


Achieving Dose Optimization of Mental Health
Medications through Prescription Change Forms:
Initial Results from a State Medicaid Program



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Background

In 2004, 10 MH Drugs Accounted for 36% of Gross OMAP FFS Drug Cost

Drug	Annualized* Gross Spend	Percent of Total Spend
ZYPREXA	\$19,595,100	8.61%
RISPERDAL	\$13,817,700	6.07%
SEROQUEL	\$11,085,100	4.87%
ZOLOFT	\$ 8,239,700	3.62%
→ EFFEXOR XR	\$ 6,627,900	2.91%
DEPAKOTE	\$ 5,859,900	2.58%
ABILIFY	\$ 5,689,200	2.50%
PAROXETINE	\$ 4,324,300	1.90%
→ LEXAPRO	\$ 3,713,100	1.63%
→ CELEXA	\$ 3,250,100	1.43%
→ Total FFS Drug Cost	\$227,522,600	36.13%

*From SYBASE Drug2004, based on service dates 1/1/04-8/26/04 Total Funds before rebate, excludes FCHP drugs

Background

- ❑ Dose optimization (tablet splitting or dose consolidation) is one strategy to reduce prescription drug costs while maintaining nearly identical therapy.
- ❑ Flat-pricing of prescription drugs (i.e., all strengths priced the same) presents an opportunity to save up to fifty percent of the original prescription cost of some medications.

Background

- SSRIs are ideal drugs for dose optimization:
 - Flat priced
 - Easily split
 - Long half-life
 - Clinical actions depend on long-term alterations of receptors and neurotransmitter production and minor variations in dose from the split tablets are not likely to have significant clinical consequences
 - Large therapeutic index

Background

- Due to the high expenditures and limited options to contain costs, the Oregon State University College of Pharmacy, in conjunction with the Oregon Department of Human Services, initiated a voluntary antidepressant dose optimization program for Medicaid clients.

Intervention

- Identified patients taking “dose optimizable” regimens of:
 - Sertraline
 - Paroxetine
 - Citalopram
 - Escitalopram

Intervention

- Patients were excluded if:
 - <60-day SSRI treatment history
 - Residence in a long-term care facility
 - Age >74 years (Children were not excluded from this intervention.
 - No valid or identifiable individual prescriber identification number

Intervention

- Beginning in October 2004, Medicaid prescribers were contacted by fax using patient specific forms that identified drug regimens acceptable for dose consolidation or tablet splitting

Intervention

□ Examples

■ Tablet splitting

- sertraline 50 mg one tablet daily to sertraline 100 mg ½ tablet daily

■ Dose consolidation

- citalopram 10 mg one tablet twice daily to citalopram 20 mg one tablet daily

Intervention—Change Form



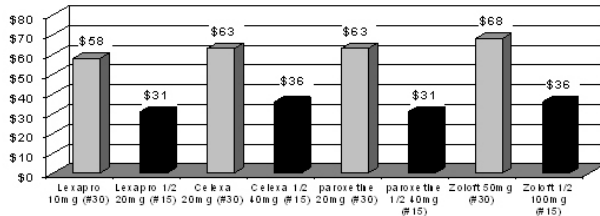
Prescriber Name _____ telephone: Telephone Number _____
 Prescriber Address _____ fax: Fax Number _____
 City _____ State _____
 ZIP Code _____ Date _____

Dear Oregon Health Plan (OHP) Clinician,

As a part of the Partnership for Psychiatric Medication Access Program, we are identifying Oregon Health Plan (OHP) patients who could be considered for cost-effective dosing strategies of psychiatric medications. The two major alternatives include tablet splitting and dose consolidation.

Tablet Splitting:

- Tablet splitting is only recommended for certain drugs including: paroxetine (generic Paxil), Celexa, Lexapro, and Zoloft.
- Only patients who are physically and mentally capable of splitting tablets should be considered.
- The OHP will provide a tablet-splitter to the patient at no cost.
- Cutting larger dose tablets in half can save up to half of the original prescription cost.



Dose Consolidation:

- Dose consolidation is an easy way to encourage medication adherence.
- All of the SSRIs have pharmacokinetic properties that permit once daily dosing.
- Similar to tablet splitting, using one higher dose tablet to equal the strength of two lower dose tablets can save up to one-half of the original prescription cost.

