

# Psychotropic Medication Use in the Foster Care Population in Arizona

AUGUST 15, 2012

## Abbreviations

**AACAP**= The American Academy of Child and Adolescent Psychiatry

**ADHS/DBHS**= The Arizona Department of Health Services / Division of Behavioral Health Services

**AHCCCS**= The Arizona Health Care Cost Containment System

**CFT**= Child and Family Team

**CMDP**= Comprehensive Medical and Dental Program

**CPS**= Child Protective Services

**DCYF**= Division of Children, Youth, and Families

**GAO**= Government Accountability Office

**T/RBHA**= Tribal and Regional Behavioral Health Authority

## Background

The GAO released a report in December 2011 comparing rates of psychotropic prescribing for foster children to non-foster children in Medicaid for calendar year 2008 by analyzing fee-for-service prescription claims for Florida, Maryland, Massachusetts, Michigan, Oregon, and Texas. Results indicate that hundreds of foster and non-foster children studied were on five or more psychotropic medications, thousands of foster and non-foster children were prescribed doses higher than maximum cited in guidelines based on The Food and Drug Administration (FDA) approved labels, foster and non-foster children under 1 year of age were prescribed psychotropic medications, and psychotropic medications were prescribed at over two to four times higher for the foster care children compared to non-foster children. As the results of the GAO analysis cannot be generalized to Arizona, this paper evaluates Arizona's data during this same period.



### Medication Lists included in GAO Study

#### Primary List

- ADHD
- Anti-anxiety
- Anti-depressant
- Anti-psychotic
- Hypnotic
- Combination
- Mood Stabilizer

#### Secondary List

- Alpha-agonist/ other anti-hypertensive
- Anti-histamine
- Anti-convulsant
- Anti-enuretic
- Anti-Parkinson

### Indicators of Potential Health Risks of Psychotropic Prescribing Evaluated by GAO

1. Concomitant prescriptions of five or more drugs
2. Prescriptions exceeding dosage guidelines in the Psychotropic Medication Utilization Parameters for Texas Foster Children
3. Psychotropic prescriptions for children under 1 year old

## Physical and Behavioral Health Services for Children in Foster Care

The [ADHS/DBHS Covered Services Guide](#) describes the array of behavioral health services which can be utilized. The categories of service include:

- Treatment Services
- Rehabilitation Services
- Medical Services
- Support Services
- Crisis Intervention Services
- Inpatient Services
- Residential Services
- Behavioral Health Day Programs
- Pharmacy

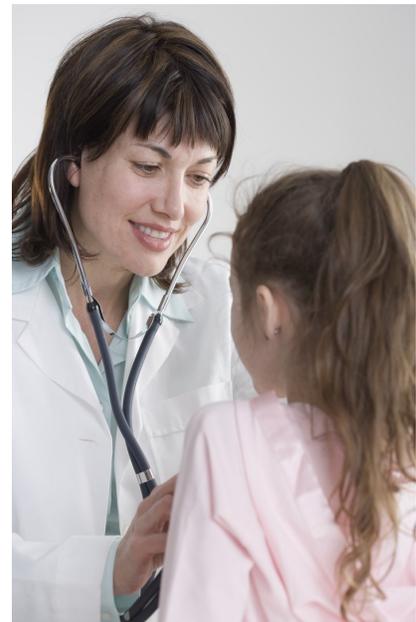
ADHS/DBHS and CMDP are responsible for the delivery of behavioral and physical health care through AHCCCS respectively for children in foster care. As of March 2012, 11,292 children were eligible for CMDP and 6,624 of these children (58.6%) were in an active episode of care for behavioral health services.

Referrals from the child welfare system for behavioral health services are usually initiated at the time of the child's removal from his/her home by CPS through a 72 hour urgent behavioral health response. As children enter out-of-home placement, approximately 90% are evaluated through urgent response regardless of AHCCCS eligibility at the time of the removal. The initial behavioral health assessment must be provided within 7 days and definitive services must begin no later than 23 days from the date of the initial assessment per [ADHS/DBHS policy](#).

