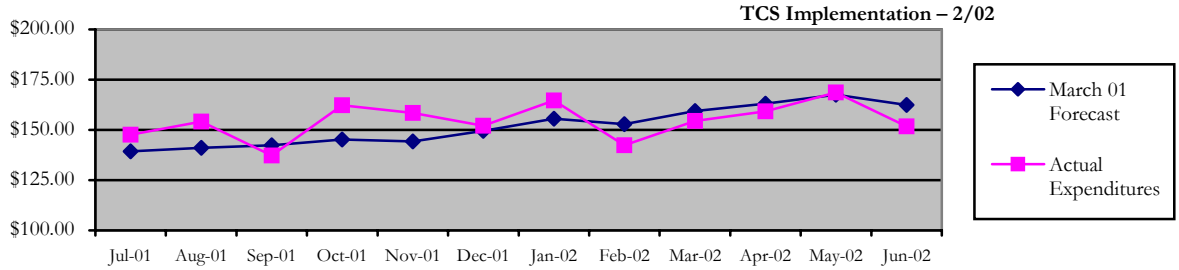
1080 MN Aged: Drug Service Forecast vs. Actual Expenditures



1100 MN Blind, Disabled: Drug Service Forecast vs. Actual Expenditures



1110 GAU: Drug Service Forecast vs. Actual Expenditures



Other factors (in addition to TCS) impact the variance between the March forecast and actual expenditures. ***Attachment A*** identifies some of those factors.

II. TCS IMPACTS/BENEFITS: Provides analysis and impacts of TCS components.

1) TCS – **Four Brand-Name Edit**: The following provides 1) a measure of generic utilization before and after TCS intervention and 2) a measure of client generic drug utilization patterns before and after TCS interventions:

- Total number of prescription drug claims per month, % of claims billed for brand name vs. generic drugs (January 2001 through present)
- Total dollars per month for prescription drugs, % of dollars for brand name vs. generic drugs (January 2001 through present)
- A random sample of clients for whom TCS consultations occurred details generic vs. brand name drug utilization patterns pre and post-TCS (***Attachment B***)
- Number of pharmacy claims that trigger the 4-brand edit exception in POS will be tracked to determine trends over time

Brand Name vs. Generic – Savings Calculation

- **TABLE #1** shows the monthly count and % of generic vs. brand name pharmacy claims; generic claims counts are compared to the baseline month (January 2002). The trend of generic usage and the increase in generic claims is recorded.
- **TABLE #2** shows the monthly cost of generic vs. brand name pharmacy claims.
- **TABLE #3** shows the average cost per claim for brand name and generic pharmacy claims with a column that calculates the difference between the two.
- **(Dollar difference between average brand name and average generic) X (generic claim count increase) = monthly savings**

TABLE #1 – Monthly Claim Count Analysis (Generic vs. Brand Name)

Year/Month		Total Claims	% Brand Name	% Generic	Generic Trend*	Generic Claim Count Increase
2001	1	883,045	49.70%	50.30%		
2001	2	796,441	49.78%	50.22%		
2001	3	888,534	50.00%	50.00%		
2001	4	849,062	50.21%	49.79%		
2001	5	895,410	50.18%	49.82%		
2001	6	854,937	50.35%	49.65%		
2001	7	870,027	50.39%	49.61%		
2001	8	903,966	49.84%	50.16%		
2001	9	833,486	49.40%	50.60%		
2001	10	962,163	49.12%	50.88%		
2001	11	915,855	49.26%	50.74%		
2001	12	902,328	49.46%	50.54%		
2002	**1**	**972,382**	**49.28%**	**50.72%**	**BASELINE**	
2002	2	866,778	47.64%	52.36%	↑ **1.64%**	14,233
2002	3	941,674	47.87%	52.13%	↑ **1.41%**	13,225
2002	4	955,755	48.03%	51.97%	↑ **1.25%**	11,909
2002	5	958,208	47.86%	52.14%	↑ **1.42%**	13,606
2002	6	888,253	48.43%	51.57%	↑ **.85%**	7,497
2002	7	958,619	47.25%	52.75%	↑ **2.03%**	10,265
2002	8	920,802	46.26%	53.74%	↑ **3.02%**	27,775
2002	9	754,118	46.32%	53.68%	↑ **2.96%**	22,332
*** Generic Trend and Generic Claim Count Increase is calculated using January 2002 as a baseline month**						
Average CY2001				**50.19%**		
Average After 2/2002				**52.54%**	↑ **2.35%**	