The form(s) following this letter are based on pharmacy claims for patient(s) linked to your OHP identification number. Please evaluate each patient for a once-a-day or half-tablet dosing change. Use the form to communicate a change, or no change, and fax it back to **503-494-1082**. Please take the time to review the forms and discuss them with your patient(s) as necessary. If a change is authorized, it will be forwarded to the dispensing pharmacy and a notification detailing the exact change will be sent to the patient.



Patient Name: _____ DOB: _____

If you agree with this recommendation:

1. Check box
2. Sign and date where indicated
3. Fax to number above for processing

Discontinue the following order:

LEXAPRO 10MG Qty: 30 Day Supply: 30

Last Dispensed On

Annual Cost: \$711

Please check one box from choice(s) below:

LEXAPRO 20MG Qty: 15

Sig: one-half tablet P O QD

Annual Cost: \$370

Prescriber Signature: _____ Date: _____

Prescriber Name: Last Name

Faxing Personnel: _____

If you DO NOT agree with the recommendation:

Not my patient Dose and/or med changing Other

Patient physically unable Patient refuses

1. Please indicate the reason
2. Fax back to number above for our records

Prescriber Information

OHP ID: _____
 Prescriber Name and Address _____

 Telephone: _____
 Fax: _____

Pharmacy Information

OHP ID: _____
 Pharmacy Name and Address _____

 Telephone: _____
 Fax: _____

CONFIDENTIALITY NOTICE: This communication may contain confidential and privileged information for the use of the designated recipient(s) named above. If you are not the intended recipient, you are hereby notified that you have received this communication in error and that any review, disclosure, dissemination, distribution, copying or other use of this information is prohibited. If you have received this communication in error, please notify the sender as listed above and destroy all copies of this communication.

Intervention—Change Forms

- Voluntary forms were faxed to prescribers
 - Prescribers were asked to return the forms to the College of Pharmacy
- Notification and education regarding the dose optimization program were sent to all potentially affected patients.

- Changes:
 - We now send early notification to pharmacies to help identify patient who should be excluded from the program.
 - Prescribers are now asked to send the forms directly to the pharmacy.

Analysis

- ❑ Returned Change Form Analysis
- ❑ Pharmacy Claims Analysis

Analysis

- The changes in average drug cost per pharmacy claim were quantified for the:
 - 4 months prior to the intervention
 - June through September 2004
 - 4 months following the intervention
 - November 2004 through February 2005
- Changes in the average units and days supply dispensed for targeted patients were also evaluated.

Analysis

- Daily units consumed was used as one of the primary indicators of program effectiveness.
- In order to quantify cost avoidance attributable to the program, and to verify the estimates made from returned forms, a linear extrapolation of total drug costs for targeted patients based on data from the previous 6 months was conducted and compared to the costs observed.

Results

- ❑ In October 2004, 1582 change forms were faxed to 556 unique prescribing providers.
- ❑ On average, 2.8 forms were faxed to each prescribing provider
 - Range 1-22 change forms per prescriber

Results

- 1118 forms (70.7%) were returned
- 956 with an authorized change (60.4% of all forms sent out and 85.5% of returned forms).
- The rate of return was statistically similar between drugs ($p = 0.13$).

Results

- Forms recommending tablet splitting were significantly more likely ($P = 0.002$) to have been returned (1031/1436, 71.8%) than forms suggesting dose consolidation (87/146, 59.6%).
- The rates of acceptance on returned forms were statistically similar between specific drug types and dosing suggestions.

Drug Type	Sent	Returned	% of sent	Accepted	% of sent	% of returned not accepted
Citalopram	242	171	70.7%	145	59.9%	15.2%
Escitalopram	499	365	73.2%	311	62.3%	14.8%
Paroxetine	448	322	71.9%	272	60.7%	15.5%
Sertraline	393	260	66.2%	228	58.0%	12.3%
Drug Dosing Suggestions						
Dosing Suggestions	Sent	Returned	% of sent	Accepted	% of sent	% of returned not accepted
Dose Consolidation	146	87	59.6%	72	49.3%	17.2%
Tablet Splitting	1436	1031	71.8%	884	61.6%	14.3%
Total	1582	1118	70.7%	956	60.4%	14.5%

