



ANNUAL REPORT

JULY 2007 to JUNE 2008



The Utah Medicaid
Drug Regimen Review Center
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Salt Lake City, UT 84108
www.utahdrrc.org

The University of Utah College of Pharmacy began operating the Drug Regimen Review Center (DRRC) in May 2002 to fulfill the terms of a contract with Utah Medicaid. The contract supports the Utah Medicaid prescription drug program and its drug utilization review department. The emphasis of the program is to improve drug use in Medicaid patients, to reduce the number of prescriptions and drug cost in high utilizers of the Medicaid drug program, and to educate prescribers for top utilizers of the Utah Medicaid prescription drug program.

Each month, the top drug utilizers are reviewed by a team of clinically trained pharmacists. These reviews result in recommendations that are made to prescribers. These recommendations are described later in this report. Recommendations are transmitted in writing, are sent to all prescribers, and include a list of drugs dispensed during the month of review. The DRRC also provides information and consultation by telephone with prescribers and pharmacists.

Staff

The DRRC utilizes a staff of professionals to run the program including:

Pharmacists

Benjamin Campbell, Pharm.D.
Karen Gunning, Pharm.D.
Mei Jen Ho, Pharm.D.
Joanne LaFleur, Pharm.D., MSPH
Bryan Larson, Pharm.D.
CarrieAnn Madden, Pharm.D., BCPS
Janet Norman, R.Ph.
Gary M. Oderda, Pharm.D., MPH
Lynda Oderda, Pharm.D.
Marianne Paul, Pharm.D.
Wade R. Poulson, Pharm.D.
Carin Steinvort, Pharm.D.

Data Management

Lisa Angelos
Sauwanee Bahn
Kami Doolittle
Yvonne Nkwen-Tamo
Brian Oberg
David Servatius

Mission

The mission of the DRRC is to review the drug therapy of Medicaid patients receiving more than seven prescriptions per month and to work with the individual prescribers to provide the safest and highest quality pharmacotherapy at the lowest cost possible.

Methodology

DRRC program methodology continues with no change from previous reports.

We continue to build a cross-reference table of prescriber identification numbers, prescriber license numbers and DEA numbers that now contains 63,421 listings covering all known license addresses.

We continue to send letters to prescribers with recommendations for changes in drug therapy as appropriate. To date, we have mailed 39,691 of these letters to 9,729 different prescribers with recommendations concerning 12,306 Medicaid patients.

Overview

Utah Medicaid drug claim costs had been increasing substantially over the past several years. The total increase in these costs from January 2002 to January 2006, when the Medicare Part D prescription drug benefit went into effect, had been approximately 75.8%. In January 2006 these costs dropped sharply and have been fluctuating but fairly level since that time. Recently, the total number of claims increased slightly from 164,396 to 165,781 per month (0.84%) during the period from July 2007 to June 2008. Drug costs also increased slightly from \$11,249,829 to \$11,543,383 per month (2.61%) during this same period.

Figures 1 and 2 show the total number of Medicaid pharmacy claims and the total cost of these claims for each month during the reporting period from July 2007 to June 2008, and Figure 3 shows the trend in total drug claim costs during the entire project period from January 2002 to June 2008.

