OREGON HEALTH & SCIENCE UNIVERSITY

OHSU

IMPROVING THE APPROPRIATE USE OF PSYCHOTROPIC MEDICATIONS FOR CHILDREN AND YOUTH IN SUBSTITU CARE

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HISTORY

- In 2009, the Oregon legislature passed House Bill 3114, which amended Oregon Revised Statute 418.571 concerning psychotropic medication for children in foster care.
- The law went into effect on June 30, 2010.

GAO report 2009

- Atypical antipsychotic use in pediatric patients increased by 65% from 2.9 million to 4.8 million prescriptions from Y2002-Y2009. The number of unique patients increased by 35% from 592,000 to 801,000 patients over the same years.
- GAO report revealed that 4% of youth in Medicaid and 20 % of youth in foster care were receiving psychotropic medication.
- High rates of antipsychotic use for off label indications.
- High rates of polypharmacy in foster youth

DHS and Providers (now CCO's) Must Assure:

- A mental health assessment occurring before any child in foster care receives more than one new psychotropic medication or any antipsychotic medication, except in cases of urgent medical need.

DHS Must Assure:

- An annual review of psychotropic medications is required for all children under the age of 6 on psychotropic medications or who are receiving more than two psychotropic medications.
- This annual review will be done by the Oregon Medicaid Drug Use Review (DUR) Program in concert with DHS medical personnel.

DHS \ AMH Mental Health Screening requirement

- All youth in placed in foster care shall have a mental health assessment within 60 days

GAO Letter to state Medicaid Directors

- Nearly One-Fifth of Foster Children Took Psychotropic Medications, and Nearly One-Third of Foster Children Who May Have Needed Mental Health Services Did Not Receive Them.
- Oregon one of 16 states asked to provide data about prescribing practices
- Implementation of State oversight under ongoing investigation.

Consent

- Psychotropic medications have been considered to be above routine medical care for many years in Department rules.
- Beginning July 1, 2010 DHS assigned the responsibility for providing consent for psychotropic medications to the local Child Welfare Program Manager or his or her Designee.

Technical Assistance Grant – CHCS Quality Improvement Collaborative

- The Department of Human Services and the Oregon Health Authority made a joint application for and were awarded a Technical Assistance grant by the Center for Health Care Strategies (CHCS) in April 2012.
- The 3-year grant was funded by Casey Foundation and it involved DHS Child Welfare and OHA Addictions and Mental Health and DMAP.
- The states participating were: Oregon, Illinois, New Jersey, New York, Rhode Island, and Vermont.

Common Themes

- Trauma drives behavioral challenges and is under recognized.
- Aggression and sleep disturbance are symptoms commonly associated with antipsychotic overutilization and polypharmacy.
- Pediatric Bipolar disorder is over diagnosed.
- Mental Health Care is delivered too late or ineffectively.

Common Themes

- Primary care providers are frequently on the front line (Friday afternoon syndrome) and do not have the support they require in terms of services and or expertise.
- Records do not follow the child.
- Medications are used before the use of non medical strategies.
- Once regimens start they may be continued without re-evaluation.

OREGON GOALS

- Improve the effectiveness of the consent process for psychotropic medication use.
- Expand collaboration among stakeholders in this quality improvement project.
- Improve the safety and effectiveness of psychotropic medication use through the utilization of best practices.
- Reduce use of antipsychotic medications for unapproved indications
- Reduce polypharmacy use (4 or more psychotropic medications)

STRATEGIES

- INFORMATION
- CONSENT
- CLINICAL PRACTICE

Information

- Youth in foster care (YOUTH ADVOCACY GROUPS)
  - What to expect in foster care and rights
    - Developed and distributed
  - Review of Psychiatric Medications
    - Tip Sheets Created and distributed to foster youth and care givers when psychiatric appointments are anticipated.

Newly Developed Resources

OREGON DEPARTMENT OF HUMAN SERVICES

Child Welfare

PSYCHOTROPIC MEDICATIONS

Guide for youth in Oregon foster care

Questions to ask before consenting to a new medication

- What is my diagnosis?
- What is the name of the medication you recommend?
- Are there any alternatives to taking this medication?
- How much do I have to take and how often?
- How long will I have to take it?
- When will it start working?
- How will I know it is working?
- What are the side effects?
- What side effects do people my age most commonly experience?
- Will the medication make me gain weight? What can I do to keep my

THINGS YOU NEED TO KNOW...

What are psychotropic medications?

Psychotropic medication (pronounced "sike-oh-trope-ick") medications affect a person's mind, emotions, moods, and behaviors. These medicines are used to help people with thoughts, feelings, and emotions that are getting in the way of day to day life, and to help a person feel better.

Sometimes your thoughts, emotions or behaviors get in the way of doing things you want to do. Maybe you're not able to sleep at night or do your homework or have fun with friends. One option that can make you feel better is psychotropic medication. Doctors and nurse practitioners prescribe these medications to reduce symptoms such as anxiety, difficulty paying attention, depression and racing thoughts, if other things like talk therapy, or exercise are not helpful. These medications can have many benefits. They also can cause negative side effects and can be harmful if not used correctly.

What is informed consent?

Consent means to give permission for something to happen. *Informed consent* means a doctor gives you specific information about the risks and benefits of a medication or treatment before permission is given for the medication to be used. Make sure you have all of the information you need to decide if these medications are a good option for you. Because you are in foster care, the law says your caseworker also has to give consent for you to start any new psychotropic medication.

