

TEXAS MEDICATION ALGORITHM PROJECT PROCEDURAL MANUAL

BIPOLAR DISORDER ALGORITHMS

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Disclaimer

This manual is based upon the evidence based, expert consensus recommendations presented in the article, Suppes T, Dennehy E, Hirschfeld RMA, Altshuler LL, Bowden CL, Calibrese CR, Crismon ML, Ketter T, Sachs G, Swann AC. The Texas Implementation of Medication Algorithms: Update to the Algorithms for Treatment of Bipolar I Disorder. *J Clin Psychiatry* 2005;60:870-886. The manual also reflects the experiences of the TMAP team in conducting the research evaluating use of the algorithms, as well as in implementing the algorithms in public mental health systems. These algorithms reflect the state of knowledge, current at the time of publication, on effective and appropriate care as well as clinical consensus judgments when research-based knowledge is lacking. The inevitable changes in the state of scientific information and technology mandate that periodic review, updating, and revisions will be needed. These guidelines (algorithms) may not apply to all patients, and each must be adapted and tailored to each individual patient. The authors bear no responsibility for the use and/or modification of these guidelines by third parties. The provision of clinical care, including recommendations contained in these or other guidelines, in whole or in part, is entirely the responsibility of the clinician.

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Overview of the Texas Medication Algorithm Project

Algorithms facilitate clinical decision making by providing clinicians with large amounts of current information on the newest psychotropic medications and research data, as well as specific treatment sequences with tactical recommendations. Patients receive the benefit of patient education, which should enhance adherence to the treatment program. Algorithms are designed with the objectives of long-term safety, tolerability, and full symptom remission — not just response. The employment of such treatment guidelines to assertively treat the severely and persistently mentally ill (SPMI) population may enhance patient outcomes while improving the utilization of crisis/hospital services and improving accountability for scarce resources — thereby increasing the overall efficiency of patient care.

Beginning in 1995, The Texas Medication Algorithm Project (TMAP) was developed by the Texas Department of Mental Health and Mental Retardation (TDMHMR^{*}) in collaboration with Texas universities to assess the value of an algorithm-driven disease management program in the pharmacological management of mentally ill patients. The result has been a set of algorithms for the treatment of the three major disorders most commonly encountered in the Texas public mental health system: schizophrenia (SCZ), bipolar I disorder (BDI), and major depressive disorder (MDD). A best practice treatment has been defined as a series of treatment steps that guides physicians in determining medication treatment plans, thereby generating the best outcome for each individual consumer. The algorithms consist of both treatment strategies (recommended sequential medication regimen options) and treatment tactics (recommended options for optimal use of a medication regimen in a given patient). Equal attention should be given to the treatment tactics as to the strategies.

Practitioners, patients, families, and administrators all contributed to the formulation and implementation of TMAP, ensuring an optimum level of efficacy and practicality. Phase 1 of TMAP dealt with the development of these algorithms using expert consensus. In Phase 2, the feasibility of algorithm implementation in the TDMHMR system was evaluated. Phase 3 evaluated the clinical and economic impact of medication treatment algorithms for MDD, SCZ, and BDI in comparison with Treatment As Usual (TAU). For bipolar disorder, results from each of these phases has been published (please refer to Appendix F for a list of publications).

Implementation of the algorithms on a system wide basis was the next step in offering high quality care to the SPMI patient population in the public mental health sector. This rollout was referred to as Texas Implementation of Medication Algorithms (TIMA) (Phase 4 of TMAP) in order to distinguish it from the research phases of TMAP. However, in order to retain name identity, TMAP is once again being used for the program. The rollout began with the training of physicians and support personnel in algorithm implementation.

Continued revision may be required in the structure and function of clinical staff to increase patient education and adherence, to improve follow up, and to develop psychosocial supports to improve symptom recognition, symptom control, and functional restoration. Continuous education, consultation, and collaboration are necessary for both clinicians and administrators

^{*} State public mental health services are now provided as a component of the Texas Department of State Health Services (DSHS).

in making timely revisions in clinical procedures and budgetary allocations. From a clinical and administrative perspective, medication algorithms should demonstrate validity with far-reaching and long-term applications.

For additional information regarding the development of the most current Bipolar I Disorder Algorithms, please refer to the article: Suppes T, Dennehy E, Hirschfeld RMA, Altshuler LL, Bowden CL, Calíbrese CR, Crismon ML, Ketter T, Sachs G, Swann AC. The Texas Implementation of Medication Algorithms: Update to the Algorithms for Treatment of Bipolar I Disorder. *J Clin Psychiatry* 2005;60:870-886.

Clinical Management

- At baseline and throughout treatment, the patient should be evaluated for possible psychosocial interventions, including evidence based psychotherapy.
- Use of the algorithms, assumes that the clinician has made a thorough evaluation and an accurate diagnosis. If a patient completes trials of two stages of the algorithm without observable positive outcomes, the patient should be re-evaluated for accuracy of diagnosis and the occurrence of co-occurring general medical and mental disorders, including substance abuse.
- If co-occurring substance abuse is present, concomitant treatment of both the bipolar disorder and the substance abuse disorder must be implemented in order to obtain positive patient outcomes.
- Brief symptom ratings (BDSS, CGI) should be completed at each visit so that treatment decisions are guided by objective data.
- Adequate documentation should be completed for each algorithm stage and treatment choice (i.e., decision points). If algorithm stages are skipped or if treatment is different from the algorithms, the rationale should be adequately documented.
- The frequency of clinic visits should be adequate to monitor for symptom changes and adverse effects, to adjust doses as necessary to achieve an optimum therapeutic trial, and change regimens when suboptimal clinical response is observed after regimen optimization.
- All patients with bipolar I disorder who achieve a satisfactory clinical response (and preferably symptom remission) should continue treatment until a full response to treatment is sustained for at least four weeks. At that point, continuation treatment should begin.
- When a choice exists between brand, generic, or different formulations (e.g., slow release) of a recommended medication, always initiate treatment with the form that is likely to be best tolerated by the patient, which will lead to enhanced adherence with treatment. Careful attention should be given to adequate dose and duration of treatment for each chosen regimen.
- If medication acquisition cost is a consideration in medication selection, these decisions should be addressed within a specific treatment stage. If all other things are equal (i.e., efficacy, safety, tolerability), then a less expensive medication regimen within a specific algorithm stage may be considered.