Every child in foster care served through the public behavioral system is served through [CFT practice](#), which is Arizona's form of wraparound. The CFT is responsible for the development and implementation of a behavioral health service plan. The structure of

the CFT depends on the complexity of needs, the child's and family's strengths, and the goals identified by the child, family, CPS, foster parents and other members of the CFT.

The CFT is the mechanism by which service planning occurs, including identifying the services needed to assist a child in achieving the goals on their individual service plan. Children in the public behavioral health system can access the full spectrum of wraparound services, including supportive services such as high needs



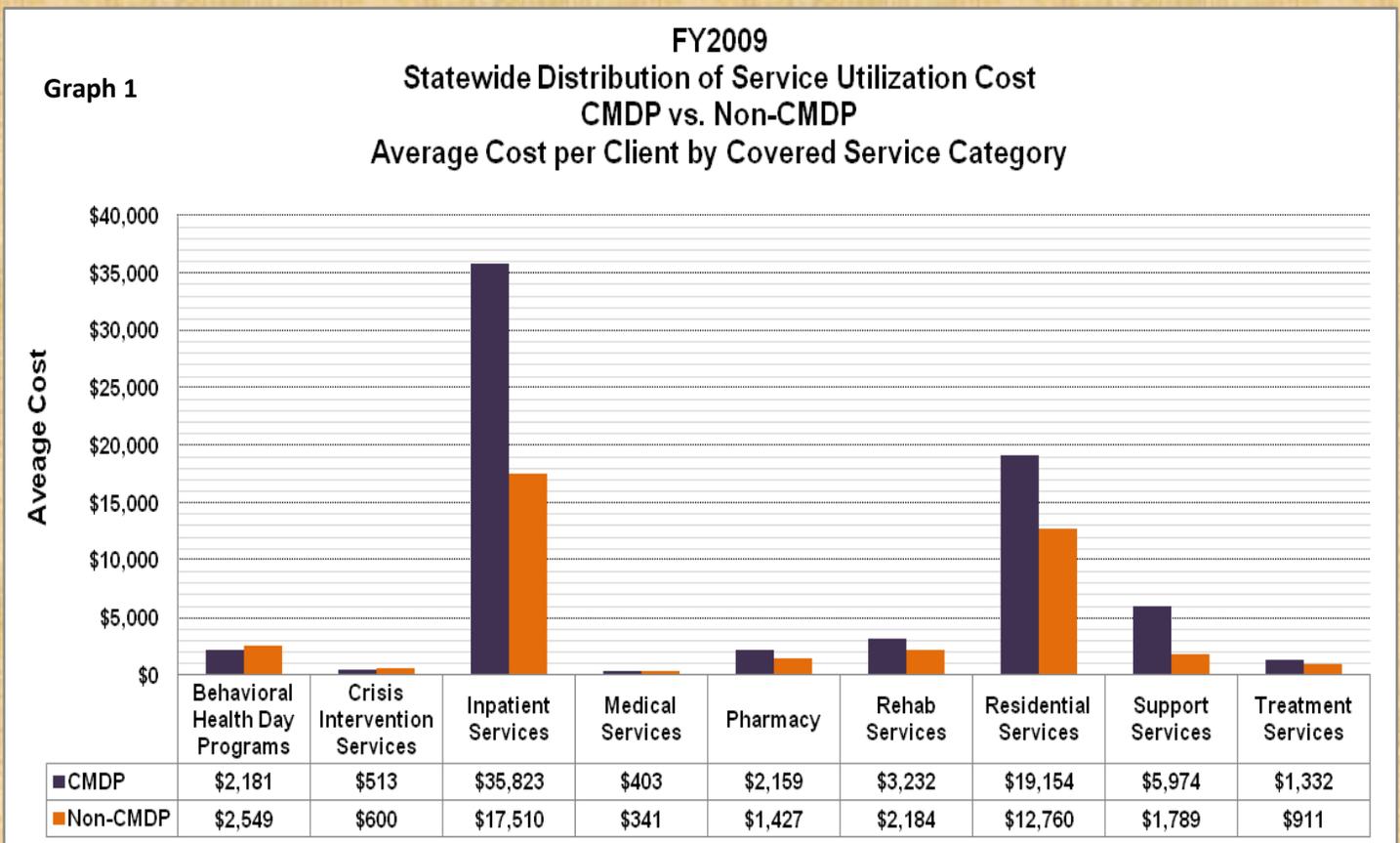
## Overall Utilization of Behavioral Health Services for CMDP vs. Non-CMDP