What are my options?

Your doctor or mental health specialist

Information

- Foster Parents:
  - Trauma training
    - PSU OHSU Trauma Informed Oregon created this summer
    - Improving trainings in terms of content and duration
  - CPS training
    - Pilot project proposed and under consideration
    - Already utilized in Maple Star Homes
  - Medication / health care training
    - In place, continue to improve process and materials

OREGON DEPARTMENT OF HUMAN SERVICES

Child Welfare

PSYCHOTROPIC MEDICATIONS

Guide for caseworkers and advocates of foster youth

BEFORE PSYCHOTROPIC MEDICATIONS ARE PRESCRIBED, CONSIDER THE FOLLOWING

Has your foster child had a comprehensive mental health and physical health evaluation within the past 30 days? Recognize that all youth in foster care have a history of traumatic life experiences, loss and separation from care givers. Trauma and loss may cause a range of emotional and behavioral challenges that *mimic* psychiatric illnesses such as ADHD and bipolar disorder or cause problems like aggression and insomnia. Youth in foster care do have higher rates of these challenges than the general population and may require medication as part of a comprehensive plan.

Many non medical strategies can improve challenges that are due to trauma:

- Relationships with caregivers that are empathetic, predictable, flexible and structured.
- Being physically active or trying music, dance or other art.
- Focusing on areas of strength and interests that are not based on performance.
- Helping the child identify things that trigger their fears (loud voices, being hungry, bedtimes, etc.)
- Helping youth share triggers and ways they may deal with them.
- Using trauma-focused Cognitive Behavioral Therapy and other psychotherapies.
- The Collaborative Problem Solving (CPS) approach is a trauma informed philosophy and approach that can reduce challenging behaviors and improve outcomes with youth in foster care.

Have non medication strategies been considered and implemented before using a psychotropic medication?

When a child has an identified mental health condition and is receiving psychotropic medications, practices that should be documented:

- The provider is aware of key elements of the child's history;
- The provider discusses non medical strategies to address challenges
- The medical recommendations include risks, benefits, or alternatives to the plan.
- The treatment plan identifies trauma history and other environmental factors in a child's life
- The treatment plan identifies the child's strengths
- The treatment plan identifies the child's triggers.

Information

- DHS Staff
  - Trauma training
    - Trauma Informed Oregon
    - Involve PSU training
      - Establishing curriculum
      - Establishing methods of consistent training
  - CPS training
    - Work with OHSU CPS advisory committee to develop curriculum and strategy for implementation
  - Medication / health care training
    - In place, improving process and materials
    - Created tip sheets
    - Consultation and second opinions now starting with OPAL K (December 2014).

Information

- Providers:
  - Dashboards are going to Providers and CCOS
    - Some CCOs are starting Q I projects using the data
  - Trauma informed clinics and clinicians
    - TIO focused on provider training primary and secondary
  - Evidence Based Guidelines
    - OPAL K guidelines are being vetted by OCCAP and published on the web site
    - Providers are given guidelines after OPAL K calls

Annual: Pediatric Polypharmacy Clinician Questionnaire

DIVISION OF MEDICAL ASSISTANCE PROGRAMS
Policy & Planning Section
John A. Kitzhaber, MD, Governor

Oregon Health Authority

Date: 1/14/2014

Attention:

Fax:

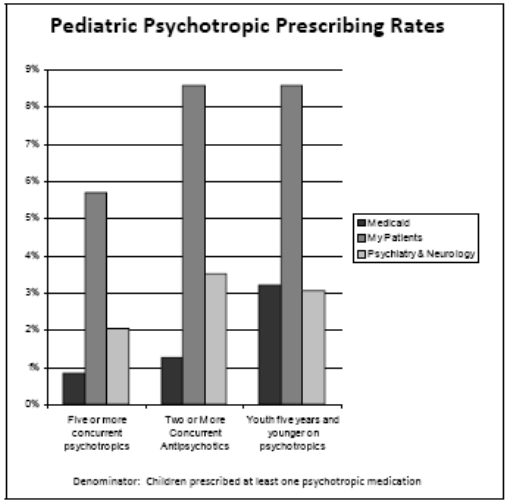
Your Patients Subject to Psychotropic Case Reviews

The Division of Medical Assistance Programs (DMAP) is requesting additional clinical data for patients meeting one or more of the following criteria:

- Five or more chronic psychotropics in children
- Two or more chronic antipsychotics in children
- Psychotropics in children under 6 years old (except stimulants in children 3-5)

The chart on the right shows your prescribing patterns for Medicaid patients. Prescribing patterns for your specialty (as indicated by NPI number when available) and rates across all providers are included for your reference

The intention of this program is not to prohibit these regimens. The goal is to promote continuity and quality of care through centralized monitoring and support. The therapeutic goals of psychopharmacologic therapy, especially in foster children, are not always effectively communicated between clinicians due to a variety of factors within and outside of the control of clinicians and caregivers.



Following is a list of patients with a recent (within 90 days) prescription written by you subject to this policy. Please complete these forms and fax to DMAP at 503-947-2596.

DIVISION OF MEDICAL ASSISTANCE PROGRAMS
Policy & Planning Section
John A. Kitzhaber, MD, Governor

Oregon Health Authority

Patient [redacted] DOB 4/21/2008 (6 yrs old) Member ID [redacted]

Please answer the questions below and fax to DMAP at 503-947-2596.

