

Indications for Psychotropic Medication Use

The following table highlights common diagnostic and clinical indications for using psychotropic medication. This may be used in conjunction with the attached general valid reasons for using psychotropic medication as a broad tool for evaluating whether the use seems appropriate. This is not meant to second-guess physicians and their order but as a point of team discussion.

When the justification is based more exclusively on signs and indications, greater care must be taken. For example, more comprehensive baseline data and descriptive information must be documented and regularly reviewed. The identified signs and symptoms must show clear evidence of decreased intensity and severity to justify continued use.

The top row identifies the family of medication with the columns organized in descending order of valid use by medication family. The table is not meant to be exhaustive, for example the entire family of barbiturate medications is not included as they are rarely used with individuals with developmental disabilities.

	Neuroleptic (Antipsychotic)	Antidepressant	Mood Stabilizer	Anti-anxiety	Stimulant	Antiparkinsonian
Diagnostic indications (primary)	Psychosis, schizophrenia, schizoaffective disorder, delusional disorder, atypical psychosis	Depressive disorders	Bipolar mood disorder, depression, schizo- affective disorder	Anxiety disorders, (Obsessive compulsive, post- traumatic stress, panic, generalized)	Attention deficit disorder	Extrapyramidal side effects
(secondary)	Bipolar mood disorder--acute manic phase, delusional depression	Anxiety disorders, (Obsessive compulsive, post- traumatic stress, panic, generalized) Disorders of attention	Mood instability	Phobic disorders, akathisia, tardive dyskinesia	Depressive disorders in those who are medically fragile, narcolepsy	
Signs and indications	Disorganized thought, poor impulse control	Bulimia, narcotic craving and withdrawal depression, chronic pain, poor impulse control	Poor impulse control, neuroleptic or antidepressant boost	Anxiety symptoms: aggression, sleep disturbance, nightmares, preoccupations		Disturbed sleep

Six valid reasons for using psychotropic medications

Reason Number 1

To treat a clearly diagnosed primary psychiatric illness:

Whether a potential recipient has a developmental disability or not, the criteria established in the Diagnostic and Statistics Manual of Mental Disorders-IV-TR (DSM-IV-TR) or the International Classifications of Diseases-10 (ICD-10), should be satisfied. At least the same depth and breadth of evaluation must be exercised. This becomes increasingly more difficult with more significant developmental disabilities and problems with speech, motor performance, cognitive ability and sensory integration interfere with standardized testing and mental status exams. We expect this problem to diminish as the Diagnostic Manual-Intellectual Disability (DM-ID) becomes more widely and effectively used.

Reason Number 2

Medical conditions:

Some conditions may have associated secondary psychiatric features. Examples include specific types of epilepsy, which may lead to a variety of seizures and problematic behaviors. For example, temporal lobe seizures can appear as unusual behaviors. Use of appropriate psychotropic medication for this reason should continue until the primary condition is treated and the symptoms resolve, or until it is clear that, even with treatment, the psychiatric symptoms will continue. Long term medication therapy will frequently be necessary in order to control symptoms. Examples of other medically indicated uses are small doses of antipsychotic drugs prior to chemotherapy (for the antiemetic effect) or general anesthesia.

Reason Number 3

Emotionally distressing, extreme behavior that interferes with important aspects of a person's life:

This is perhaps the most contentious and challenging rationale. The risk of it being used as a “garbage can” to justify medication for a variety of unpleasant, obnoxious, even hurtful behaviors that serve clear functional means for an individual is inherent. This rationale should be accompanied by a comprehensive assessment of the behavior that includes a functional assessment. If such assessment is unavailable or yields unclear results—and intermediate intervention is necessary for safety or continued inclusion in support efforts—short term psychotropic intervention may be considered. Use of medication in these circumstances is most clearly indicated when the individual with developmental disabilities who presents challenging behavior expresses a desire for the behavior to be controlled. When the person cannot clearly communicate intentions, discerning the appropriateness of medication is more complicated.