Generic Usage by Percent of Total Claims

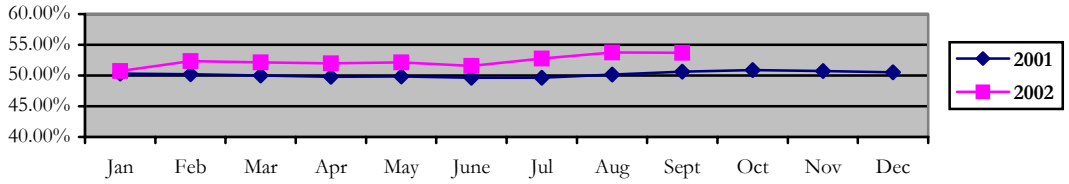


TABLE #2 – Monthly Expenditure Analysis (Generic vs. Brand Name)

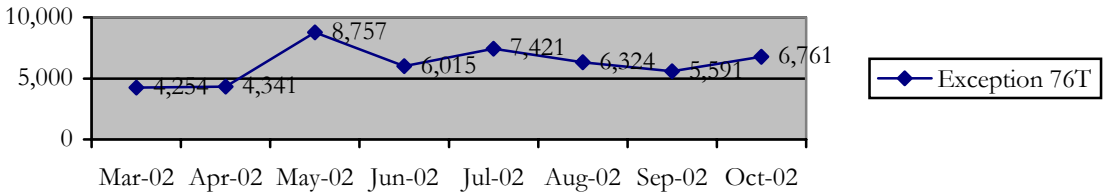
Year/Month		Total Dollars	% Brand Name	% Generic	Generic Trend
2001	1	$41,243,939.75	82.71%	17.28%	
2001	2	$37,349,427.19	83.09%	16.90%	
2001	3	$41,935,643.33	83.47%	16.52%	
2001	4	$40,365,605.72	83.23%	16.76%	
2001	5	$42,544,112.39	82.92%	17.07%	
2001	6	$41,283,393.80	83.25%	16.74%	

Year/Month		Total Dollars	% Brand Name	% Generic	Generic Trend
2001	7	$42,552,754.69	83.07%	16.92%	
2001	8	$44,496,423.88	82.32%	17.67%	
2001	9	$40,946,044.98	81.52%	18.47%	
2001	10	$46,886,916.04	81.58%	18.41%	
2001	11	$45,244,001.53	81.77%	18.22%	
2001	12	$45,150,612.16	81.95%	18.04%	
2002	**1**	**$49,078,366.92**	**82.12%**	**17.87%**	**BASELINE**
2002	2	$43,146,487.93	80.67%	19.32%	**↑ 1.45%**
2002	3	$47,319,015.64	80.86%	19.13%	**↑ 1.26%**
2002	4	$48,307,603.41	80.78%	19.21%	**↑ 1.34%**
2002	5	$49,009,910.80	80.70%	19.29%	**↑ 1.42%**
2002	6	$45,213,938.41	82.66%	17.33%	**↓ .54**
2002	7	$49,331,384.77	81.70%	18.29%	**↑ .42%**
2002	8	$45,590,308.59	81.92%	18.07%	**↑ .2%**
2002	9	$37,172,004.98	81.49%	18.50%	**↑ .63%**
Average 2001				**17.42%**	
Average After 2/2002				**18.64%**	**↑ 1.23%**

TABLE #3 – Savings Calculations (Generic vs. Brand Name)

Year/Month		Average Cost per Generic Drug Claim	Average Cost per Brand Name Claim	Difference	Claims Changed to Generic	Dollar Savings
2002	2	$18.37	$84.30	$65.93	14,233	$938,373.28
2002	3	$18.45	$84.88	$66.43	13,225	$878,543.92
2002	4	$18.68	$85.01	$66.33	11,909	$789,906.29
2002	5	$18.93	$86.25	$67.33	13,606	$916,053.26
2002	6	$17.11	$86.88	$69.77	7,497	$523,042.54
2002	7	$17.84	$88.99	$71.15	10,265	$730,351.74
2002	8	$16.65	$87.68	$71.02	27,775	$1,972,654.80
2002	9	$16.99	$86.73	$69.74	22,332	$1,557,331.60
TOTAL SAVINGS THROUGH SEPTEMBER 2002						**$8,306,257.43**

