

Wyoming's Experience with Child Psychotropic Medications and Consultation Services

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Disclosures

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A Little Bit About Wyoming

- 10th largest state in the US
- Smallest state population in the US
 - 582,000 (137,000 kids)
 - ~6 people per square mile
 - Largest city ~62,000 people



Wyoming and “Frontier” Experiences

- About 3% of the US population lives in a “frontier” county
- In Wyoming, 74% live in a “frontier” county
 - Next closest are Montana 54% and Alaska 52%
- Per the National Center of Frontier Communities, a “frontier” county is defined as:
 - County with low population (i.e. <6 people per sq. mile)
 - Significant travel distance to nearest services
 - Nearest population centers are of small size
 - Relative lack of paved roads

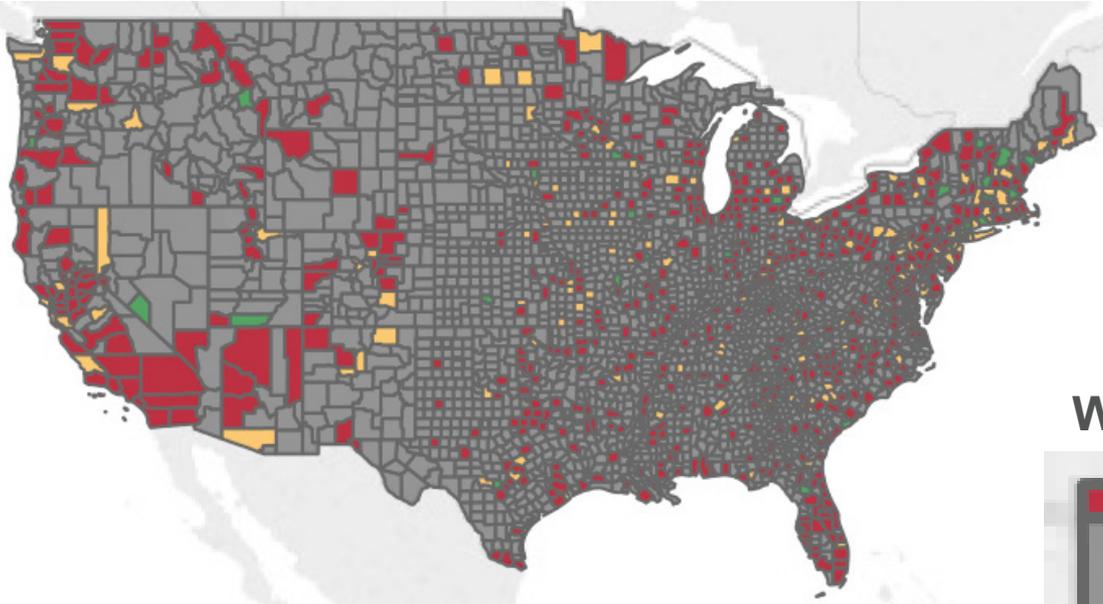
The Wyoming Department of Health's Programming



System of Consultation Services

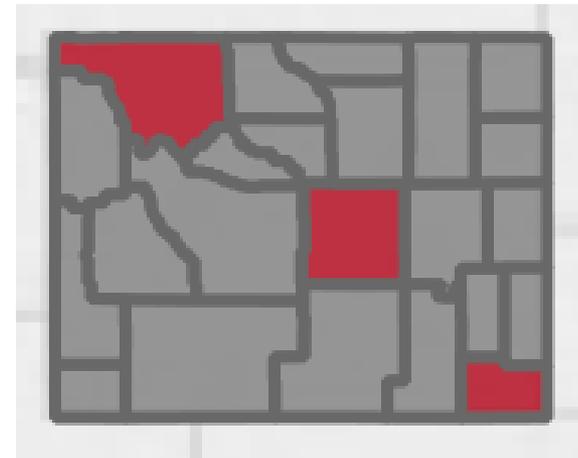
- WY DOH observed persisting challenges in
 - Child psychiatrist access,
 - Outlier prescribing practices for children,
 - High rate of out of home PRTF placements
- Collaboration started in 2011 with Wyoming's state medical school partner at University of Washington (the WWAMI system) and Seattle Children's Hospital