Figure 1 – Total Medicaid Drug Claims by Month from July 2007 to June 2008

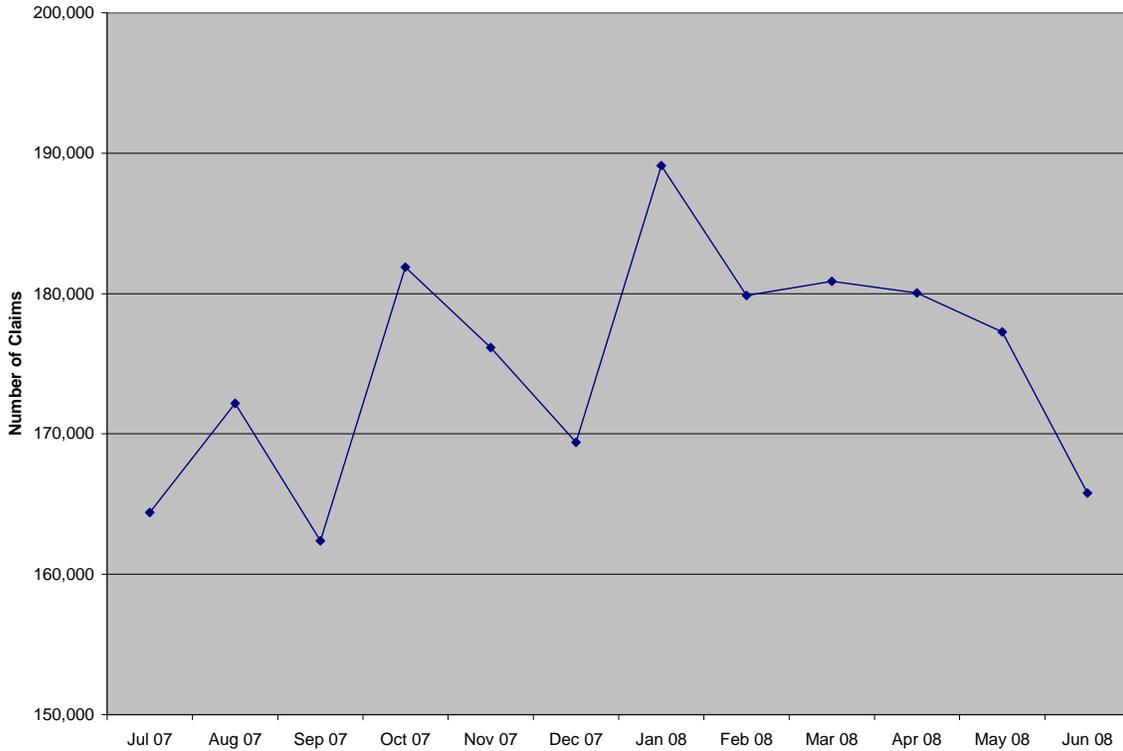


Figure 2 – Total Medicaid Drug Claim Costs by Month from July 2007 to June 2008

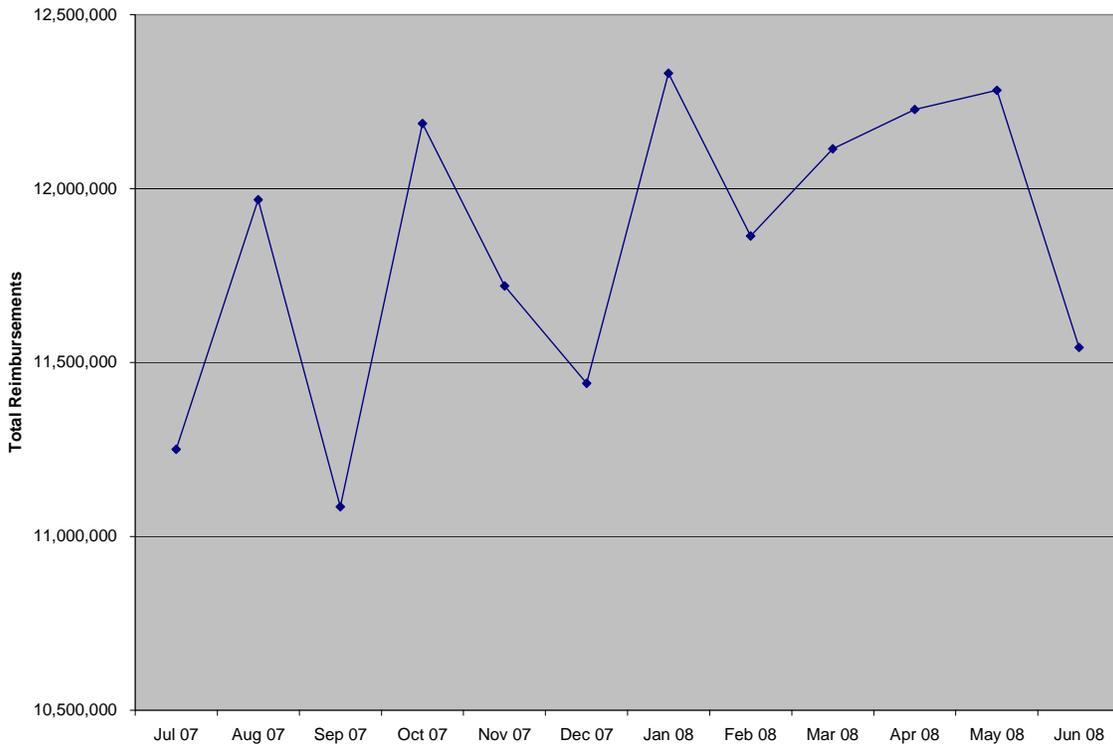
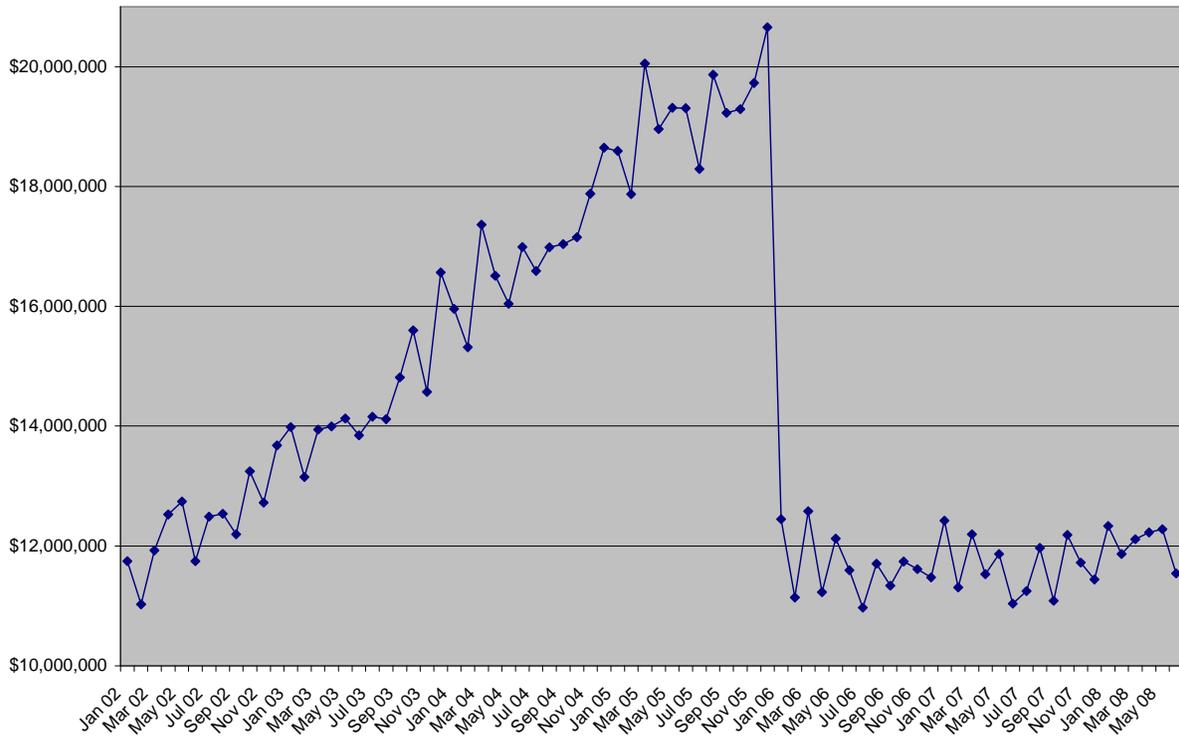


Figure 3 – Total Medicaid Drug Program Costs from January 2002 to June 2008

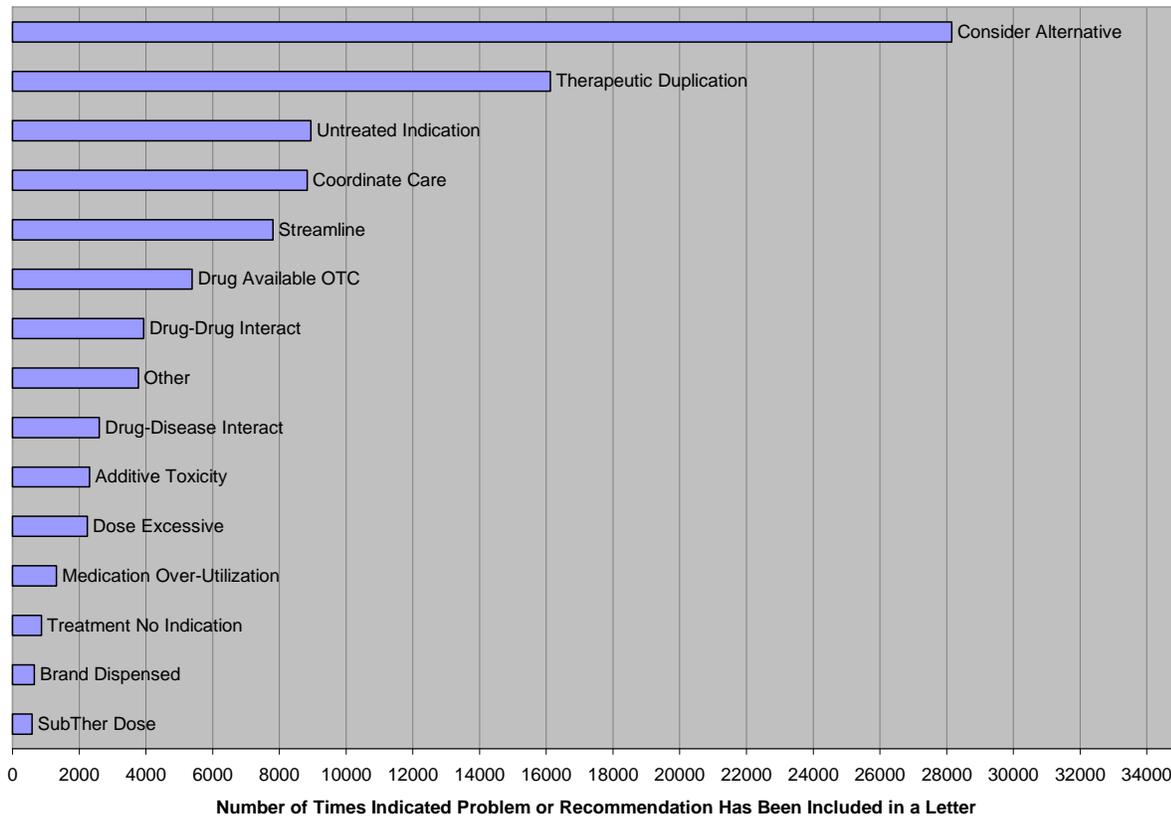


Additional figures for each fiscal year from 2001 to present are included in **Appendix A**. Increases for the past four fiscal years were 16.4% (July 2004 to June 2005), 13.1% (July 2005 to January 2006 – when Medicare Part D went into effect), 0.6% (July 2006 to June 2007) and recently 2.6% (July 2007 to June 2008).

Program Summary

Figure 4 summarizes the drug related problems identified in the letters that have been sent to prescribers.