Number of Claims Triggering the 4-Brand Limit POS Exception



2) TCS - **Preferred Drug List (PDL):** The following provides a before/after TCS comparison for each of the two therapeutic classes included on the PDL:
   - Total number of claims, % billed for preferred vs. non-preferred drugs in that class

- Total number of recipients per month receiving drugs in a therapeutic class, % of clients using preferred vs. non-preferred drugs in that class
- Total dollars per month for a therapeutic drug class, % of dollars per month expended for preferred vs. non-preferred drugs

Preferred Drug List – Savings Calculation

- **TABLE #1** shows the monthly count of preferred vs. non-preferred pharmacy claims for each therapeutic class; preferred drug claims counts are compared to the baseline month (January 2002). The trend of preferred drug usage is recorded and the increase in preferred drug claims is calculated.
- **TABLE #2** shows monthly costs of preferred vs. non-preferred pharmacy claims.
- **TABLE #3** calculates the average cost per claim for preferred and non-preferred drug pharmacy claims with a column that calculates the difference between the two.
- **(Dollar difference between average preferred and average non-preferred) X (preferred drug claim count increase) = monthly savings**

H2RA TABLE #1 – Monthly Claim Count Analysis (Ranitidine vs. Non-Preferred)

Year/Month		Total Claims	% Ranitidine	% Non-Preferred Drug	Ranitidine	
					Trend	Claim Count Increase
2001	1	15,985	65.03%	34.97%		
2001	2	14,165	64.96%	35.04%		
2001	3	15,943	65.92%	34.08%		
2001	4	15,068	66.19%	33.81%		
2001	5	15,567	66.69%	33.31%		
2001	6	14,915	66.62%	33.38%		
2001	7	15,252	66.77%	33.23%		
2001	8	15,716	66.67%	33.33%		
2001	9	14,175	66.84%	33.16%		
2001	10	16,070	67.34%	32.66%		
2001	11	15,035	67.59%	32.41%		
2001	12	14,742	68.33%	31.67%		
2002	**1**	**15,692**	**69.25%**	**30.75%**	**BASELINE**	
2002	2	13,478	97.17%	2.83%	↑ 27.93%	3,765
2002	3	14,675	93.07%	6.93%	↑ 23.82%	3,520
2002	4	14,907	93.10%	6.90%	↑ 23.86%	3,558
2002	5	14,810	96.78%	3.22%	↑ 27.53%	4,084
2002	6	13,210	96.39%	3.61%	↑ 27.14%	3,581
2002	7	13,948	96.60%	3.40%	↑ 27.36%	3,795
2002	8	13,135	96.74%	3.26%	↑ 27.50%	3,599
2002	9	10,679	97.14%	2.86%	↑ 27.90%	2,959
*** Preferred Drug Trend and Claim Count Increase calculated using January 2002 as a baseline month**						
Average CY2001			**66.58%**			
Average After 2/2002			**95.88%**		**↑ 29.3%**	

H2RA – Monthly Client Usage Analysis (Ranitidine vs. Non-Preferred)

Year/Month		Total Clients	Percent Using		Ranitidine Trend
			Ranitidine	Non-Preferred Drug	
2001	1	14,742	65.10%	34.90%	
2001	2	13,418	65.25%	34.75%	
2001	3	14,709	66.29%	33.71%	
2001	4	14,082	66.23%	33.77%	
2001	5	14,296	66.72%	33.28%	
2001	6	13,957	66.91%	33.09%	
2001	7	14,138	66.83%	33.17%	
2001	8	14,390	67.05%	32.95%	
2001	9	13,422	67.06%	32.94%	
2001	10	14,660	67.63%	32.37%	
2001	11	13,968	67.99%	32.01%	
2001	12	13,741	68.55%	31.45%	
2002	**1**	**14,418**	**69.56%**	**30.44%**	**BASELINE**
2002	2	12,848	97.49%	2.51%	↑ 27.93%
2002	3	13,717	93.55%	6.45%	↑ 23.99%
2002	4	13,894	93.43%	6.57%	↑ 23.87%
2002	5	13,640	97.13%	2.87%	↑ 27.57%
2002	6	12,560	96.66%	3.34%	↑ 27.11%
2002	7	12,740	96.77%	3.23%	↑ 27.21%
2002	8	12,285	96.96%	3.04%	↑ 27.40%
2002	9	10,442	97.27%	2.73%	↑ 27.71%
Average 2001			**66.8%**		
Average After 2/2002			**95.16%**		**↑ 29.36%**