At-a-Glance Bipolar Disorder Medication Algorithms

Visit Frequency: While medications are being actively adjusted, patients should be seen every 2 weeks. As medications are stabilized and patients exhibit stable, positive response, visit intervals can be gradually lengthened to every 4 weeks. When patients achieve a stable response, visit frequency can be scheduled for every 8-12 weeks, as individually determined. Additional patient contact (e.g., by telephone) may be necessary to provide optimal care for a symptomatic patient.

Assessment Frequency: The Brief Bipolar Disorder Symptom Scale (BDSS) should be completed at each clinic visit. If the patient is contacted by phone, an Interim Contact Form (ICF) must be completed.

Criteria for Medication Change: Medication changes are made after evaluation of tolerability, efficacy across multiple symptom domains, and safety. Clinicians should consult the Tactics and Critical Decision Points for the Treatment of Bipolar Disorder after review of symptom patterns and severity on the BDSS score sheet, as well as any medication side effects and tolerability. The goals of treatment are full symptomatic remission, return of psychosocial functioning, and prevention of relapses and recurrences. Any symptoms, even those in the mild to moderate range, warrant consideration of tactics that may further optimize response. It is appropriate to try more than one combination at a given level. New trials from each stage can be labeled Stage 2-1, Stage 2-2, etc.

Evaluations: At each visit, a physician will assess core symptom severity, overall functional impairment, and side effect severity. The Clinical Coordinator (CC) or the physician can complete the BDSS and patient global self-rating of symptom severity and side effects.

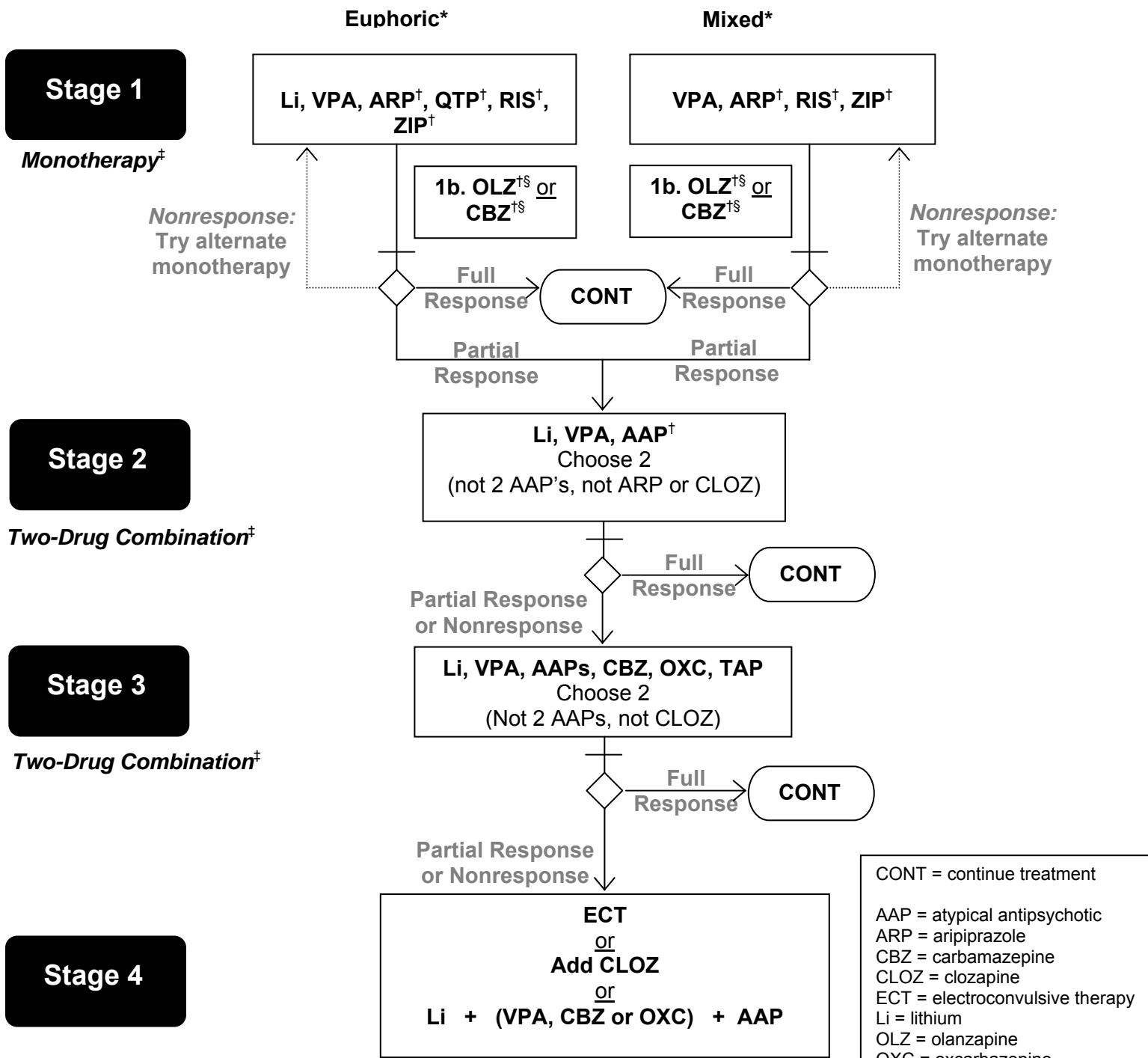
Medication Doses: Appropriate dosage ranges for medications used in the algorithms are included in *Appendix C*. Doses outside of the ranges should have a chart note indicating “change from algorithm recommended” and documentation of rationale for change. Doses above the usual therapeutic range should be time limited (e.g., 4-6 weeks), and response to this dose evaluated using the brief clinical rating scales. If improvement has not occurred with the higher than usual dosage in this time frame, then treatment should be changed to the next treatment stage or an alternative medication within the same stage, using an overlap and taper strategy.