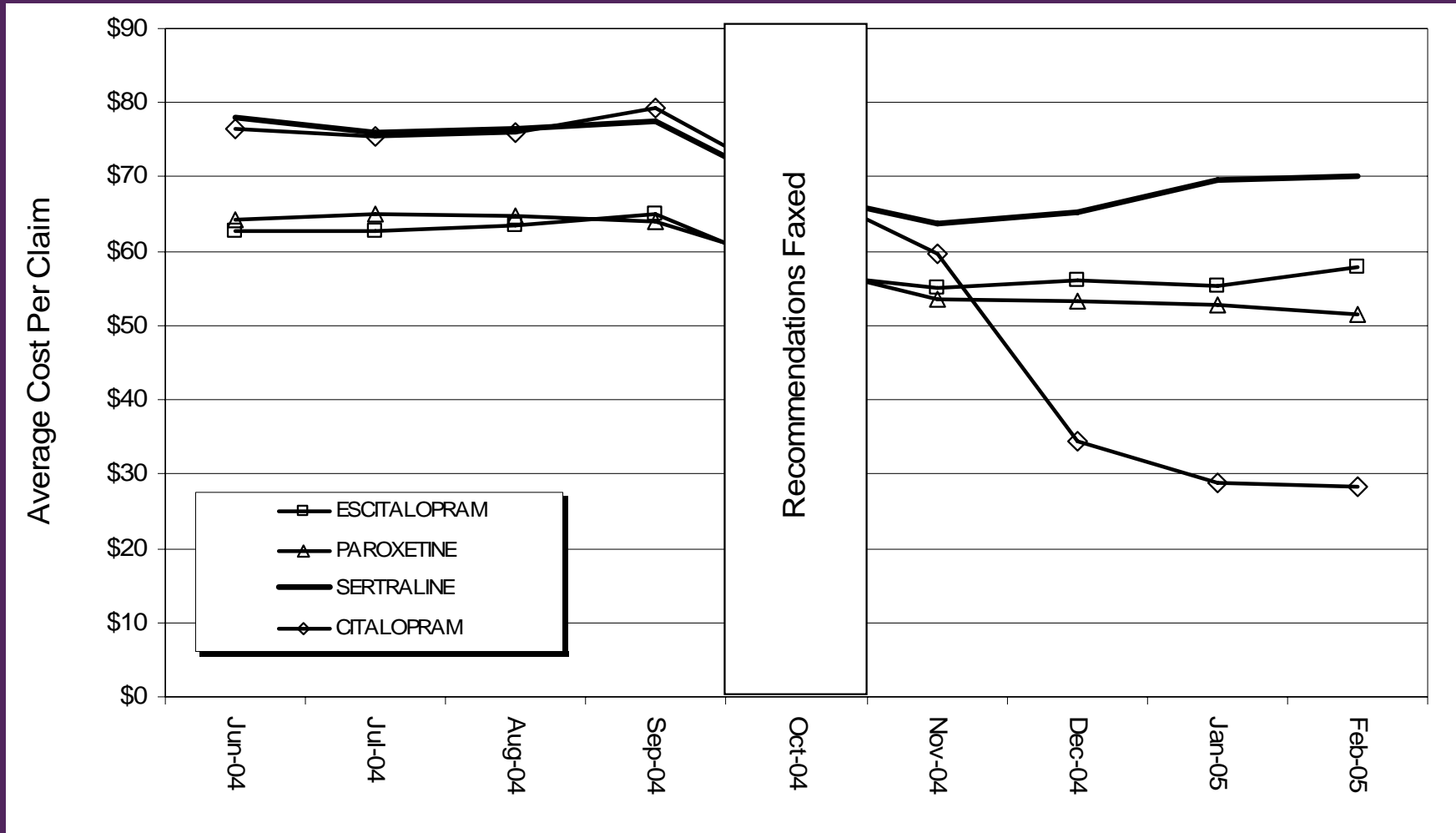
Results

- Change forms returned and not approved (n=162):
 - 96 (8.6% of total) not my patient
 - 18 (1.6 %) in process of titrating dose
 - 8 (0.7 %) patient physically unable to split tablets
 - 3 (0.3 %) patient refused
 - 37 (3.3 %) no indicated reason for denial

Results—Cost Savings Analysis

- Reductions in the cost per claim were observed for all 4 target drugs.
 - Citalopram was excluded from the analysis due to its coincident availability as a generic.
 - Escitalopram was reduced 12%, from \$64 to \$56 per claim
 - Paroxetine was reduced 18%, from \$64 to \$53 per claim
 - Sertraline was reduced 13%, from \$77 to \$67 per claim