If you have any questions or comments regarding this policy, please call 503-945-6513 or fax 503-947-2596. Additional pages may be used if more space is required.

1. The indication(s) and target symptoms for all psychotropics current prescribed to this patient by any provider

Most Recent Prescriber	Last Fill Date	Drug Strength	Dose	Indication(s) Target Symptoms
[redacted]: Psychiatry & Neurology	10/16/2013	ARIPIPRAZOLE 2 mg TABLET	1 units/day	
[redacted]: Psychiatry & Neurology	1/1/2014	GUANFACINE 2 mg TAB ER 24H	1 units/day	
[redacted]: Psychiatry & Neurology	12/16/2013	RISPERIDONE 0.25 mg TABLET	4 units/day	

2. Please answer each of these questions which apply to this patient
   a. Explain why 5 or more psychotropics are required for this patient

   b. Explain why two concurrent antipsychotics are being used

   c. Explain why psychotropics are being used in a child under five years old

3. Please indicate the psychosocial intervention strategies being used for this patient. If none are being used, please explain why.

4. As applicable to the currently prescribed medications, please indicate the last evaluation for metabolic and cardiovascular risk (laboratory monitoring and physical assessment) and therapeutic/toxic plasma concentrations.

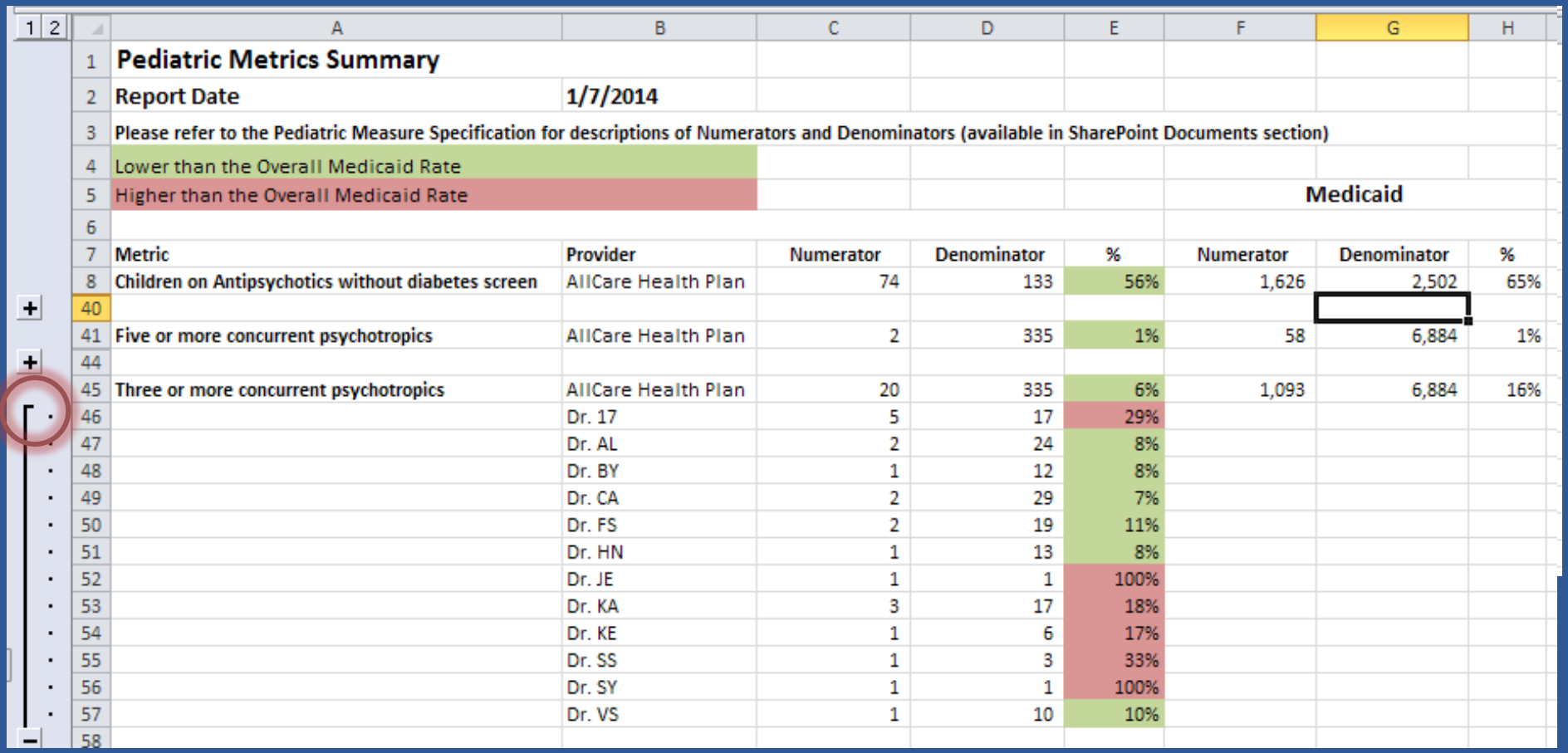
5. Who is the provider primarily tasked with care coordination? What barriers, if any, make care coordination challenging?