Medication Serum Concentrations: Serum concentrations should be obtained about 5 days (5 half-lives) after reaching the minimum target dose for lithium or valproate (please refer to Appendix C). Thereafter, serum concentrations should be ordered as necessary to ensure that dosing is within the therapeutic window for an individual patient. Intolerable side effects require immediate evaluation of serum concentrations.

Documentation: Uniform documentation is an important component of the algorithm program. Clinical rating scale information, response to treatment, prescribed medications, and the rationale for changing medications should be clearly documented on the Clinical Report Form.

Bipolar Disorder Algorithms

Algorithm for the Treatment of Bipolar Disorder – Currently Hypomanic/Manic



* It is appropriate to try > 1 combination at any given level. New trials from each stage can be labeled Stage 2 (-1), Stage 2 (-2), etc.

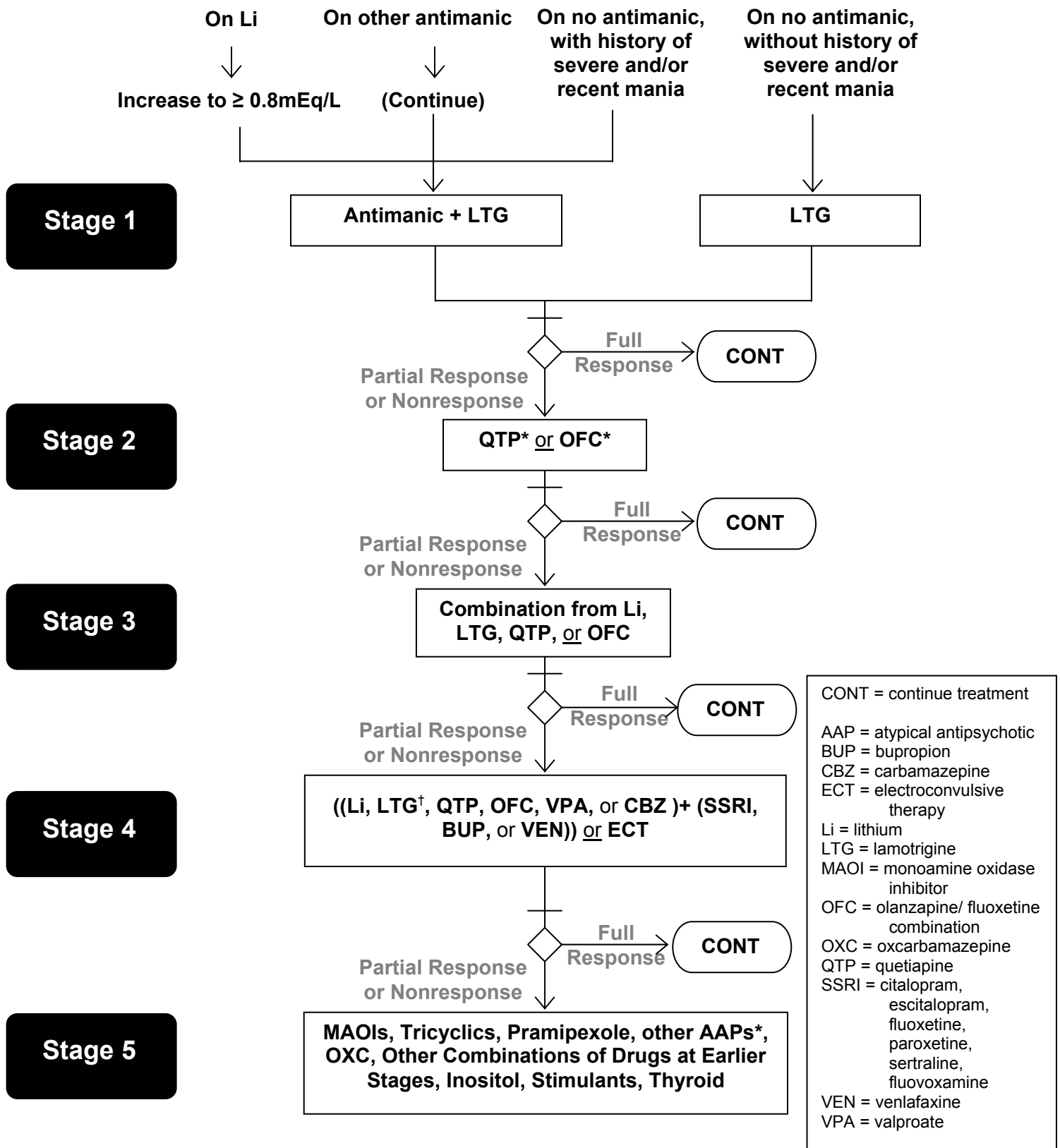
[†] Routine monitoring should occur for patients receiving atypical or typical antipsychotic treatment

[‡] Use targeted adjunctive treatment as necessary before moving to next stage:

[§] Safety and other concerns led to placement of OLZ and CBZ as alternate first-stage choices

Bipolar Disorder Algorithms

Algorithm for the Treatment of Bipolar Disorder – Currently Depressed



* Routine monitoring should occur for patients receiving atypical or typical antipsychotic treatment

† LTG has limited antimanic efficacy and in combination with an antidepressant may require the addition of an antimanic.