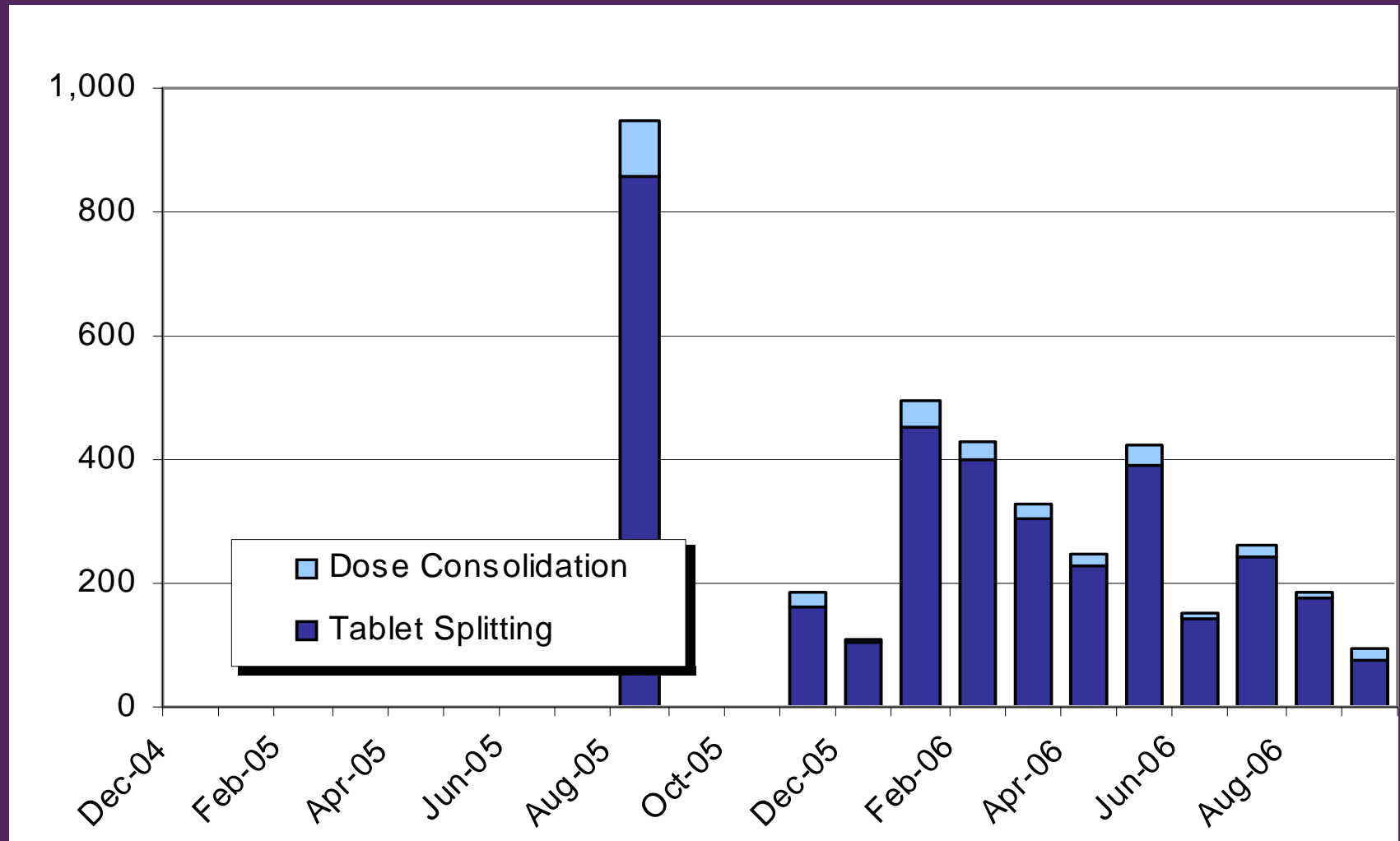
Average Cost per Claim among Patients Approved for Dose Optimization