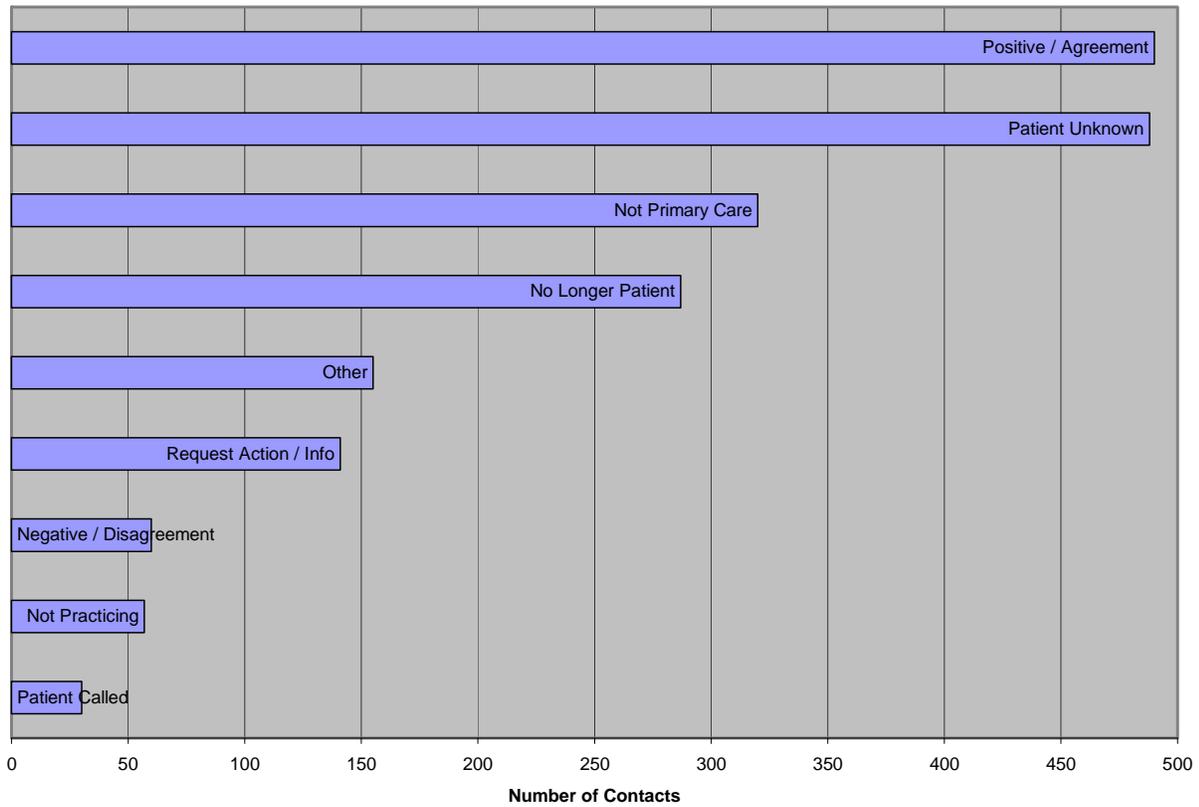
Figure 4 – Type of Drug Related Problems and Recommendations in Letters Sent to Prescribers



Recommendation categories outlined above are self-explanatory, although the top categories do deserve further description. The most common recommendation was for the prescriber to consider alternative therapy. This recommendation would have been made for a number of reasons, including considering a less costly alternative. Therapeutic duplication recommendations were made when the patient was taking multiple therapeutic agents for the same indication when there was generally no reason to include therapy with more than one agent. Coordinate care relates to situations where it appeared that multiple prescribers were ordering therapy for what appeared to be the same illness, and untreated indication recommendations were made if there was an absence of a medication that appeared to be needed based on usual best practice or guidelines. Streamline therapy refers to considering changes in therapy to eliminate some of the drugs dispensed.

Figure 5 summarizes the responses of the 2,028 individuals who contacted the DRRC after receipt of a letter.

Figure 5 – Types of Prescriber Responses to Letters Received

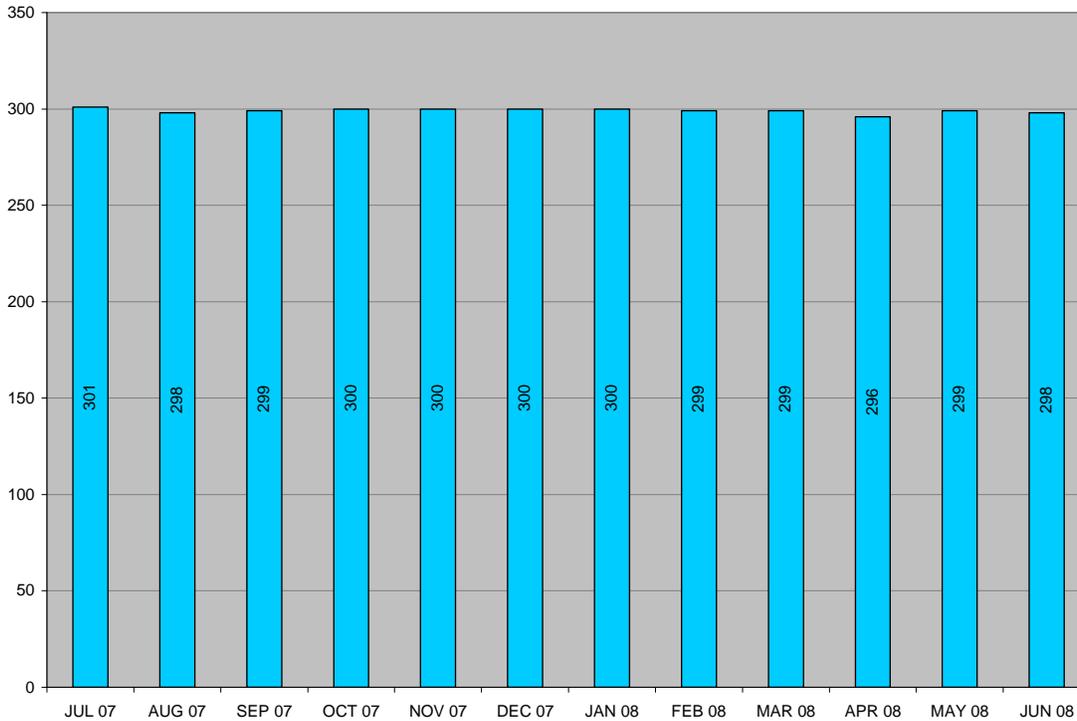


We have received a variety of comments from the prescribers, including both agreement with recommendations and some disagreement. We have also encountered some administrative problems such as pharmacy input error, incorrect addresses on file, and patients not being treated by the prescriber identified. As a result of verification procedures we have implemented, the incidence of these types of problems has gone down dramatically since the beginning of the program.

Demographics

The 3,589 patients reviewed from July 2007 to June 2008 were separated into cohorts based on the month they were reviewed. Figure 6 summarizes the number of patients reviewed each month during this period. The average was 300 patients per month and 25 of the reviewed patients each month were nursing home patients.

Figure 6 – Summary of Patients Reviewed Each Month from July 2007 to June 2008



Demographics for these cohorts are displayed in Table 1 and include gender, average age, and the average number of prescriptions dispensed. Nursing home patients are not included in this table.