Practicing Child Psychiatrists in 2015



Grey = county with no child psychiatrists

Wyoming has total of 6

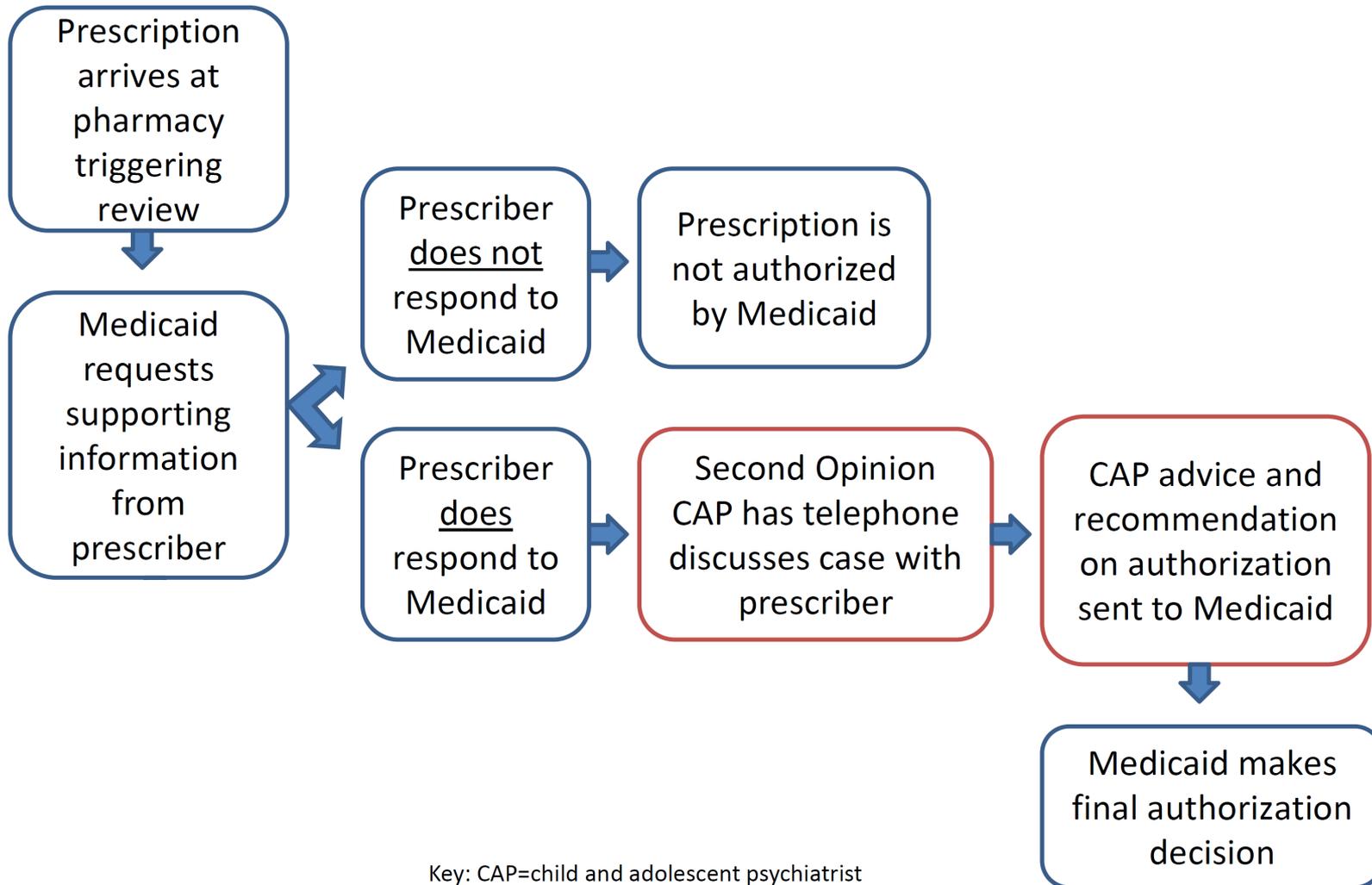


Source: aacap.org

Result of the State's Planning Phase

- Three Programs with Seattle Children's
 - Medication 2nd opinion reviews
 - Partnership Access Line (PAL)
 - Multi-disciplinary Team (MDT) Psychiatric Consults

Medication 2nd Opinion Reviews



Key: CAP=child and adolescent psychiatrist

Antipsychotic Reviews

Dose review thresholds established by DUR and OPS:

Antipsychotic Drug	Max Dose, Age <13 Years	Max Dose, Age 13-17 Years
Abilify® (aripiprazole)	23 mg per day	45 mg per day
Geodon® (ziprasidone)	180 mg per day	180 mg per day
Invega® (paliperidone)	18 mg per day	18 mg per day
Risperdal®/M-Tab® (risperidone)	5 mg per day	5 mg per day
Seroquel®/XR (quetiapine)	600 mg per day	900 mg per day
Saphris (asenapine)*	30 mg per day	30 mg per day
Zyprexa®/Zydis® (olanzapine)	15 mg per day	30 mg per day

*Non-preferred agents require a prior trial of ALL preferred agents at max doses.