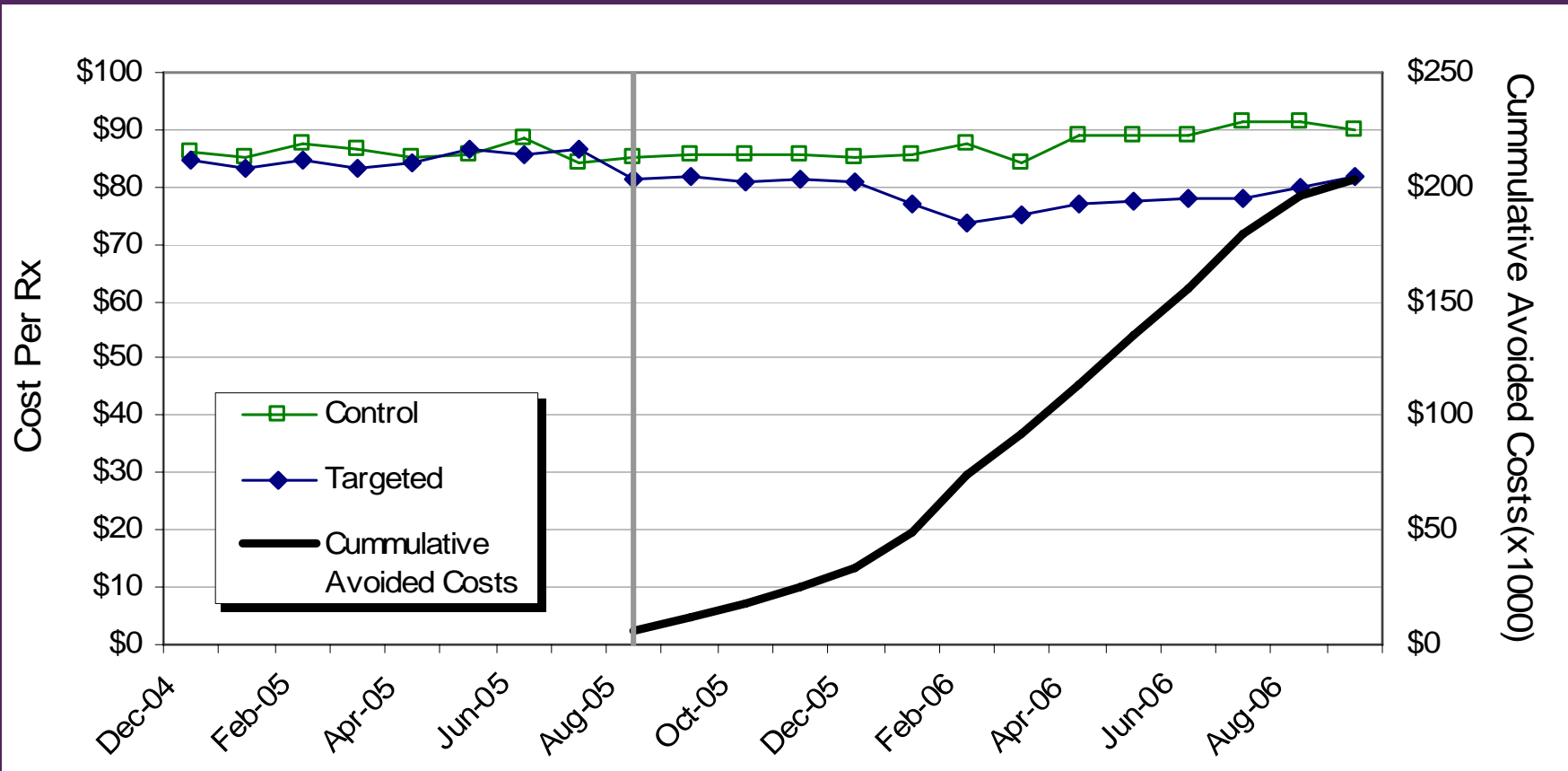
Current Program

- ❑ Started September of 2005
- ❑ Dose optimization of antidepressants and atypical antipsychotics
 - Lexapro, Zoloft, and Effexor XR
 - Risperdal, Zyprexa, Abilify
- ❑ Each prescriber/patient combination only generates one form

