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MISSISSIPPI DIVISION OF  
**MEDICAID**

## Use of Multiple Concurrent Antipsychotics in Children Enrolled in the Mississippi Medicaid Program

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### OBJECTIVES:

Little evidence exists to support the increasing concurrent use of multiple antipsychotics (APs) among children. Case reports suggest that use of multiple APs could lead to an increased risk of delirium, serious behavioral changes, cardiac arrhythmias, and death. In 2013, the National Collaborative for Innovation in Quality Measurement (NCINQ) proposed a quality measure of concurrent use of multiple (2+) APs among children for use in Medicaid and CHIP programs. The Pharmacy Quality Alliance (PQA) has been working on a similar measure using 3+ APs. The objectives were to analyze the performance in the Mississippi Medicaid program on both the 2+ and 3+ proposed quality measures.

### METHODS:

A retrospective analysis was conducted using Mississippi Medicaid data for July 2013 through June 2014. For both measures the denominator contained beneficiaries ages 0 to 21 as of June 2014, who were continuously enrolled 3+ months and were on any AP for at least 90 days. Individuals eligible for Medicare and Medicaid (dual eligibles) were excluded from the study due to lack of access to Medicare Part D data. The numerators contained those beneficiaries who were concurrently on 2+ APs or 3+ APs for a period of at least 90 days during the measurement year. of beneficiaries exceeding the prescription cap was reported.

### RESULTS:

The denominator included 4,435 children who were on at least 1 AP. About 464 (10.5%) and 159 (3.6%) beneficiaries were concurrently on 2+ or 3+ APs respectively. The performance rates on the two measures did not significantly differ for the fee-for-service or two managed care plans. Also, the performance rates on the measures decreased with an increase in beneficiary age. These results also were consistent across the three health plans

TABLE 1: Percentage of Children Taking Antipsychotics Being Treated With Multiple Antipsychotics by Age and Pharmacy Plan (July 2013 - June 2014)					
	Age (As of 6/30/2014)	Pharmacy Plan			
		FFS	Magnolia	United Health Care	Total
Beneficiaries taking at least 1 AP for longer than 90 days (denominator)	0-5	61	19	10	90
	6-11	1,138	244	173	1,555
	12-17	1,584	381	248	2,213
	18-20	238	185	154	577
	TOTAL	3,021	829	585	4,435
Beneficiaries taking multiple (2 or more) concurrent APs for longer than 90 days (numerator)	0-5	3 4.9%	0 0.0%	0 0.0%	3 3.3%
	6-11	58 5.1%	16 6.6%	8 4.6%	82 5.3%
	12-17	216 13.6%	39 10.2%	23 9.3%	278 12.6%
	18-20	60 25.2%	25 13.5%	16 10.4%	101 17.5%
	TOTAL	337 11.2%	80 9.7%	47 8.0%	464 10.5%
Beneficiaries taking multiple (3 or more) concurrent APs for longer than 90 days (numerator)	0-5	0 0.0%	0 0.0%	0 0.0%	0 0.0%
	6-11	17 1.5%	3 1.2%	2 1.2%	22 1.4%
	12-17	76 4.8%	12 3.1%	2 0.8%	90 4.1%
	18-20	33 13.9%	8 4.3%	6 3.9%	47 8.1%
	TOTAL	126 4.2%	23 2.8%	10 1.7%	159 3.6%

### CONCLUSIONS:

Although Mississippi Medicaid performs fairly well on quality measures for the overall percentage of children taking antipsychotics, it appears that performance is not as good at controlling polypharmacy with antipsychotics. There is considerable debate about what rate is appropriate for concurrent use of 2 or more antipsychotics since there are sound clinical reasons for using 2 or more different products. However, there is no clinical support for concurrent use of 3 or more antipsychotics. Although the percentage of children concurrently taking 3 or more antipsychotics is small, possible drug utilization management actions are needed to further reduce this occurrence.

### IMPLICATIONS:

The current study used administrative claims data to understand the increased use of APs in children. Based on the results of the current study, the Mississippi Medicaid Drug Utilization Review program has recommended the following actions in order to reduce the percentage of children being treated concomitantly with 3+ APs. First, an electronic clinical edit should be implemented that would force manual prior authorization for any claim that results in concurrent use of 3+ APs. Second, manual review criteria should be developed requiring that concurrent use of 3+ APs can only occur when prescribed by a psychiatrist or recommended by a psychiatric consult.

### LIMITATIONS:

The study sample only included children on APs enrolled in the Mississippi Medicaid program. Therefore the study findings cannot be generalized to all children on APs in the US.

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