

PATTERNS OF PRESCRIPTION USE OF TRIAZOLAM

Version July 17, 2015

BACKGROUND

Triazolam is an oral benzodiazepine. It is used as a sedative-hypnotic agent in treating severe short-term insomnia which generally lasts 7 to 10 days. Guidance on usage and length of therapy from the prescribing information include:

Indications and Usage for Triazolam

Triazolam Tablets USP, are indicated for the short-term treatment of insomnia (generally 7 to 10 days). Use for more than 2 to 3 weeks requires complete reevaluation of the patient (see [WARNINGS](#)).

Prescriptions for Triazolam should be written for short-term use (7 to 10 days) and it should not be prescribed in quantities exceeding a 1-month supply.

Warnings

Because sleep disturbances may be the presenting manifestation of a physical and/or psychiatric disorder, symptomatic treatment of insomnia should be initiated only after a careful evaluation of the patient. **The failure of insomnia to remit after 7 to 10 days of treatment may indicate the presence of a primary psychiatric and/or medical illness that should be evaluated.** Worsening of insomnia or the emergence of new thinking or behavior abnormalities may be the consequence of an unrecognized psychiatric or physical disorder. Such findings have emerged during the course of treatment with sedative-hypnotic drugs. Because some of the important adverse effects of sedative-hypnotics appear to be dose related (see [PRECAUTIONS](#) and [DOSAGE AND ADMINISTRATION](#)), it is important to use the smallest possible effective dose, especially in the elderly.

In the post discussion following the May 12, 2015 Medicaid P&T Committee meeting, MS-DUR was asked to run an analysis to:

- determine how many beneficiaries are using Triazolam
- evaluate whether prescribers were following the recommended duration of therapy.

METHODS

A retrospective analysis was conducted using Mississippi Medicaid fee-for-service (FFS) and managed care pharmacy claims data for the period January 1, 2014 through December 31, 2014. Triazolam was identified using NDC codes in the pharmacy data. Beneficiaries using Triazolam were tracked to identify their prescribers and prescribing patterns.

RESULTS

A total of 320 unique beneficiaries were identified as having been prescribed Triazolam in 2014. The majority of these beneficiaries were female with considerable variation in age. Table 1 shows the characteristics of Triazolam users by Medicaid pharmacy program. 6.6% of Triazolam users had prescriptions from more than one provider. Almost one-fourth of Triazolam users had more than one prescription filled during the year. The average days supply per prescription fill was 4.8 days in the FFS program and 10.5 days in the UHC program. This average indicates that most prescribing is within the recommended 7-10 days of treatment. The average prescription fill in the Magnolia program, however, was 16.3 days, indicating that beneficiaries in this program may be receiving longer treatment than is recommended.

No maximum length of therapy is indicated in the prescribing information. However, the warning indicates that if 7-10 days of therapy is not sufficient, patients should be reevaluated for an underlying psychiatric or mental health condition that should be addressed rather than continuing treatment with Triazolam. The average total days of therapy for beneficiaries in the FFS program was 11.1 days. This indicates that most patients were only treated for a short period of time. However, the average total days of therapy for beneficiaries in the Magnolia and UHC programs were 64.9 and 51, respectively. These figures greatly exceed the recommended 7-10 days and the warning of exceeding a one-month supply.

TABLE 1: Beneficiary Characteristics and Triazolam Use by Pharmacy Program (January - December 2014)					
		Pharmacy Program			TOTAL
		FFS	Magnolia	UHC	
Total		181	66	73	320
Gender	F	122 67.4%	53 80.3%	52 71.2%	227 70.9%
	M	59 32.6%	13 19.7%	21 28.8%	93 29.1%
Age (as of 12/31/2014)	<=15	55 30.4%	3 4.6%	3 4.1%	61 19.1%
	16 - 20	76 42.0%	6 9.1%	6 8.2%	88 27.5%
	21 - 35	17 9.4%	29 43.9%	24 32.9%	70 21.9%
	36 - 45	7 3.9%	12 18.2%	15 20.6%	34 10.6%
	46+	26 14.4%	16 24.2%	25 34.3%	67 20.9%
# of different prescribers	1	176 97.2%	57 86.4%	66 90.4%	299 93.4%
	2	4 2.2%	7 10.6%	7 9.6%	18 5.6%
	3	1 0.6%	2 3.0%	0 0.0%	3 0.9%
# of RX fills	1	153 84.5%	46 69.7%	46 63.0%	245 76.6%
	2	15 8.3%	8 12.1%	6 8.2%	29 9.1%
	3	5 2.8%	0 0.0%	2 2.7%	7 2.2%
	4	2 1.1%	0 0.0%	4 5.5%	6 1.9%
	5+	6 3.3%	12 18.2%	15 20.6%	33 10.3%
Average days supply/ fill		4.8	16.3	10.5	8.6
Average days total supply		11.1	64.9	51	31.6

Note: Beneficiaries are attributed to last pharmacy program enrolled in.

A total of 120 prescribers were associated with these prescriptions for Triazolam. Table 2 shows the number of each type of provider and the average prescribing pattern for each type.