Table 1 – Cohort Demographics

MONTH	Patients							
	Females				Males			
	Percent	Mean Age	Mean # Rx	Mean Cost Per RX	Percent	Mean Age	Mean # Rx	Mean Cost Per RX
Jul 07	78.3	45.1	12.7	\$68.80	21.7	48.6	12.3	\$79.81
Aug 07	75.8	42.9	12.6	\$57.55	24.2	44.8	12.5	\$92.75
Sep 07	71.5	43.9	13.5	\$72.04	28.5	46.9	13.3	\$85.91
Oct 07	75.6	43.9	12.9	\$66.17	24.4	44.8	13.1	\$79.98
Nov 07	76.7	44.4	13.1	\$69.88	23.3	47.0	13.0	\$80.03
Dec 07	72.7	46.6	12.6	\$72.81	27.3	46.7	12.7	\$74.31
Jan 08	77.1	42.7	12.1	\$69.33	22.9	45.7	11.7	\$75.04
Feb 08	76.6	45.7	12.1	\$69.07	23.4	45.4	12.7	\$89.79
Mar 08	77.4	47.8	13.3	\$70.09	22.6	47.3	13.5	\$67.69
Apr 08	77.7	44.4	13.6	\$64.65	22.3	47.5	13.5	\$67.52
May 08	77.0	45.0	13.8	\$75.57	23.0	47.3	13.0	\$75.86
Jun 08	74.8	46.2	12.9	\$64.71	25.2	47.2	12.8	\$89.41

Reviewed ambulatory patients during the reporting period were predominantly females in their 40s who filled on average between 12 and 14 prescriptions per month.

Program Trends

The following figures show the number of patients exceeding seven prescriptions per month, and the average and range of the number of prescriptions for the reviewed cohorts. Between 2,900 and 3,300 patients each month exceeded seven prescriptions. The mean number of prescriptions that triggered review generally ranged from 12 to 14 while the maximum number of prescriptions for a reviewed patient exceeded 35.

Figure 7 – Total Number of Ambulatory Medicaid Patients Exceeding Seven Prescriptions per Month between July 2007 and June 2008

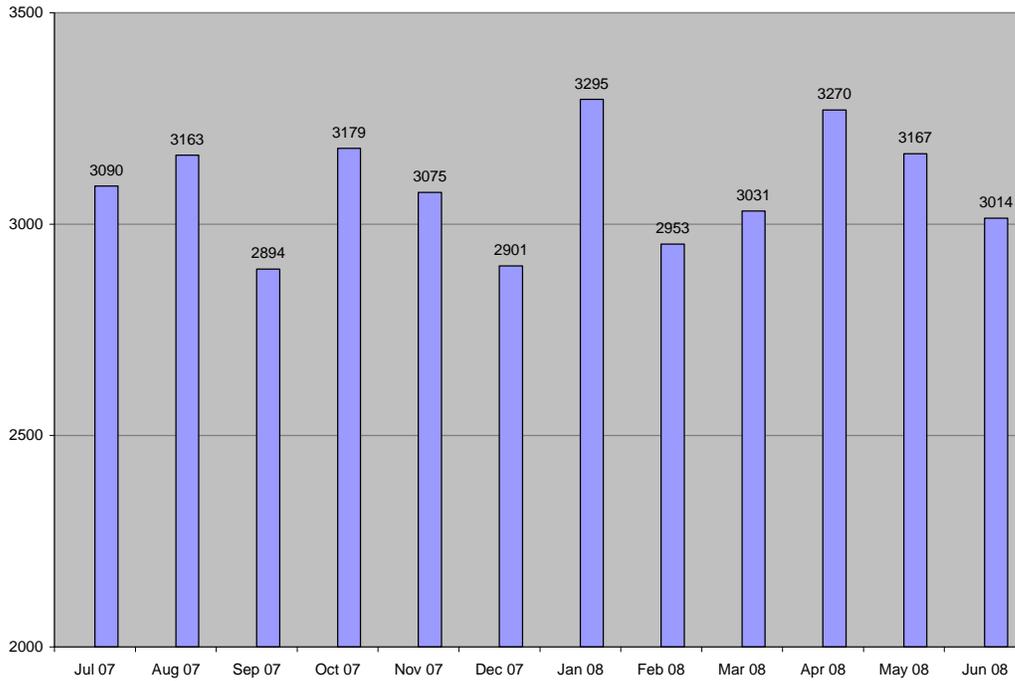
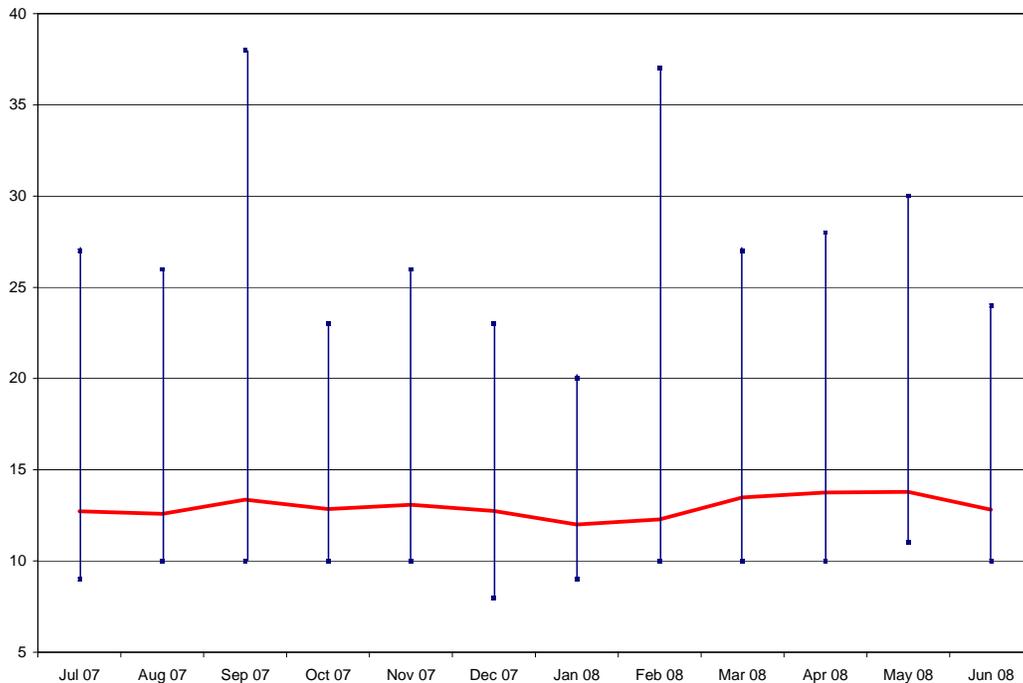


Figure 8 – Average Number of Prescriptions per Month per Reviewed Ambulatory Medicaid Patient, including Minimum and Maximum Number of Prescriptions per Review Group



Program Effectiveness

The DRRC's two major goals are to improve pharmacotherapy for Medicaid patients and to reduce health care costs by decreasing the number of prescriptions and prescription cost. As the review process has matured, we have increased the number of telephone calls to providers to discuss drug related problems. Because of that, we have more information on the impact of our reviews.