Reason Number 4

For empirical reasons, to address severe dysfunction that has been resistant to other intervention:

There are times when the use of psychotropic medication should be considered when addressing a chronic condition or characteristic (other than behavior) which significantly interferes with an individual's social functioning and quality of life, particularly when exhaustive habilitative, environmental and lifestyle adaptation interventions have not provided relief. If effective, the smallest dose should be sought, with occasional, systematic attempts to reduce or discontinue the medication. An example is using a mild anxiolytic to ease acute difficulty with transitions experienced by an individual diagnosed with Pervasive Developmental Disorder (PDD), even when an anxiety disorder diagnosis is not established.

Reason Number 5

To treat medication withdrawal or discontinuation symptoms:

There is a growing awareness that people may experience withdrawal difficulties from a variety of psychotropic medications, although they may be markedly softened with gradual reductions. These symptoms may include anxiety, agitation, unstable mood, self-stimulation, insomnia, expressiveness,

sexual expression, property destruction, and self-injury. Another instance would be when—upon decreasing or discontinuing a psychotropic medication which masked severe tardive dyskinesia symptoms—a return to a small dose or alternative drug may be required. For a small group of individuals with developmental disabilities who exhibit chronic, severe self-injury, withdrawal from endogenous endorphins may be a factor needing psychotropic medication intervention. Endogenous endorphins are naturally occurring neurotransmitters which have a narcotic-like effect. For some, withdrawal from alcohol, caffeine, nicotine or illicit drugs may require short term intervention.

Reason Number 6

For sedation during a medical procedure:

When the importance of a medical procedure is unquestioned and the procedure cannot be performed without sedation, a psychotropic may be used for its sedating effect. For some individuals these medical procedures may include dental work, diagnostic evaluations such as EEGs, EKGs, C-T scans or physical exams. If used for this purpose, an adequate dose to accomplish the desired sedation must be sought and balanced against the least potential side effects.

Cautions and Questionable Uses of Psychotropic Medication

Just as there are clear reasons to consider the use of psychotropic medications, there are also questionable ones, many of which suggest misuse of the drug and, potentially, abuse of the individual with developmental disabilities. We encourage the following to be considered even if one of the preceding reasons seems to be met. The following is a list of questionable uses that can be prevented, avoided or corrected. Subsequent chapters offer methods of support that reduce the likelihood that these problems will occur.

Caution Number 1

No re-examination of the original decision to prescribe psychotropics:

When the initial rationale for prescribing a medication is not reexamined and when there is a lack of evidence for the continued need for long-term use of psychotropic medication.

Caution Number 2

Inadequate assessment:

When psychotropic medication is prescribed without a thorough assessment and comprehensive reporting to the prescribing physician.

Caution Number 3

Haphazard prescribing:

When psychotropic medications are prescribed in a reactive, haphazard manner, quickly discontinuing one and substituting another.

Caution Number 4

Prescribing psychotropics for the convenience of caregivers:

When medication is used to make the individual more “manageable” for the convenience of individuals who provide support to the person. The expectation that psychotropic medication can preclude outbursts is unrealistic except at extremely high doses. In fact, using psychotropic medication may make life more difficult for support providers as the individual changes in response to the drug. In many cases, moderate doses of antipsychotic medications (or any dose of benzodiazepines) may interfere with the learning processes that would enable the individual to change “unmanageable” behaviors.

Caution Number 5

Ignoring the message the person is attempting to communicate with behavior:

When medication is used to blunt a behavior without recognizing what the person intended to communicate with the behavior.

Caution Number 6

Interpreting an understandable behavioral response as pathological:

When medications are used to treat the response to an empty life rather than addressing the empty life. Many individuals with developmental disabilities who present challenging behavior are expressing appropriate anger, fear, sadness, loneliness, frustration, and other unpleasant, powerful emotions in the only way they know.

Caution number 7

Limiting autonomy:

When the effects of medication or the methods used to monitor them unduly limit the person’s autonomy. When possible, the individual with a developmental disability must have a forum for expressing his/her reaction to the psychotropic medication. Do they feel better or worse? Does taking a particular medication

enhance or detract from their notion of how they want to live?