Count of Antidepressant Dose Recommendations



Cost per Rx (Antidepressants) with Cumulative Savings



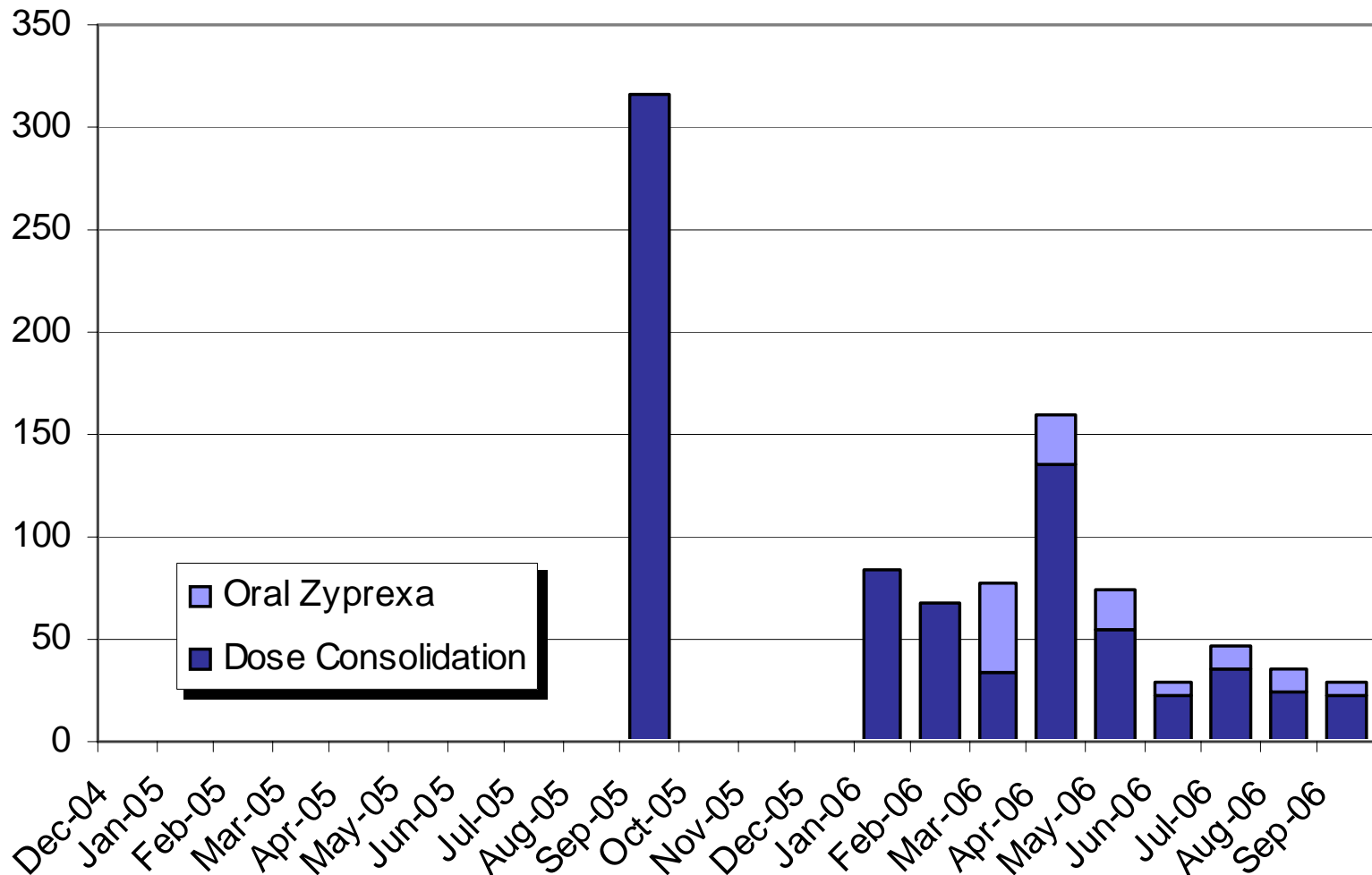
Current Program—Antidepressants

- ❑ After August 2005, the average monthly cost/rx was reduced among targeted patients by approximately 9.8 % compared to non-targeted controls.
- ❑ The average reduction in cost per claim was approximately \$8.60 per Rx.