Non-preferred = ABILIFY Oral disintegrating tablet, FANAPT (iloperidone), LATUDA, (lurasidone), SAPHRIS (asenapine), and SEROQUEL XR

ADHD Medication Reviews

ADHD Drug	Max Dose, Age >5
Adderall	90 mg per day
Adderall XR	45 mg per day
Concerta	135 mg per day
Daytrana	45 mg per day
Dexedrine	90 mg per day
Focalin	30 mg per day
Focalin XR	45 mg per day if <13 yr 60 mg per day if >14 yr
Metadate CD* or ER	90 mg per day
Methylin ER	135 mg per day
Ritalin	135 mg per day
Ritalin LA*	90 mg per day
Ritalin SR	135 mg per day
Strattera	150 mg per day
Vyvanse	105 mg per day

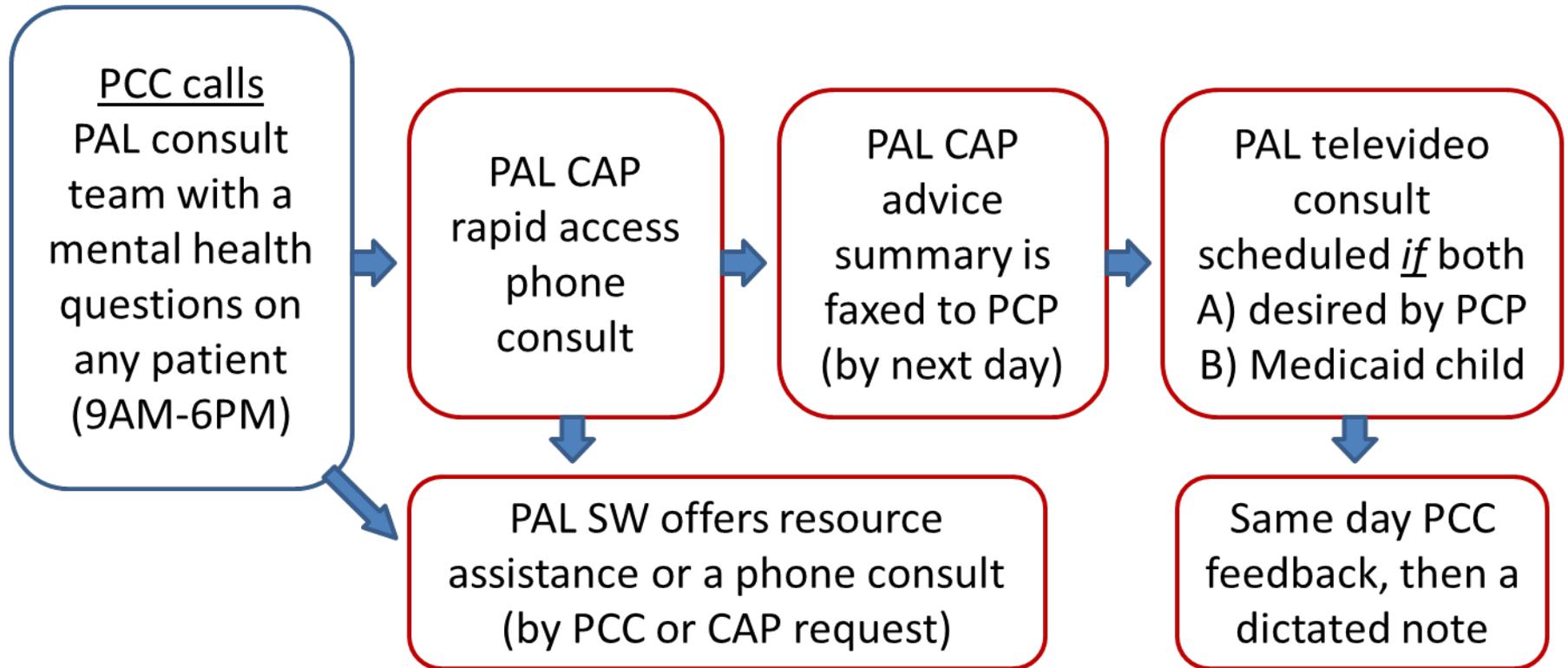
Also review if:

1. Five or more concurrent psychiatric medications (after 60 days)
2. Any stimulant use for age <4 years

Review Recommendations

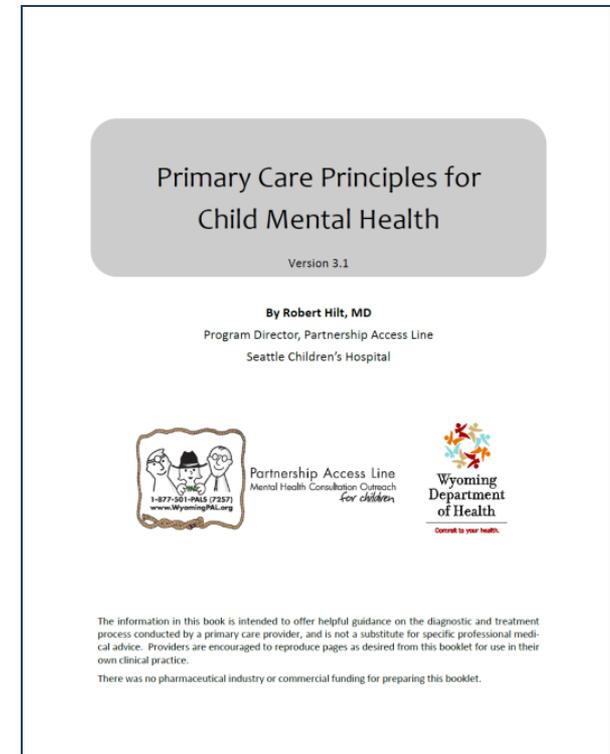
- Who got reviewed
 - Providers: 48% psychiatrists, 40% primary care
 - Patients: 37% 0-5yr, 23% 6-12yr, 34% 13-18yr. 66% male.
- For which trigger
 - 60% high dose
 - 37% young age
 - 3% polypharmacy
- Reviews recommended:
 - 2/3 to approve as prescribed
 - 1/6 to temporarily approve (while care changes proceed)
 - 1/6 to deny authorization

Providers also have the Elective PAL Phone Consult System



Other Aspects of PAL

- Psychiatric care education conferences, cat. I, free for providers
 - Initially 3, now 2 times a year
- Provide an expert reviewed care guide for primary care
 - Also at wyomingpal.org and seattlechildrens.org/pal
- Quarterly fidelity audits and team consult approach to ensure consistent care



Care Guide Content Examples

Anxiety Resources

Information for F

Books parents may find helpful:

[Freeing your Child from Anxiety](#) (2004), by Tamar Chansky

[Helping Your Anxious Child](#) (2008), by Rapee, PhD, Wignall Lyneham, PhD

[Worried No More: Help and Hope for Anxious Children](#) (2004), by John March, MD

[Talking Back to OCD](#) (2006), by John March, MD

[Freeing Your Child from Obsessive-Compulsive Disorder](#) (2004), by John March, MD

Books children may find helpful:

[What to Do When You Worry Too Much](#) (2005), by Dawn Huebner, PhD

[What to Do When You Are Scared and Worried](#) (2004), by Dawn Huebner, PhD

Websites parents may find helpful:

Anxiety Disorders Association of America
www.adaa.org

Children's Center for OCD and Anxiety
www.worrywisekids.org

Child Anxiety Network
www.childanxiety.net/Anxiety_Disorders.htm

American Academy of Child and Adolescent Psychiatry
www.aacap.org/cs/AnxietyDisorders.ResourceCenter

National Institute of Mental Health
www.nimh.nih.gov/health/topics/anxiety-disorders/index

Pediatric Symptom Checklist-17 (PSC-17)

Caregiver Completing this Form: _____ Date: _____
Name of Child: _____

		Please mark under the heading that best fits your child		
		NEVER	SOMETIMES	OFTEN
1.	Fidgety, unable to sit still			
2.	Feels sad, unhappy			
3.	Daydreams too much			
4.	Refuses to share			
5.	Does not understand other people's feelings			
6.	Feels hopeless			
7.	Has trouble concentrating			
8.	Fights with other children			
9.	Is down on him or herself			
10.	Blames others for his or her troubles			
11.	Seems to be having less fun			
12.	Does not listen to rules			
13.	Acts as if driven by a motor			
14.	Teases others			
15.	Worries a lot			
16.	Takes things that do not belong to him or her			
17.	Distracted easily			
(scoring totals)				

Scoring:

- Fill in unshaded box on right with: "Never" = 0, "Sometimes" = 1, "Often" = 2
- Sum the columns.
PSC17 Internalizing score is sum of column I
PSC17 Attention score is sum of column A
PSC17 Externalizing score is sum of column E
PSC-17 Total Score is sum of I, A, and E columns

Suggested Screen Cutoff:
PSC-17 - I ≥ 5
PSC-17 - A ≥ 7
PSC-17 - E ≥ 7
Total Score ≥ 15
Higher Scores can indicate an increased risk of a behavioral health disorder.