Bipolar Disorder Algorithms

This version of the algorithms includes treatment recommendations for patients presenting with hypomanic/manic/mixed episodes or depressive episodes. A significant change in this version is that the algorithm for treatment of bipolar depression is now a stand-alone guideline, distinct from the recommendations for treating patients who are acutely hypomanic, manic, or mixed. All patients diagnosed with bipolar I disorder should be treated with medication or medication combinations recommended within these guidelines. Consistent with other published guidelines for treatment of bipolar I disorder, the majority of treatment stages consist of medication combinations. If possible, when adjusting medications, it is preferable to make adjustments to one agent at a time, to allow for evaluation of response. These algorithms do not include recommendations for bipolar II disorder, as the consensus panel did not deem that sufficient evidence was available to construct an evidence based algorithm.

When utilizing mood-stabilizing medications, it is recommended that the dose be maximized (either alone or in combination) as much as tolerability allows and for an adequate duration of time to observe symptom improvement before changing treatment stages. Switching to alternative mood stabilizers, versus adding, is recommended in cases of intolerance or no response, using the overlap and taper tactics provided (please refer to *Appendix E* for Overlap and Taper Guidelines). It is recommended that the clinician later try to taper and discontinue the first medication so that the patient's clinical status can be evaluated on the second monotherapy. If a patient has partial response to a medication, and is tolerating the medication, a new medication should be added. It is recommended that the clinician try to taper the first medication at a later date if the patient's mood stabilizes.

When treating patients with hypomania or mania, a first consideration involves decreasing and/or discontinuing antidepressant medications. This taper should be done relatively quickly, except in cases where it is contraindicated. For those patients with rapid cycling, antidepressants should also be tapered and discontinued.

Serum Concentrations: If lithium or valproate is utilized, serum concentrations should be a part of evaluating response and tolerability. In outpatient practice, serum concentrations may not be available at each visit. It is recommended that by 2 weeks after initiating lithium (Li) or valproate (VPA) that the patient be receiving the minimum target dose. If possible, a serum concentration 5 days (5 half-lives) after reaching the target dose is recommended before the first appointment to assess response (e.g., 2-3 weeks after starting the trial). While awaiting serum concentrations (e.g., 4 weeks), it is generally safe to gradually increase VPA if no side effects develop.

Target serum concentrations are provided in *Appendix C*. For Li and VPA, evidence supports differences in clinical response for some patients between therapeutic and high therapeutic levels. Clinically, it is reasonably safe and well tolerated to exceed the recommended therapeutic range for VPA (> 125 ug/ml), but few psychiatric patients appear to need these higher levels. The upper limits of Li (1.5 mEq/L) are usually associated with unacceptable side effects, and levels over these limits are potentially toxic, with the exception of patients in a full-blown manic episode who may tolerate and benefit from levels of Li between 1.2 –1.5 mEq/L.

Similarly, it is necessary to obtain more frequent levels of VPA when used in combination with an enzyme inducer such as carbamazepine. Once you have obtained a couple of levels for VPA or Li, it is often possible to estimate the likely increase of serum concentrations with dose changes and collect serum concentrations somewhat less often. However, the development of side effects should always signal consideration of a serum concentration.

Bipolar Disorder Algorithms

Monitoring Atypical Antipsychotics:

Routine health monitoring is an essential part of managing side effects that may result from certain pharmacologic treatments. Atypical antipsychotics are one class of medications that have evidence supporting their use in the treatment of hypomanic, manic, mixed, and depressed episodes of bipolar I disorder. As use of this class of medications has continued to expand in the treatment of psychiatric illnesses, several health implications have been recognized through post-marketing surveillance. Taking into account these findings, the Texas public health system recently adopted the Mount Sinai Conference monitoring guidelines (Marder SR, et al. *American Journal of Psychiatry* 2004;161:1334-49.). Although these recommendations are for patients with schizophrenia, they apply to any patient taking an antipsychotic medication. Similar recommendations have also been developed by a joint task force of the American Psychiatric Association and the American Diabetes Association (American Diabetes Association, American Psychiatric Association, American Association of Clinical Endocrinologists, et al. Consensus Development Conference on Antipsychotic Drugs and Obesity and Diabetes. *Diabetes Care* 2004;27:596-601. and American Diabetes Association, American Psychiatric Association, American Association of Clinical Endocrinologists, et al. Consensus Development Conference on Antipsychotic Drugs and Obesity and Diabetes. *J Clin Psychiatry* 2004;65:267-272.)

Co-Occurring Substance Abuse

It is extremely common for patients with bipolar disorder to have a co-occurring alcohol or other substance abuse disorder. In this occurrence it is extremely important that both disorders be appropriately treated. The patient is not likely to do well clinically if only one of the two disorders is treated. Most importantly, the clinician should not wait until the patient is abstinent from substances before beginning appropriate treatment for the bipolar disorder.

Although the data are limited regarding pharmacotherapy of bipolar disorder co-occurring with a substance abuse disorder, some evidence suggests that divalproex and carbamazepine may be preferred mood stabilizers for patients with concomitant alcohol or benzodiazepine abuse. Results from an open label study suggest that patient symptoms and craving decreased when they were switched from a first generation antipsychotic to quetiapine. It is unknown whether this is a class effect, or whether these results will withstand the rigor of a randomized controlled trial.

Description of Algorithm Stages

Algorithm for Treatment of BDI – Currently Hypomanic/Manic

Stage 1. For patients presenting with euphoric mania/hypomania or psychotic mania, medication choices are lithium, valproate, aripiprazole, quetiapine, risperidone, and ziprasidone. For dysphoric or mixed mania, the recommendation is to choose among valproate, aripiprazole, risperidone or ziprasidone. Divalproex is generally recommended instead of valproate due to better tolerability. Severe clinical presentation may warrant beginning treatment at Stage 2.