H2RA TABLE #2 – Monthly Expenditure Analysis (Ranitidine vs. Non-Preferred)

Year/Month		Total Dollars	Percent		Ranitidine Trend
			Ranitidine	Non-Preferred Drug	
2001	1	$664,521.87	37.02%	62.98%	
2001	2	$582,204.67	36.96%	63.04%	
2001	3	$657,610.50	38.18%	61.82%	
2001	4	$610,695.20	38.80%	61.20%	
2001	5	$567,455.10	39.15%	60.85%	
2001	6	$522,423.08	37.63%	62.37%	
2001	7	$541,643.61	38.63%	61.37%	
2001	8	$554,120.65	39.05%	60.95%	
2001	9	$494,844.57	38.66%	61.34%	
2001	10	$397,222.11	49.19%	50.81%	
2001	11	$345,953.32	47.83%	52.17%	

Year/Month		Total Dollars	Percent		Ranitidine Trend
			Ranitidine	Non-Preferred Drug	
2001	12	$325,473.28	47.85%	52.15%	
2002	**1**	**$344,048.38**	**50.49%**	**49.51%**	**BASELINE**
2002	2	$204,440.16	94.31%	5.69%	↑ 43.82%
2002	3	$234,191.71	85.46%	14.54%	↑ 34.97%
2002	4	$240,270.62	84.60%	15.40%	↑ 34.11%
2002	5	$221,765.08	92.56%	7.44%	↑42.07%
2002	6	$192,702.58	90.34%	9.66%	↑ 39.85%
2002	7	$209,302.50	92.47%	7.53%	↑ 41.98%
2002	8	$199,348.81	94.22%	5.78%	↑ 43.73%
2002	9	$160,335.55	95.38%	4.62%	↑ 44.89%
Average 2001			**40.75%**		
Average After 2/2002			**91.17%**		**↑ 50.42%**

H2RA TABLE #3 – Savings Calculations (Ranitidine vs. Non-Preferred)

Year/Month		Average Cost		Difference	Claims Changed to Ranitidine	Dollar Savings
		Ranitidine Claim	Non-Preferred Drug Claim			
2002	2	$14.72	$30.49	$15.77	3,765	$ 59,374.05
2002	3	$14.65	$33.47	$18.82	3,520	$ 66,246.40
2002	4	$14.65	$35.98	$21.33	3,558	$ 75,892.14
2002	5	$14.32	$34.56	$20.24	4,084	$ 82,660.16
2002	6	$13.67	$38.98	$25.31	3,581	$ 90,635.11
2002	7	$14.37	$33.21	$18.84	3,795	$ 71,497.80
2002	8	$14.78	$26.88	$12.10	3,599	$ 43,547.90
2002	9	$14.74	$24.25	$9.51	2,959	$ 28,140.09
TOTAL SAVINGS THROUGH SEPTEMBER 2002						**$ 517,993.65**

PPI TABLE #1 – Monthly Claim Count Analysis (Protonix vs. Non-Preferred)

Year/Month		Total Claims	Percent		Preferred Drug	
			Protonix	Non-Preferred Drug	Trend	Claim Count Increase
2001	1	20,234	5.51%	94.49%		
2001	2	18,382	6.41%	93.59%		
2001	3	20,713	7.10%	92.90%		
2001	4	20,209	7.99%	92.01%		
2001	5	21,614	8.47%	91.53%		
2001	6	21,086	9.07%	90.93%		
2001	7	22,157	10.19%	89.81%		
2001	8	23,065	11.06%	88.94%		
2001	9	21,417	12.00%	88.00%		
2001	10	24,593	13.28%	86.72%		

