

# Best Practices for Medication Management for Children & Adolescents in Foster Care

October 2015



## Introduction

There are typically over 10,000 children in foster care in North Carolina on any given day. These children have special health care needs. Often because of the circumstances that led them to be placed into foster care, their physical, developmental, mental/social-emotional and oral health care has been inconsistent and sometimes impacted by crisis or injury.

According to national data, children in foster care are more likely to have a behavioral health (BH) diagnosis than other children, with one study reporting 63% of kids age 14 to 17 in foster care met criteria for at least one BH diagnosis at some point in their lifetime <sup>1</sup>. With more BH diagnoses come more psychotropic medications that kids in foster care are receiving. A 2008 study of children in foster care taking psychotropic medication found 21.3% were receiving monotherapy (one class of psychotropic medication), 41.3% were taking three or more classes of psychotropic medications, 15.4% were taking medication from four or more classes, and 2.1% were taking five or more classes of psychotropic drugs <sup>2</sup>. Though children often have complex symptoms and multiple conditions, there is little evidence of the effectiveness of treatment with multiple medications. What's more, taking multiple meds increases the likelihood of drug interactions and other adverse effects.

This document was developed by Community Care of North Carolina with the assistance of the Medication Management Sub-Group of the Fostering Health NC initiative, a project of the North Carolina Pediatric Society, that is focused on building and strengthening medical homes for infants, children, adolescents and young adults in foster care through integrated communications and coordination of care through a unique partnership among local Departments of Social Services, CCNC Networks, the pediatric care team, the child and the child's family.

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## **Psychotropic Medications Key Information**

**Purpose:** This document is designed for any reader of this document and provides foundational information about psychotropic medications.

## **Definition of Psychotropic Medication:**

Capable of affecting the mind, emotions, and behavior; denoting drugs used in the treatment of mental illnesses <sup>3</sup>.

## **Common Classes of Psychotropic Medications:**

- Antipsychotics
- ADHD medications
- Anti-depressants
- Mood stabilizers
- Anxiety medications

## Educational Resources for Psychotropic Medications Used for Children 4-7:

- 1. Psychotropic Medication Utilization Parameters for Children and Youth in Foster Care, Sep. 2013.
  - Psychotropic medication tables with information including: clinical indications for use, drug name, initial and maximum dosage, dose schedule, monitoring, black box warning, and precautions/warnings:
  - <a href="https://www.dfps.state.tx.us/documents/Child">https://www.dfps.state.tx.us/documents/Child</a> Protection/pdf/TxFosterCareParameters-September2013.pdf
- 2. Los Angeles County Department of Mental Health Parameters 3.8 for Use of Psychotropic Medication in Children and Adolescents, December 2014.
  - Psychotropic medication tables with information including: drug name and drug class, clinical indications for use, drug interactions, complications/side effects, cautions/contraindications, medical work-up, medical follow-up, dosage, dose schedule, adverse effects, and special considerations:
  - http://file.lacounty.gov/dmh/cms1\_191102.pdf
- 3. John's Hopkins Guide to Psychopharmacology for Pediatricians
  - A guide for pediatricians when considering psychiatric medications that would be most appropriate for Primary Care Clinicians to prescribe:
  - http://web.jhu.edu/pedmentalhealth/Psychopharmacolog%20use.html
- 4. Appropriate Use of Psychotropic Drugs in Children and Adolescents: A Clinical Monograph. Magellan Health Services, 2013.
  - Psychotropic medication tables with information including: drug name, FDA Approval Age/Indication, pediatric dosage, black box warning, precautions/warnings, drug class typical side effects, pregnancy information, and monitoring/monitoring frequency:
  - <a href="https://www.openminds.com/wp-content/uploads/indres/magellan-psychotropicdrugs-020314.pdf?status=free">https://www.openminds.com/wp-content/uploads/indres/magellan-psychotropicdrugs-020314.pdf?status=free</a>



# "Red Flag" Medication Review Guidelines for Children & Adolescents in Foster Care

**Purpose**: To assist Prescribers, Pharmacists, and DSS Staff (in consultation with pharmacist or prescriber) with the identification of "Red Flag" criteria which may be potentially harmful to the child/adolescent while reviewing their medications.

"Red Flag" criteria indicate a <u>need to review the child/adolescent's</u> clinical status in order to verify the medication regimen is accurate and appropriate. These parameters <u>do not</u> necessarily indicate that treatment is inappropriate, but they do indicate a <u>need for further review</u>. Page 13 and 14 (Medication Management Protocols) explain how Providers, Pharmacists, and DSS Staff can use these "Red Flag" criteria.

For a child/adolescent being prescribed a psychotropic medication, any of the following suggests the need for additional review of a patient's clinical status:

#1: <b>Absence of a thorough assessment</b> for the DSM-5 diagnosis (es) in the	YES
child/Adolescent's medical record.	NO
#2: Four (4) or more psychotropic medications prescribed at the same time (medications being prescribed to deal with the side effects of the primary medication are not included in this count (i.e., benztropine, diphenhydramine, trihexyphenidyl)).	YES NO
<ul> <li>#3: Prescribing of: <ul> <li>Two (2) or more concomitant stimulants *1, or</li> <li>Two (2) or more concomitant alpha agonists 2, or</li> <li>Two (2) or more concomitant antidepressants 3, or</li> <li>Two (2) or more concomitant antipsychotics 4, or</li> <li>Three (3) or more concomitant mood stabilizers 5</li> </ul> </li> <li>* The prescription of a long-acting stimulant and an immediate release stimulant of the same chemical entity (e.g., methylphenidate) does not constitute concomitant prescribing.</li> <li>* Wote: When switching psychotropic medications, medication overlaps (where one medication overlaps with another medication for a period of time) and cross taper (slowly decreasing the dose of one medication while slowly increasing the dose of another medication) should occur in a timely fashion, generally within 4 weeks.</li> </ul>	YES NO
#4: Psychotropic medications are prescribed for children of very young age, including children receiving the following medications with an age of:  • Stimulants ¹: Less than three (3) years of age  • Alpha Agonists ²: Less than four (4) years of age  • Antidepressants ³: Less than four (4) years of age  • Antipsychotics ⁴: Less than four (4) years of age  • Mood Stabilizers ⁵: Less than four (4) years of age	YES NO



#5: The prescribed psychotropic medication is not consistent with appropriate care for the patient's diagnosed mental disorder** or with documented target symptoms usually associated with a therapeutic response to the medication prescribed (i.e. medication isn't usually used to treat diagnosed mental disorder or symptoms).	□ YES □ NO
** See page 4 for resources that include information about clinical indications for use.	
#6: Psychotropic polypharmacy (2 or more medications) for a given mental disorder is prescribed before utilizing psychotropic mono-therapy (single medication).	□ YES □ NO
#7: The psychotropic medication dose exceeds usual recommended doses***  (FDA and/or literature based maximum dosages).  *** See page 4 for resources that include information about maximum dosages.	□ YES □ NO
#8: Prescribing by a primary care provider who has not documented previous specialty training for a diagnosis other than the following (unless recommended by a psychiatrist consultant):  • Attention Deficit Hyperactive Disorder (ADHD)  • Uncomplicated Anxiety Disorders  • Uncomplicated Depression	□ YES □ NO
#9: Antipsychotic medication(s) prescribed continuously without appropriate monitoring of glucose and lipids at least every 6 months.	□ YES □ NO
#10: Psychotropic medication therapy for longer than 6 months without reevaluation of the need for the medication.	□ YES □ NO
#11: Psychotropic medication(s) prescribed without co-occurring counseling or psychotherapy.	□ YES □ NO

This resource was adapted from the <u>Psychotropic Medication Utilization Parameters for Children and Youth in Foster Care (September 2013)</u> that was developed by the Texas Department of Family and Protective Services and The University of Texas at Austin College of Pharmacy. Any changes, and additional criteria were decided upon by the Medication Management Subgroup of the Fostering Health NC Initiative, a project of the North Carolina Pediatric Society. This project is focused on building and strengthening medical homes for infants, children, adolescents, and young adults in foster care through integrated communications and coordination of care through a unique partnership among local Department of Social Services, Community Care of North Carolina Networks, the pediatric care team, the child, and the child's family.



<sup>&</sup>lt;sup>1</sup> Examples of **stimulants** include methylphenidate, (Ritalin®, Concerta®), dexmethylphenidate (Focalin®), lisdexamfetamine (Vyvanse®), and amphetamine mixed salts (Adderall®).

<sup>&</sup>lt;sup>2</sup> Examples of **alpha agonists** include Guanfacine ER (Intuniv®) and clonidine ER (Kapvay®).

<sup>&</sup>lt;sup>3</sup> Examples of **antidepressants** include Escitalopram (Lexapro®), Sertraline (Zoloft®), fluoxetine (Prozac®), and Trazodone.

<sup>&</sup>lt;sup>4</sup> Examples of **antipsychotics** include Risperidone (Risperdal®), olanzapine (Zyprexa®), Aripiprazole (Abilify®), and Ouetiapine (Seroquel®).

<sup>&</sup>lt;sup>5</sup> Examples of **mood stabilizers** include Divalproex (Depakote®), lithium, Lamotrigine (Lamictal®), and carbamazepine (Tegretol®, Equetro®).