Multiple studies have demonstrated that children in foster care have a higher prevalence of behavioral health conditions compared to the non-foster care population and utilize behavioral health services at a higher rate. The findings of these studies are consistent with the data analyzed in Arizona's Public Behavioral Health System.

As per the ADHS/DBHS Enrollment Penetration Report, there is a >10 fold higher penetration rate into the behavioral health system for foster children (64%) compared to non-foster children (5.6%) age birth to 18 as of June 30, 2008.

Foster care children utilize behavioral health services for

the majority of covered service category at a higher rate than non-foster children; this is evidenced by higher expenditures per child utilizing the service category depicted in Graph 1 for Fiscal Year 2009 (July 1, 2008 through June 30, 2009).



## Arizona Study on Psychotropic Medication Use

AHCCCS analyzed psychotropic claims according to the methodology published in the December 2011 GAO report. 14,840 foster care and 719,663 non-foster care Medicaid-eligible children age birth to 18 were included in the analysis for calendar year 2008. This data is representative of ~90% of the foster care population of Arizona.

As data was derived at the AHCCCS level, it includes psychotropic medications prescribed by both CMDP primary care physicians and by behavioral health medical practitioners through the behavioral health system. As diagnosis is not linked to prescription and many of the medications studied in the GAO report could be used for physical health conditions, the results presented are over-representative of the use of psychotropic medications for behavioral health purposes in both the foster care and non-foster care child populations. There are other data limitations with the methodology utilized for this report; these are listed in further detail within the GAO report.

Arizona results indicate that foster care children age birth to 18 were prescribed psychotropic medications at 4.4 times the rate of non-foster children during calendar year 2008 (Table I). Children age 6 to 12 were the most likely to be prescribed psychotropic medication in both the foster care and non-foster care populations (27.6% and 5.4% respectively). Fifty-five foster children age birth to 1 received a psychotropic prescription during 2008 (Table II). Children in foster care in Arizona were more likely than non-foster children to receive psychotropic medications outside the FDA-approved doses or standards published in the medical literature (Table III). Foster children were also more likely to be prescribed medications concomitantly at higher rates than non-foster children (Table IV). For example, foster children were 9 times more likely than non-foster children to be concomitantly prescribed five psychotropic medications.

**TABLE I Rates of Foster and Non-foster Children Prescribed at Least one Psychotropic Drug through AHCCCS during 2008**

Age	Foster Children		Nonfoster Children		Ratio of Foster to Nonfoster children
	Number	%	Number	%	
0-17	1,681	11.3%	18,690	2.6%	4.4
13-17	312	6.7%	2,626	1.8%	3.8
6-12	1,144	27.6%	13,966	5.4%	5.1
0-5	225	3.7%	2,098	0.7%	5.5