Generally, in the case of partial response with good tolerability, the recommendation is to add a second mood stabilizing medication (move to combination therapy, i.e., Stage 2) versus switching. If the patient is intolerant or does not respond to the medication used in Stage 1, the recommendation is to try an alternative mood stabilizer within Stage 1. This principal applies to all stages when more than one treatment option is available. New trials from each stage can be labeled Stage 1-2, Stage 1-3, etc. When changing medications, the recommendation is to cross over (overlap and taper), using abrupt discontinuation only when medically necessary. However, the overlap and taper period should be as brief as feasible (please refer to Appendix E for Overlap and Taper Guidelines).

Stage 1B. The consensus panel placed olanzapine and carbamazepine as potential monotherapy options within a sub-stage, titled Stage 1B. These medications have equivalent efficacy to Stage 1 medications, but concern about greater potential adverse events or complexity associated with treatment places them at Stage 1B. Olanzapine causes significant weight gain in a substantial percentage of patients. Carbamazepine stimulates its own metabolism as well as that of numerous other psychotropic medications. This creates complexity with its own dosing as well as concomitant medications.

Stage 2. Stage 2 treatment includes combination treatment with two of the following: lithium, valproate, olanzapine, quetiapine, risperidone, or ziprasidone. The panel does not recommend the use of two antipsychotics, but rather suggests the combination of lithium plus valproate or lithium or valproate plus an atypical antipsychotic (not including clozapine or aripiprazole). No evidence exists to support superior efficacy with the use of two antipsychotics in acute mania. All of the other atypical antipsychotics except aripiprazole and clozapine have randomized controlled trial data to support combination use with lithium or valproate. Clozapine is also not recommended here because of its side effect profile.

Stage 3. In Stage 3, a different two drug combination of medications is recommended, drawing from a larger group of medication choices than described in Stage 2. Carbamazepine, oxcarbazepine, aripiprazole, and typical antipsychotic agents were added as additional choices here. Again, the panel does not recommend the use of two antipsychotic agents during Stage 3. Preferably, one agent from the previous combination would be kept, and change would occur to a different second agent. Clozapine again is not recommended at this stage due to monitoring and safety concerns.

Stage 4. Stage 4 introduces the option of electroconvulsive therapy (ECT) treatment, as well as clozapine or 3-drug combinations. 3-drug combinations would include lithium, and an anticonvulsant mood stabilizer (valproate, carbamazepine, or oxcarbazepine), plus an atypical antipsychotic. Clozapine may be added to lithium, an anticonvulsant mood stabilizer, or lithium plus an anticonvulsant mood stabilizer.

Algorithm for Treatment of BDI – Currently Depressed

Stage 1. The first stage has multiple entry points. First, all patients with bipolar I disorder, currently depressed, who are currently receiving a mood stabilizer should have that medication dosage optimized before initiation of other medications for bipolar depression. For those patients already taking lithium, it is recommended that the lithium dose be optimized to achieve a 12 hour post dose, steady state serum concentration ≥ 0.8 mEq/L. Patients with a history of recent and/or severe mania and not current receiving an antimanic medication should have a mood stabilizer initiated (see algorithm for treatment of mania/hypomania and mixed episodes). If depressive symptoms persist after mood stabilizer treatment is optimized, lamotrigine is recommended as the Stage 1 medication for depression. Lamotrigine monotherapy is recommended as a first-stage option only for those patients without a recent and/or severe history of manic symptoms. Other patients should receive lamotrigine plus a mood stabilizer.

Stage 2. Stage 2 options include quetiapine monotherapy or the olanzapine-fluoxetine combination treatment. An overlap and taper strategy is recommended for moving from Stage 1 to Stage 2, unless medications are discontinued because of severe adverse effects. In non-responders at Stage 2, the recommendation is to try an alternative intervention within Stage 2. This principal applies to all stages when more than one treatment option is available. New trials from each stage can be labeled Stage 2-2, Stage 2-3, etc.

Stage 3. At this point, the algorithm begins to rely more heavily on open label studies, case series, and expert clinical consensus, as only limited data are available on treatment of bipolar depression following failure with Stage 2 medications. Stage 3 treatment includes the combination of any two of the four agents already introduced in this treatment guideline, namely lithium, lamotrigine, quetiapine, and olanzapine-fluoxetine combination. These recommendations are relatively low risk for mania induction or cycle acceleration and reflect acute strategies that may be particularly effective in longer-term treatment. Once again, two antipsychotics are not recommended.

Stage 4. Stage 4 includes a variety of other treatment options, including ECT and combinations that include the use of lithium, lamotrigine, quetiapine, olanzapine-fluoxetine combination, valproate, or carbamazepine in combination with an SSRI medication, bupropion, or venlafaxine. SSRIs include citalopram, escitalopram, fluoxetine, paroxetine, sertraline, and fluvoxamine. SSRIs are not introduced until Stage 4 because controlled studies of the use of SSRIs in patients with bipolar I depression are limited, and more recent studies suggest that the efficacy is only modest in this population. Mania induction remains a possibility with SSRIs and should be discussed with the patient. Given the limited efficacy of lamotrigine in preventing new manic episodes, the addition of an antimanic is recommended when lamotrigine is used in combination with a traditional antidepressant (i.e., three-medication combination). The use of two SSRIs or two antipsychotics is not recommended.

Stage 5. Stage 5 offers a variety of treatment options with limited empirical evidence in support of their use or significant adverse effects. Stage 5 suggestions include MAOIs, tricyclic antidepressants, other atypical antipsychotics, oxcarbazepine, trials of new combinations of drugs included in the algorithm, thyroid supplementation, as well as pramipexole, inositol and stimulant adjunctive treatment. Clinicians may decide to use other options from earlier stages not previously used before proceeding to Stage 5. Two SSRIs, two TCAs, or two antipsychotics are not recommended.

Tactics and Critical Decision Points

Critical Decision Points (CDPs) are designed to prompt an assessment of symptoms and a determination of a need for a change in strategy or tactics. At each CDP, the physician should assess the patient and make a decision to either continue or change treatment based on improvement in symptoms and tolerability. Note: Patients start at CDP # 1 at the beginning of each new stage or treatment. If tolerability is good, patients should receive an adequate dose and duration trial before moving to the next algorithm stage in patients with inadequate improvement.