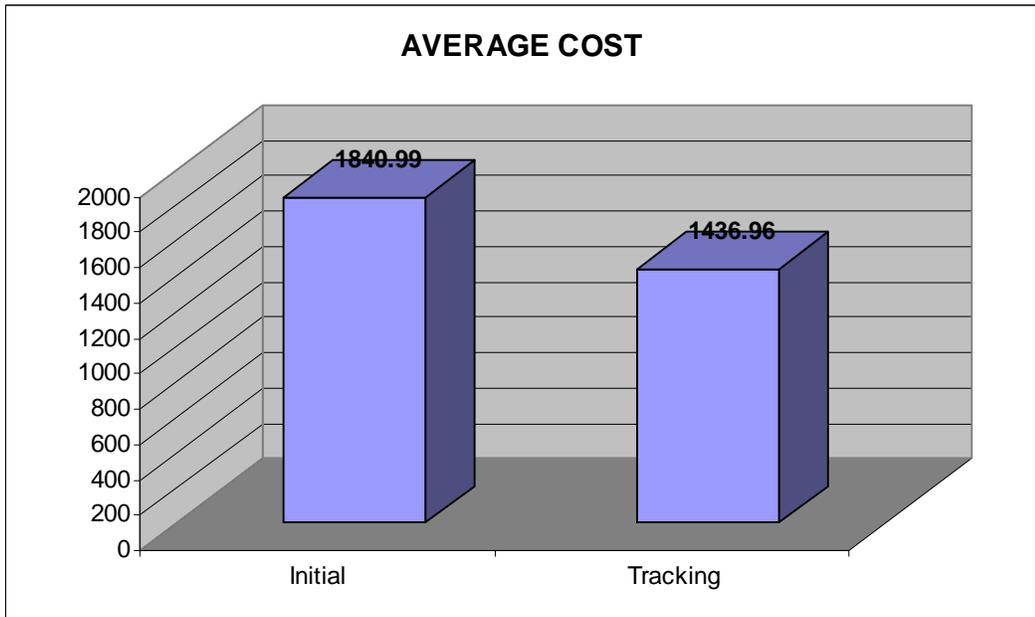
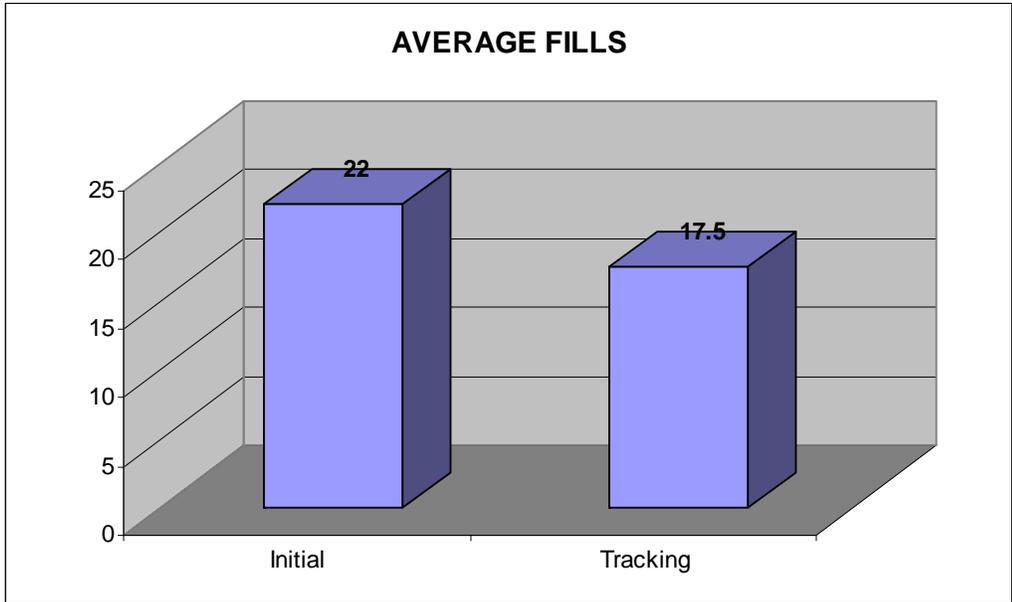
90-Day Tracking of Top Ten Reviewed Utilizers per Month

We have also tracked the top ten reviewed utilizers of the Medicaid prescription drug benefit for 90 days following the mailing of the recommendation letters to prescribers. We compared each patient's total drug fills, total costs and total drug related problems identified in the letters at the time of review and then again after 90 days. In all instances so far we have seen substantial to dramatic decreases in all three categories.

Table 2 – 90 Day Tracking of Top Ten Reviewed Utilizers per Month

	Drug Fills			Costs			Drug Related Problems			Demographics		
	Initial	Track	Change	Initial	Track	Change	Initial	Track	Change	M	F	Mean Age
Jan-07	25.0	16.1	-35.6%	1973.85	1330.68	-32.6%	87	35	-59.8%	10%	90%	53.1
Feb-07	20.9	15.9	-23.9%	1666.48	1430.62	-14.2%	64	37	-42.2%	20%	80%	47.3
Mar-07	17.3	6.1	-64.7%	2284.14	798.68	-65.0%	35	9	-74.3%	25%	75%	37.8
Apr-07	20.7	16.9	-18.4%	1453.08	1099.71	-24.3%	41	28	-31.7%	14%	86%	48.1
May-07	21.7	18.9	-12.9%	1676.79	1548.52	-7.6%	51	38	-25.5%	14%	86%	48.6
Jun-07	19.9	16.5	-17.1%	1645.06	1229.26	-25.3%	56	36	-35.7%	10%	90%	47.7
Jul-07	23.1	20.4	-11.7%	1720.65	1438.19	-16.4%	53	33	-37.7%	11%	89%	51.4
Aug-07	22.1	15.8	-28.5%	1650.85	1308.67	-20.7%	52	32	-38.5%	11%	89%	44.1
Sep-07	28.0	27.1	-3.2%	2229.61	2168.07	-2.8%	62	46	-25.8%	33%	67%	50.3
Oct-07	21.8	19.2	-11.9%	2338.99	1461.49	-37.5%	42	28	-33.3%	44%	56%	47.3
Nov-07	22.2	17.5	-21.2%	1673.24	1737.81	3.9%	48	32	-33.3%	30%	70%	51.9
Dec-07	21.0	19.2	-8.6%	1779.24	1691.78	-4.9%	50	31	-38.0%	33%	67%	51.2
2007	22.0	17.5	-20.5%	1840.99	1436.96	-21.9%	641	385	-39.9%			

Figure 9 – Summary of Results: 90-Day Tracking of Top Ten Reviewed Utilizers per Month