PSC-17 may be freely reproduced.
Created by W Gardner and K Kelleher (1999), and based on PSC by M Jellinek et al. (1988)
Formatted by R Hill, inspired by Columbus Children's Research Institute formatting of PSC-17

Considering ADHD diagnosis?
Problem from inattention/hyperactivity?

Consider comorbidity or other diagnosis:
Oppositional Defiant Disorder
Conduct Disorder
Substance Abuse
Language or Learning Disability
Anxiety Disorder
Mood Disorder
Autistic Spectrum Disorder
Low Cognitive Ability/Mental Retardation

Diagnosis:
Preschoolers have some normal hyperactivity/impulsivity; recommend skepticism if diagnosing ADHD in this group. (Note that Medicaid may require a medication review if prescribing and child age <5)
If rapid onset symptoms, note this is not typical of ADHD

Use DSM-5 criteria:
Must have symptoms present in more than one setting
Symptom rating scale strongly recommended from both home and school
Vanderbilt ADHD Scale (many others available, for a fee)
If unremarkable medical history, neuro image and lab tests are not indicated
If significant concern for cognitive impairment, get neuropsychological/learning disability testing

Treatment: If diagnose ADHD

Mild impairment,
or no medication trial per family preference

Psychosocial Treatment
Behavior therapy
Behavior management training (essentially more effective time outs and rewarding positive behaviors)
Social skills training
Classroom support/communication
Give parent our parent handout resource list from this guide, to explain the above treatments

Significant impairment,
or psychosocial treatments not helping

Treat substance abuse, consider atomoxetine or alpha-2 agonist trial

Active substance abuse?

Monotherapy with methylphenidate or amphetamine preparation. Titrate up every week until maximum benefit (follow-up rating scales help)

If problem side effects or not improving, switch to the other stimulant class

If problem side effects, or not improving, switch to atomoxetine or alpha-2 agonist monotherapy

If no improvement, reconsider diagnosis. Medication combinations like alpha-2 agonist plus stimulant may be reasonable at this stage.

Primary References:

AACAP: "Practice Parameter for the Assessment and Treatment of Children and Adolescents with Attention Deficit/Hyperactivity Disorder." JAACAP 46(7): July 2007:894-921

AAP: "ADHD: Clinical practice guideline for the diagnosis, evaluation, and treatment of ADHD in children and adolescents." Pediatrics 128(5), November 2011: 1007-1022

Written Consult Follow-Up Notes

Faxed on next business day



Partnership Access Line
Mental Health Consultation Outreach
For children

Exxxx Bxxxxxxx
Xxxx xxxxx xxxx
xxxx, WA xxxxx
360-xxx-xxxx (Fax)

Dear Exxxx Bxxxxxxx,

On 1/4/2013 you had a telephone discussion with xxx xxxx of the Partnership Access Line regarding your patient xxxx xxxxxx. Based on the information you provided to our program, we offered some suggestions for how to better help xxxx. Below is a summary of those care suggestions as recorded by xxx xxxxx, which you might find helpful for future reference.

Particular non-medication interventions we recommended:

Psychiatric Evaluation - referrals already provided to family
Cognitive Behavior Therapy - for depression and anxiety; if self-harm is more chronic and prominent, consider Dialectical Behavioral Therapy

Psychosocial treatment advice discussed:

1. Pursue the excellent treatment plan that you have already laid out by obtaining a comprehensive psychiatric evaluation and follow up with the therapist to ensure evidence-based therapy is being conducted
2. Encourage the family to follow a crisis prevention plan: if one is not already in place, they should work with the therapist on one right away

Medication to consider stopping (in the next month), or to cancel plans to start:

Paxil - although the plan now is to stop it given more concerns about increased suicidality with Paxil and xxxx's perception that it is not helpful, Paxil can be reconsidered at a higher dose in the future if other antidepressants prove ineffective

Medication to consider starting (in the next month):

Prozac - can be helpful for depression and anxiety and potentially bulimia if there's significant bingeing and purging to qualify for the diagnosis

