

DARAPRIM PRICE INCREASE AND UTILIZATION

BACKGROUND

A dramatic increase in the price of Daraprim has sparked national attention on the issue of how drugs, both old and new, are priced. Daraprim, the brand name for pyrimethamine, is the only medication for treating toxoplasmosis. Daraprim was developed in 1953 as a treatment for toxoplasmosis, an infection caused by a parasite. Daraprim is used in combination with a sulfonamide and is indicated for malaria, malaria prophylaxis, and toxoplasmosis. Toxoplasmosis comes from eating under-cooked meat or drinking contaminated water, and affects those with compromised immune systems, like AIDS and cancer patients.

When Turing Pharmaceuticals bought the 62-year-old drug called Daraprim from Impax Laboratories in August 2015, the company immediately raised the price of one pill from \$13.50 to \$750, (a 5,000 percent increase). The average cost of treatment for patients rose from about \$1,130 to \$63,000. For certain patients, the cost can go as high as \$634,000. DOM requested MS-DUR run an analysis of Daraprim utilization to estimate the potential impact of the pricing increase and to determine whether clinical edits were needed to assure appropriate use.

Since this initial report was requested, Turing Pharmaceutical CEO Martin Shkreli has backed down on his plan for an astronomical price increase. The company did not say what the new price would be, but presumably less than the \$750 a pill it had planned to charge.

METHODS

A retrospective analysis was conducted using MS Medicaid pharmacy and medical claims for all programs [fee-for-service (FFS) and coordinated care organizations (CCOs)] for the timeframe January, 2014 through August, 2015. Daraprim was identified using NDC codes in the pharmacy data.

RESULTS

Only 12 unique beneficiaries were identified as being prescribed Daraprim during the observation period (Table 1). Nine of these patients had a medical claim with a diagnosis of toxoplasmosis during the same time period.

Diagnosis		Number of patients
Total patients		12
Diagnoses Detected	Both HIV and Taxoplasmosis	7
	HIV only	2
	Taxoplasmosis only	2
	No diagnosis	1

TABLE 2: Types of Prescribers Writing Daraprim Prescriptions

Prescriber Specialty	Number of Unique Beneficiaries	Number of Prescription Claims
Internal Medicine	5	39
Infectious Disease	2	4
Nurse Practitioner	2	10
Family Medicine	1	1
General Practice	1	1
Student in health program training	1	2

Most of the Daraprim prescriptions were written by internal medicine or infectious disease providers.

Information on the prescribing characteristics (quantity dispensed and number of tablets /day prescribed) and the average amount DOM paid for Daraprim prescriptions prior to the price increase are summarized in Table 3. A total of 57 prescription fills, with an average paid amount of \$882.10 per prescription filled. The most common dosing was 2 tablets per day (40.4%) followed by 3 tablets per day (35.1%).

Total dollar amount paid for Daraprim during this period was \$50,280, with an average unit cost paid of \$14.40 per tablet. Table 4 illustrates the total amount that would be paid for these 57 prescriptions at varying costs per tablet as compared to the amount paid prior to the price increase.

TABLE 3: Amount Paid for Daraprim and Prescription Characteristics (January 2014 - August 2015)

TOTAL NUMBER RXs		57
Total amount paid		\$50,280
Average paid / prescription		\$882.10
Average unit cost paid*		\$14.40
Quantity Dispensed	9	1 1.8%
	30	14 24.6%
	40	1 1.8%
	60	23 40.4%
	90	17 29.8%
	92	1 1.8%
Number of Tablets / Day	1	14 24.6%
	2	23 40.4%
	3	20 35.1%

* Paid amount for prescription - dispensing fee divided by quantity dispensed.

TABLE 4: Estimated Impact of Daraprim Price Increase*

Unit Price	Price Increase Percent	Total Amount Paid
Amount paid at previous price		\$50,280
\$600 / tablet	3590%	\$1,794,684
\$700 / tablet	4205%	\$2,102,079
\$750 / tablet	4513%	\$2,255,776

*Percentage increase was only applied to ingredient costs.

Applying the scenario in Table 4 for a price increase to \$750 per tablet, the DOM would be paying approximately \$2.2 million more in costs to treat the same number of cases prescribed Daraprim during the last 20 months. Even if the price is increased to only \$600 / tablet, the DOM would experience an increase of more than \$1.7 million in the amount paid for this therapy.

CONCLUSIONS AND RECOMMENDATIONS

During the last year and a half, only 12 beneficiaries were treated with Daraprim; resulting in a total of 57 prescription fills. A total of \$50,280 was paid to pharmacies for these prescriptions. The planned price increase could translate to as much as a \$2.2 million increase DOM payments for this therapy.

Although a price increase of the magnitude initially proposed would result in a major increase in the amount DOM pays to pharmacies for Daraprim therapy, the net impact on DOM may be an actual reduction in net cost due to mandatory Federal rebate guidelines.

Since the current use for Daraprim appears to be appropriate and the new price will not result in an increase in the net cost of the product to DOM, MS-DUR recommends that no new utilization management actions be taken at this time.

Action needed by DUR Board: Reported for information purposes only, no action needed.