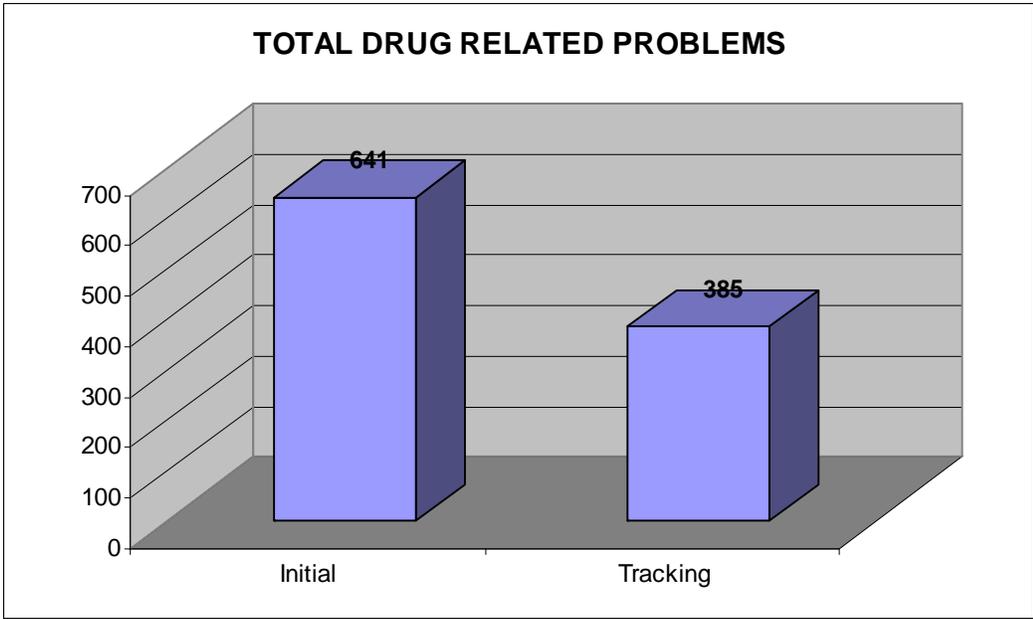
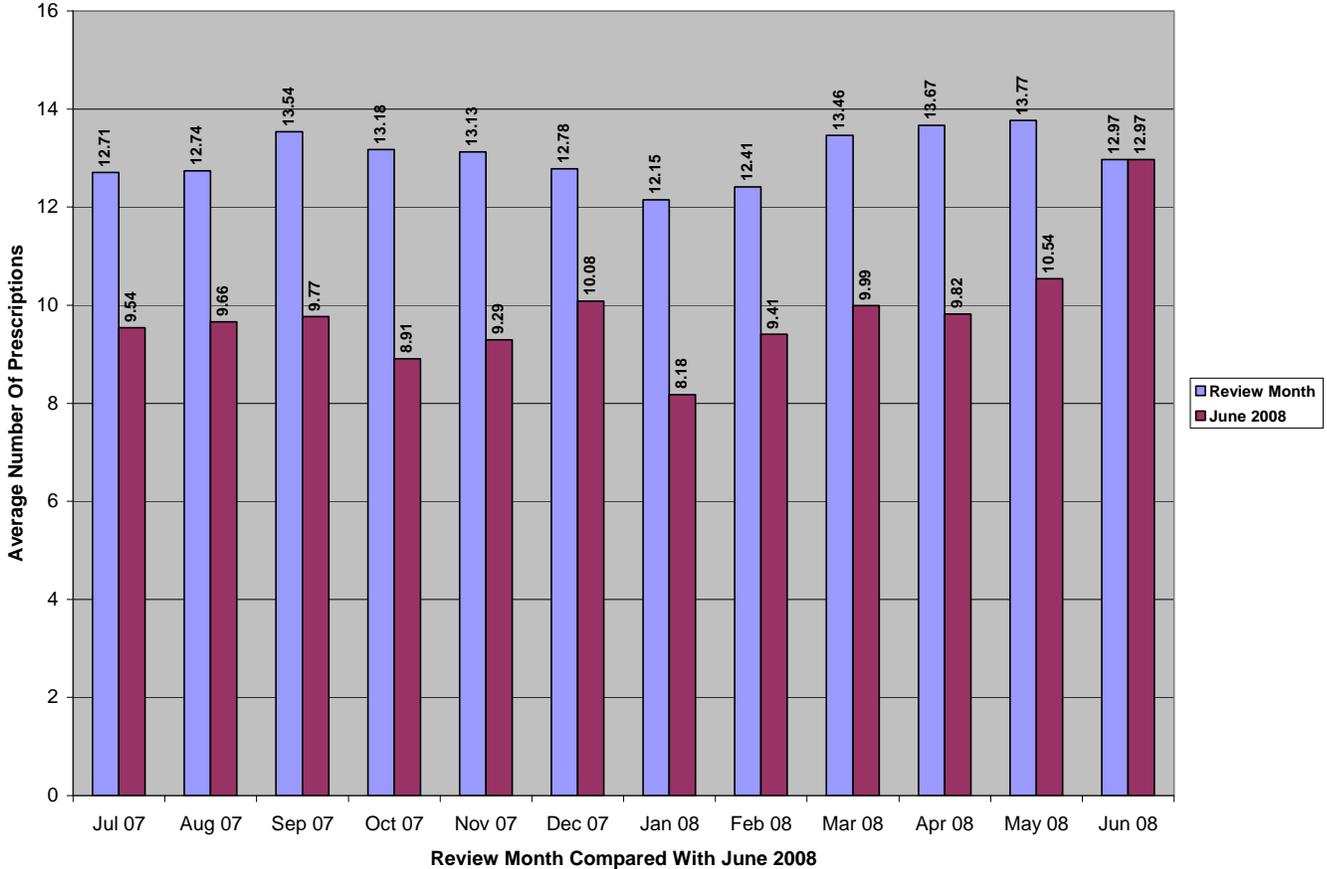


Figure 10 shows the average number of prescriptions per reviewed patient for each month from July 2007 to June 2008, compared to the average number of prescriptions per patient for the same cohort in June 2008. The number of prescriptions dispensed has decreased for all review cohorts. No change was seen for June 2008 since this report only covers data through June 2008.

Figure 10 – Average Prescriptions for Reviewed Cohort in Review Month and Compared to June 2008



We have tracked drug cost reimbursements to review cohorts for the remainder of the reporting year following the month they were reviewed. We have only tracked costs for patients within each review cohort who remained eligible during the entire reporting period and accessed their drug benefit at least one time during each of the 12 months in the reporting period. Decreases in drug costs for these selected patients were significant.

The review month was used as the baseline amount for comparison. Costs were compared for the baseline amount with the amount for June 2008. For example, costs in June 2008 and October 2007 were compared for patients reviewed during October 2007. Cost savings were calculated only for patients reviewed from July 2007 to June 2008. Additional cost savings for patients reviewed before July 2007 are not included, nor are additional savings that would be expected after June 2008 for patients included in this report. We have assumed that drug costs would remain constant since the month of review. Given this assumption costs decreased by \$1,039,457.

In considering this information it is important to understand that we cannot determine what the reviewed patients' drug costs would have been if they had not been reviewed. It is possible that without a review their costs would have increased, remained the same or declined. To effectively address this we would need to compare changes in prescription drug costs over the same period with a suitable control group. This is not possible with our current patient selection process but will be done as part of the Medicaid Transformation grant that is currently underway. We have also obtained summary data from Idaho Medicaid and are working on an analysis to compare costs between Utah and Idaho.

Cost calculations are detailed on the following page in Table 3.

Table 3 – Costs

TOTAL FOR ALL REVIEWED PATIENTS ELIGIBLE AND UTILIZING RX BENEFITS ENTIRE REPORTING PERIOD - NO INCREASE IN COSTS ASSUMED

	Jul 07	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	TOTAL PROJECTED	SAVINGS	
Jul 07	189,807	180,430	166,287	180,928	171,002	163,084	178,769	163,215	174,933	176,977	168,720	169,294	2,083,446	2,277,684	194,238
Aug 07		203,469	167,453	194,119	184,103	173,784	167,017	175,936	182,879	179,033	189,824	183,842	2,001,459	2,238,159	236,700
Sep 07			201,430	183,466	186,484	191,929	194,600	176,913	191,054	184,856	188,800	183,659	1,883,191	2,014,300	131,109
Oct 07				183,098	170,804	164,693	168,031	172,742	160,474	174,838	164,809	150,377	1,509,866	1,647,882	138,016
Nov 07					191,677	179,890	186,627	187,562	192,035	179,465	189,932	176,582	1,483,770	1,533,416	49,646
Dec 07						184,366	172,291	165,027	168,258	174,855	165,710	165,234	1,195,741	1,290,562	94,821
Jan 08							162,485	125,842	141,727	142,804	140,586	135,569	849,013	974,910	125,897
Feb 08								190,142	196,346	201,946	184,383	178,391	951,208	950,710	-498
Mar 08									197,833	191,236	191,205	186,608	766,882	791,332	24,450
Apr 08										193,911	183,305	180,974	558,190	581,733	23,543
May 08											220,844	199,309	420,153	441,688	21,535
Jun 08												184,298			
													13,702,919	14,742,376	1,039,457