Ideas that were discussed for monitoring your patient:

1. Stop Paxil as planned and replace with Prozac as recommended: please refer to PAL Care Guide for details. If Prozac is not tolerated or ineffective, please call PAL for further recommendations if () does not already have a psychiatrist in place
2. Administer screening questionnaires from PAL Care Guide for depression, anxiety and eating disorder

Care Guide Components Recommended:

Depression, Anxiety, Eating Disorder

MDT Psychiatric Consultations

- DFS case worker or Guardians Ad Litem (GAL) makes request
 - Collect any pertinent collateral documents
- Coordinator sets up appointment
- Case worker and consultant speak for ~30min just before we meet patient
- Televideo full appointment at local DFS office
 - With caregiver, when possible
- Rapid feedback, then report written by next day

www.wyomingmdteval.org

What was Found by doing these Televideo MDT Consultations

- Children often had:
 - Unrecognized problems (i.e. anxiety)
 - High complexity (i.e. mean of 4 diagnoses/child)
 - Frequent desire by local teams for long term inpatient placements
 - ~80% of the initial referrals
 - Less frequently found need for inpatient placement
 - ~25% of our initial referrals
 - Translates to more care within community & financial savings

MDT Psychiatric Consult Feedback

- Initially: local team wariness about the program
- Now the DFS case workers praise the service
- Encouraging more appropriate use of local services
 - Keeping foster kids closer to their families

Positive Results from These Consultations

- Last year's analysis found:
 - MDT and PAL consults together yielded a 1.8 to 1 ROI
 - Greater use of appropriate local mental health services
 - Positive community feedback

Original Research

A Statewide Child Telepsychiatry Consult System Yields Desired Health System Changes and Savings

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Abstract

Background: Telepsychiatry has clinical efficacy with children, but questions remain about cost-effectiveness. State agencies and health systems need to know if a child telepsychiatry consult system can address system concerns and improve care quality while lowering costs. **Materials and Methods:** To assist care in a rural state with few child and adolescent psychiatrists, an academic center coordinated a consult system of (1) televideo consults for high-needs children with Medicaid and state Multidisciplinary Team (MDT)/foster care involvement, (2) remote medication reviews for beyond guidelines prescribing, and (3) elective community provider telephone-based consults. Consult service data were collected and analyzed with Wyoming's Medicaid and Foster Care Divisions between the program start in January 2011 until March 2013. **Results:** There were 229 televideo MDT/foster care consults, 125 mandatory medication reviews, and 277 elective phone consultations supporting community providers during this period. Following implementation, the number of Medicaid children ≤ 5 years of age using psychotropic medications decreased by 42% ($p < 0.001$), and the number of children using psychotropic doses $> 150\%$ of the Food and Drug Administration maximum decreased by 52% ($p < 0.001$). Televideo consults redirected 60% of children slated by caseworkers for a psychiatric residential treatment facility admission into alternative community treatment and placements. A financial return on investment was 1.82 to 1 for combined services. **Conclusions:** This coordinated child telepsychiatry consult system for a state Medicaid division reduced outlier pediatric psychiatric medication prescribing, supported local community-delivered treatments, and reduced unnecessary hospitalizations in a financially advantageous manner that was well received by the practice community.

Key words: telepsychiatry, pharmacy, behavioral health, pediatrics, telemedicine

Introduction

Limited access to skilled psychiatric care for children, especially access to child psychiatrists, is a major systems problem.^{1,2} Although half of all lifetime mental illness begins by 14 years of age, less than a quarter of these children are identified and treated.^{3,4} Specialists like child psychiatrists are poorly distributed and thus are difficult to access in rural and low-income areas.⁵