Critical Decision Points involve a consideration of response among all domains, symptom improvement, tolerability, and safety. Evaluate the pattern and severity of symptoms by reviewing the BDSS score sheet (please refer to *Appendix A* for score sheet). Depending on the pattern and severity of symptom scores, the clinician may follow recommendations within the column that includes the most severe symptoms, or the column that contains the majority of clinical symptoms. The symptoms are loosely grouped by clinical presentation to allow for quicker assessment of potential treatment decisions. The Tactics and Critical Decision Points for treatment of the bipolar patient allow for clinician judgment and choice in determining where to make adjustments to medications, responsive to the individual patient's presentation.

Patients should return to the clinic, or be contacted by clinic personnel, every two weeks (office visit or by phone) until symptom patterns are primarily contained within the mild range on the BDSS, or remission is achieved. Patients will then be evaluated monthly, until the clinician determines the patient may begin transitioning to maintenance treatment. It is recommended that clinicians see the patient every 8-12 weeks while they are transitioning to maintenance treatment. Support personnel may see the patient in clinic or contact patients by phone between physician visits as necessary.

All recommendations assume that side effects are tolerable. Please refer to *Appendix D* for suggestions on how to manage side effects. Intolerable, unmanageable side effects may warrant changing to a different stage of treatment with medications different than those causing the adverse effects. Tolerability should be evaluated at each Critical Decision Point. The terms "associated or co-existing symptoms" refers to symptoms which often accompany an exacerbation of bipolar disorder (agitation, anxiety, insomnia) and which frequently complicate the course of illness. The treatments used for these symptoms are generally time-limited and symptom-oriented, in contrast to the maintenance and illness-oriented role of mood stabilizers and other primary treatments for bipolar I disorder.

At any point within the CDPs, if medications are stabilized and patient outcomes remain positive and stable, visit intervals can be extended to every four weeks. All patients with bipolar I disorder who achieve a satisfactory clinical response (preferably symptom remission) should transition to maintenance treatment. Please refer to the section on transition to maintenance treatment for further recommendations.

Tactics and Critical Decision Points

Tactics and Critical Decision Points (CDPs) for the Treatment of Bipolar Disorder

<i>Critical Decision Point</i>	<i>Clinical Status</i>	<i>Plan</i>
Week 0 (CDP # 1)	Symptomatic	<ul style="list-style-type: none"> Assess patient and decide on appropriate algorithm for treatment (manic/hypomanic/mixed or depressed); choose a treatment stage and initiate a medication regimen from that stage; adjust dose to lower end of therapeutic dose range or serum concentration.
	Full Response (No Symptoms)	<ul style="list-style-type: none"> Continue current dose.
Week 2 (CDP # 2)	Mild to Moderate Symptoms	<ul style="list-style-type: none"> Continue current dose. Consider increasing dose if medication tolerability is good.
	Severe Symptoms	<ul style="list-style-type: none"> Increase dose if medication tolerability is good.
	Full Response (No Symptoms)	<ul style="list-style-type: none"> Continue current dose.
Week 4 (CDP # 3)	Mild to Moderate Symptoms	<ul style="list-style-type: none"> Increase dose if medication tolerability is good. Consider the next stage or change medication(s) within stage.
	Severe Symptoms	<ul style="list-style-type: none"> Increase dose if medication tolerability is good. Consider the next stage or change medication(s) within stage.
	Full Response (No Symptoms)	<ul style="list-style-type: none"> Once a patient sustains a full response to medication for at least four weeks, a transition to continuation treatment occurs. In general, the patient should have full response for two consecutive visits before beginning continuation treatment. After maintaining a full response for 4-6 months, the clinician should consider medication dosage reduction or regimen simplification in maintenance phase treatment. Otherwise, continue current dose.
Week 6 (CDP # 4)	Mild to Moderate Symptoms	<ul style="list-style-type: none"> Increase dose if medication tolerability is good. Consider the next stage or change medication(s) within stage.
	Severe Symptoms	<ul style="list-style-type: none"> Increase dose if medication tolerability is good. Consider the next stage or change medication(s) within stage.
	Full Response (No Symptoms)	<ul style="list-style-type: none"> Once a patient sustains a full response to medication for at least four weeks, a transition to continuation treatment occurs. In general, the patient should have full response for two consecutive visits before beginning continuation treatment. After maintaining a full response for 4-6 months, the clinician should consider medication dosage reduction or regimen simplification in maintenance phase treatment. Otherwise, continue current dose.
Week 8 (CDP # 5)	Mild to Moderate Symptoms	<ul style="list-style-type: none"> Increase dose if medication tolerability is good. Consider the next stage or change medication(s) within stage.
	Severe Symptoms	<ul style="list-style-type: none"> Go to the next stage or change medication(s) within stage.
	Full Response (No Symptoms)	<ul style="list-style-type: none"> Once a patient sustains a full response to medication for at least four weeks, a transition to continuation treatment occurs. In general, the patient should have full response for two consecutive visits before beginning continuation treatment. After maintaining a full response for 4-6 months, the clinician should consider medication dosage reduction or regimen simplification in maintenance phase treatment. Otherwise, continue current dose.
	Severe Symptoms	<ul style="list-style-type: none"> Go to the next stage or change medication(s) within stage.

Process Measures: Evaluation of Patient Response

Brief Bipolar Disorder Symptom Scale (BDSS)

Patients with a diagnosis of bipolar I disorder will be evaluated using the Brief Bipolar Disorder Symptoms Scale, or BDSS. This scale is derived from items included on the 24-item Brief Psychiatric Rating Scale^{1,2,3}. The 10-item version utilized for TMAP includes items assessing hostility, elevated mood, grandiosity, excitement, motor hyperactivity, depressed mood, anxiety, emotional withdrawal, blunted affect, and unusual thought content.