**TABLE II Prescriptions of Psychotropic Drugs to Foster and Non-foster Children Age 0-1 through AHCCCS during 2008**

MEDICATION CATEGORY	INGREDIENT	Foster Children		Non-Foster Children	
		Children	Prescriptions	Children	Prescriptions
ADHD	CLONIDINE HCL	2	3	3	5
Anti-anxiety	ALPRAZOLAM			1	1
Anti-anxiety	CHLORDIAZEPOXIDE HCL			1	1
Anti-anxiety	CLONAZEPAM	3	5	20	45
Anti-anxiety	CLORAZEPATE DIPOTASSIUM	1	1	1	11
Anti-anxiety	DIAZEPAM	3	6	18	33
Anti-anxiety	DIPHENHYDRAMINE HCL	30	33	2059	2333
Anti-anxiety	HYDROXYZINE HCL	7	14	437	516
Anti-anxiety	LORAZEPAM			26	30
Anti-anxiety	PROPRANOLOL HCL	2	6	47	190
Anti-convulsant	CARBAMAZEPINE	1	2	4	7
Anti-convulsant	DIVALPROEX SODIUM			1	1
Anti-convulsant	GABAPENTIN			1	2
Anti-convulsant	LAMOTRIGINE			1	3
Anti-convulsant	OXCARBAZEPINE			3	7
Anti-convulsant	TOPIRAMATE	3	15	10	38
Anti-convulsant	VALPROATE SODIUM	1	2	7	14
Anti-depressant	AMITRIPTYLINE HCL			1	1
Anti-depressant	DOXEPIN HCL	1	1	10	21
Anti-enuretic	DESMOPRESSIN ACETATE	1	3	1	5
Anti-parkinson	AMANTADINE HCL			9	9
Hypnotic	MIDAZOLAM HCL			1	1

**TABLE III Rates of Children Prescribed Psychotropic Drugs Outside FDA-Approved Doses or Standards Published in Medical Literature through AHCCCS during 2008**

Category	Foster Children		Non-Foster Children		Ratio of Foster to Non-Foster Children
	Number of Children Exceeding Max Dose	Percentage of Children Exceeding Max Dose	Number of Children Exceeding Max Dose	Percentage of Children Exceeding Max Dose	
Prescription exceeding FDA maximum dose for age group	91	0.6%	876	0.1%	5.0
Prescription exceeding maximum dose published in medical literature for age group	143	1.0%	941	0.1%	7.4
Prescription with no FDA-approved dose for child's age, exceeding dosages for the next most relevant standard	8	0.1%	79	0.0%	4.9
Prescription for medication with no FDA-approved dose for age group	157	1.1%	1,214	0.2%	6.3
Prescription for medication with no published dose in medical literature for age group	6	0.0%	63	0.0%	4.6

**TABLE IV Rates of Concomitant Psychotropic Prescriptions by Number of Drugs through AHCCCS during 2008**

Medications prescribed concomitantly	Foster Children		Non-Foster Children		Ratio of Foster to Non-Foster Children
	Total Number of Foster Children	Percent	Total Number of Non-Foster Children	Percent	
1 (combination drug)	0	0.0%	0	0.0%	-
2	360	2.4%	4055	0.6%	4.3
3	228	1.5%	1959	0.3%	5.6
4	126	0.8%	822	0.1%	7.4
5	50	0.3%	270	0.0%	9.0
6	17	0.1%	89	0.0%	9.3
7	<10	0.1%	24	0.0%	18.2
8	<10	0.0%	<10	0.0%	36.4
9	<10	0.0%	<10	0.0%	24.2
10	<10	0.0%	<10	0.0%	48.5
Total	798	5.4%	7230	1.0%	5.4

### Comparing Arizona Practice to AACAP Best Practice Guidelines

AACAP is a national medical organization whose goal is to aid in the understanding and treatment of the developmental, behavioral, and mental disorders that affect children and adolescents. This organization has developed guidelines that address psychotropic prescribing concerns in the foster care population. These guidelines are arranged into four categories (consent, oversight, consultation, information sharing ) and contain practices defined as minimal, recommended, or ideal. The December 2011 GAO report on psychotropic medication use in the foster care population includes an analysis of how the six states’ oversight programs compared with the AACAP best practice guidelines.