TABLE 2: Triazolam Prescribing Characteristics by Type of Prescriber (January - December 2014)								
Type of Prescriber	# of Prescribers	Total # Beneficiaries	Average # Beneficiaries/ Prescriber	Total # of Fills	Average # of Fills/ prescriber	Average # of Fills/ Beneficiary	Average Days Supply/ Fill	Average Total Days Supply/ Beneficiary
DDO-Dentist	19	211	11.1	227	11.9	1.1	2	2
MD-Cardiologist	1	1	1.0	1	1.0	1.0	30	30
MD-Emergency Med	2	2	1.0	2	1.0	1.0	19	19
MD-Family Practice	27	40	1.5	123	4.6	3.4	25	94
MD-General Practice	2	2	1.0	5	2.5	2.5	30	75
MD-Gastroenterology	1	1	1.0	4	4.0	4.0	30	120
MD-Hematology/Onc	1	1	1.0	1	1.0	1.0	30	30
MD-Internal Medicine	7	9	1.3	29	4.1	3.6	30	107
MD-Neurology	4	7	1.8	18	4.5	1.7	29	46
MD-OB/GYN	4	10	2.5	10	2.5	1.0	24	24
MD-Ophthalmologist	1	1	1.0	1	1.0	1.0	10	10
MD-Orthopedist	1	1	1.0	1	1.0	1.0	2	2
MD-Other	1	2	2.0	11	11.0	5.5	30	165
MD-Pain	3	7	2.3	27	9.0	2.7	20	70
MD-Pediatrics	2	3	1.5	5	2.5	1.5	1	2
MD-Psychiatrist	3	5	1.7	13	4.3	2.3	24	58
MD-Surgeon	2	2	1.0	4	2.0	2.0	16	46
NP	3	3	1.0	11	3.7	3.7	20	100
NP-Family Practice	20	27	1.4	68	3.4	2.4	26	65
NP-Mental Health	3	6	2.0	30	10.0	5.4	30	164
Podiatrist	1	1	1.0	1	1.0	1.0	1	1
Other Provider	1	1	1.0	6	6.0	6.0	15	90

MS-DUR contacted the pharmacies filling Triazolam prescriptions written by gastroenterologist and podiatrist to confirm NPIs are correct. The pharmacist reported that the gastroenterologist sees this patient every couple of weeks and the pharmacist is aware of the unusual nature of this prescribing. The pharmacy confirmed the prescription by the provider identified as being a podiatrist. This was a single prescription for one dose to be taken the night before a procedure.

Examples of clinical criteria utilized by other state Medicaid agencies for Triazolam include the following.

State	Status / Clinical Criteria / Limits
Alabama	Class is not reviewed for PDL
Florida	Class is not reviewed for PDL
Georgia	Triazolam and Halcion non-preferred
Louisiana	Triazolam generic preferred product
Maine	Triazolam generic preferred product Maximum quantity 10/month for all benzodiazepines
New York	Triazolam and Halcion non-preferred product First fill limited to 10 day supply 30 day duration limit (no time period specified)
Nevada	Triazolam generic preferred product
Tennessee	Triazolam and Halcion non-preferred products 14 / 30 days
Wisconsin	Triazolam generic preferred product

CONCLUSIONS

Currently in the UPDL, Triazolam (generic) is a preferred product and Halcion (brand) is a non-preferred product. The benzodiazepine class has a quantity limit of 31 units per 31 days (a dosing limit) but no cumulative quantity limit over time.

THERAPEUTIC DRUG CLASS	PREFERRED AGENTS	NON-PREFERRED AGENTS	PA CRITERIA
SEDATIVE HYPNOTICS			
	BENZODIAZEPINES		
	estazolam flurazepam temazepam (15mg and 30mg) triazolam	DALMANE (flurazepam) DORAL (quazepam) HALCION (triazolam) RESTORIL (temazepam) temazepam (7.5mg and 22.5mg)	Single source benzodiazepines and barbiturates are NOT covered – NO PA's will be issued for these drugs. Quantity Limits – CUMULATIVE Quantity limit per rolling days for all strengths 31 units/31 days - all strengths

Based on the average number of fills/beneficiary, the average days supply/fill and the average total days supply/beneficiary it appears that many prescribers seem to be unaware of the therapy recommendations for Triazolam and may be using the drug longer than recommended.

RECOMMENDATIONS

Triazolam is available in bottles of 500 and bottles/strips of 10. Based on these finding, MS-DUR makes the following recommendations:

1. The DUR Board recommend to the P&T Committee that Triazolam be changed to non-preferred unless there are supplemental contract requirements preventing this change.
2. MS-DUR initiate an educational intervention with prescribers exceeding the following treatment guidelines:
 - a. Beneficiaries having more than 2 Triazolam fills in a year that exceed a total of 30 days supply
 - b. Beneficiaries having 2 or more prescriptions for >15 days supply
3. DOM implement the following clinical edits to assure more appropriate use of Triazolam:
 - a. Quantity limit of 10 day supply per month
 - b. Cumulative quantity limit of 60 days within a 365 day period