# "High Alert" Medication Review Guidelines - for Children & Adolescents in Foster Care

**Purpose**: To assist DSS staff with a child transitioning into foster care, or changing placements, to make sure the child has needed medication in a timely fashion to prevent adverse events as a result of being without or not taking the medication.

## Medications listed are separated into three categories:

- Medications that can cause withdrawal symptoms if stopped abruptly (benzodiazepines, antidepressants, stimulants, atomoxetine, opioids, baclofen, phenobarbital)
- Medications that would be risky to stop due to potential disease re-occurrence (diabetic agents, antiepileptic's, maintenance asthma inhalers, Pancrelipase, airway clearance therapies, antibiotics, hydroxyurea, endocrine agents, antipsychotics, oral contraceptives)
- Medications that might be needed in an emergency (rescue asthma inhalers, Epi-pen®, triptans)

DSS staff should use this sheet in combination with the Community Care of North Carolina Provider Portal\* when a child first comes into DSS custody or is moved to a different placement. If the child appears to be taking any of these classes of medications consistently within the past 60 days, DSS staff should contact the medical home as soon as possible to get these medications filled in order to prevent adverse effects.

<b>Condition</b>	"High Alert" Medication (Note: List is Not all-inclusive)			
	Medications that cause withdrawal symptoms if stopped abruptly	Medications risky to stop due to potential disease re- occurrence	Medications that might be needed in an emergency	
Diabetes (Type I and II)		Insulin Glyburide Glipizide Metformin		
Seizure Disorder	Phenobarbital	Divalproex (Depakote®) Lamotrigine (Lamictal®) Oxcarbazepine (Trileptal®) Levetiracetam (Keppra®)		
Asthma Inhalers (Acute/rescue)			Albuterol inhalers  ○ ProAir®  ○ Proventil®  ○ Ventolin®	
Asthma Inhalers (maintenance)		Beclomethasone (QVAR®) Budesonide (Pulmicort®)		
Asthma oral medications		Montelukast (Singulair®)		
Schizophrenia/Bipolar Disorder/Autism Spectrum Disorders - antipsychotics		Risperidone (Risperdal®) Aripiprazole (Abilify®) Quetiapine (Seroquel®) Olanzapine (Zyprexa®)		
Allergy requiring treatment of anaphylaxis (i.e., bee sting)			Epi-pen® Epi-pen JR®	



<u>Condition</u>	"High Alert" Medication (Note: List is Not all-inclusive)			
Anxiety/Depression (treated with medication)	Antidepressants  Escitalopram (Lexapro®)  Sertraline (Zoloft®)  Fluoxetine (Prozac®)  Trazodone  Benzodiazepines  Alprazolam (Xanax®)  Lorazepam  Clonazepam  Diazepam			
Endocrine		Levothyroxine (Synthroid®) Methimazole Propylthiouracil Hydrocortisone Desmopressin		
Infection - Antibiotics		Amoxicillin Azithromycin Cefdinir Amoxicillin/clavulanate (Augmentin®) Trimethoprim/ sulfamethoxazole (Bactrim®) Clindamycin		
ADHD	Stimulants  Methylphenidate (Ritalin®, Concerta®)  Dexmethylphenidate (Focalin®)  Lisdexamfetamine (Vyvanse®)  Amphetamine mixed salts (Adderall®)  Others  Atomoxetine (Strattera®)			
Sickle Cell Disease/Pain	Opioids  Oxycodone/APAP  (Percocet®, Roxicet®)  Hydrocodone  (Vicodin®, Lortab®)	Maintenance Hydroxyurea (+ folic acid) Penicillin (up to age 5)		
Migraine Headaches – Triptans			Sumatriptan (Imitrex®) Zolmitriptan (Zomig®)	
Cerebral Palsy	Baclofen			



<b>Condition</b>	"High Alert" Medication (Note: List is Not all-inclusive)		
Pancreatic Insufficiency	Pancrelipase  O Pertzye®  O Ultresa®  O Creon®  O Pancreaze®  O Zenpep®		
Cystic Fibrosis	Airway Clearance Therapies  O Albuterol O HyperSal® O Pulmozyme®  Aerosolized Antibiotics O Cayston® O TOBI®		
Oral Contraceptives	Ortho Tri-Cyclen® TriNessa® Tri-Sprintec® Activella® Loestrin® Junel®		

<sup>\*</sup>To learn more about accessing Provider Portal, see *Accessing CCNC Provider Portal - w/Executed TECCA* at <a href="https://www.ncpeds.org/county-dept-social-services-professionals-online-library">www.ncpeds.org/county-dept-social-services-professionals-online-library</a>

<u>Disclaimer</u> – It is important that a child continue to take all prescribed medications as directed; however this list indicates some medications that could be potentially problematic if stopped abruptly.

<u>Please Note:</u> This is <u>NOT</u> an all-inclusive list.



# "High Alert" Medication Review Quick Guide - for Children & Adolescents in Foster Care

**Purpose**: To assist DSS staff with a child transitioning into foster care, or changing placements, to make sure the child has needed medication in a timely fashion to prevent adverse events as a result of being without or not taking the medication.

#### Medications listed are separated into three categories:

- 1. Medications that can cause withdrawal symptoms if stopped abruptly (benzodiazepines, antidepressants, stimulants, atomoxetine, opioids, baclofen, phenobarbital)
- 2. Medications that would be risky to stop due to potential disease re-occurrence (diabetic agents, antiepileptic's, maintenance asthma inhalers, Pancrelipase, airway clearance therapies, antibiotics, hydroxyurea, endocrine agents, antipsychotics, oral contraceptives)
- 3. Medications that might be needed in an emergency (rescue asthma inhalers, Epi-pen®, triptans)

DSS staff should use this sheet in combination with the Community Care of North Carolina Provider Portal\* when a child first comes into DSS custody or is moved to a different placement. If the child appears to be taking any of these classes of medications consistently within the past 60 days, DSS staff should contact the medical home as soon as possible to get these medications filled in order to prevent adverse effects.

\*To learn more about accessing Provider Portal, see *Accessing CCNC Provider Portal - w/Executed TECCA* at www.ncpeds.org/county-dept-social-services-professionals-online-library

<u>Disclaimer</u> – It is important that a child continue to take all prescribed medications as directed; however this list indicates some medications that could be potentially problematic if stopped abruptly.

<u>Please Note:</u> This is <u>NOT</u> an all-inclusive list.

Abilify® (2)	Dexmethylphenidate (1)	Lorazepam (1)	Ritalin® (1)
Activella® (2)	Diazepam (1)	Lortab® (1)	Roxicet® (1)
Adderall® (1)	Divalproex (2)	Metformin (2)	Seroquel® (2)
Albuterol (2)	Epi-pen® (3)	Methimazole (2)	Sertraline (1)
Alprazolam (1)	Epi-pen JR® (3)	Methylphenidate (1)	Singulair® (2)
Amoxicillin (2)	Escitalopram (1)	Montelukast (2)	Strattera® (1)
Amphetamine mixed	Fluoxetine (1)	Olanzapine (2)	Sumatriptan (3)
salts (1)	Focalin® (1)	Ortho Tri-Cyclen® (2)	Synthroid® (2)
Aripiprazole (2)	Glipizide (2)	Oxcarbazepine (2)	TOBI® (2)
Atomoxetine (1)	Glyburide (2)	Oxycodone/APAP (1)	Trazodone (1)
Augmentin® (2)	Hydrocodone (1)	Pancreaze® (2)	Trileptal® (2)
Azithromycin (2)	Hydrocortisone (2)	Penicillin (2)	Trimethoprim/
Baclofen (1)	Hydroxyurea+folic acid (2)	Percocet® (1)	sulfamethoxazole (2)
Bactrim® (2)	HyperSal® (2)	Pertzye® (2)	TriNessa® (2)
Beclomethasone (2)	Imitrex® (3)	Phenobarbital (1)	Tri-Sprintec® (2)
Budesonide (2)	Insulin (2)	ProAir® (3)	Ultresa® (2)
Cayston® (2)	Junel® (2)	Propylthiouracil (2)	Ventolin® (3)
Cefdinir (2)	Keppra® (2)	Proventil® (3)	Vicodin® (1)
Clavulanate (2)	Lamictal® (2)	Prozac® (1)	Vyvanse® (1)
Clindamycin (2)	Lamotrigine (2)	Pulmicort® (2)	Xanax® (1)
Clonazepam (1)	Levetiracetam (2)	Pulmozyme® (2)	Zenpep® (2)
Concerta® (1)	Levothyroxine (2)	Quetiapine (2)	Zolmitriptan (3)
Creon® (2)	Lexapro® (1)	QVAR® (2)	Zoloft® (1)
Depakote® (2)	Lisdexamfetamine (1)	Risperdal® (2)	Zomig® (3)
Desmopressin (2)	Loestrin® (2)	Risperidone (2)	Zyprexa® (2)



# "High Alert" Medication Review for a Child/Adolescent Transitioning into Foster Care or Changing Foster Care Placement

Review to be completed by - Prescribers/Pharmacists

<u>Purpose</u>: To assist Prescribers and Pharmacists with a child transitioning into foster care, or changing placements, to make sure the child has needed medication in a timely fashion to prevent adverse events as a result of being without or not taking the medication. This form should be used in combination with Community Care of North Carolina Provider Portal\* and filled out by a Prescriber or Pharmacist. Once completed, it should be given to the DSS staff member who is caring for the child in order for them to assist the child in obtaining any needed medication.