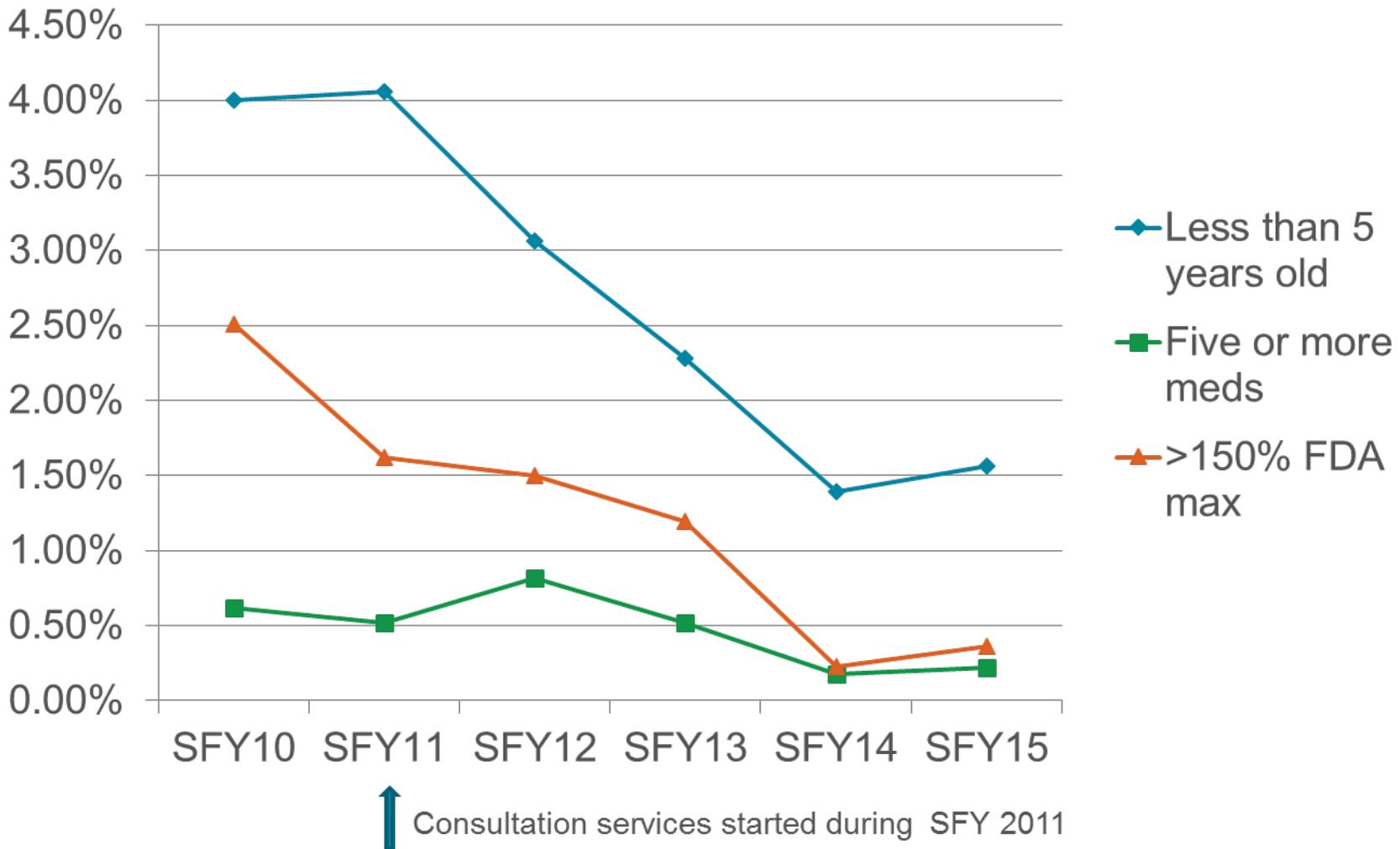
Without quality service access, a child's treatment plan might over-rely on the use of psychiatric medications. State and federal agencies are investigating if this is one reason why children with Medicaid coverage are more likely than other children to receive psychotropics, as well as twice as likely to receive antipsychotics.^{6,6} Increased prevalence of children receiving psychiatric medications at very high doses or at a very young age is a concern when that use is ineffective or creates unnecessary side effects.⁷⁻⁹ Concerns like these have led to all U.S. states now being required to monitor psychiatric medication use for children in foster care.¹⁰

The demand for child psychiatric hospitalizations increases when local services are limited, when the child is living in a rural location, or when the child is receiving fewer community services.¹¹⁻¹³ Receiving appropriate mental health services and high-quality treatment planning may, in turn, reduce intensive and unnecessary child psychiatric inpatient care.¹³

Telepsychiatry addresses regional access and care quality challenges like those described above. Outcome studies show that child telepsychiatry assessment and treatment compare favorably with in-person care.^{14,15} Although telepsychiatry systems include additional technology and administrative costs, reductions in patient transportation costs and provider overhead may offset these expenses.¹⁶⁻¹⁸ Because insurers and payers may not be directly responsible for those transportation expenses, the payer appeal of telepsychiatry increases if or when cost savings for health systems are identified.

