

P.I.E.C.E.S.™ Learning and Development Model Psychotropic Framework

Framework for the detection, selection and monitoring (response/side effects) related to the use of Psychotropics

1. When should a psychotropic be used or considered? **(Detect)**
2. How do I select the right medication? **(Select)**
3. How do I monitor the response and side effects (with person, family, providers)? **(Effect)**

Are the benefits outweighing the risks and side effects (to this treatment vs. other treatments)?

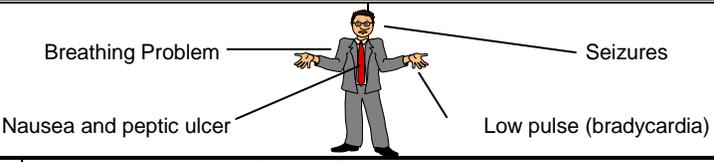
- How long is the medication to be used, and when is it to be reviewed?
- What are the indicators for increasing or decreasing the medication?

Important Note:

Withdrawal symptoms are associated with many psychoactives, including SSRIs (flu-like symptoms). The dose must be reduced slowly and the status monitored closely.

If no response; consider non-adherence, wrong diagnosis, wrong dose, or not enough time.

CLASS	Preferred choices, starting doses	Side Effects	Notes & max recommended dosages
SSRI	Citalopram (10 mg), Escitalopram (5-10 mg), Sertraline (25 mg): preferred Paroxetine, Fluoxetine, Fluvoxamine: more common or severe drug interactions; prolonged side effects with Fluoxetine	Headache, Agitation, Nausea, Diarrhea, Sweating, Somnolence Monitor for hyponatremia. Anticholinergic effects: Paroxetine	HANDS Initially, watch for increased agitation, sleeplessness, increased suicidality or excessive drowsiness. Monitor sodium in first month of Rx. Individuals usually do not feel subjectively better for 6-8 weeks
SNRI	Venlafaxine (37.5 mg)	Headache, nausea, elevated BP in higher doses.	Watch for suicidal risk when “energy” increased but still despondent. Max. recommended dose: 300 mg daily
	Duloxetine (Start dose 30 to 60 mg)	Dry mouth, Appetite loss, Nausea, Constipation Equilibrium (dizziness), Somnolence or sleep disturbance	Not for use with persons with liver disease and/or sever kidney problems, uncontrolled glaucoma. Watch for drug-drug interaction (i.e. Cipro, etc)
NASA	Mirtazapine (15 mg)	Dry mouth, drowsiness, weight gain, dizziness: mild anticholinergic activity	Weight gain can be substantial. Maximum recomm. Dose: 45 mg
NDRI	Bupropion (100 mg)	Seizures, Headache, Agitation, Rash, Emesis, Sleep disturbance	SHARES Maximum recommended dose: 150 mg BID
SARI	Trazodone (25-50 mg)	Drowsiness and orthostatic hypotension	Used more for sedation than for antidepressant effect. Effects last approx. 4 hours
RIMA	Moclobemide (150 mg)	Monitor for hypotension. When combined with MAO-B (Eldepryl), MAOI diet/full precautions needed	In doses up to 600 mg per day, no dietary precautions required. Given BID from 300 mg to 600 mg daily
STIMULANT	Methylphenidate (5 mg in morning)	Cardiovascular risks: high BP, agitation, sleeplessness	Usually not a first line treatment
TRICYCLIC	Avoid most TCAs, Nortriptyline or Desipramine may be considered in treatment resistant depression	Cardiovascular: Orthostatic hypotension (dizziness), falls, ↑ pulse rate AntiCholinergic: Urinary retention constipation, dry mouth, blurred vision (C)onfusion: Monitor with the C.A.M.	3 C's Usually not a first line treatment

Atypical Antipsychotics		Newer Antipsychotics – Side Effects to Monitor	Clinical Response
Common Olanzapine Risperidone Quetiapine Advantages of New Antipsychotics <ul style="list-style-type: none"> • Less EPS • Less risk of developing tardive dyskinesia • Less cognitive effects • May stabilize mood 		Dizziness, Agitation (early), Somnolence, Hypotension May cause weight gain May cause tachycardia, with higher doses – EPS Watch for sedation Cautions: <ul style="list-style-type: none"> • Lipid increases • Insulin resistance (glucose changes) • Weight gain • Potential cardiovascular events 	The clinical factors to monitor include the 7 parameters of delusion: <ol style="list-style-type: none"> 1. Dangerous, threatening 2. Distressing to self 3. Disturbing to others 4. Direct Action, if acting on them 5. Jeopardizing independence 6. Distant or present 7. Definite (fixed) vs insight Tranquilizing effect usually occurs early; however, resolution of psychosis may take 1-2 months
Traditional antipsychotics or neuroleptics High potency Haloperidol Mid potency Loxapine, Perphenazine Low potency Chlorpromazine		Traditional Antipsychotics - Side Effects to Monitor <ul style="list-style-type: none"> • Constriction: EPS: rigidity, tremors, slowed movements, drooling, leaning to one side, parkinsonian gait and falls • Less EPS but more anti-cholinergic than Haloperidol • Anti-Cholinergic side effects, Confusion, Cardiovascular side effects 	Mainly used if delirium In general, should be avoided
If it is an anxiolytic, what class is it?		Side Effects to Monitor	Response
Benzodiazepine	Lorazepam, Oxazepam, Alprazolam, Temazepam, Clonazepam	Confusion and memory problems, ataxia (poor balance) and falls, disinhibition leading to inappropriate or aggressive behaviour	<ul style="list-style-type: none"> • decreased agitation and anxiety • Rapid response within 1-2 hours • Best in panic attacks or catastrophic reactions
Mood stabilizers		Side Effects to Monitor	Response
	Lithium Carbonate	Ataxia and falls, confusion, weakness, diarrhea usually when serum level is greater than 0.8 mmol/L Some GI upset in early treatment. Polyuria, tremor may occur at therapeutic doses. Maintain serum levels between 0.4 to 0.7 mMol/L	<ul style="list-style-type: none"> • Stabilization of mood and behaviour within 2-4 weeks at therapeutic dose/level • Mostly used when previous recurrent mood disorder, particularly bipolar illness
Antiepileptic	Na Valproate, Carbamazepine, Lamotrigine	Sedation, ataxia, nausea; if there is bruising or bleeding of any type, call physician. Check if drug levels and blood work done regularly (liver, hematology). Watch for rashes particularly with Lamotrigine.	<ul style="list-style-type: none"> • May be considered in lability of mood and behavioural problems in dementia
Drugs to treat Dementia		Side Effects to Monitor	Response
Cholinesterase inhibitors	Donepezil, Rivastigmine, Galantamine	Muscle cramp, Insomnia, Nausea, Diarrhea and weight loss Slow pulse, heart block, peptic	<ul style="list-style-type: none"> • Improve or prevent decline in ADLs, Behaviour, Cognition, and Decrease caregiver time (ABCD)
Cognitive Enhancers (Potential Problems)			
			
Glutamnergic agent		Side Effects to Monitor	Response
Memantine <ul style="list-style-type: none"> • Indicated for moderate to severe dementia 		Confusion, Headache, Equilibrium, Constipation, Kidney function	<ul style="list-style-type: none"> • Cognition - improved • Socialization – improvements • Household tasks • ADLs - improved function • Persecutory thoughts decreased • Excessive activity/irritability decreased • Caregiver time saved