<u>Note</u>: If this form is filled out by a prescriber, it would be helpful to the DSS staff member who is caring for the child to also include prescriptions for any needed medications.

Att	: DSS Case Worker			DSS County	
DSS Telephone:				DSS Fax No	
Nar	ne Child/Adolescents			D.O.B	
Dear		(DSS	Case Wor	ker/Superviso	r),
		with			, a
oract		twork in			
		, DOB/MID:			n Provider Portal and have the
		regarding acuity of medication need nedications for one or more of the		. ,	er Primary Care Provider.
Fo	ster Child's Medical (	Condition		Foster Child's	s Medication(s)
	Diabetes (Type I and II)	)			
	Seizure Disorder (antic	onvulsants)			
	Asthma (acute/rescue,	maintenance)			
	Anxiety/Depression (tr	eated with medication)			
	Allergy requiring treati	ment of anaphylaxis (i.e., bee sting)			
	Pancreatic Insufficiency	y (pancreatic enzyme supplements)			
	Cystic Fibrosis				
	Infection (antibiotics)				
	ADHD (stimulants, ator	noxetine)			
□ Sickle Cell Disease/Pain (opioids, hydroxyurea, etc.)					
	Migraine Headaches (ti	riptans)			
	□ Cerebral Palsy (baclofen)				
	Endocrine (levothyroxi	ne, hydrocortisone, etc.)			
	Schizophrenia/Bipolar (antipsychotics, mood s	Disorder/Autism Spectrum Disorder stabilizers)	rs		
	Oral Contraceptives				
	Other (specify):				



Date:

#### Recommended to obtain medications noted above:

- □ Urgently / As soon as possible (ASAP)
- □ Within 48-72 hours (2-3 days)
- □ Within 1 week
- □ Not needed until next scheduled visit

#### According to the AAP Standards of Care:

- 1. The "Initial Visit", to address acute care needs, should occur <u>within 72 hours of placement</u> into foster care (NC Division of Social Services policy directs that this visit is scheduled within seven days of entry into care).
- 2. A 30-day "Comprehensive Visit" should occur within 30 days of placement into foster care, unless medically necessary to see the child sooner.

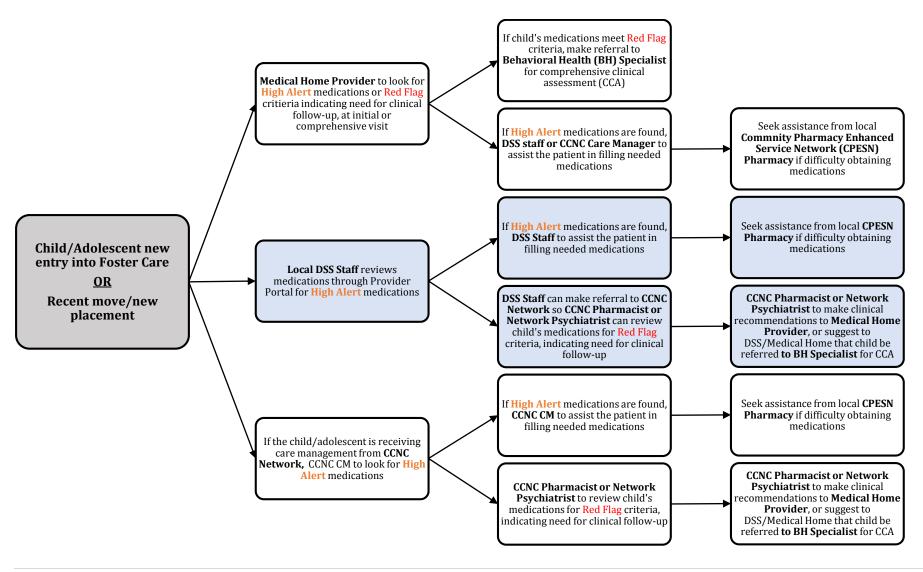
I may also include a **Portal Patient Care Team and Medication Report** for this child/Adolescent, which includes pharmacy information for the medications noted above. Please contact me if you have any further questions.

Recommendations & Review done by:				
Provider's Name:		Date:	_/	_/
Provider's Tel No.:	Fax No.:			
Provider's E-mail Address:				

\* To learn more about accessing Provider Portal, see *Accessing CCNC Provider Portal - w/Executed TECCA* at www.ncpeds.org/county-dept-social-services-professionals-online-library

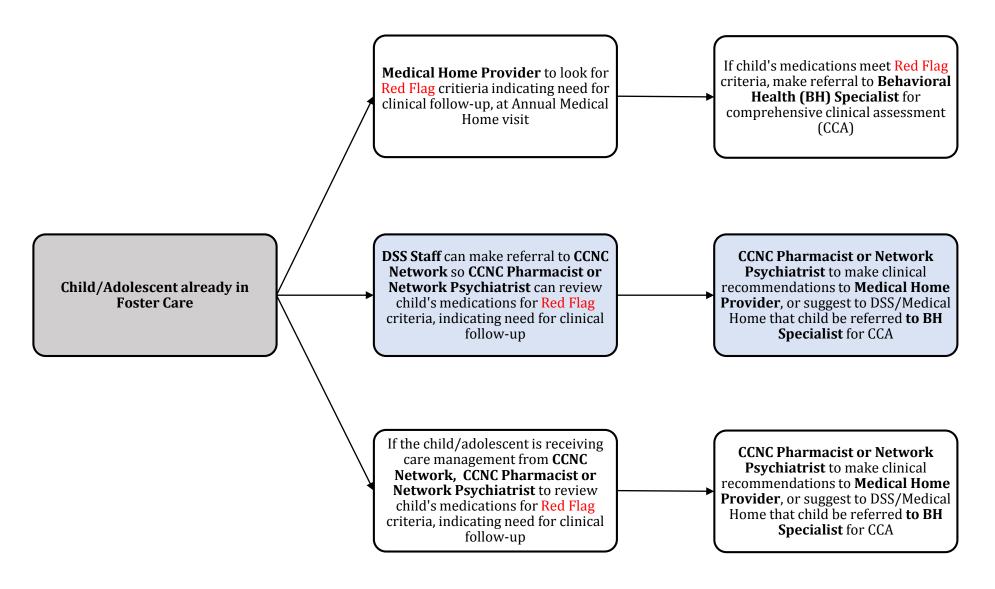


# Protocol for a Child or Adolescent who is <u>New</u> to Foster Care or has recently <u>Changed</u> <u>Placements</u> (i.e. gone to a new foster home, group home, returned home.)





## Protocol to follow for Child/Adolescent Already in Foster Care System







## **Community Pharmacy Enhanced Services Network**

Integrating pharmacy services, medical services, and behavioral health

In 2014, Community Care of North Carolina (CCNC) created the **Community Pharmacy Enhanced Services Network** (CPESN), an open network of 200+ (and growing) North Carolina pharmacies committed to broadening the availability of medication management resources to our state's highest-needs population. The goal of the CPESN is to improve quality of care and patient outcomes related to medication use, enhance patients' overall health trajectory and reduce the total cost of care.

Community pharmacists are ideal partners for this effort, as North Carolina Medicaid claims data indicate that the portion of the population most in need of medication management visits a local pharmacy <u>more than 35 times annually</u>.

Key to the CPESN approach is active integration of pharmacist activity with the larger care team, including the primary care physicians, specialty providers such as behavioral health professionals, and the extended care team of the Patient Centered Medical Home. Each local Community Care network identifies a lead pharmacist and care manager for the CPESN, along with other clinicians ready to provide additional support as needed.

In September 2014, CCNC was awarded a grant from the Centers for Medicare and Medicaid Innovations (CMMI) under the second round of Health Care Innovations Awards aimed at transforming financial and clinical models of care for specific providers. CMMI funds will help support the innovative service model of the CPESN.

## How can CPESN help Behavioral Healthcare providers?

- The CPESN is a <u>collaborative care partnership</u> that better supports the pharmaceutical needs of your Medicaid patients at no additional cost to them.
- CPESN pharmacies have access to <u>detailed medication data</u> through a system called PHARMACeHOME.
- Pharmacists help <u>educate and engage your patients</u>, leading to <u>improved patient compliance with treatment plans</u>. CPESN pharmacists can help patients understand the benefits and potential side effects of medications and over-the-counter products and how to take each safely.
- CPESN pharmacies <u>help strengthen your ongoing professional relationship with the patient</u> by treating all patients with respect and offering a safe, convenient and confidential setting to discuss medications and related issues.

CPESN core services include medication fill synchronization, adherence monitoring, adherence coaching, compliance packaging, home delivery, comprehensive medication review, care plan development and reinforcement and clear communication back to the provider. Many CPESN pharmacies offer broader services as well, including the additional services listed on the following page.