Caution Number 8

Exceeding therapeutic range:

When medication dosages are increased, beyond the therapeutic range, in response to a conclusion that a smaller amount didn't work (more medicine isn't necessarily better). The exception is when the treatment plan calls for an initial low dose with the intention of periodic, potential increases in dosage based on response.

Caution Number 9

Caregivers lacking knowledge:

When the people empowered to administer and/or monitor the effective use of the medication lack the information about the person, the prescribed medication, and the reason for using it, as well as the necessary training to competently administer medication and monitor its effect.

Caution Number 10

Lax administration of prn medication:

When medications prescribed on a prn (as needed) basis are administered by various people with minimal training working in different environments without adequate training, supervision, monitoring, or communication among various staff and provider agencies.

Caution Number 11

Using medication to mask abuse:

When medications are used to mask signs of abuse, effectively silencing legitimate complaints. Emerging research indicates that 95% of individuals with mild or moderate cognitive disabilities who present aggressive behavior have been physically or sexually abused by peers, family members or caregivers.

Caution Number 12

Using medications as a substitute for appropriate support:

When medications are used as a substitute rather than a complementary adjunct to thorough, meaningful habilitative programs and positive behavioral support.

Commonly Prescribed Psychotropic Medication

This is not a comprehensive listing of either psychotropic medication or side effects.

Antipsychotic medication

Medication Type	Generic Name	Trade Name	Usual Adult Dose Range (mg/day)*	Prescribing limits (mg/day)**	Side Effects
Typical Antipsychotic					
	chlorpromazine (CPZ)	Thorazine	100-800	1000	Very sedating, blood pressure drop, increased heart rate, sun sensitivity, heat stroke, anticholinergic effects, cataracts, weight gain, , neuroleptic malignant syndrome, lower seizure threshold, tardive dyskinesia
	fluphenazine	Prolixin	2-20	40	Extrapyramidal side effects, decreased anticholinergic effects
	haloperidol	Haldol	2-20	100	Extrapyramidal side effects, decreased anticholinergic effects
	loxapine	Loxitane	10-80	250	Same as CPZ, mildly less sedating
	mesorezazine	Serentil	50-400	500	Similar to CPZ, mildly less sedating, low extrapyramidal effects
	molindone	Moban	10-100	225	Extrapyramidal side effects, decreased anticholinergic effects
	perphenazine	Trilafon	10-64	64	Same as CPZ
	prochlorperazine	Comazol, Compazine	15-150	150	Extrapyramidal side effects, less sedating, low incidence anticholinergic effects.
	thioridazine	Mellaril	100-800	800	Same as CPZ add retinal pigmentation above 800 mg.
	thiothixene	Navane	4-40	60	Extrapyramidal side effects, decreased anticholinergic effects
	trifluoperazine	Stelazine	5-40	80	Moderately sedating, moderate extrapyramidal side effects, decreased anticholinergic effects

*The range found necessary to manage symptoms of psychosis determines dose range.

** Prescribing limits are often determined by the manufacturer and represent the maximum daily dose administered to manage severe symptoms of psychosis, usually in a hospital setting.

Incidence of side effects

Medication Type	Generic Name	Trade Name	Sedation	EPS	Anticholinergic
Typical Antipsychotic					
	chlorpromazine (CPZ)	Thorazine	++++	+++	+++
	fluphenazine	Prolixin	+	++++	+
	haloperidol	Haldol	+	++++	+
	loxapine	Loxitane	+++	+++	++
	mesoredazine	Serentil	+++	+	++
	molindone	Moban	+	+++	++
	perphenazine	Trilafon	++	+++	++
	prochlorperazine	Comazol, Compazine	++	++++	+
	thioridazine	Mellaril	++++	+++	++++
	thiothixene	Navane	+	++++	++
	trifluoperazine	Stelazine	++	+++	++