ADHS/DBHS in partnership with DCYF and CMDP conducted a self-assessment of how Arizona practice compares with the AACAP Best Principle Guidelines; findings are summarized in Tables V-VIII.

AACAP has several helpful resources for behavioral health providers and families. This includes:

- [Child Abuse Resource Center](#)
- [Facts for Families](#)

**Table V Arizona Consent Laws and Policies Compared with AACAP Best Principle Guidelines**

Standard	Guideline	Arizona Practice	Reference
Minimal	Identify the parties empowered to consent for psychotropic drug treatment for youth in state custody in a timely fashion	Fully Implemented	<ul style="list-style-type: none"> <li>• <a href="#">Arizona Revised Statute § 514.05</a></li> <li>• <a href="#">DCYF Children’s Service Manual</a></li> </ul>
Minimal	Establish a mechanism to obtain assent for psychotropic medication management from minors when possible	Partially Implemented	<ul style="list-style-type: none"> <li>• <a href="#">ADHS/DBHS Adopted Practice Guidelines</a></li> </ul>
Recommended	Obtain simply written psycho-educational materials and medication information sheets to facilitate the consent process	Fully Implemented	<ul style="list-style-type: none"> <li>• <a href="#">CPS Psychotropic Medication Guide</a></li> <li>• <a href="#">DES/DCYF Pamphlet for Caregivers</a></li> </ul>
Ideal	Establish training requirements for child welfare, court personnel and/or foster parents to help them become more effective advocates for children in their custody	Fully Implemented	<ul style="list-style-type: none"> <li>• <a href="#">ADHS/DBHS Policy</a></li> </ul>

**Table VI Arizona Information-Sharing Laws and Policies Compared with AACAP's Best Principle Guidelines**

<b>Ideal</b>	Create a website to provide ready access for clinicians, foster parents, and other caregivers to pertinent policies and procedures governing psychotropic medication management	Fully Implemented	<ul style="list-style-type: none"> <li>• <a href="#"><u>ADHS/DBHS Website link specific to CPS</u></a></li> </ul>
<b>Ideal</b>	Website includes psycho-educational materials	Fully Implemented	<ul style="list-style-type: none"> <li>• <a href="#"><u>ADHS/DBHS Website link specific to CPS</u></a></li> </ul>
<b>Ideal</b>	Website includes consent forms	Fully Implemented	<ul style="list-style-type: none"> <li>• <a href="#"><u>ADHS/DBHS Website link specific to CPS</u></a></li> </ul>
<b>Ideal</b>	Website includes adverse effect rating forms	Not Implemented	
<b>Ideal</b>	Website includes reports on prescription patterns for psychotropic medications	Fully Implemented	<ul style="list-style-type: none"> <li>• <a href="#"><u>ADHS/DBHS Website link specific to CPS</u></a></li> </ul>
<b>Ideal</b>	Website includes links to helpful, accurate, and ethical websites about child and adolescent psychiatric diagnoses and psychotropic medications	Fully Implemented	<ul style="list-style-type: none"> <li>• <a href="#"><u>ADHS/DBHS Website link specific to CPS</u></a></li> </ul>