## **Optional Enhanced Services Provided by CPESN Pharmacies**

- 24-hour Emergency Service/On Call Dispensing and Non-Dispensing
- Adherence Packaging
- Collection of Vital Signs or Standardized Assessments (PHQ, etc.)
- Comprehensive Medication Review
- Home Delivery
- Medication Synchronization Program
- Medication Dispensing for Patients with Presumptive Medicaid Eligibility
- Smoking Cessation Program
- DME Billing Medicare and Medicaid
- Home Visits

- Care Plan Development/Reinforcement
- Point of Care Testing
- Immunizations Non-Medicaid
- In Depth Counseling/Coaching
- Long-Acting Injections
- Multi-Lingual Staff
- Naloxone Dispensing
- Nutritional Counseling
- Printout of Patient's Personal Medication Record
- Pre-filling Syringes for Oral Administration
- Specialty Pharmacy Dispensing
- Disease State Management Programs
- Compounding, Sterile and/or Non-Sterile

## How do I find the CPESN pharmacies in my area of North Carolina?

A list of CPESN pharmacies by county, along with the services that are offered by each, is available through your local CCNC Network. Patients may be referred to a CPESN pharmacy simply by the Network contacting the specific pharmacy chosen.

For more information about this program and what participation can mean for you and your patients, contact Jerry McKee Pharm.D., M.S., BCPP via phone at 919-516-8118 or email <a href="mailto:imckee@n3cn.org">imckee@n3cn.org</a>.

## **CPESN Success Story**

A CCNC Network Pharmacists received a call from the Foster Care Program Care Manager about an adolescent in foster care being discharged from a behavioral health (BH) facility in Columbia, SC. The DSS Case Worker who had traveled down to pick her up was not able to fill her discharge medications since the facility's Prescriber was not enrolled with NC Medicaid. The BH facility was unable to send her home with any medications to bridge her therapy until she could be linked to a Primary Care Physician so the child and DSS Case Worker were waiting at the facility until medication access could be obtained.

CCNC Pharmacist reached out to one of their CPESN pharmacy partners to explain the situation and request they use the organizational NPI of the facility to run the claims. The Foster Program Care Manager called the facility to request their NPI and have the prescriptions faxed to the CPESN Pharmacy.

The CPESN Pharmacy was even willing to run a test claim to ensure the patient's prescriptions were successfully covered before receiving the faxed prescriptions. The CCNC Pharmacist explained to the DSS Case Worker that she could bring the patient home and her prescriptions would be ready when they arrived. The willingness of the CPESN Pharmacy to go above and beyond resulted in no disruption of medication management for this complex patient transitioning back into the community.



## **Antipsychotics - Keeping it Documented for Safety (A+KIDS)**

### A+KIDS Project Re-launches June 5, 2015

Beginning on June 5, 2015, the Antipsychotics – Keeping It Documented for Safety (A+KIDS) program was relaunched for North Carolina Medicaid and Health Choice beneficiaries under age 18 years.

Providers will once again be able to document information regarding the efficacy of therapy (when antipsychotic therapy is utilized), side effects, and metabolic monitoring parameters (height/weight, lipid panel, and blood glucose). Once the information is submitted to the NCTracks web-based portal or phoned in successfully, the medication is authorized for 6 months. All antipsychotic therapy and clinical documentation is required to be authorized via the NCTracks portal (or via phone), irrespective of whether the medication use is FDA-approved or off-label.

Objectives of the A+KIDS NCTracks portal include improving the use of evidence-based safety monitoring for patients for whom an antipsychotic agent is prescribed, reduction of antipsychotic polypharmacy, and reduction of cases in which the FDA maximum dose is exceeded. It is a safety monitoring program designed to make sure that children enrolled in NC Medicaid and Health Choice who are prescribed an antipsychotic medication are monitored according to generally accepted guidelines.

The questions that providers are expected to document in the NCTracks portal are listed on the worksheet on the next page.

## **O & A for Providers**

### What will I need to do if I prescribe an antipsychotic for a child enrolled in the Medicaid program?

Beginning on June 5, 2015, you will need to go online and enter some basic information about the patient, medication, dose, diagnosis, etc. into the NCTracks provider portal. Data elements collected within the NCTracks portal reflect a generally accepted monitoring profile for the safety and efficacy of antipsychotic therapy, are typically collected as part of a routine exam, and should take no longer than 5 minutes to enter. The requirement of safety monitoring documentation in the NCTracks portal by the prescriber occurs when an antipsychotic agent is prescribed for any Medicaid or Health Choice beneficiary under age 18. Once the data is entered into the NCTracks portal, the pharmacy will have authorization to process the claim.

#### How do I enter the data online or by phone?

In order to have access to the NCTracks Provider portal, each Provider (NPI) must first complete the NCTracks Currently Enrolled Provider (CEP) Registration.

NCTracks enrolled providers may then enter the requested information by visiting the NCTracks Web Portal using your NCID and password (log in at <a href="https://www.nctracks.nc.gov/ncmmisPortal/login">https://www.nctracks.nc.gov/ncmmisPortal/login</a>).

The prior authorization (PA) may also be authorized by phone by calling CSC-NCTracks at 1-866-246-8505. Providers must be enrolled in Medicaid and have an NPI number in order to access the NCTracks phone option.

#### Use of Point of Sale (POS) Overrides

Point of sale (POS) overrides are available for pharmacies to use when the prescriber has not provided NCTracks portal documentation either electronically or by phone for the recipient. Use of overrides to successfully process a claim for an antipsychotic medication for NC Medicaid and Health Choice patients is restricted to 2 overrides per beneficiary per rolling calendar year. Pharmacists are encouraged to ensure that all providers are informed when the override option is utilized for their patient. Each override will apply to all claims for antipsychotic medication(s) on the same date of service.



## **Information Gathering Resource Tool for A+KIDS**

**Purpose**: This tool will assist Providers in collecting the necessary information to complete the required documentation for NCTracks Provider Portal when prescribing an antipsychotic for a child less than 18 years of age.

**Note:** There is NO fax option available for A+KIDS authorizations, so this form should NOT be used as a fax form.

Drug Information .
9. Drug Name: 10. Strength: 11. Quantity Per 30 Days:
12. Length of Therapy (in days): 180
13. Dosing Instructions:
Clinical Information
Select one of the primary psychiatric diagnosis:
a. Attention Deficit-Hyperactivity Disorder b. Bipolar Disorder c. Disruptive Behavior Disorder
d. Mood Disorder-NOS e. Any Pervasive Developmental Disorder f. PTSD g. Schizophrenia
h. Schizoaffective Disorder i. Tourette's Syndrome j. Other
2. Select one of the primary target symptoms:
a. Psychosis b. Mania c. Irritability d. Aggression e. Impulsivity f. Inattentiveness
g. Oppositional h. Other
3. Measurements: a. Height inches b. Weightlbs c. Date obtained//20
4. Labs: Complete results below (If labs have not been done move to Question #5)
Lipids: a. Date Obtained/20 Glucose: f. Date Obtained/20
b. TC level mg/dl
c. LDL level h. Fasting Yes No
d. HDL level
e. TG level
5. If labs were not completed, select one of the following reasons:
a. Not Clinically indicated b. Labs Pending c. Unable to obtain
6. Select one of the following clinical improvements since starting drug treatment:
a. Very much improved b. Much improved c. Modestly improved d. No change
e. Modestly worse f. Much worse g. Very much worse h. Not accessed/Not applicable
7. Adverse effects over the past week: (Select all that apply)
Daytime sedation: a. None b. Mild c. Moderate d. Severe
Significant restlessness: e. None f. Mild g. Moderate h. Severe
Stiffness/Dystonia/Tremor: i. None j. Mild k. Moderate I. Severe
Other Dyskinesia: m. None n. Mild o. Moderate p. Severe



# NC Medicaid and Health Choice Behavioral Health Preferred Drug List (PDL) Changes

## Effective November 1, 2015

The NC Medicaid Outpatient Pharmacy Program implemented changes to the PDL on Sunday, November 1, 2015. Included are some tips to help providers successfully navigate these transitions for their patients.

## **Summary**

Each year North Carolina Medicaid publishes its Preferred Drug List (PDL). The agents listed as preferred do not require prior authorization unless clinical criteria apply. The agents that are non-preferred will require a non-preferred drug request (prior authorization).

BH drug classes affected by PDL changes include:

- Antidepressants and Selective Serotonin Reuptake Inhibitors (SSRIs)
- Antipsychotics (oral and long-acting injections)
- ADHD Medications

## **Non-Preferred Drug Requests**

In order to request a non-preferred behavioral health drug for a NC Medicaid or Health Choice Beneficiary, the patient must have tried and failed 2 preferred agents, or have a contraindication to preferred agents, or have other clinically compelling rationale to remain on the non-preferred agent.

Please note that trial and failure of only one preferred agent is required for all oral and long-acting injection antipsychotic medications.

Requests may be submitted via phone or through the NCTracks Web Portal using your NCID and password (log in via <a href="https://www.nctracks.nc.gov/ncmmisPortal/login">https://www.nctracks.nc.gov/ncmmisPortal/login</a>).