+ a very low incidence, ++ a low incidence, +++ a moderate incidence, and ++++ a high incidence

Atypical Antipsychotic	Generic Name	Trade Name	Usual Adult Dose Range (mg/day)*	Prescribing limits (mg/day)**	Side Effects
	aripiprazole	Abilify	10-30	30	Nausea, vomiting, constipation, headache, dizziness, an inner sense of restlessness or need to move (akathisia), anxiety, insomnia, and restlessness
	clozapine	Clozaril	50-600	900	Agranulocytosis, sedation, anticholinergic effects, increased blood pressure, orthostatic blood pressure drop, sun sensitivity, drooling, sweating, weight gain, nausea, headaches, lower seizure threshold
	olanzapine	Zyprexa	10-20	20	Drowsiness, dizziness, dry mouth, agitation, orthostatic blood pressure drop, weight gain,
	quetiapine	Seroquel	250-600	800	Sedation, orthostatic blood pressure drop, increased heart rate, weight gain,
	risperidone	Risperdal	2-6	16	Orthostatic blood pressure drop, insomnia, weight gain, extrapyramidal side effects above 6 mg, akathisia, anxiety
	ziprasidone	Geodon	40-160	200	Sleepiness, abnormal muscle movements (e.g., tremors, shuffling, and uncontrolled muscle movements), dizziness, restlessness

*The range found necessary to manage symptoms of psychosis determines dose range.

** Prescribing limits are often determined by the manufacturer and represent the maximum daily dose administered to manage severe symptoms of psychosis, usually in a hospital setting.

Incidence of side effects

Atypical Antipsychotic	Generic Name	Trade Name	Sedation	EPS	Anticholinergic
	aripiprazole	Abilify	++	+	+
	clozapine	Clozaril	++++	+	++++
	olanzapine	Zyprexa	++	++	++
	quetiapine	Seroquel	++	+	+
	risperidone	Risperdal	+	++	+
	ziprasidone	Geodon	++	++	+

+ a very low incidence, ++ a low incidence, +++ a moderate incidence, and ++++ a high incidence

Antidepressant medications.

Antidepressants (cyclical)	Generic name	Trade name	Initial adult dose (Prescribing limit) mg/day	Side effects	Other information
	amitriptyline	Elavil, Endep, others	50-100 (300)	Overdose potential, sedation, blood pressure drop, anticholinergic effects (see CPZ), cardiac arrhythmias, weight gain, decreased libido, impotence, lower seizure threshold, nightmares	Increase effect of alcohol, abrupt withdrawal can produce problems
	amoxapine	Ascendin	100+150 (600)	Same as above, extrapyramidal side effects, tardive dyskinesia	Contains Loxitane
	chlomipramine	Anafranil	75 (300)	Same as above	Good results with obsessive compulsive disorder
	desipramine	Norpramine	100-200 (300)	Same as above	SSRI boost
	doxepin	Sinequan	75 (300)	Same as above	Popular with substance abusers
	imipramine	Tofranil, Norfranil, others	75-200 (300)	Same as above	Good results with panic disorder, bedwetting
	nortriptyline	Pamelor, Aventyl	75-100 (150)	Fewer, but same as above	
Antidepressants (Second generation)				*SSRI-Selective Serotonin Reuptake Inhibitor	
	bupropion	Wellbutrin	150 (400)	Excess stimulation, headache, insomnia, anxiety, nausea	High incidence of seizures in those with anorexia
	Citalopram*	Celexa	20 (60)	Same as with other SSRI's, particularly reduced libido or impotence, but usually less apparent	Considered by some to be a "weaker" SSRI