6. Does the child, parents and/or caregivers understand the risks, benefits and alternatives to this strategy?

Please check all that apply

- ☐ This Information was useful
- ☐ This Information will change my future practice
- ☐ Other _____
- ☐ Not my patient/no longer my patient
- ☐ Patient Deceased
- ☐ Neither clinician or patient with this office

Dashboard Metric Summaries for CCOs



	A	B	C	D	E	F	G	H
1	**Pediatric Metrics Summary**							
2	**Report Date**	**1/7/2014**						
3	**Please refer to the Pediatric Measure Specification for descriptions of Numerators and Denominators (available in SharePoint Documents section)**							
4	Lower than the Overall Medicaid Rate							
5	Higher than the Overall Medicaid Rate					**Medicaid**		
6								
7	**Metric**	**Provider**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
8	**Children on Antipsychotics without diabetes screen**	AllCare Health Plan	74	133	56%	1,626	2,502	65%
40								
41	**Five or more concurrent psychotropics**	AllCare Health Plan	2	335	1%	58	6,884	1%
44								
45	**Three or more concurrent psychotropics**	AllCare Health Plan	20	335	6%	1,093	6,884	16%
46		Dr. 17	5	17	29%			
47		Dr. AL	2	24	8%			
48		Dr. BY	1	12	8%			
49		Dr. CA	2	29	7%			
50		Dr. FS	2	19	11%			
51		Dr. HN	1	13	8%			
52		Dr. JE	1	1	100%			
53		Dr. KA	3	17	18%			
54		Dr. KE	1	6	17%			
55		Dr. SS	1	3	33%			
56		Dr. SY	1	1	100%			
57		Dr. VS	1	10	10%			
58								

Metabolic Monitoring of Antipsychotics

DIVISION OF MEDICAL ASSISTANCE PROGRAMS
Policy & Planning Section
John A. Kitzhaber, MD, Governor

Oregon Health Authority

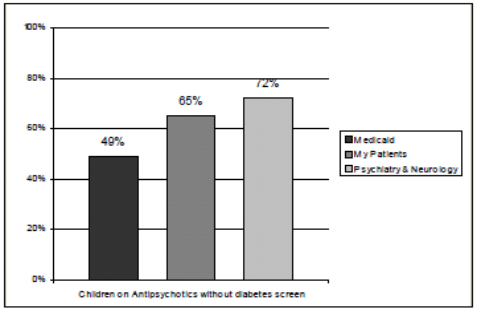
Attention: 1/15/2014

Fax:

Your pediatric patients receiving antipsychotics without claims for routine glucose monitoring

The FDA issued a safety warning for all second generation antipsychotics recommending monitoring of blood glucose. Careful monitoring for metabolic abnormalities (body composition, lipids, glucose, blood pressure) is the standard of care when prescribing antipsychotics.

The following pages contain a list of Fee-For-Service (FFS) Medicaid patients that you are identified by the pharmacy claim as the most recent prescriber of an antipsychotic and who do not have annual glucose screening claims. We understand claims data do not always reflect actual testing, that laboratory claims may be delayed and errors are made in prescriber identification.



The chart above reflects the proportion of patients without annual glucose screening who recently filled an antipsychotic prescription indicating you are the prescriber. For your reference, overall Medicaid rates and, when available, rates for your specialty are included.

Consensus Development Conference on Antipsychotic Drugs and Obesity and Diabetes (2004) Diabetes Care, 27(2), 596-601

	Baseline	4 wks	8 wks	12 wks	Quarterly	Annually	Q 5 Yr
Personal/ Family History	X					X	
Weight	X	X	X	X	X		
Waist Circumference	X			X		X	
Blood Pressure	X			X		X	
Fasting Blood Glucose	X			X		X	
Lipids	X			X			X

If you have any questions or comments regarding this policy or would like a claims-based profile for any of these patients, please call 503-945-6513 or fax 503-947-2596.

Please check all that apply

- ☐ This Information was useful
- ☐ This Information will change my future practice
- ☐ Other _____

Please indicate the status of this required laboratory work and fax this report within 30 days to DMAP at 503-347-1119.

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Metabolic Syndrome Detection and Management

The 2007 International Diabetes Federation[1] consensus guidelines for the diagnosis of metabolic syndrome in children synthesized recommendations from the ADA, the World Health Organization, and National Cholesterol Education Program (see table below).

- Weight is not a reliable surrogate marker for glucose and lipid irregularities. Waist circumference predicts metabolic syndrome similarly to body mass index when gender, age and ethnic group have been considered.[1]
- The metabolic effect profiles vary from one antipsychotic to another thus changing antipsychotics is an option to manage metabolic abnormalities for some patients.[2]
- A meta-analysis found individual and group non-pharmacological interventions such as cognitive behavioral therapy and diet and exercise counseling reduce mean body weight (-2.56kg) and BMI (-0.91kg/m^2) in adults, but studies in children are lacking.[3]
- Pharmacologic strategies to mitigate weight gain include:[4]
  - Metformin may prevent new weight gain in antipsychotic-naïve patients and patients who have gained weight due to antipsychotic therapy.[5,6]
  - A recent meta-analysis found only metformin, d-fenfluramine, and topiramate superior to placebo at reducing weight gain.[7]
  - Methylphenidate, dextroamphetamine, amantadine, orlistat, famotidine and rosiglitazone **all failed to show significant advantages** compared to placebo.[7,8]

Changes in metabolic parameters in antipsychotic naïve children and adolescents after 12 weeks