Year/Month		Total Claims	Percent		Preferred Drug	
			Protonix	Non-Preferred Drug	Trend	Claim Count Increase
2001	11	23,692	14.08%	85.92%		
2001	12	23,853	15.18%	84.82%		
2002	**1**	**25,350**	**18.84%**	**81.16%**	**BASELINE**	
2002	2	21,016	89.48%	10.52%	↑ 70.64%	14,846
2002	3	24,237	80.96%	19.04%	↑ 62.12%	15,056
2002	4	24,959	79.59%	20.41%	↑ 60.75%	15,163
2002	5	24,935	85.33%	14.67%	↑ 66.49%	16,579
2002	6	23,492	84.45%	15.55%	↑ 65.61%	15,413
2002	7	26,278	84.36%	15.64%	↑ 65.52%	17,217
2002	8	25,360	83.98%	16.02%	↑ 65.14%	16,520
2002	9	20,690	83.91%	16.09%	↑ 65.07%	13,463
*** Preferred Drug Trend and Claim Count Increase calculated using January 2002 as a baseline month**						
Average CY2001			**10.03%**			
Average After 2/2002			**84.01%**		**↑ 65.17%**	

PPI – Monthly Client Usage Analysis (Protonix vs. Non-Preferred)

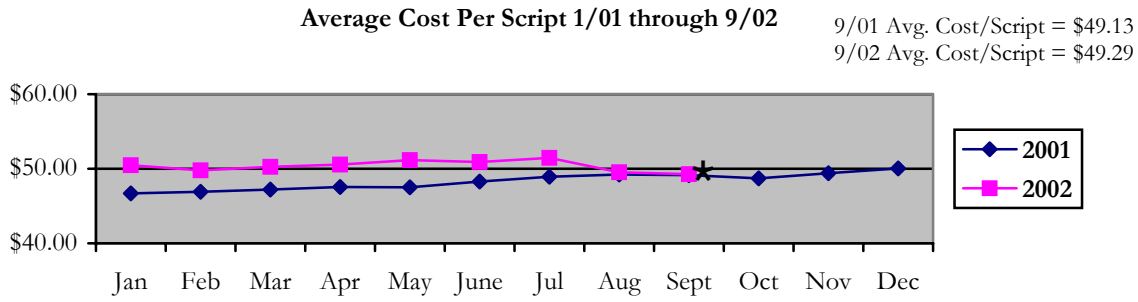
Year/Month		Total Claims	Percent		Preferred Drug Trend
			Protonix	Non-Preferred Drug	
2001	1	18,381	5.53%	94.47%	
2001	2	17,365	6.40%	93.60%	
2001	3	18,889	7.13%	92.87%	
2001	4	18,751	7.96%	92.04%	
2001	5	19,671	8.60%	91.40%	
2001	6	19,454	9.18%	90.82%	
2001	7	20,310	10.26%	89.74%	
2001	8	20,937	11.22%	88.78%	
2001	9	20,227	12.05%	87.95%	
2001	10	22,189	13.42%	86.58%	
2001	11	21,936	14.07%	85.93%	
2001	12	22,023	15.23%	84.77%	
2002	**1**	**23,036**	**18.94%**	**81.06%**	**BASELINE**
2002	2	19,939	90.58%	9.42%	↑ 71.64%
2002	3	22,317	82.69%	17.31%	↑ 63.75%
2002	4	22,885	80.88%	19.12%	↑ 61.93%
2002	5	22,897	86.45%	13.55%	↑ 67.51%
2002	6	22,226	85.30%	14.70%	↑ 66.36%
2002	7	23,943	85.05%	14.95%	↑ 66.11%
2002	8	23,608	84.65%	15.35%	↑ 65.70%
2002	9	20,232	84.48%	15.52%	↑ 65.53%
Average 2001			**10.09%**		
Average After 2/2002			**85.01%**		**↑ 66.07%**

PPI TABLE #2 – Monthly Expenditure Analysis (Protonix vs. Non-Preferred)

Year/Month		Total Dollars	Percent		Preferred Drug Trend
			Protonix	Non-Preferred Drug	
2001	1	$2,370,657.89	3.52%	96.48%	
2001	2	$2,154,120.36	4.07%	95.93%	
2001	3	$2,431,781.77	4.55%	95.45%	
2001	4	$2,363,561.90	5.17%	94.83%	
2001	5	$2,526,061.13	5.62%	94.38%	
2001	6	$2,457,131.35	5.94%	94.06%	
2001	7	$2,662,700.68	6.47%	93.53%	
2001	8	$2,745,043.54	7.03%	92.97%	
2001	9	$2,550,553.49	7.79%	92.21%	
2001	10	$2,909,091.24	8.35%	91.65%	
2001	11	$2,790,439.06	9.00%	91.00%	
2001	12	$2,778,322.94	9.88%	90.12%	
2002	**1**	**$3,014,733.45**	**12.86%**	**87.14%**	**BASELINE**
2002	2	$1,927,373.61	85.28%	14.72%	↑ 72.42%
2002	3	$2,367,467.77	74.27%	25.73%	↑ 61.41%
2002	4	$2,485,109.68	72.89%	27.11%	↑ 60.03%
2002	5	$2,429,049.36	80.00%	20.00%	↑ 67.14%
2002	6	$2,308,337.41	78.75%	21.25%	↑ 65.89%
2002	7	$2,609,205.20	79.06%	20.94%	↑ 66.20%
2002	8	$2,428,880.67	78.20%	21.80%	↑ 65.34%
2002	9	$2,035,951.84	78.33%	21.67%	↑ 65.47%
Average 2001			**6.45%**		
Average After 2/2002			**78.35%**		**↑ 71.90%**