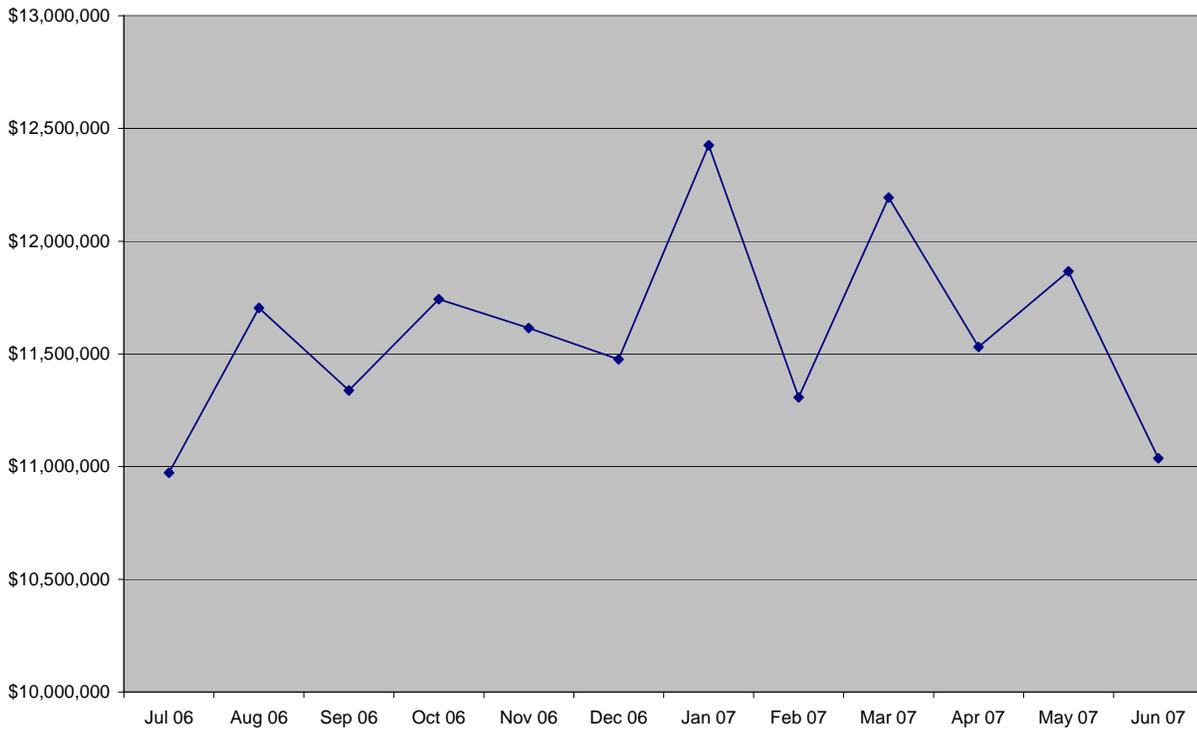
PATIENTS 183 192 178 174 180 179 174 174 194 174 161 190 172
 *Total number from each monthly review cohort remaining eligible for AND utilizing prescription drug benefits during the entire 12 month reporting period.

AVERAGE PER PATIENT

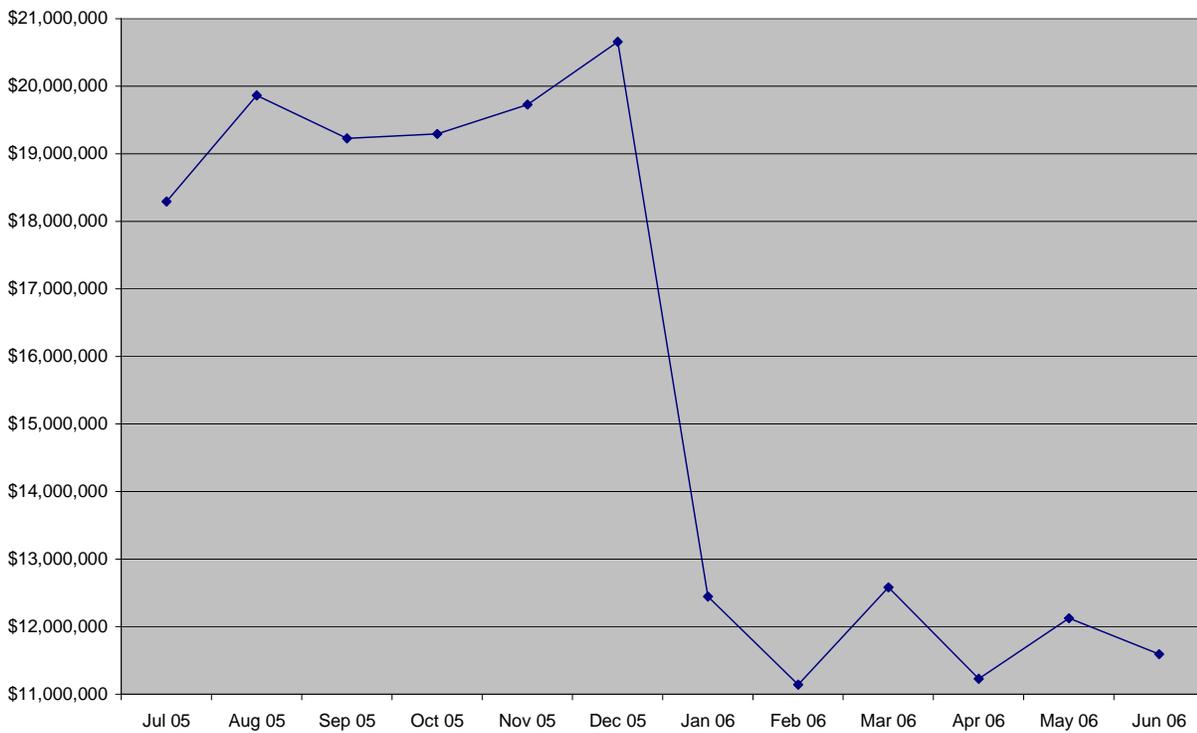
	Jul 07	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	TOTAL PROJECTED	SAVINGS	
Jul 07	1,037	986	909	989	934	891	977	892	956	967	922	925	11,385	12,446	1,061
Aug 07		1,060	872	1,011	959	905	870	916	952	932	989	958	10,424	11,657	1,233
Sep 07			1,132	1,031	1,048	1,078	1,093	994	1,073	1,039	1,061	1,032	10,580	11,316	737
Oct 07				1,052	982	947	966	993	922	1,005	947	864	8,677	9,471	793
Nov 07					1,065	999	1,037	1,042	1,067	997	1,055	981	8,243	8,519	276
Dec 07						1,030	963	922	940	977	926	923	6,680	7,210	530
Jan 08							934	723	815	821	808	779	4,879	5,603	724
Feb 08								980	1,012	1,041	950	920	4,903	4,901	-3
Mar 08									1,137	1,099	1,099	1,072	4,407	4,548	141
Apr 08										1,204	1,139	1,124	3,467	3,613	146
May 08											1,162	1,049	2,211	2,325	113
Jun 08												1,072			
													75,858	81,608	5,751