Metric	Medication	Mean	(95% CI)	p Value
Weight (kg)				
	Aripiprazole	4.44	(3.71 to 5.18)	<.001
	Olanzapine	8.54	(7.38 to 9.69)	<.001
	Quetiapine	6.06	(4.90 to 7.21)	<.001
	Risperidone	5.34	(4.81 to 5.87)	<.001
	Untreated	0.19	(-1.04 to 1.43)	0.77
Waist, cm				
	Aripiprazole	5.4	(2.87 to 7.93)	<.001
	Olanzapine	8.55	(7.43 to 9.67)	<.001
	Quetiapine	5.27	(4.07 to 6.47)	<.001
	Risperidone	5.1	(4.49 to 5.71)	<.001
	Untreated	0.7	(-0.87 to 2.27)	0.4
Glucose, mg/dL				
	Aripiprazole	0.54	(-2.85 to 3.93)	0.76
	Olanzapine	3.14	(0.69 to 5.59)	0.02
	Quetiapine	2.64	(-0.65 to 5.93)	0.12
	Risperidone	1.14	(-0.84 to 3.12)	0.26

Critera for Metabolic Syndrome in Children and Adolescents

Age group (years)	Obesity Waist Circumference‡	Plus two or more of the following	Triglycerides	HDL-C	Blood pressure	Fasting Plasma Glucose
6–<10	>=90th percentile		Metabolic Syndrome cannot be diagnosed in this age group, but additional testing may be warranted for patients with a family history of risk factors			
10–<16	>=90th percentile or adult cut-off whichever is lower		>=150 mg/dL	<40 mg/dL	Systolic >=130mmHg or Diastolic >=85mm Hg	>=100 mg/dL or T2DM
16+ (Adult criteria)	Male >= 90 cm¥ Female >=80 cm¥		>=150 mg/dL	Male <40 mg/dL Female <50 mg/dL	Systolic >=130mmHg or Diastolic >=85mm Hg	>=100 mg/dL
			Or Active Lipid Treatment		Or Active Treatment	Or T2DM

HDL-C, high-density lipoprotein cholesterol; T2DM, type 2 diabetes mellitus ¶Male Europids >=94cm, Male Japanese >=85cm, ¥ Female Japanese >=90cm, ‡Tables for waist Circumference Percentiles for American children by age, gender, and ethnic background available at: http://www.idf.org/webdata/docs/Mets_definition_children.pdf

1. Zimmet P, Alberti KGM, Kaufman F, et al. The metabolic syndrome in children and adolescents – an IDF consensus report. Pediatr Diabetes. 2007;8(5):299–306.
2. Correll C, Carlson HE. Endocrine and Metabolic Adverse Effects of Psychotropic Medications in Children and Adolescents. Am Acad Child Adolesc Psychiatry. 2006;45(7):771–791
3. Alvarez-Jimenez M, Hetrick SE, Gonzalez-Blanch C, Gleeson JF, McGorry PD. Non-pharmacological management of antipsychotic-induced weight gain: systematic review and meta-analysis of randomised controlled trials. Br J Psychiatry. 2008;193(2):101–107.
4. Maayan L, Vakhrusheva J, Correll CU. Effectiveness of Medications Used to Attenuate Antipsychotic-Related Weight Gain and Metabolic Abnormalities: A Systematic Review and Meta-Analysis. Neuropsychopharmacology. 2010;35(7):1520–1530.
5. Klein DJ, Cottingham EM, Sorter M, Burton B, Morrison JA. A Randomized, Double-Blind, Placebo-Controlled Trial of Metformin Treatment of Weight Gain Associated with Initiation of Atypical Antipsychotic Therapy in Children and Adolescents. Am J Psychiatry. 2006;163(12):2072–2079.
6. Arman S, Sadramely MR, Nadi M, Koleini N. A randomized, double-bline, placebo-controlled trial of metformin treatment for weight gain associated with initiation of risperidone in children and adolescents. Saudi Med J. 2008;29(8):1130–1134.
7. Maayan L, Correll CU. Weight gain and metabolic risks associated with antipsychotic medications in children & adolescents. J Child Adolesc Psychopharmacol. 2011;21(6):517–535.
8. Penzner JB, Dudas M, Saito E, et al. Lack of effect of stimulant combination with second-generation antipsychotics on weight gain, metabolic changes, prolactin levels, and sedation in youth with clinically relevant aggression or oppositionality. J Child Adolesc Psychopharmacol. 2009;19(5):563–573.

Please indicate the status of this required laboratory work and fax this report within 30 days to DMAP at 503-347-1119.

Consent

- Modified process:
- Clinician PARC (informs) with child and caregiver
- Form (173C) was changed to include line for youth and caregiver to sign for acknowledgement and *assent*

  - Caregiver provides information to caseworker/supervisor (verbal and written 173C)
  - Supervisor and caseworker reviews information (department protocols)
  - Caseworker notifies caregiver when and if to proceed with medication regime

