Driving Market Share in an Integrated Health System without Therapeutic Interchange

by Joseph F. Fischer, Robert M. Mowers, David J. Ormerod, and Ellen S. Burriss

It is rare for a new drug, in a major therapeutic class, to be released at a significantly lower acquisition cost compared to the existing drugs in that class. In March 1999 we targeted the use of the selective serotonin reuptake inhibitors (SSRI) for review; in July 1998 citalopram (Celexa) had become the fourth SSRI marketed in the United States. The average wholesale price (AWP) for citalopram was significantly less than the other SSRI drugs available, especially fluoxetine (Prozac).

The managed care team at the UC Davis Medical Group (UCDMG) set out to treat depression more cost-effectively by increasing the use of citalopram and decreasing the use of fluoxetine. The goal was to save at least $100,000 per year on SSRI prescriptions. In the first quarter of 1999 citalopram made up 3% of the SSRIs prescribed at UCDMG but 9% of the SSRI market in the United States. (Market share is defined here as the number of prescriptions for each individual SSRI divided by the total number of SSRI prescriptions, expressed as a percent.)

A review of the literature established that citalopram was an effective SSRI with a side-effect profile comparable to the other drugs in its class; it was comparable to the other SSRIs in overdose and safer than tricyclic antidepressants. Since the AWP for citalopram was lower than the other SSRI drugs, patients could get a state-of-the-art SSRI as first-line therapy, physicians could use an SSRI as first-line therapy, and managed care would be providing, based on our analysis of the literature, the most cost-effective drug in the class.

UCDMG is composed of 12 off-campus medical clinics and several outpatient clinics on the hospital grounds. The clinics are staffed by 40 family-practice physicians and 34 internal-medicine physicians. UCDMG has 90,000 managed care patients under contract with several large health maintenance organizations. Our three major insurers added citalopram to their formularies.

The authors reviewed the data on the effectiveness, side effects, and costs associated with SSRI antidepressants with the chair of the department of psychiatry and the medical director for managed care. The managed care team was commissioned to implement an effort to move market share at UCDMG to citalopram. The team consists of the medical director, the nurse manager, and two managed care pharmacists. Rather than increasing the presence of drug manufacturer representatives, internal detailing was used because it has more credibility with our providers. It would also allow the managed care pharma-
drivers to respond to drug information being provided to the physicians from other sources, such as the pharmaceutical industry.

Because of the nature of depression, it would not have been appropriate to ask physicians to do a therapeutic interchange, switching patients off their current SSRI if it was working. We therefore developed the following message to deliver to our physicians:

- Citalopram is an antidepressant that is as effective as the other SSRI agents.
- Citalopram has an adverse-event profile similar to the other SSRI agents.
- Citalopram costs less than the other SSRI agents.
- Fluoxetine is the least cost-effective antidepressant at UCDMG, especially at doses greater than 20 mg.
- Citalopram should be considered for all new patients who are candidates for an SSRI and for patients who have not achieved optimum therapeutic benefit from their current SSRI.

This message was delivered by as many methods as possible. The main pathway was at the monthly utilization management (UM) meetings at each clinic site. The managed care team already participated in these meetings. At each meeting, pharmacists comment on the treatment of depression. Initial discussions focused on the effectiveness and safety of citalopram in comparison to the other agents. The managed care medical director was present at these meetings to lend full support to the program. The medical director thanked the providers for their help in this area and shared cost-savings data with them.

To reinforce this message, the managed care pharmacists prepared a clinical synopsis of citalopram and the treatment of depression. At least quarterly, the pharmacist e-mails all the clinic providers drug-information sheets related to managed care and pharmacoeconomics. The citalopram sheet detailed the basic pharmacology and toxicology of the drug and gave a synopsis of the clinical trials and cost comparisons.

Because of Joint Commission on Accreditation of Healthcare Organizations (JCAHO) restrictions on storage and dispensing of samples, most of the UCDMG clinics have chosen not to sample. The manufacturer gave trial script vouchers for citalopram to the managed care pharmacists, who distributed them at the UM meetings after initial discussions of the product. Several physicians requested an additional supply. In all, about 200 vouchers were given out to UCDMG physicians; more than 100 of them were redeemed at retail pharmacies.

Once the clinicians had been introduced to citalopram, the pharmacists discussed the pharmacoeconomics of the treatment of depression. Each clinic is routinely given a list of its top-50 drugs by cost. The pharmacist would highlight all the antidepressants on this list, emphasizing the number of prescriptions and the cost per prescription. This technique graphically showed the physicians the significant cost reduction possible in the SSRI class. The top-50 report shows the average ingredient cost for all prescriptions; it reflects the strengths and quantities of each drug as actually prescribed by UCDMG physicians. The report showed that paroxetine was the second most cost-effective SSRI for our medical group. This was incorporated into the pharmacists’ message.

It also became important to counter misinformation that our physicians were getting from some pharmaceutical representatives. A common ploy was to imply that the cost savings using citalopram would be lost because the dose had to be increased from 20 mg to 40 mg. This was deliberately misleading: the AWP as published in the Redbook (2000) for citalopram 20 mg was $2.10 each versus the 40-mg tablet at only $2.19 each. There were no reports from physicians of increased office visits to titrate dose. This misleading tactic of the pharmaceutical representatives has helped to solidify the position of the managed care team as a source of unbiased drug information.