PPI TABLE #3 – Savings Calculations (Protonix vs. Non-Preferred)

Year/ Month		Average Cost		Difference	Claims Changed to Protonix	Dollar Savings
		Protonix Claim	Non-Preferred Drug Claim			
2002	2	$87.41	$128.33	$40.92	14,846	$607,556.70
2002	3	$89.61	$131.98	$42.37	15,056	$637,932.01
2002	4	$91.18	$132.28	$41.10	15,163	$623,185.10
2002	5	$91.34	$132.77	$41.43	16,579	$686,871.95
2002	6	$91.63	$134.27	$42.64	15,413	$657,186.20
2002	7	$93.07	$132.88	$39.81	17,217	$685,456.10
2002	8	$89.19	$130.30	$41.11	16,520	$679,117.14
2002	9	$91.87	$132.48	$40.61	13,463	$546,676.09
TOTAL SAVINGS THROUGH SEPTEMBER 2002						**$5,123,981.29**



3) Total annual TCS Expenditures are offset by total annual TSC savings to calculate Return on Investment (ROI)

TCS Savings FY03 To Date	
4-Brand Edit	**$8,306,257.43**
PDL – H2RA	**$517,993.65**
PDL – PPI	**$5,123,981.29**
TOTAL	**$13,948,232.37**

TCS Expenditures FY03 To Date	
TCS Implementation (ACS)	**$1,700,000.00**
Monthly Maintenance (ACS)	
DSHS Staff	
TOTAL	

Attachment A

Other factors (in addition to TCS) will impact the variance between the March forecast and actual expenditures. Impacts include, but are not limited to, the following items:

- The cost of prescription drugs has risen steadily over the last decade. Nationwide, it is estimated that state Medicaid drug programs are experiencing an average of 18-20% growth. Multiple market factors are driving the rise in prescription drugs, and the Department has implemented a number of initiatives aimed at ***reducing*** the expenditure growth.
- Effective August 1, 2002, the AWP discount for single source drugs and multiple source drugs with fewer than five manufacturers/labelers, increased from 11% to 14%. The discount from AWP for multiple source drugs with five or more manufacturers/labelers increased from 11% to 50%. AWP cost savings will ***decrease*** overall drug service expenditures and will need to be calculated into the cost savings.
- DSHS Disease Management Initiative: Washington has implemented a Disease Management program for fee-for-service clients with a diagnosis of Asthma, Congestive Heart Failure, Diabetes and End Stage Renal Disease/Chronic Kidney Disease. Disease Management supports goals such as continuity of care, improved understanding and client satisfaction, and the appropriate utilization of a "medical home". Disease Management expected results include improved healthcare outcomes and cost savings. However, it is important to note that overall MAA program savings may involve cost shifting, and there is a potential for ***increased*** drug service utilization and associated costs.
- The MAA/Coordination of Benefits Unit (COB) has responsibility for the identification, recovery and cost avoidance of funds where Medicare or any Third Party Insurance (TPL) should pay a client's medical expenses (total or in part). Increased emphasis on COB activities and post-pay reviews of Point of Sale (POS) prescription drug claims when TPL is identified may result in cost savings that will ***decrease*** overall drug service expenditures.
- The ongoing identification of edits that can be added to the Point of Sale (POS) system will result in the avoidance of paying certain pharmacy claims in error. Resultant cost savings will ***decrease*** overall drug service expenditures.
- Increased coverage of drugs by Medicare and DSHS/MAA recovery and cost avoidance of these funds may ***decrease*** overall drug service expenditures.
- Continuous research and implementation or edits of state Maximum Allowable Costs for prescription drugs will impact overall drug service expenditures.