APPENDIX A

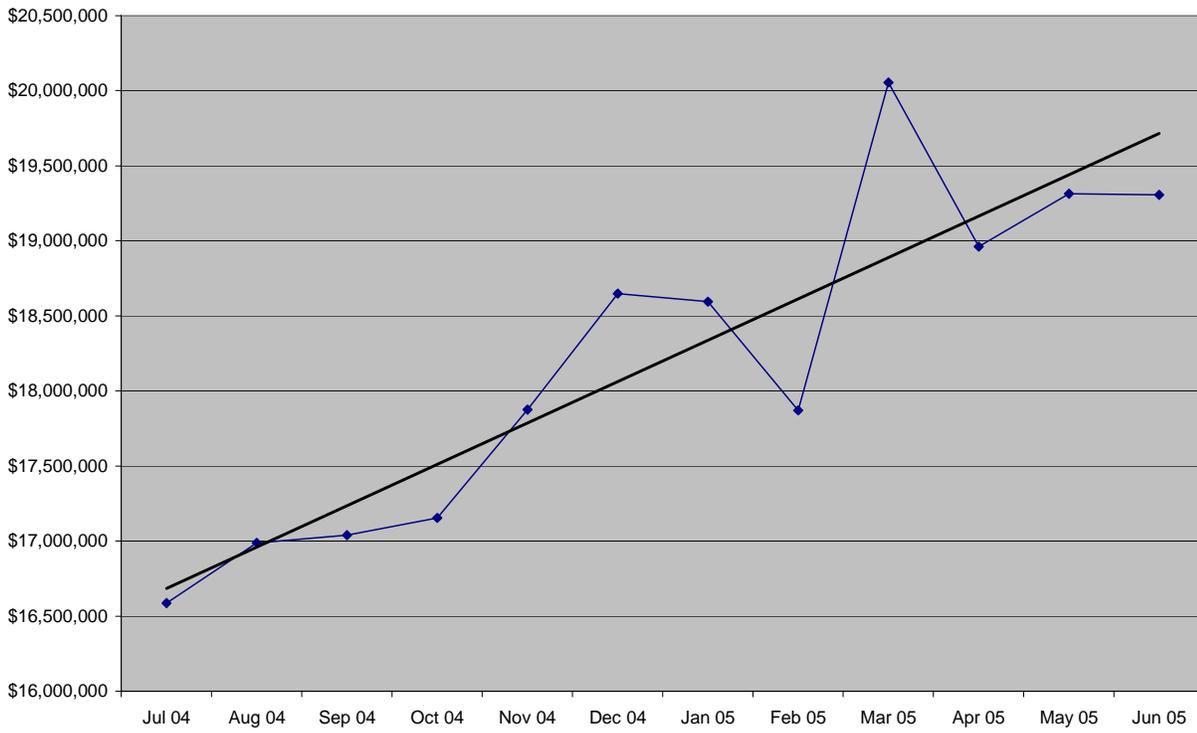
JULY 06 to JUNE 07



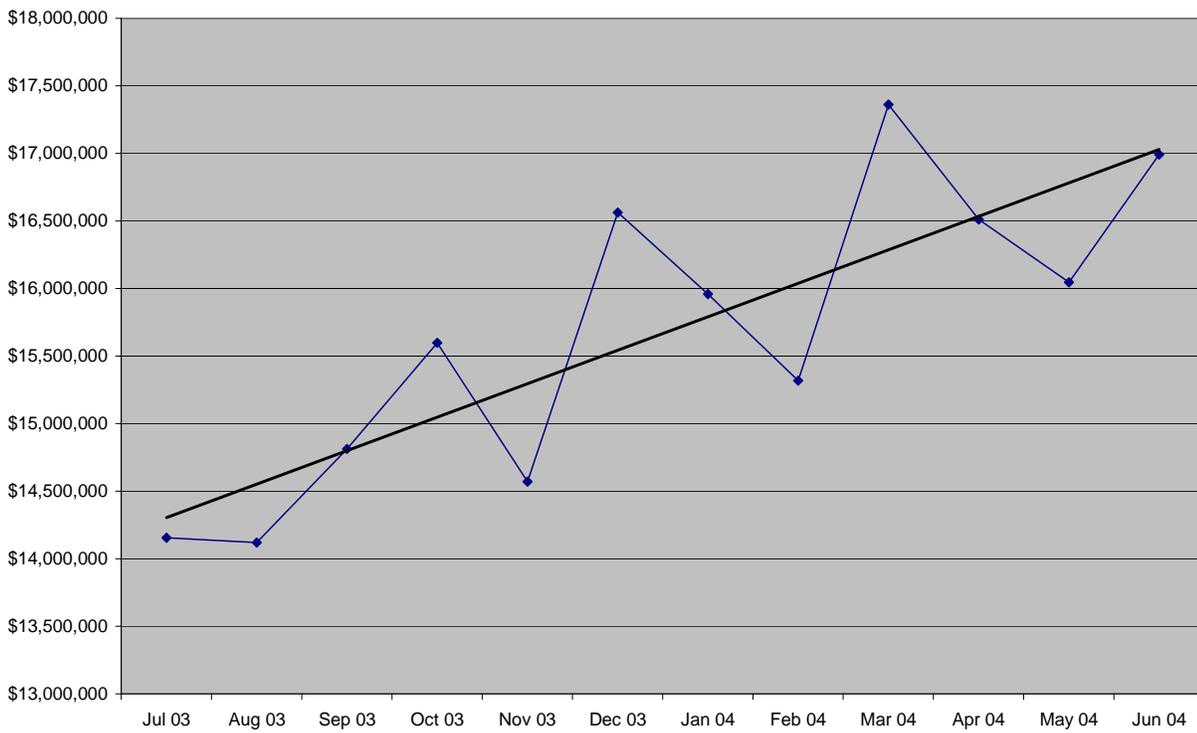
JULY 05 to JUNE 06



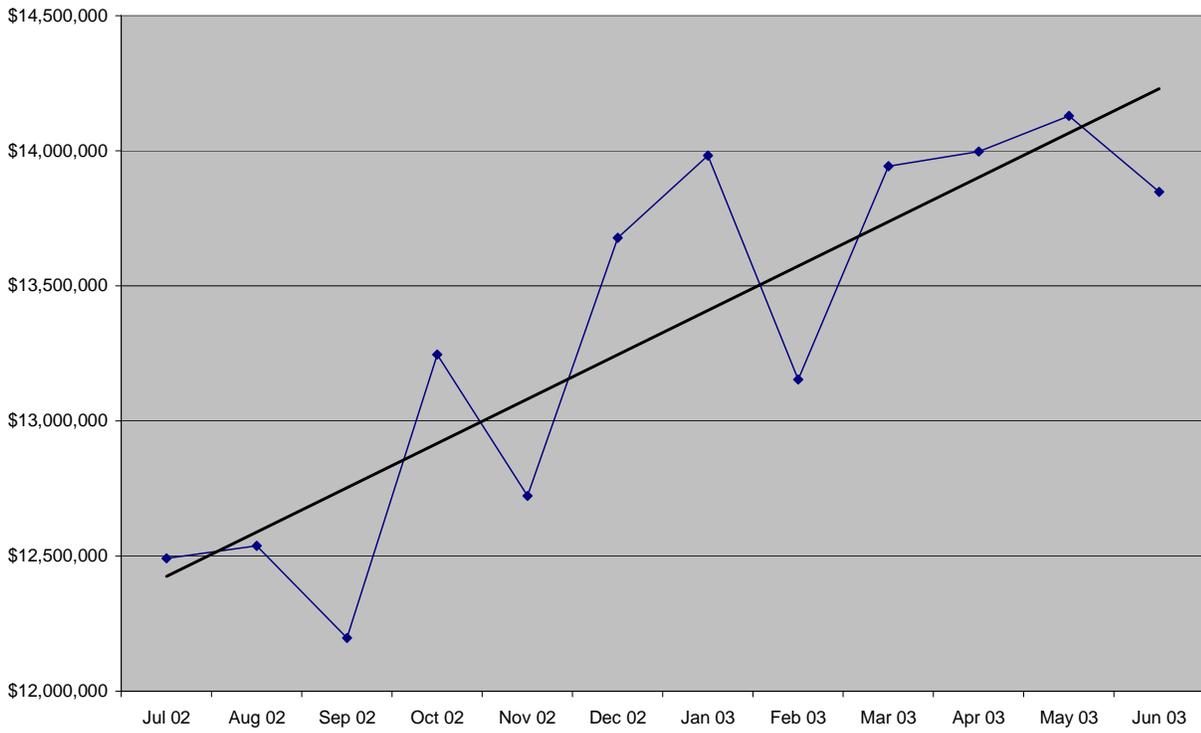
JULY 04 to JUNE 05



JULY 03 to JUNE 04



JULY 02 to JUNE 03



JULY 01 to JUNE 02