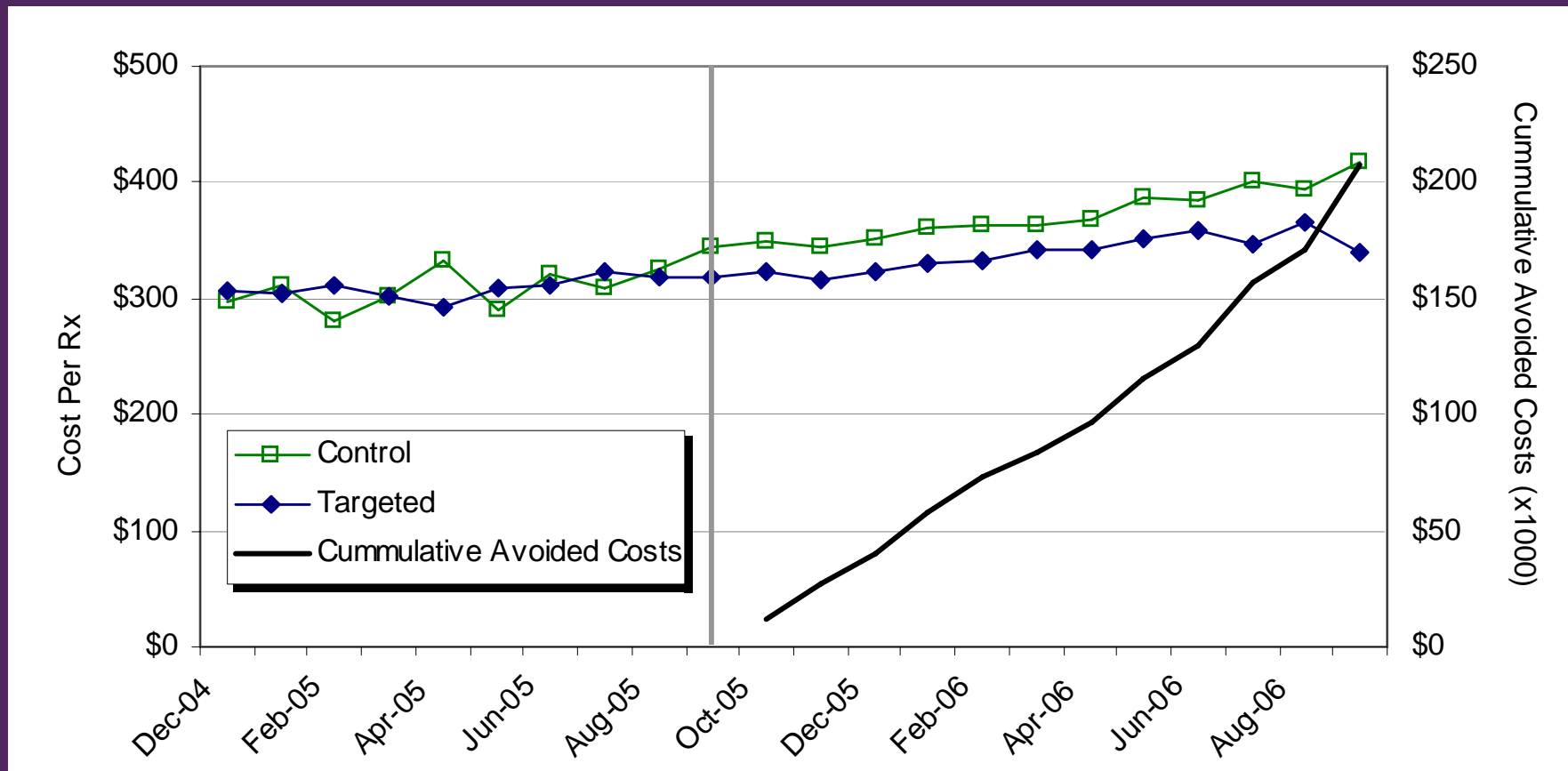
Current Program—Antidepressants

- The estimated average avoided cost per month was approximately \$14,561, yielding a cumulative cost avoidance of \$204,000 during the first 12 months of operation

Count of Antipsychotic Dose Optimization Recommendations



Cost per Rx (Antipsychotics) with Cumulative Savings



Current Program—Antipsychotics

- The average cost per Rx decreased by approximately 16.6% after the program began operation compared to the control cohort.
- The average reduction in cost per claim was approximately \$34.

Current Program—Antipsychotics

- ❑ The estimated average monthly avoided cost was approximately \$17,320.
- ❑ We estimate approximately \$207,842 cumulative costs avoided during the first 12 months of operation.

Summary

- The utilization of a voluntary prescription change form process appears to be an effective mechanism to promote dose form optimization and reduction in the direct costs of certain mental health medications.