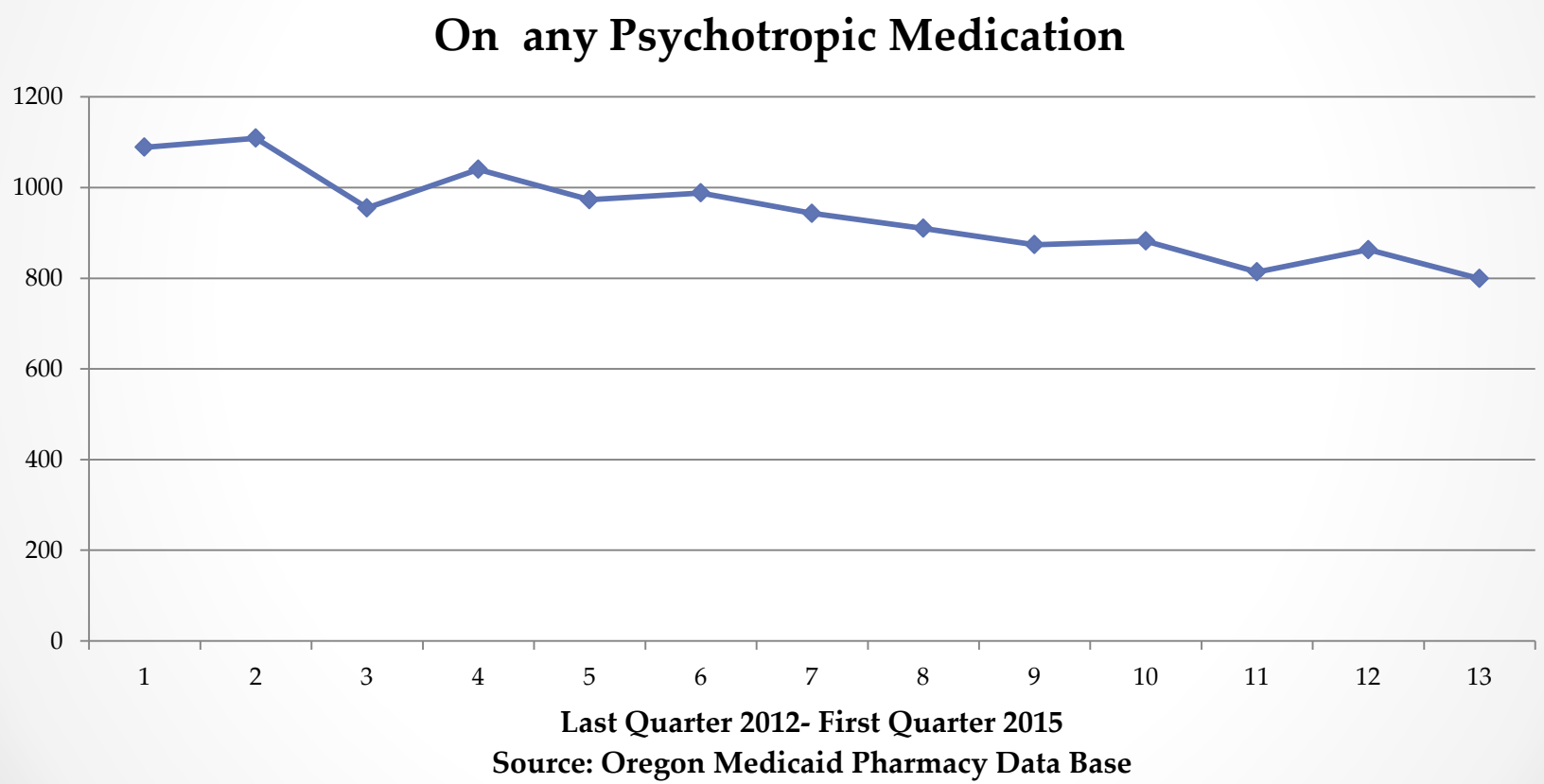
Clinical Practice

- Disseminate Prescribing Flags
  - Poly pharmacy greater than 4
  - Two or more medications in the same class
  - Antipsychotic prescribing without metabolic monitoring.
  - Medication for children under six other than stimulants
  - Antipsychotics
    - Under six
    - Multiple
    - Longer than 6 months without a diagnosis

Clinical Practice

- Oversight
  - Still considering a pre authorization process for oversight of requests for new antipsychotic for any child and any psychotropic for a child under the age of 6 (except stimulant)
  - Dashboards to providers
  - Dashboards to CCOs
  - When flags triggered
    - Communicate with provider
    - Peer review via OPAL K
    - Option for tele medical evaluation now available