**Table VII Arizona Oversight Laws and Policies Compared with AACAP’s Best Principle Guidelines**

Standard	Guideline	Arizona Practice	Reference
<b>Minimal</b>	Establish guidelines for the use of psychotropic medications for children in state custody	Fully Implemented	<ul style="list-style-type: none"> <li>• <a href="#">ADHS/DBHS Adopted Practice Guidelines</a></li> <li>• <a href="#">DCYF Children’s Service Manual</a></li> <li>• <a href="#">CPS Psychotropic Medication Guide</a></li> </ul>
<b>Ideal</b>	Oversight program includes an advisory committee to oversee a medication formulary and provide medication monitoring guidelines to practitioners who treat children in the child welfare system	Partially Implemented	<ul style="list-style-type: none"> <li>• Pharmacy and Therapeutics Committees at ADHS/DBHS, T/RBHA and CMDP</li> </ul>
<b>Ideal</b>	Oversight program monitors the rate and types of psychotropic medication usage and the rate of adverse reactions among youth in state custody	Partially Implemented	<ul style="list-style-type: none"> <li>• T/RBHAs have implemented oversight specific to their geographic area</li> <li>• <a href="#">ADHS/DBHS Policy</a></li> </ul>
<b>Ideal</b>	Oversight program establishes a process to review non-standard, unusual, and/or experimental psychiatric interventions with children who are in state custody	Partially Implemented	<ul style="list-style-type: none"> <li>• Pharmacy and Therapeutics Committees at both ADHS/DBHS and T/RBHA levels</li> </ul>
<b>Ideal</b>	Oversight program collects and analyzes data and makes quarterly reports to the state or county child welfare agency regarding the rates and types of psychotropic medication use. These data are made available to clinicians in the state to improve the quality of care provided	Partially Implemented	<ul style="list-style-type: none"> <li>• Pharmacy and Therapeutics Committees at ADHS/DBHS, T/RBHA and CMDP</li> </ul>
<b>Ideal</b>	Maintain an ongoing record of diagnoses, height and weight, allergies, medical history, ongoing medical problem list, psychotropic medications, and adverse medication reactions that are easily available to treating clinicians 24 hours a day	Partially Implemented	<ul style="list-style-type: none"> <li>• <a href="#">ADHS/DBHS Policy</a></li> </ul>



**Table VIII Arizona Consultation Programs Compared with AACAP’s Best Principle Guidelines**

Standard	Guideline	Arizona Practice	Reference
<b>Recommended</b>	Design a consultation program administered by child and adolescent psychiatrists. This program provides consultation by child and adolescent psychiatrists to the persons or agency that is responsible for consenting for treatment with psychotropic medications	Partially Implemented	<ul style="list-style-type: none"> <li>• <a href="#">ADHS/DBHS Practice Guideline</a></li> </ul>
<b>Recommended</b>	The consultation program provides consultations by child and adolescent psychiatrists to, and at the request of, physicians treating this difficult patient population	Partially Implemented	<ul style="list-style-type: none"> <li>• <a href="#">ADHS/DBHS Practice Guideline</a></li> <li>• <a href="#">ADHS/DBHS Policy</a></li> </ul>
<b>Recommended</b>	The consultation program conducts face-to-face evaluations of youth by child and adolescent psychiatrists at the request of the child welfare agency, the juvenile court, or other state or county agencies empowered by law to consent for treatment with psychotropic medications when concerns have been raised about the pharmacological regimen	Partially Implemented	<ul style="list-style-type: none"> <li>• Second Opinions are made available by T/RBHAs with Board Certified/Board-Eligible Child and Adolescent Psychiatrists</li> </ul>

## Summary

Arizona psychotropic prescribing to children in foster care compared to non-foster children demonstrate findings similar to that published in the December 2011 GAO report of six other states. As Arizona foster children have higher rates of penetration into the behavioral health system and higher utilization of most behavioral health service categories compared to non-foster children, it is critical that Arizona evaluate psychotropic prescribing in the overall context of this service delivery system.

ADHS/DBHS, AHCCCS, CMDP and DCYF have partnered to address ongoing concerns related to high risk prescribing practices to children in foster care and are strengthening oversight of the Medicaid program by utilizing the AACAP Best Practice Guidelines as the foundation moving forward. These state agencies will be attending the Federal Summit *Because Minds Matter: Collaborating to Strengthen Psychotropic Medication Management for Children and Youth in Foster Care*, taking place in Washington, D.C. on August 27-28, 2012, aimed at improving oversight of psychotropic prescribing for children in foster care.

***For more information about Arizona's System of Care for children in foster care, please visit:***

***<http://www.azdhs.gov/bhs/children/CPS.htm>***