Wyoming is a large and very rural state, with the smallest total state population and only 6 residents per square mile (the U.S. state average is 87 per square mile).¹⁹ In 2010, Wyoming state agencies identified three areas of concern: (1) child psychotropic medications prescribed at high doses, in high numbers, or for children under 5 years of age; (2) long-term psychiatric hospitalizations suspected as due to poor community child psychiatrist access; and (3) primary care providers requested additional child mental health supports. Long-term psychiatric hospitalization in psychiatric residential treatment facilities (PRTFs) was a particular concern because the state's total number of reimbursed bed days had increased by 54% between Fiscal Years 2008 and 2010.²⁰

All State Medicaid Psychiatric Medication Users ≤ 21 years of age



State Data on Psychiatric Medication Users

	All Medicaid clients ≤ 21 prescribed psychotropics	All foster care clients ≤ 21 prescribed psychotropics	≤ 5years old All Medicaid psychotropic users	≤ 5years old Foster client psychotropic users
SFY10	5450	1056	218 (4.0%)	7 (0.66%)
SFY11	5616	1075	228 (4.06%)	7 (0.65%)
SFY12	5617	1073	172 (3.06%)	5 (0.47%)
SFY13	5533	1062	126 (2.28%)	11 (1.04%)
SFY14	5559	1102	77 (1.39%)	5 (0.45%)
SFY15	5569	1068	87 (1.56%)	9 (0.84%)

State Data (continued)

	≥ 5 meds All Medicaid psychotropic users	≥ 5 meds Foster client psychotropic users	>150% FDA max All Medicaid psychotropic users dose	>150% FDA max Foster client psychotropic Dose
SFY10	34 (0.62%)	0 (0.0%)	137 (2.51%)	24 (2.27%)
SFY11	29 (0.52%)	1 (0.09%)	91 (1.62%)	15 (1.4%)
SFY12	46 (0.82%)	1 (0.09%)	84 (1.50%)	17 (1.58%)
SFY13	29 (0.52%)	1 (0.09%)	66 (1.19%)	11 (1.04%)
SFY14	10 (0.18%)	4 (0.36%)	13 (0.23%)	2 (0.18%)
SFY15	12 (0.22%)	5 (0.47%)	20 (0.36%)	0 (0.0%)

Current State with Foster Care

- ~30% of children in Wyoming foster care receive psychiatric medications (2013)
 - Not known if this is too much, too little, or just right
 - There is no accepted “best practice” overall medication use rate in foster care

Driver Diagrams



1. Identify Overall Aim /Measure(s) to improve:

Improve Compliance with all measures recommended by Seattle in the children identified by TMTMTY.

Baseline rate (date):

Target rate (date):

2. Who will take action?



Key Stakeholders

3. How can each actor/stakeholder contribute



Goals

4. How can you assess/track how each stakeholder is doing?



Measure and/or data

5. What can the state do to drive each stakeholder towards the goals?



**State Affinity Group Participant
Levers of Influence**

Office of Pharmacy services	Identify those children who trigger the TMTMTY criteria, and refer them to both SCH and Magellan	Numbers who trigger in each category	
SCH	Identify Medical and Psychosocial recommendations.	Be available for PAL and video consults	
Case management	Track compliance with each recommendation	Sort CME candidates vs Optum referrals. Track compliance with each recommendation.	Track changes based on recommendations and barriers to compliance. Track CANS and POC outcomes .

1. Identify Overall Aim /Measure(s) to improve:

Improve compliance with all SCH recommendation (Continued).

Baseline rate (date):

Target rate (date):

2. Who will take action?



Key Stakeholders

3. How can each actor/stakeholder contribute



Goals

4. How can you assess/track how each stakeholder is doing?



Measure and/or data

5. What can the state do to drive each stakeholder towards the goals?



State Affinity Group Participant
Levers of Influence

<p>PCP's</p>	<ul style="list-style-type: none"> Compliance with recommendations 	<ul style="list-style-type: none"> Track changes based on recommendations 	<ul style="list-style-type: none"> Provider education. Case management support.

1. Identify Overall Aim /Measure(s) to improve:

Safe monitoring HEDIS measures for ADHD and Antipsychotics

Baseline rate (date):

Target rate (date):

2. Who will take action?



Key Stakeholders

3. How can each actor/stakeholder contribute



Goals

4. How can you assess/track how each stakeholder is doing?



Measure and/or data

5. What can the state do to drive each stakeholder towards the goals?



State Affinity Group Participant
Levers of Influence

OPS

- Identify all new prescriptions for Stimulants and antipsychotics

AIMS unit

- Take Pharmacy list and search for corresponding CPT codes

CM teams and PCP's

- Educate PCP on measure, verify if was done.

- Track HEDIS compliance numbers.

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