## **NCTracks Pharmacy Page**

https://nctracks.nc.gov/content/public/providers/pharmacy.html

## **NCTracks Pharmacy Call Center**

**Phone:** 1-866-246-8505 **Fax:** 1-855-710-1969

Hours of operation: Monday - Friday: 7:00 AM to 11:00 PM & Saturday and Sunday: 7:00 AM to 6:00 PM

### 72-Hour Emergency Supply

Pharmacies may dispense an emergency 72-hour supply if a beneficiary is awaiting prior authorization (PA).

*Please Note:* If the 72-hour supply is for a C-II medication, the pharmacy will have to obtain a new prescription after the PA is approved, or they can reverse the 72-hour supply claim and bill for the entire prescription quantity for the original prescription.



# NC Medicaid and Health Choice Behavioral Health Preferred and Non-Preferred Medications

If a brand name drug is preferred when its equivalent generic is non-preferred, prior authorization is not needed. Likewise, "brand medically necessary" is NOT needed on the face of the prescription. If you are used to prescribing these medications using the generic medication name, you may continue to do so – pharmacies can substitute the preferred brand at the time of dispensing.

**PLEASE NOTE:** IF "Preferred" and "Non-Preferred" are contained on the same row, agents are considered therapeutic equivalents.

#### **ADHD Medications:**

Preferred	Non-Preferred
Adderall XR ®	Amphetamine Salt Combo XR capsules (Adderall XR®)
Amphetamine Salt Combo (Adderall®)	Adderall® (generic product per FDA)
Clonidine ER (Kapvay®)	
Kapvay ®	*******
Daytrana® Patch	
Desoxyn®	Methamphetamine (Desoxyn®)
Dexedrine Spansules®	Dextroamphetamine ER (Dexedrine Spansules®)
Dextroamphetamine (Dexedrine®)	
Dexedrine®	
Focalin®	Dexmethylphenidate (Focalin®)
Focalin XR®	Dexmethylphenidate ER (Focalin XR®)
Guanfacine ER (Intuniv®)	Intuniv®
Metadate CD®	Methylphenidate CD capsules (Metadate CD®)
Methylin® solution	Methylphenidate solution (Methylin® solution)
Methylphenidate ER (Ritalin SR®/Metadate ER®)	
Metadate ER®	
Methylphenidate ER—Actavis Product (Concerta®)	Concerta®
Methylphenidate ER—Mallinckrodt & Kreamer Urban Products (NOT EQUIVALENT to Concerta®)	
Methylphenidate (Methylin®/Ritalin®) Ritalin®	
Quillivant XR® Suspension	
Ritalin LA®	Methylphenidate LA capsules (Ritalin LA®)
Strattera®	*******
Vyvanse®	
	Evekeo®
	Dextroamphetamine solution (ProCentra®)
	ProCentra®
	Methylphenidate chewable tablets Methylin® chewable tablets
	Zenzedi®



## **Antidepressant Medications:**

Preferred	Non-Preferred
Bupropion IR, SR, XL (Wellbutrin®/SR®/XL®)	Wellbutrin®/ Wellbutrin SR®/ Wellbutrin XL®
Cymbalta®	
Duloxetine (Cymbalta®)	
Maprotiline (Ludiomil®)	
Mirtazapine ODT/tablet (Remeron®)	Remeron®
	Remeron® Solutab
Nardil® (phenelzine)	
Phenelzine (Nardil®)	
Parnate® (tranylcypromine)	
Tranylcypromine (Parnate®)	
Savella®	
Trazodone (Desyrel®)	******
Venlafaxine (Effexor®)	******
Venlafaxine ER capsules	Effexor XR® Capsules
	Venlafaxine ER tabs (Effexor XR Tablets®)
	Aplenzin® (bupropion hydrobromide)
	Brintellix® (vortioxetine)
	Desvenlafaxine ER (Pristiq®/Khedezla®)
	Pristiq®
	Khedezla®
	Emsam®
	Fetzima® (levomilnacipran)
	Forfivo XL® (bupropion)
	Nefazodone (Serzone®)
	Oleptro ER® (trazodone ER)
	Viibryd® (vilazodone)

## **Selective Serotonin Re-uptake Inhibitors (SSRIs):**

Preferred	Non-Preferred
Citalopram solution/tablet (Celexa®)	Celexa® solution/tablet
Escitalopram (Lexapro®)	Lexapro®
Fluoxetine capsule/solution/tablet (Prozac®)	Prozac®
Fluvoxamine (Luvox®)	
Paroxetine (Paxil®)	Paxil®
Sertraline solution/tablet (Zoloft®)	Zoloft® solution/tablet
	Brisdell® (paroxetine mesylate)
	Escitalopram solution (Lexapro® solution)
	Lexapro® solution
	Fluoxetine DR 90 (Prozac® Weekly)
	Prozac® Weekly
	Fluvoxamine ER (Luvox CR®)
	Paroxetine CR (Paxil CR®)
	Paxil CR®
	Pexeva® (paroxetine)
	Sarafem®



## **Antipsychotics (Oral):**

Preferred	Non-Preferred
Abilify®	
Clozapine (Clozaril®)	Clozaril®
Clozapine ODT (FazaClo®)	FazaClo®
Fanapt®	
Invega®	
Latuda®	
Olanzapine (Zyprexa®)	Zyprexa®
Olanzapine ODT (Zyprexa Zydis®)	Zyprexa Zydis®
Quetiapine (Seroquel®)	Seroquel®
Risperidone solution/tablet (Risperdal®)	Risperdal® solution/tablet
Risperidone ODT (Risperdal M®)	Risperdal M®
Saphris®	
Seroquel XR®	
Symbyax®	Olanzapine/fluoxetine (Symbyax®)
Ziprasidone (Geodon®)	Geodon®
	Fanapt® Titration Pack
	Versacloz® (clozapine suspension)
	Seroquel XR® Sample Kit

# **Antipsychotics (Long-Acting Injections):**

Preferred	Non-Preferred
Abilify Maintena®	
Fluphenazine decanoate (Prolixin decanoate®)	
Haldol decanoate®	
Haloperidol decanoate (Haldol decanoate®)	
Invega Sustenna®	
Invega Trinza®	
Risperdal Consta®	
Zyprexa Relprevv®	



# Questions DSS Social Workers and/or Resource Parents Can Ask of Treatment Providers Who Prescribe Psychotropic Medications <sup>5</sup>

- 1. Are there behavioral interventions that might be tried before medication is used, or effectively used in combination with medication, which may help to lower the required medication dose?
- 2. Does research support the use of the recommended medication for a child that is my child's age and with similar needs?
- 3. How does medication fit within the overall treatment plan and how will we coordinate with other treatment, such as therapy, school behavior plans, and more?
- 4. Is the prescribed medication more, less, or equally effective as other non-medicinal interventions?
- 5. What should we be looking for in changes in behavior, changes in symptoms, and whom should we contact with questions about these changes and the medication?
- 6. How long will it take before we should begin seeing behavioral changes? Will those potential changes be significant or minor?
- 7. What are the potential risks and benefits of the medication and other treatment options, and what are the potential side effects?
- 8. If a medication dose is missed or stopped abruptly, are there potential adverse effects? What might those be and what should I do if I observe them?
- 9. How will our family, our child, and the treating provider monitor progress, behavior changes, symptoms, and safety concerns? (Close monitoring is critical with all medications at all times, however, it is especially important when medication is started and when dosages are changed.)
- 10. How will we know when it is time to talk about stopping medication treatment and what steps need to be taken before the medication is stopped?
- 11. How can we best develop a clear communication plan between our family and the treating providers (therapist and psychiatrist) to ensure open lines of communication?
- 12. What if my child has a crisis and is hospitalized? Who can we contact in your office, especially if someone wants to change medications?

Adapted from NAMI, "Choosing the Right Treatment: What Families Need to Know about Evidence-Based Practices, 2007."



#### **References:**

- 1. White, CR; Havalchak, A; Jackson, L; O'Brien, K; & Pecora, PJ. (2007). Mental Health, Ethnicity, Sexuality, and Spirituality among Youth in Foster Care: Findings from the Casey Field Office Mental Health Study. Casey Family Programs.
- 2. Zito JM, Safer DJ, Sai D, et al. Psychotropic Medication Patterns Among Youth in Foster Care. Pediatrics. 2008;121(1):157-63.
- 3. Medical Dictionary for the Health Professions and Nursing © Farlex 2012
- Texas Dept. of Family and Protective Services & University of Texas at Austin College of Pharmacy. (2013, September). Psychotropic medication utilization parameters for foster children. Accessed November 11, 2013 from <a href="http://www.dfps.state.tx.us/documents/Child Protection/pdf/TxFosterCareParameters-September2013.pdf">http://www.dfps.state.tx.us/documents/Child Protection/pdf/TxFosterCareParameters-September2013.pdf</a>
- 5. Department of Mental Health (2014, December). Parameters 3.8 For Use of Psychotropic Medication in Children and Adolescents. Accessed January 15, 2015 from <a href="http://file.lacounty.gov/dmh/cms1">http://file.lacounty.gov/dmh/cms1</a> 191102.pdf
- 6. John's Hopkins Guide to Psychopharmacology for Pediatricians. (2011, Spring) Accessed May 8, 2015 from <a href="http://web.jhu.edu/pedmentalhealth/Psychopharmacolog%20use.html">http://web.jhu.edu/pedmentalhealth/Psychopharmacolog%20use.html</a>
- 7. Appropriate Use of Psychotropic Drugs in Children and Adolescents: A Clinical Monograph. Magellan Health Services, 2013. Accessed February 4, 2014 from <a href="https://www.openminds.com/wp-content/uploads/indres/magellan-psychotropicdrugs-020314.pdf">https://www.openminds.com/wp-content/uploads/indres/magellan-psychotropicdrugs-020314.pdf</a>?status=free
- 8. Choosing the Right Treatment: What Families Need to Know About Evidence- Based Practices, 2007. NAMI, The National Alliance on Mental Illness. Accessed May 8, 2015 from <a href="http://www2.nami.org/Content/ContentGroups/CAAC/ChoosingRightTreatment.pdf">http://www2.nami.org/Content/ContentGroups/CAAC/ChoosingRightTreatment.pdf</a>