APPENDIX B

Change in Claims Volume
in Top 20 Therapeutic Classes[1]
Generic vs. Brand Comparison

	Number of Claims						Percent of Total Claims				Net Change in Usage	
	Feb 02 - May 02			Jun 02 - Aug 02			Feb 02 - May 02		Jun 02 - Aug 02			
Class	Generic	Brand	Total	Generic	Brand	Total	% Generic	% Brand	% Generic	% Brand	Generic	Brand
ANALGESICS,NARCOTICS	12,072	11,686	23,758	9,249	6,809	16,058	50.8%	49.2%	57.6%	42.4%	6.8%	-6.8%
ANTICONVULSANTS	1,757	4,319	6,076	1,330	3,194	4,524	28.9%	71.1%	29.4%	70.6%	0.5%	-0.5%
ANTIEMETIC/ANTIVERTIGO AGENTS	1,000	719	1,719	763	415	1,178	58.2%	41.8%	64.8%	35.2%	6.6%	-6.6%
ANTIHISTAMINES	2,753	7,100	9,853	1,913	4,837	6,750	27.9%	72.1%	28.3%	71.7%	0.4%	-0.4%
ANTIMIGRAINE PREPARATIONS	88	3,369	3,457	60	2,086	2,146	2.5%	97.5%	2.8%	97.2%	0.3%	-0.3%
ANTIPSYCHOTICS,ATYPICAL,DOPAMI	172	2,078	2,250	114	1,671	1,785	7.6%	92.4%	6.4%	93.6%	-1.3%	1.3%
BETA-ADRENERGIC AGENTS	4,381	5,236	9,617	2,927	3,074	6,001	45.6%	54.4%	48.8%	51.2%	3.2%	-3.2%
BETA-ADRENERGICS AND GLUCOCORT	0	1,826	1,826	0	1,381	1,381	0.0%	100.0%	0.0%	100.0%	0.0%	0.0%
CALCIUM CHANNEL BLOCKING AGENT	2,152	4,770	6,922	1,643	3,281	4,924	31.1%	68.9%	33.4%	66.6%	2.3%	-2.3%
ESTROGENIC AGENTS	898	6,486	7,384	849	4,177	5,026	12.2%	87.8%	16.9%	83.1%	4.7%	-4.7%
GASTRIC ACID SECRETION REDUCER	3,639	13,804	17,443	2,080	7,841	9,921	20.9%	79.1%	21.0%	79.0%	0.1%	-0.1%
GLUCOCORTICOIDS	1,840	4,543	6,383	1,070	2,899	3,969	28.8%	71.2%	27.0%	73.0%	*-1.9%*	*1.9%*
HYPOGLYCEMICS, INSULIN-RESPONS	0	3,408	3,408	0	2,337	2,337	0.0%	100.0%	0.0%	100.0%	0.0%	0.0%
HYPOTENSIVES, ACE INHIBITORS	983	4,277	5,260	1,761	2,921	4,682	18.7%	81.3%	37.6%	62.4%	18.9%	-18.9%
HYPOTENSIVES,ANGIOTENSIN RECEP	0	3,639	3,639	0	2,836	2,836	0.0%	100.0%	0.0%	100.0%	0.0%	0.0%
INSULINS	0	3,549	3,549	0	2,630	2,630	0.0%	100.0%	0.0%	100.0%	0.0%	0.0%
LIPOTROPICS	821	9,482	10,303	971	6,392	7,363	8.0%	92.0%	13.2%	86.8%	5.2%	-5.2%
NSAIDS, CYCLOOXYGENASE INHIBIT	3,208	6,733	9,941	2,206	4,425	6,631	32.3%	67.7%	33.3%	66.7%	1.0%	-1.0%
SEROTONIN SPECIFIC REUPTAKE IN	1,287	5,325	6,612	943	3,706	4,649	19.5%	80.5%	20.3%	79.7%	0.8%	-0.8%
SKELETAL MUSCLE RELAXANTS	3,663	1,377	5,040	2,771	733	3,504	72.7%	27.3%	79.1%	20.9%	6.4%	-6.4%

[1] Top 20 classes in total paid amount.