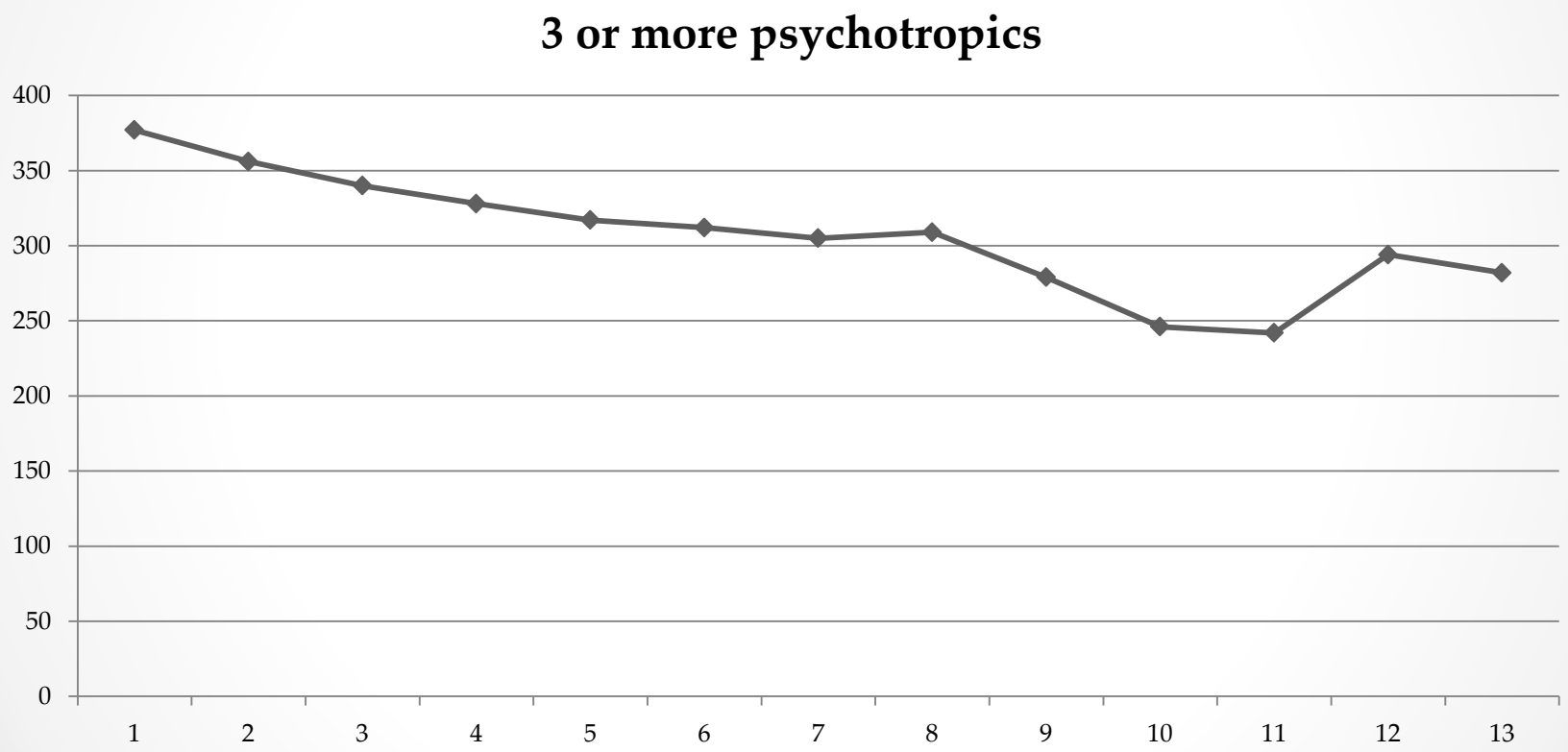
Youth in Foster Care



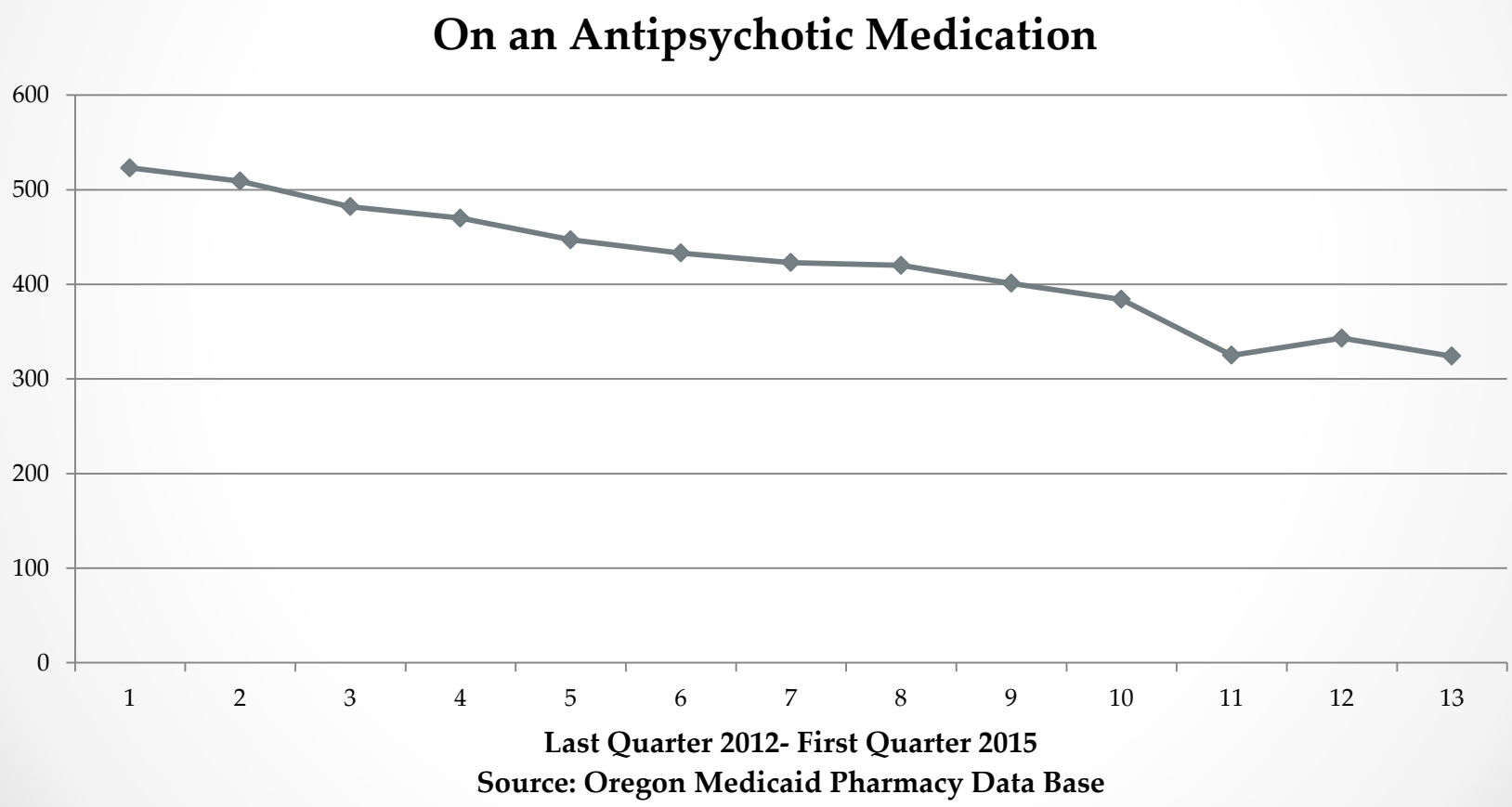
Last Quarter 2012- First Quarter 2015

Source: Oregon Medicaid Pharmacy Data Base

Youth in Foster Care

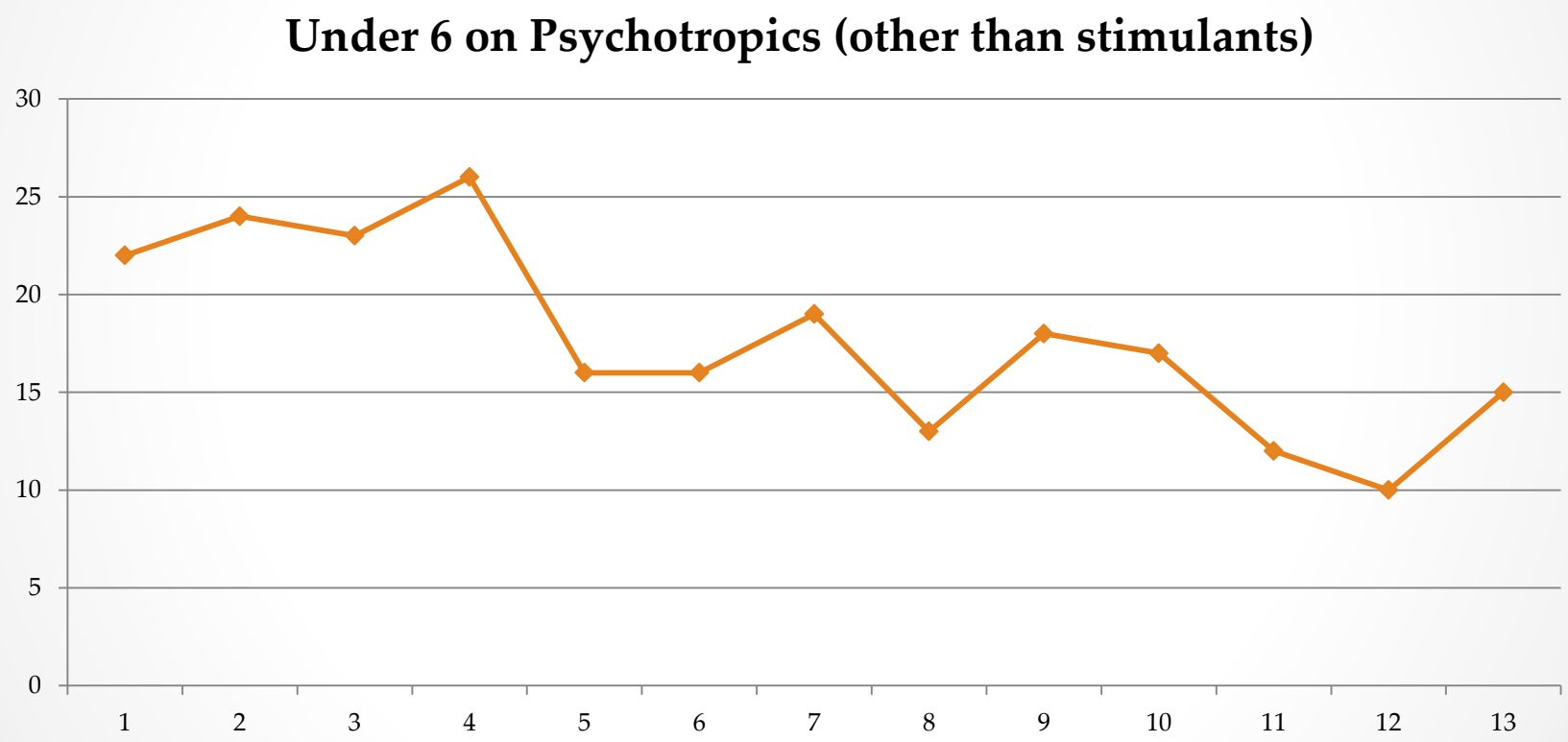


Youth in Foster Care



Last Quarter 2012- First Quarter 2015
Source: Oregon Medicaid Pharmacy Data Base

Youth in Foster Care



Last Quarter 2012- First Quarter 2015
Source: Oregon Medicaid Pharmacy Data Base

Recommended Reading

- **Guide for Advocates and Care Givers**

https://www.childwelfare.gov/pubs/factsheets/mhc-caregivers/