## **Updates to the Document:**

- 1. July 2015: Document completed and released
- 2. October 2015: Pages 19-22 updated to reflect NC Medicaid PDL changes effective Nov. 1, 2015

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# Psychotropic Medications in Children and Adolescents: Guide for Use and Monitoring

This document was developed by Community Care of North Carolina with the assistance of the Medication Management Workgroup of the Fostering Health NC initiative, a project of the NC Pediatric Society (<a href="www.ncpeds.org/fosteringhealthnc">www.ncpeds.org/fosteringhealthnc</a>). The information contained in this guide is not intended to substitute or act as medical advice. If you have any questions about a medication prescribed to a child or adolescent in your care, contact the prescriber or a licensed medical professional.

## **Definition of Psychotropic Medication:**

Medication used in the treatment of mental illnesses and capable of affecting the mind, emotions, and behavior.

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#### Use of this Information:

The tables below offer information for care managers and foster and resource parents to use when they want to learn more about certain psychotropic medications. Specific information is outlined including the therapeutic class, brand and generic names, FDA approved uses, common evidence-based uses, potential side effects, and medication-specific safety/effectiveness monitoring necessary when prescribed to a child or adolescent. Because few medications have been FDA approved for use in children 5 years of age and under, there is a column in the table that lists the FDA approved status and age ranges for the approved uses of each medication. This guide also provides a color-coded quick reference guide for each medication (Appendix A), questions that a foster or resource parent should ask a prescriber (Appendix B), and a glossary of terms (Appendix C). Information provided in this document is based on "Psychotropic Medication Utilization Parameters for Children and Youth in Foster Care", 5<sup>th</sup> Version-Texas Dept. of FPS; Lexicomp.

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		ADHD	Medication	ıs	
		:	Stimulants		
Generic Name	Brand Names	FDA Approval Age/Indication	Other Common Uses in Children	Potential Side Effects	Monitoring
Amphetamine Mixed Salts	Adderall, Adderall XR	3 and older; 6 and older (XR)	None	<ul><li>Increased blood pressure</li><li>Increased heart rate</li></ul>	<ul><li>Height</li><li>Weight</li></ul>
Dextroamphetamine	Dexedrine, Zenzedi	3 and older		Tics (abnormal movement	Heart rate
Lixdexamfetamine  Methylphenidate	Vyvanse  Ritalin, Ritalin SR, Ritalin LA, Methylin, Methylin ER, Metadate ER, Metadate CD, Quillivant XR, Concerta	6 and older 6 and older		<ul> <li>most often in the face)</li> <li>Weight loss</li> <li>Loss of appetite</li> <li>Sleep disturbance</li> <li>Irritability/anxiety</li> </ul>	Blood pressure
Dexmethylphenidate	Focalin, Focalin XR	6 and older	1		
, ,	,	Other A	DHD Medication	S	-
Generic Name	Brand Names	FDA Approval Age/Indication	Other Common Uses in Children	Potential Side Effects	Monitoring
Atomoxetine	Strattera	6 and older	None	<ul> <li>Increased blood pressure</li> <li>Increased heart rate</li> <li>Sleep disturbance</li> <li>Stomach discomfort</li> <li>Dizziness</li> </ul>	<ul><li>Height</li><li>Weight</li><li>Heart rate</li><li>Blood pressure</li></ul>
Clonidine	Catapres, Kapvay	IR form not FDA approved for children; ER form ages 6-17	None	<ul> <li>Low blood pressure</li> <li>Decreased heart rate</li> <li>Feeling faint or dizzy</li> <li>Feeling tired</li> </ul>	<ul><li>Heart rate</li><li>Blood pressure</li></ul>
Guanfacine	Tenex, Intuniv	6 and older	None		

# Depression & Anxiety Medications

## **SSRIs (Selective Serotonin Reuptake Inhibitors)**

Generic Name	Brand Names	FDA Approval Age/Indication	Other Common Uses in Children	Potential Side Effects	Monitoring
Citalopram*	Celexa	18 and older	Obsessive	<ul> <li>Suicidal thoughts or</li> </ul>	Suicidal thoughts or
Escitalopram	Lexapro	12-17 for	Compulsive	behavior	behavior
		depression	Disorder (OCD)	<ul> <li>Weight gain</li> </ul>	Height
Fluoxetine	Prozac	8 and older for		<ul> <li>Headache</li> </ul>	Weight
		depression		<ul> <li>Stomach discomfort</li> </ul>	Sodium levels in the blood
Paroxetine*	Paxil	18 and older		<ul> <li>Sleep disturbance</li> </ul>	
Fluvoxamine	Luvox	8 and older for OCD		<ul> <li>Flu-like symptoms if</li> </ul>	
Sertraline	Zoloft	6 and older for OCD	1	stopped too quickly	
Vilazodone*	Vibryd	18 and older		<ul> <li>Abnormal generalized bleeding risk</li> </ul>	

<sup>\*</sup>not approved for children and adolescents

## **SNRIs (Serotonin-Norepinephrine Reuptake Inhibitors)**

Generic Name	Brand Names	FDA Approval Age/Indication	Other Common Uses in Children	Potential Side Effects	Monitoring
Venlafaxine*	Effexor, Effexor XR	18 and older	Obsessive Compulsive	Suicidal thoughts or behavior	Suicidal thoughts or behavior
Duloxetine	Cymbalta	18 and older	Disorder (OCD)	Weight gain	• Height
Desvenlafaxine*	Pristiq	18 and older		<ul><li>Headache</li><li>Seizures</li></ul>	<ul><li>Weight</li><li>Blood pressure during</li></ul>
Clomipramine	Anafranil	10 and older for OCD		Hyponatremia/low blood sodium levels	initial dose adjustment and periodically thereafter
Levmilnacipram*	Fetzima	18 and older		Hepatic toxicity/liver damage	Hepatic function testing     baseline and periodically
*not approved for childr	en and adolescents			<ul> <li>Skin reactions</li> <li>Stomach discomfort</li> <li>Sleep disturbance</li> <li>Flu-like symptoms if stopped too quickly</li> <li>Elevated blood pressure/pulse</li> <li>Abnormal bleeding risk</li> </ul>	CBC and EKG baseline and periodically

# Depression & Anxiety Medications

# **Other Depression & Anxiety Medications**

Generic Name	Brand Names	FDA Approval Age/Indication	Other Common Uses in Children	Potential Side Effects	Monitoring
Mirtazapine*	Remeron	18 and older	None	Suicidal thoughts or behavior	Suicidal thoughts or behavior
Vortioxetine*	Brintellix/Trintellix	18 and older	None	<ul> <li>Abnormal bleeding risk</li> <li>Weight gain</li> <li>Headache</li> <li>Hyponatremia</li> <li>Stomach discomfort</li> <li>Sleep disturbance</li> <li>Flu-like symptoms if stopped too quickly</li> <li>Dizziness</li> <li>Liver toxicity, seizures, and white blood cell decrease risk with mirtazapine</li> </ul>	<ul> <li>Height</li> <li>Weight</li> <li>Blood pressure-during titration and periodically</li> <li>Hepatic function testing baseline and periodically</li> <li>CBC baseline and periodically</li> <li>Cholesterol testing at baseline and periodically</li> </ul>
Bupropion*	Wellbutrin, Wellbutrin XL/SR	18 and older	ADHD	<ul> <li>Increased blood pressure, elevated pulse</li> <li>Seizure risk</li> <li>Discontinuation Syndrome if stopped abruptly</li> <li>Appetite suppression</li> <li>Suicidal thoughts or behavior</li> </ul>	<ul> <li>Blood pressure and pulse-during titration and periodically</li> <li>Suicidal thoughts or behavior</li> <li>Seizure risk with other medications</li> <li>Weight</li> </ul>