Clinicians can use the scoring sheet to graph patient scores on each of these 10 symptom domains. While the presence of one or more of these symptoms may be suggestive of different things, they are loosely grouped within the categories of mania/hypomanic symptoms, depressive symptoms, and psychotic symptoms. Of course, clinician judgment is necessary to evaluate the source of particular symptoms. For example, blunted affect may be a result of increased depression, increased psychosis, or other sources. Elevated mood may be related to increased hypomania/mania or a manifestation of increased delusional/psychotic symptoms. The grouping is intended to help facilitate decision-making within the algorithms, but is not exclusive.

A copy of this scale and the scoring sheet can be found in Appendix A.

Clinician Ratings

Each of the symptom clusters is rated on a 10-point scale (from “no symptoms” to “extremely severe”). The rating is based on impression of the patient at this visit, as well as information about the patient’s clinical status during the week prior to the visit.

- **Core Symptoms:** Based upon all available information, clinician impression of the presence and severity of each of the symptoms in this patient.
- **Other Symptoms:** Clinician rating of other symptoms associated with the patient’s disorder, but not core symptoms of the patient’s illness. Rate impressions for each of the specific “other symptoms” listed (irritability, mood lability, insomnia, agitation, anxiety, level of interest, appetite, energy level). Under “other,” specify and rate any other symptom that are significant.
- **Overall Side Effect Severity:** Overall rating of side effects from all medications being taken by the patient.
- **Overall Functioning:** Overall impression of this patient’s ability to function on a daily basis. “10” is the highest possible functioning, and “1” is the lowest possible functioning.

¹ Dennehy EB, Suppes T, Crismon ML, Toprac M, Carmody TJ, Rush AJ. Development of the Brief Bipolar Disorder Symptom Scale for patients with bipolar disorder. *Psychiatry Research* 2004;127:137-45.

² Overall JE, Gorham DR. Introduction - the Brief Psychiatric Rating Scale (BPRS): Recent developments in ascertainment and scaling. *Psychopharmacol Bull* 1988;24:97-99.

³ Ventura J, Green MF, Shaner A, Liberman RP. Training and quality assurance with the Brief Psychiatric Rating Scale: “The drift busters.” *Int J Methods Psychiatric Res* 1993;221-244.

Medications and Dosing

Please refer to *Appendix C* for summary of recommended doses, titration schedules, maximum recommended doses, side effects, monitoring parameters, and drug interactions for medications used in the Algorithm for Treatment of BDI – Currently Hypomanic/Manic/Mixed or the Algorithm for Treatment of BDI – Currently Depressed.

Appendix D contains recommendations for dealing with treatment-emergent side effects as well as co-existing symptoms.

Overlap and Taper Guidelines are outlined in *Appendix E*.

Transition to Maintenance Treatment

Continuation Treatment

All patients with bipolar I disorder who achieve a satisfactory clinical response (symptom remission when possible) should continue treatment with the same agent(s), with dosage adjustments as needed to optimize and maintain symptom resolution and good tolerability.

Continuation treatment usually lasts for 2-4 months following acute response. Continuation treatment allows the clinician to continue to monitor the effectiveness of the regimen that provided clinical response during acute treatment. Ongoing contact between the clinician and the patient are important, and support personnel may contact patients in person or by phone between physician visits in order to screen for emergent problems and encourage patient treatment adherence.

Once treatment is stabilized and patient outcomes remain positive and stable, visit intervals can be extended to every four weeks for the first three months, then every 2-3 months thereafter. Once full response is achieved, medication(s) should be continued. If symptoms should recur, prompt treatment with the medication and dose previously shown to be effective during the most recent acute episode should be initiated.

If a patient has received ECT as an acute phase treatment, medication treatment is recommended once the initial treatment phase of ECT is completed. Selecting one or more medications that the patient has not previously received, or medications that the patient has responded to during a previous episode of bipolar I disorder (BDI), is generally recommended. If there is a history of severe and/or recent mania, a mood stabilizer should be included in this medication regimen after ECT is completed. If a patient relapses, resuming ECT should be considered. It is important to remember that ECT should not be administered with concomitant anticonvulsant mood stabilizers or lithium.

All patients should be actively involved in psychoeducation programs that address the patient's need for knowledge about the illness and its treatment, emphasize the role of healthy lifestyles, provide emotional support, and enforce the importance of treatment adherence. Patients may also benefit from cognitive behavioral therapy that is targeted for patients with bipolar disorder, as well as family-focused therapy if available.

Maintenance Treatment

Maintenance treatment recommendations depend on the polarity of the most recent episode, and levels of recommendations were hierarchically ordered by the TMAP consensus panel. The ordering reflects the quality and quantity of research evidence balanced with safety and tolerability information. Maintenance treatment typically begins with the same regimen that the patient received in acute treatment. Although maintenance treatment research to date has focused on the use of monotherapy, it is reasonable to start maintenance treatment with the medications that brought the patient to this point in care. It is likely the majority of patients will need combination treatment to maintain long-term stability.

The goal of maintenance treatment is to continue treatment at the minimum dose and number of medications necessary for the patient to attain an optimal quality of life and to prevent relapse. Thus, unless the patient's treatment history dictates otherwise, attempts should be made to simplify complex medication regimens. Similarly, if higher medication doses were utilized during the acute

Transition to Maintenance Treatment

episode, attempts should generally be made to lower the dose to one that may enhance tolerability, and thus medication adherence, over the longer term.

General practice at this time is lifetime mood stabilizers following 2 manic episodes, or 1 episode if it is a severe episode and/or significant family history of bipolar or major depressive disorder.

Data regarding maintenance treatment after a depressive episode of BDI are limited. As a rule of thumb, attempts to simplify maintenance treatment should begin about 3-6 months after resolution of the acute episode, and changes should only be made in one medication at a time. Due to the risks of inducing a manic episode and accelerating the cycle, antidepressant monotherapy is not recommended as an appropriate maintenance treatment for patients with bipolar I disorder (BDI) who have recently had a depressive episode. As well, the long-term use of antidepressants in conjunction with a mood stabilizer in patients with BDI continues to be controversial.