The managed care pharmacists then published a “Primary Care Strategy for Treatment of Adult Depression” in conjunction with the department of psychiatry. The front of the brochure listed the treatment algorithm psychiatry suggests for the family practice and internal medicine physicians who are the primary care providers (PCP) for patients. For patients without anxiety, two SSRIs were listed: citalopram and sertraline. For those with anxiety, the recommended SSRIs were citalopram and paroxetine. The brochure also contained information on cost for the most common antidepressants and a grid showing what drugs the local HMOs’ formularies covered.

Updates on the success of this project and cost savings are presented to the medical group at the UM site meetings at least every other month. The initiative is monitored through pharmacy claims data for the three largest health maintenance organizations (HMOs) contracting with UCDMG. Plans H, P, and W all cover citalopram. Plans H and W cover all four of the available SSRIs; plan P covers only citalopram and paroxetine. On plan P, fluoxetine and sertraline require prior approval (PA).

The market share percentage report represents the average market share for the quarter.

**Results**

By March 1999, citalopram had been available for nine months. The usage by UCDMG physicians was 2% for plan H, 3% for plan P, and 1% for plan W. Since the initiative began in March 1999, there has been an almost linear increase in the market share for citalopram (see Figure 1, page 285). By the 2nd quarter of 2000, it had reached 21% (plan H), 26% (plan P), and 14% (plan W).

All quarterly mean market-share percentages were compared for significance using chi-square analysis with appropriate p values reported. The increase in the percent market share was statistically significant (p<0.01) by the start of the third quarter of 1999 for all three plans. The national market share of this drug, its manufacturer reports, is currently 14% (August 1999).
Plan P, with its more restrictive formulary, had the highest increase. However, the difference between plan P and plan H was not statistically significant.

Table 1, above, shows SSRI market shares for the second quarter of 2000 for each SSRI and for new prescriptions only. The percent of new prescriptions for citalopram was 32% (plan P) and 27% (plan H). The increase in mean market share of new prescriptions for citalopram compared to its total market share was statistically significant for the two plans for which data on new prescriptions were available (plan H; \( p < 0.01 \), plan P; \( p = 0.05 \)).

Table 2, left, shows that market share for fluoxetine decreased by 10% from the first quarter 1999 to the second quarter of 2000. The difference was significant for all plans (\( p < 0.01 \)). The market shares for paroxetine and sertraline were not significantly altered.

**Limitations**

Pharmacy claims data were only available from 3 of the 10 managed care companies doing business with UCDMC. Two of the companies are large HMOs while the third is a small company (fewer than 50,000 lives). Not all of the managed care companies for which UCDMC has pharmacy risk cover citalopram. UCDMC has no control over formulary selection at these companies.

**Conclusion**

The managed care team achieved both its objectives. First, market share for citalopram increased significantly. In March 1999, citalopram use at UCDMG was 7%–8% below the national average; currently, it exceeds the national average by 6%. Second, the use of fluoxetine has decreased. It is possible to move market share in both a positive and negative direction without therapeutic interchange.

Analysis of new prescriptions for SSRIs written in the second quarter of 2000 (Table 1) indicates the market share for citalopram continues to increase. The percent of new prescriptions for citalopram was significantly higher than its market share for all (new and refill) prescriptions. Since this program does not involve therapeutic interchange, new prescriptions are an important indicator of market trends. While this is not a perfect indicator, it does give an indication of initial therapy. (Some new prescriptions will be the result of continuing therapy where refills have expired.)

Plan W was the slowest to respond. This is the only plan to have California Medi-Cal Managed Care (MCMC) members. They account for 61% of the membership of just over 13,000. Analysis of this subgroup of Plan W patients is shown in Table 3, page 286.

The MCMC section of Plan W had a market share for citalopram of only 8% by the end of the first quarter of 2000, while its commercial plan members had citalopram utilization of 18%. Of the MCMC patients, 30%–50% have contracted physician groups as their primary care providers. Because these groups are not part of the integrated health system and do not have regularly scheduled meetings with the managed care team, the team only had access to about 50% of those who provide care to MCMC patients.
MCMC patients function as an internal control group. The importance of the managed care team repeatedly reinforcing the initiative is reflected in the increased use of citalopram in the commercial versus the MCMC patients. Based on a comparison of the market share for the MCMC group versus the average market share for all the commercial plans the estimated yearly cost saving is $126,000, or 8% of total SSRI ingredient cost. This is a conservative estimate, as the managed care team did have contact with the providers of care for about 50% of the MCMC patients, which undoubtedly affected the use of citalopram.

As the market share for citalopram increases while fluoxetine decreases, cost savings will continue. Savings from this program will continue until generic fluoxetine costs less than citalopram. Generic fluoxetine is scheduled to become available in September 2001.

This process should work for any large integrated health system, provided that a mechanism is in place to educate providers and monitor the movement of market share. The managed care team identified the following factors as important for the success of this initiative: (1) the providers must be at risk for all or part of the pharmacy cost; (2) the medical director must give active support to the project; (3) individual clinics and providers must be regularly informed about their role in the success of this project; and (4) the message must be repeated and reinforced often.

### References


### TABLE 3

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*First quarter 2000 difference between Medi-Cal group and commercial group is significant; p<0.01.