	Secon	d Generation	Antipsychoti	ic Medications	
Generic Name	Brand Names	FDA Approval Age/Indication	Other Common Uses in Children	Potential Side Effects	Monitoring
Aripiprazole  Quetipine	Abilify  Seroquel, Seroquel XR	Approved for children 10 and older for bipolar disorder, manic or mixed episodes. Approved for adolescents 13 to 17 -for schizophrenia and bipolar disorder. Approved for 6 to 17 year olds for irritability associated with autistic disorder	Approved for bipolar mania or mixed episodes (10-17 years); schizophrenia (13-17 years); irritability associated with autism spectrum disorder (6-17 years)  Approved for bipolar	<ul> <li>Acute Extrapyramidal symptoms</li> <li>Tardive dyskinesia</li> <li>Neuroleptic malignant syndrome</li> <li>Hyperglycemia, diabetes mellitus</li> <li>Elevated prolactin, gynecomastia, amenorrhea</li> <li>Weight gain</li> <li>Dyslipidemia</li> <li>CBC abnormalities</li> </ul>	<ul> <li>Fasting plasma glucose or hemoglobin A1c and lipids at baseline, 3 months, then every 6 months</li> <li>EKG- baseline and periodically</li> <li>CBC- baseline and periodically</li> <li>Blood pressure each visit</li> <li>Pulse each visit</li> <li>Weight/height/BMI at each visit</li> <li>EPS evaluation baseline</li> </ul>
Quetipine	Sel oquely sel oquel yill	adolescents 13 and older for schizophrenia. Approved for young adults 18 and older for bipolar disorder. Approved for 10 to 17 years olds for manic and mixed episodes of bipolar disorder	mania (10-17 years); schizophrenia (13-17 years)	<ul> <li>Lowered seizure threshold</li> <li>Dysphagia</li> <li>Hyperthermia/lowered heat tolerance</li> <li>Cognitive impairment (confusion and/or inability to focus that differs from baseline)</li> </ul>	<ul> <li>and weekly until dose stabilized</li> <li>Tardive dyskinesia evaluation every 3 months</li> <li>Clozapine-requires REMS</li> <li>Vision assessment for changes annually</li> <li>Sexual function-at each visit for first 12 months then every 6 months</li> </ul>
Olanzapine	Zyprexa	ETC. 18 and older- schizophrenia; 13 to 17- second line treatment for manic or mixed episodes of bipolar disorder	Approved for bipolar mania or mixed episodes and schizophrenia (13-17 years)		
Risperidone	Risperdal	ETC. 13 and older- schizophrenia; 10 and older- bipolar mania and mixed episodes; 5 to 16- irritability associated with autism	Approved for schizophrenia (13-17 years); bipolar mania or mixed episodes (10-17 years); irritability associated with autism spectrum disorder (5-16 years)	Same as previous page	Same as previous page

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		T	Antipsychoti		
Generic Name	Brand Names	FDA Approval Age/Indication	Other Common Uses in Children	Potential Side Effects	Monitoring
Clozapine*	Clozaril, FazaClo, Versacloz	18 and older	None		
Asenapine	Saphris	18 and older	Approved for acute treatment of bipolar mania and mixed episodes (10-17 years)		
Iloperidone*	Fanapt	18 and older	None		
Paliperidone	Invega	12 and older	Approved for treatment of schizophrenia (12-17 years)		
Ziprasidone*	Geodon	18 and older	None		
Lurasidone*	Latuda	18 and older	None		
Brexpiprazole*	Rexulti	18 and older	None		

	Mood Stabilizer Medications						
Generic Name	Brand Names	FDA Approval Age/Indication	Other Common Uses in Children	Potential Side Effects	Monitoring		
Carbamazepine	Tegretol, Tegretol XR, Epitol, Carbatrol, Equetro	Not FDA approved for bipolar disorder or mood lability in children and adolescents*	FDA approved for seizures-all ages	<ul> <li>Stevens-Johnson Syndrome (severe rash)</li> <li>Aplastic anemia</li> <li>Suicidal ideation</li> <li>Teratogenicity</li> <li>CBC abnormalities</li> <li>Hyponatremia</li> <li>Induces metabolism of many other medications and decreases their efficacy-including oral contraceptives</li> <li>Withdrawal seizures</li> <li>Ataxia/dizziness</li> <li>Sedation</li> <li>Slurred speech</li> <li>Nausea/vomiting</li> </ul>	<ul> <li>Baseline then every 6-12 months CBC with differential, comprehensive chemistry panel<sup>‡</sup>, EKG</li> <li>Pregnancy test at baseline</li> <li>Drug levels every 1-2 weeks for initial 2 months, then every 3-6 months</li> </ul>		
Divalproex Sodium	Depakote, Depakote ER, Depakote Sprinkles	Not FDA approved for bipolar disorder or mood lability in children and adolescents*	FDA approved for seizures-ages 2 and older	<ul> <li>Transient increase in liver function tests up to hepatotoxicity</li> <li>Pancreatitis</li> <li>Bruising</li> <li>Urea cycle disorders</li> <li>Teratogenicity</li> <li>Suicidal ideation</li> <li>CBC abnormalities</li> <li>Hyperammonemia</li> <li>Multi-organ hypersensitivity reaction</li> <li>Polycystic ovary syndrome</li> <li>Weight gain</li> <li>Nausea/vomiting</li> <li>Alopecia</li> <li>Withdrawal seizures</li> </ul>	<ul> <li>Baseline then every 6 months CBC with differential, comprehensive chemistry panel<sup>‡</sup></li> <li>Pregnancy test at baseline</li> <li>Drug levels weekly for 2-3 weeks, then every 3-6 months</li> <li>Weight</li> <li>Suicidal thoughts or behavior</li> </ul>		

	Mood Stabilizer Medications						
Generic Name	Brand Names	FDA Approval Age/Indication	Other Common Uses in Children	Potential Side Effects	Monitoring		
Lithium	Eskalith, Eskalith CR, Lithobid	Approved for adolescents age 12 and older for bipolar disorder	Approved for manic episodes and bipolar maintenance for children >=12 years	<ul> <li>Narrow therapeutic index drug</li> <li>Chronic renal impairment</li> <li>Polyurea/polydipsia</li> <li>Tremor of hands, upper extremities</li> <li>Diarrhea</li> <li>Nausea/vomiting (take with food)</li> <li>Lethargy, weakness, confusion</li> <li>Hypothyroidism</li> <li>Teratogenicity</li> </ul>	<ul> <li>Baseline then every 6-12 months CBC with differential, comprehensive chemistry panel<sup>‡</sup>, EKG, thyroid function testing</li> <li>Pregnancy test at baseline</li> <li>Drug levels after 1-2 weeks of treatment or each dosage change, monthly for 3 months, then every 3-6 months</li> </ul>		
Lamotrigine	Lamictal	Not FDA approved for bipolar disorder or mood lability in children and adolescents*	FDA approved for seizures ages 2 and older	<ul> <li>Potential Stevens-Johnson         Syndrome (severe rash)-risk         increases with rapid titration</li> <li>Multi-organ hypersensitivity         reaction</li> <li>Suicidal ideation</li> <li>Dizziness/Ataxia</li> <li>Headache</li> <li>Nausea/vomiting</li> <li>Diplopia</li> <li>Aseptic meningitis</li> <li>Drug interaction with divalproex increases lamotrigine; with carbamazepine, phenytoin decreases lamotrigine levels</li> <li>Concomitant use with oral contraceptives decreases lamotrigine levels</li> <li>Withdrawal seizures</li> </ul>	<ul> <li>Dermatologic evaluation at baseline and patient education regarding reporting of new skin rash</li> <li>Suicidal thoughts or behavior</li> </ul>		

Mood Stabilizer Medications					
Generic Name	Brand Names	FDA Approval Age/Indication	Other Common Uses in Children	Potential Side Effects	Monitoring
Oxcarbazepine	Trileptal	Not FDA approved for bipolar disorder or mood lability in children and adolescents*	FDA approved for seizures ages 4 and older	<ul> <li>Hyponatremia risk</li> <li>Anaphylactic reactions with angioedema</li> <li>Drug-drug interaction potential</li> <li>Dizziness, ataxia</li> <li>Diplopia</li> <li>Tremor</li> <li>Slurred speech</li> <li>Serious dermatologic reactions</li> <li>Withdrawal seizures</li> <li>Multi-organ hypersensitivity</li> <li>Hematologic changes</li> </ul>	Electrolytes at baseline and every 3-6 months
* While difficult to establish a definitive diagnosis of bipolar disorder in children and adolescents, the mood stabilizing antiepileptic agents listed, while not FDA approved for use in children and adolescents, do have some body of published evidence based support and have received FDA approval for seizure disorder management, suggested a reasonable safety margin for that use.					<sup>‡</sup> Comprehensive chemistry panel includes: electrolytes, renal and hepatic function, and metabolic panel