	Escitalopram*	Lexapro	10 (20)	Similar to Celexa	
	Fluoxetine*	Prozac	20 (80)	Agitation, insomnia, weight loss, sexual dysfunction (decreased libido, difficulty with orgasm), sedation, headaches, Serotonin Syndrome (shivering, incoordination, fever, muscle rigidity, confusion, sweating, diarrhea)	Can interfere with how many other medications are metabolized
	Fluvoxamine*	Luvox	50 (300)	Same as above although more sedating and less agitating	Good results with obsessive compulsive disorder
	maprotiline	Ludiomil	25-75 (225)	Same as above, lower seizure Threshold, lethal overdose potential	Rarely prescribed
	mirtazapine	Remeron	15 (45)	Sedation, weight gain, dry mouth, constipation, dizziness,	Seems to help with anxiety and sleep problems in depression
	nefazodone	Serzone	200 (600)	Similar to Trazodone without priapism, some sedation, anticholinergic effects	Better tolerated by most
	Paroxetine*	Paxil	20 (50)	Same as above with less sleep disturbance	Lowest cost. Recent FDA approved for anxiety disorders
	Sertraline*	Zoloft	50 (200)	Lowest side effect profile of SSRI's, although may see effects noted above	Shorter half-life
	trazodone	Desyrel	150 (600)	Very sedating, orthostatic blood pressure drop, nausea, headache, priapism	Very short half-life
	venlafaxine	Effexor	75 (375)	Sedation, increased blood pressure, nausea, constipation, decreased libido	Affects neurotransmitter norepinephrine in addition to serotonin

Incidence of side effects

Antidepressants (cyclical)	Generic name	Trade name	Sedation	Anticholinergic	Orthostatic Hypotension	Cardiac Arrhythmia	Seizures
	amitriptyline	Elavil, Endep, others	++++	++++	+++	+++	+++
	amoxapine	Ascendin	++	+++	++	++	+++
	chlomipramine	Anafranil	++++	++++	++	+++	++++
	desipramine	Norpramine	++	++	++	++	++
	doxepin	Sinequan	++++	+++	++	++	+++
	imipramine	Tofranil, Norfranil, others	+++	+++	++++	+++	+++
	nortriptyline	Pamelor, Aventyl	++	++	+	++	++
Antidepressants (Second generation)							
	bupropion	Wellbutrin	0	+	0	+	++++
	citalopram	Celexa	+	0	0	0	++
	escitalopram	Lexapro	+	0	0	0	++
	fluoxetine	Prozac	0	0	0	0	++
	fluvoxamine	Luvox	0	0	0	0	++
	maprotiline	Ludiomil	+++	+++	++	++	++++
	mirtazapine	Remeron	++	+	++	+	+
	nefazodone	Serzone	+++	0	+++	+	++
	paroxetine	Paxil	+	+	0	0	++
	sertraline	Zoloft	0	0	0	0	++
	trazodone	Desyrel	++++	0	+++	+	++
	venlafaxine	Effexor	+	+	0	+	++

Mood stabilizing medications

Lithium has long been the gold standard for treating bipolar disorder and for mood regulation with manic features. It presents a unique challenge as it is not metabolized with drug elimination occurring almost exclusively through excretion in the urine. As a result, there is a danger of accumulation in the body to toxic levels that may include seizures, respiratory complications, coma, and death.

Mood stabilizers

carbamazepine	Tegretol	200-1800	Decreased white blood cell production, sedation, clumsiness, dizziness, tremors, abnormal cardiac conduction, decreased thyroid hormones, rashes, temporary liver enzyme increases	Significant side effects usually occur in first six months of use
gabapentin	Neurontin	1200-3600	Sedation, dizziness, tremors, fatigue, headaches, blurred or double vision, clumsiness, weight gain, constipation	Less well established as mood stabilizer
lamotrigine	Lamictal	400	Rash which may lead to a life threatening condition, clumsiness, headaches, nausea, dizziness, severe sore throat	Particularly effective for rapid cycling or hard to treat mood disorders (anecdotal reporting)
lithium	Eskalith, Lithobid, Lithonate	300-1800	Nausea, vomiting, diarrhea, increased thirst, polyuria, acne, weight gain, tremors, mild decreased cognition, hypothyroidism, fatigue	Toxic effects: decreased appetite, confusion, muscle twitching, slurred speech, eye jerking, increased reflexes, stupor, coma
valproic acid	Depakene, Depakote	750-3000	Nausea, vomiting, significant weight gain, hair loss, sedation, tremors, decreased white blood cell production, liver toxicity in children	Usually well tolerated
verapamil	Calan, Isoptin	80-160 TID	Decreased heart rate and blood pressure, dizziness, headaches, nausea, diarrhea or constipation, decreased energy	Calcium channel blocker originally used to treat angina