Change in Paid Amount
in Top 20 Therapeutic Classes[1]
Generic vs. Brand Comparison

	Total Paid Amount						Percent of Total Paid				Net Change in Paid Amount	
	Feb 02 - May 02			Jun 02 - Aug 02			Feb 02 - May 02		Jun 02 - Aug 02			
Class	Generic	Brand	Total	Generic	Brand	Total	% Generic	% Brand	% Generic	% Brand	Generic	Brand
ANALGESICS,NARCOTICS	$245,826	$973,687	$1,219,512	$216,404	$692,516	$908,920	20.2%	79.8%	23.8%	76.2%	3.7%	-3.7%
ANTICONVULSANTS	$33,129	$538,042	$571,171	$24,596	$416,724	$441,320	5.8%	94.2%	5.6%	94.4%	-0.2%	0.2%
ANTIEMETIC/ANTIVERTIGO AGENTS	$18,626	$199,224	$217,850	$18,206	$159,729	$177,936	8.5%	91.5%	10.2%	89.8%	1.7%	-1.7%
ANTIHISTAMINES	$22,701	$287,524	$310,225	$17,794	$229,373	$247,168	7.3%	92.7%	7.2%	92.8%	-0.1%	0.1%
ANTIMIGRAINE PREPARATIONS	$177	$165,468	$165,645	$103	$109,999	$110,102	0.1%	99.9%	0.1%	99.9%	0.0%	0.0%
ANTIPSYCHOTICS,ATYPICAL,DOPAMI	$11,480	$424,119	$435,599	$6,645	$346,007	$352,652	2.6%	97.4%	1.9%	98.1%	-0.8%	0.8%
BETA-ADRENERGIC AGENTS	$82,269	$202,548	$284,816	$46,630	$147,397	$194,027	28.9%	71.1%	24.0%	76.0%	-4.9%	4.9%
BETA-ADRENERGICS AND GLUCOCORT	$0	$142,782	$142,782	$0	$128,556	$128,556	0.0%	100.0%	0.0%	100.0%	0.0%	0.0%
CALCIUM CHANNEL BLOCKING AGENT	$88,461	$196,141	$284,601	$62,088	$141,404	$203,493	31.1%	68.9%	30.5%	69.5%	-0.6%	0.6%
ESTROGENIC AGENTS	$11,234	$138,902	$150,136	$10,433	$97,335	$107,768	7.5%	92.5%	9.7%	90.3%	2.2%	-2.2%
GASTRIC ACID SECRETION REDUCER	$29,377	$737,428	$766,804	$21,285	$574,028	$595,312	3.8%	96.2%	3.6%	96.4%	-0.3%	0.3%
GLUCOCORTICOIDS	$11,983	$219,158	$231,140	$6,747	$147,021	$153,768	5.2%	94.8%	4.4%	95.6%	-0.8%	0.8%
HYPOGLYCEMICS, INSULIN-RESPONS	$0	$298,858	$298,858	$0	$235,879	$235,879	0.0%	100.0%	0.0%	100.0%	0.0%	0.0%
HYPOTENSIVES, ACE INHIBITORS	$32,725	$123,976	$156,701	$52,959	$91,517	$144,476	20.9%	79.1%	36.7%	63.3%	15.8%	-15.8%
HYPOTENSIVES,ANGIOTENSIN RECEP	$0	$146,112	$146,112	$0	$119,037	$119,037	0.0%	100.0%	0.0%	100.0%	0.0%	0.0%
INSULINS	$0	$219,474	$219,474	$0	$175,011	$175,011	0.0%	100.0%	0.0%	100.0%	0.0%	0.0%
LIPOTROPICS	$40,108	$580,886	$620,994	$51,814	$426,691	$478,504	6.5%	93.5%	10.8%	89.2%	4.4%	-4.4%
NSAIDS, CYCLOOXYGENASE INHIBIT	$66,942	$430,878	$497,820	$44,974	$301,449	$346,423	13.4%	86.6%	13.0%	87.0%	-0.5%	0.5%
SEROTONIN SPECIFIC REUPTAKE IN	$133,563	$430,211	$563,775	$28,921	$308,144	$337,065	23.7%	76.3%	8.6%	91.4%	-15.1%	15.1%
SKELETAL MUSCLE RELAXANTS	$62,776	$85,739	$148,514	$59,673	$59,212	$118,884	42.3%	57.7%	50.2%	49.8%	7.9%	-7.9%

[1] Top 20 classes in total paid amount.