Sleep Medications					
Generic Name	Brand Names	FDA Approval Age/Indication	Other Common Uses in Children	Potential Side Effects	Monitoring
Diphenhydramine	Benadryl	Approved for children 12 and older for the treatment of insomnia	None	<ul> <li>Drowsiness</li> <li>Dizziness</li> <li>Dry mouth</li> <li>Nausea</li> <li>Nervousness</li> <li>Blurred vision</li> <li>Decreased mental alertness</li> <li>Paradoxical excitation</li> <li>May lower seizure threshold</li> </ul>	Caution – Assess     compliance with avoiding     operation of machinery or     power equipment until     medication effects with     use of this medication are     determined     Daytime     sedation/hangover
Trazodone*	Desyrel	18 and older	None	<ul> <li>Suicidal thoughts or behavior</li> <li>Abnormal generalized bleeding risk</li> <li>Hyponatremia</li> <li>Stomach discomfort</li> <li>Flu-like symptoms if stopped too quickly</li> <li>Orthostatic hypotension/syncopy</li> <li>Cognitive/motor impairment</li> <li>Priapism-males</li> <li>QT prolongation and risk of sudden cardiac death</li> </ul>	<ul> <li>Suicidal thoughts or behavior</li> <li>Seizure risk with other medications</li> <li>Weight</li> <li>Blood pressure baseline and periodically</li> <li>EKG baseline and periodically</li> </ul>
Eszopliclone*	Lunesta	18 and older	None	<ul> <li>Abnormal thinking and behavioral changes</li> <li>Withdrawal effects</li> <li>Drug abuse and dependence</li> <li>Tolerance</li> </ul>	Caution - Do not operate machinery or power equipment until medication effects with use of this medication Daytime sedation/hangover

Sleep Medications					
Generic Name	Brand Names	FDA Approval Age/Indication	Other Common Uses in Children	Potential Side Effects	Monitoring
Melatonin	Dosing: 0.05- 0.15mg/kg/day up to total dose of 5mg/day in children and adolescents	Not FDA regulated	Regulated by FDA as a dietary supplement and not as a medication	<ul> <li>Sedation</li> <li>May adversely affect reproductive organ development</li> <li>Give directly before sleep onset desired due to short half-life</li> </ul>	<ul> <li>Caution - Do not operate machinery or power equipment until medication effects with use of this medication</li> <li>Daytime sedation/hangover</li> </ul>
Ramelteon*	Rozerem	18 and older	None	<ul> <li>Abnormal thinking and behavioral changes</li> <li>CNS depression</li> <li>Decreased testosterone</li> <li>Hyperprolactinemia</li> </ul>	<ul> <li>Caution - Do not operate machinery or power equipment until medication effects with use of this medication</li> <li>Daytime sedation/hangover</li> </ul>
Hydroxyzine	Vistaril, Atarax	All ages for anxiety- and all ages for Pruritis/ for the treatment of Itchy skin-	Approved for anxiety and tension; approved as preprocedural sedation and following general anesthesia	<ul> <li>Drowsiness</li> <li>Dizziness</li> <li>Dry mouth</li> <li>Nausea</li> <li>Nervousness</li> <li>Blurred vision</li> <li>Decreased mental alertness</li> <li>Paradoxical excitation associated with small risk of QT prolongation and Torsades</li> </ul>	Caution - Do not operate machinery or power equipment until medication effects with use of this medication     Daytime sedation/hangover

Appendix A: Color-Coded Psychotropic Medications - Match the Color with the Therapeutic Class Above					
Amphetamine Mixed Salts	Eszopliclone	Quetipine			
Abilify	Fanapt	Quillivant XR			
Adderall, Adderall XR	Fetzima	Ramelteon			
Anafranil	Fluoxetine	Remeron			
Aripiprazole	Fluvoxamine	Rexulti			
Asenapine	Focalin, Focalin XR	Risperdal			
Atomoxetine	Geodon	Risperidone			
Benadryl	Guanfacine	Ritalin, Ritalin SR/LA			
Brexpiprazole	Hydroxyzine	Rozerem			
Brintellix	lloperidone	Saphris			
Bupropion	Invega	Seroquel, Seroquel XR			
Carbamazepine	Lamictal	Sertraline			
Catapres, Kapvay	Lexapro	Strattera			
Celexa	Lithium	Tegretol, Tegretol XR, Epitol, Carbatrol, Equetro			
Citalopram	Lixdexamfetamine	Tenex, Intuniv			
Clomipramine	Lamotrigine	Trazodone			
Clonidine	Latuda	Trileptal			
Clozapine	Levmilnacipram	Trintellix			
Clozaril, FazaClo, Versacloz	Lunesta	Venlafaxine			
Concerta	Lurasidone	Vibryd			
Cymbalta	Luvox	Vilazodone			
Depakote, Depakote ER, Depakote Sprinkles	Melatonin	Vistaril, Atarax			
Desvenlafaxine	Metadate ER, Metadate CD	Vortioxetine			
Desyrel	Methylin, Methylin ER	Vyvanse			
Dexedrine, Zenzedi	Methylphenidate	Wellbutrin, XL/SR			
Dexmethylphenidate	Mirtazapine	Ziprasidone			

Appendix A: Color-Coded Psychotropic Medications - Match the Color with the Therapeutic Class Above				
Dextroamphetamine	Olanzapine	Zoloft		
Diphenhydramine	Oxcarbazepine	Zyprexa		
Divalproex Sodium	Paliperidone			
Duloxetine	Paroxetine			
Effexor, Effexor XR	Paxil			
Escitalopram	Pristiq			
Eskalith, Eskalith CR, Lithobid	Prozac			

## **Appendix B: Questions to Ask the Prescriber**

- 1. Are there behavioral interventions that might be tried before medication is used, or effectively used in combination with medication, which may help to lower the required medication dose?
- 2. Does research support the use of the recommended medication for a child that is my child's age and with similar needs?
- 3. How does medication fit within the overall treatment plan and how will we coordinate with other treatment, such as therapy, school behavior plans, and more?
- 4. Is the prescribed medication more, less, or equally effective as other non-medicinal interventions?
- 5. What should we be looking for in changes in behavior, changes in symptoms, and whom should we contact with questions about these changes and the medication?
- 6. How long will it take before we should begin seeing behavioral changes? Will those potential changes be significant or minor?
- 7. What are the potential risks and benefits of the medication and other treatment options, and what are the potential side effects?
- 8. If a medication dose is missed or stopped abruptly, are there potential adverse effects? What might those be and what should I do if I observe them?
- 9. How will our family, our child, and the treating provider monitor progress, behavior changes, symptoms, and safety concerns? (Close monitoring is critical with all medications at all times, however, it is especially important when medication is started and when dosages are changed.)
- 10. How will we know when it is time to talk about stopping medication treatment and what steps need to be taken before the medication is stopped?
- 11. How can we best develop a clear communication plan between our family and the treating providers (therapist and psychiatrist) to ensure open lines of communication?
- 12. What if my child has a crisis and is hospitalized? Who can we contact in your office, especially if someone wants to change medications?

Adapted from NAMI, "Choosing the Right Treatment: What Families Need to Know about Evidence-Based Practices, 2007."

## **Appendix C: Glossary of Terms**

**BMI** Stands for Body Mass Index. A measure of body fat based upon height and weight.

**CBC** Stands for complete blood count. Lab test used to monitor for abnormalities in

blood cells, e.g., for anemia.

Discontinuation Syndrome

A condition that can occur following the interruption, dose reduction, or discontinuation of antidepressant drugs. The symptoms can include flu-like symptoms and disturbances in sleep, senses, movement, mood, and thinking. In most cases symptoms are mild, short-lived, and go away without treatment.

**ECG** Stands for electrocardiogram.

**EEG** Stands for electroencephalogram.

EPS Stands for extrapyramidal side effects- medication induced abnormal muscle

function and include muscle stiffness, tremor, facial tics/movements, and severe

muscle spasm.

**ER** Stands for extended release and is a formulation of a medication designed to

decrease the number of times per day in which the medication must be taken.

Evidence Based Use Substantial peer reviewed clinical trials information is in the published medical

literature supporting the safety and effectiveness of a certain practice or

medication use.

FDA Stands for (U.S.) Food and Drug Administration, the agency which reviews and

approves medications for use in the United States.

**Hemoglobin A1c** A laboratory measurement of the amount of glucose in the hemoglobin of the red

blood cells. Provides a measure of average glucose over the previous 3 months.

**Hepatic Toxicity** Liver damage which may be happen from a variety of potential causes.

Hyperammonemia Metabolic problem due to elevated ammonia in the blood and is a medical

emergency.

Hyponatremia A condition of low blood sodium (Na) levels which may be associated with a

number of medical symptoms such as decreased ability to think, headaches, nausea, and poor balance. More severe symptoms include confusion, seizures,

and coma.

**Indication** A term that means the FDA has approved a medication for use for a specific

purpose and age group.

IR Stands for immediate release of a form of a medication. May be necessary to take

multiple times per day.

**LFTs** Stands for Liver function tests.

MAOIs Stands for Monoamine Oxidase Inhibitors. A class of medications used for

depression.

MRI Stands for Magnetic Resonance Imaging.

Narrow Therapeutic A medication for which the safe and effective range (as measured by blood

**Index Drug** levels) are close to the toxic range (e.g. lithium, carbamazepine, phenytoin).

Orthostatic Blood Lowering of blood pressure, typically upon sitting up or standing, which Pressure Changes may be related to some medications and may contribute to falls and/or

accidents.

A term that means the medication should be taken as needed.

**Prolactin** A hormone produced by the pituitary gland.

**Second Generation** A classification of antipsychotics which are more often used in children and adolescents as compared to first generation antipsychotics which are more commonly associated with abnormal neurologic movements.

**Serum Creatinine** A lab test used to calculate an estimate of kidney function.

**Teratogenicity** Property of some medications meant to indicate that they are may potentially

cause abnormalities in the developing fetus.

**TFTs** Thyroid Function Tests.

**PRN**