Antianxiety medications

As noted above, many SSRI and SNRI antidepressants are becoming the first choice in addressing the symptoms of anxiety. The following are examples of traditional drugs usually classified as having sedative-hypnotic capacities and continue to be used as antianxiety agents.

Anti-anxiety (benzodiazepines)	Generic Name	Trade Name	Initial Adult Dose (mg/day)	Side Effects	Other Information
	alprazolam	Xanax	.25-.5 TID	Sedation, drowsiness, decreased cognition, decreased memory, disinhibition, decreased respiration, potential for addiction, withdrawal syndrome (anxiety, irritability, restlessness, tremors, weakness, fatigue, insomnia), rebound anxiety	Medium absorption, short acting Antipanic and mood stabilizing properties
	chlordiazepoxide	Librium	5-25 QID	Same as above	Medium absorption, long acting
	clonazepam	Klonopin	.25-.5 BID	Same as above	Rapid absorption, long acting, Antipanic and mood stabilizing properties
	clorazepate	Tranxene	7.5-15 BID to QID	Same as above	Rapid absorption, long acting
	diazepam	Valium	2-10 BID to QID	Same as above	Rapid absorption, long acting
	lorazepam	Ativan	1-3 BID or TID	Same as above	Medium absorption, short acting
	oxazepam	Serax	10-30 TID or QID	Same as above	Slow absorption, short acting
	prazepam	Centrax	20-60	Same as above	Slow absorption, long acting
	temazepam	Restoril	7.5-30	Same as above	Medium absorption, short acting

Antianxiety (non- benzodiazepines)					
	bupirone	Buspar	15-60	Headache, dizziness, nausea, dry mouth	2-4 weeks before effective, rarely effective with past benzodiazepine use, question about effectiveness with individuals with developmental disabilities
Alpha-adrenergic agonist	clonidine	Catapres	.05-.3 mg	Decreased blood pressure, dizziness, sedation, dry mouth, constipation, fluid retention, depression, nightmares, rashes	Anecdotal evi- dence of benefit to those with post- traumatic stress disorder, withdrawal from opiates and cocaine

Stimulant medication

amphetamine	Dexedrine	5-90 mg	Excess stimulation, anxiety, irritability, insomnia, decreased appetite, increased blood pressure and heart rate, sweating, glaucoma, seizures, movement disorders, psychosis, paranoia	About 75% of all stimulants are given to children in the US, Street value as "speed"
amphetamine sulfate	Adderall	5-80 mg	Nervousness, anxiety, insomnia, nausea, diarrhea, rashes, increased pulse and blood pressure	
methylphenidate	Ritalin	May-80	Same as above	Medication of choice to treat disorders of attention in children
pemoline	Cylert	18-112.5 mg	Same as above	

Side effect medications

Anticholinergic	benztropine	Cogentin	1-2	Anticholinergic syndrome (dry mouth, blurred vision, increased heart rate, flushed skin, constipation, delirium,	More often used with high potency neuroleptics
	biperiden	Akineton	6-8	Same as above	
	procyclidine	Kemadrin	7.5-15	Same as above	
	trihexyphenidyl	Artane	6-10	Same as above	
Antihistamine	diphenhydramine	Benadryl	75-200	Same as above	
Dopamine agonist	amantadine	Symmetral	100-400	Nausea, dizziness, anxiety, irritability, depression, insomnia, clumsiness, tremors, seizures, impaired cognition	Not as effective as anticholinergics
Antioxidant	vitamin E		400-1200	Fatigue, weakness, nausea, headache, blurred vision, diarrhea	Effectiveness not established