For a first episode of bipolar mania with no family history of bipolar or major depression, medication tapering and discontinuation may be considered after 6 months in remission, depending on the severity of the first episode, surrounding factors, and prodromal history. If and when discontinuing any ongoing medication, the dosage should be tapered no more rapidly than 25 percent per week. Tapering and discontinuation usually can be completed over at least 1-2 month period. If symptoms should recur, prompt treatment with the medication and dose previously shown to be effective should be initiated.

Maintenance Treatment Guidelines

Maintenance Treatment Guidelines: Most Recent Episode Hypomanic/Manic/Mixed

The current guidelines focus on the use of monotherapy for long-term treatment, reflecting the design of clinical trials to date. Options are listed as levels instead of stages because studies are too limited to delineate a full algorithm. These recommendations are intended to be utilized with ongoing medications and simplification made once the patient stabilizes. The majority of patients are likely to need combination treatment for long term management. The lowest possible dose is recommended, while maintaining the mood stabilizing treatment at therapeutic levels.

Levels of intervention recommendations are hierarchically ordered by quality and quantity of evidence balanced with safety and tolerability information for the various medications used in maintenance treatment. It is also a reasonable option to remain on well-tolerated, effective, acute-phase treatments. If a patient in maintenance treatment experiences exacerbation of symptoms, then the following recommendations should be considered. Documentation of staging should follow the acute treatment algorithms

Evidence for Efficacy in Maintenance Treatment: Most Recent Episode Hypomanic/Manic/Mixed

Level I Evidence:	Patients with frequent, recent, or severe mania	Lithium or valproate
	Patients without frequent, recent, or severe mania	Lithium, valproate, or lamotrigine
	Alternative	Olanzapine ^a
Level II Evidence:	Aripiprazole ^b	
Level III Evidence:	Carbamazepine or clozapine ^a	
Level IV Evidence:	Quetiapine ^b , risperidone ^b , or ziprasidone ^b	
Level V Evidence:	Typical antipsychotics ^a , oxcarbazepine ^b , ECT	

^a Safety issues warrant careful consideration of this option for potential long-term use

^b Relatively limited information is currently available on this agent in long-term use

Maintenance Treatment Guidelines

Maintenance Treatment Guidelines: Most Recent Episode Depressed

Data regarding maintenance treatment after a depressive episode are limited. As with maintenance options for patients with recent hypomanic, manic, or mixed episodes, these maintenance treatments are ordered by strength of evidence and safety and tolerability. The lowest possible dose is recommended, while maintaining the mood stabilizing treatment at therapeutic levels if they are a part of therapy. Due to the risks of mania induction, cycle acceleration, and lack of data supporting use, antidepressant monotherapy is not recommended as an appropriate maintenance treatment for patients with BDI. The long-term use of antidepressants in conjunction with a mood stabilizer in patients with BDI continues to be controversial. These recommendations reflect the knowledge of overall best practices due to the small number of controlled studies.

Evidence for Efficacy in Maintenance Treatment: Most Recent Episode Depressed

Level I Evidence:	Patients with recent and/or severe history of mania	Lamotrigine combined with antimanic agent
	All other patients	Lamotrigine monotherapy
Level II Evidence:	Lithium	
Level III Evidence:	Combination of antimanic and antidepressant that has been effective in the past, including olanzapine/fluoxetine combination	
Level IV Evidence:	Valproate, carbamazepine, aripiprazole ^b , clozapine ^a , olanzapine ^a , quetiapine ^b , risperidone ^b , or ziprasidone ^b	
Level V Evidence	Typical antipsychotics ^a , oxcarbazepine ^b , ECT	

^a Safety issues warrant careful consideration of this option for potential long-term use

^b Relatively limited information is currently available on this agent in long-term use

Documentation

Treatment with the bipolar disorder algorithms utilizes uniform documentation developed by TDSHS and the TMAP team, and modified for use by various centers. The critical information from patient history needed for implementation of the BDI algorithms is:

1. Past and current psychoactive medications and response
2. Primary current diagnosis. (Please note that these algorithms were developed for patients diagnosed with bipolar I disorder.)
3. Core symptoms
4. Other symptoms
5. Side effects (to evaluate tolerability)
6. Response to treatment: overall functioning, BDSS scores, patient self-report of symptom severity and side effects

Outpatient Documentation

Required Forms:

1. Outpatient Clinic Visit Clinical Record Form (CRF): The CRF should be completed at each visit in which a clinician or other clinician is evaluating response to treatment. Please note that all patients will have a stage entered for the principal treatment algorithm.

e.g. Patient is on Stage 3 of the algorithm for Mania/Hypomania/mixed mania.

Stage: 3

CRFs may vary in format, but all should contain the minimum data specified appendix G. A template CRF is also included.

Optional Forms: If these forms are not used, then an alternative uniform documentation process should be used to record this important information.

1. Outpatient Intake Form
2. Outpatient Interim Contact Form: In the event that the patient does not come into the clinic or there is not time for a complete visit, the ICF is documented by or the physician or other clinical personnel.

Inpatient Data Collection

Required Forms:

1. Inpatient Clinic Visit Clinical Record Form: Complete as usual. See instructions above for "Outpatient Clinic Visit Clinical Record Form" for detailed example.

Optional Forms:

1. Inpatient Intake Form
2. Inpatient Contact Form

Modifications for Inpatient Use

Patients who have been hospitalized for symptoms of bipolar disorder require prompt interventions to achieve stabilization and discharge. It is likely that a clinician may make the following modifications to the TMAP algorithms to achieve these goals.

Adjustment to Critical Decision Points – The critical decision points are set at 2-week intervals, assuming outpatient treatment. Of course, opportunities to evaluate the patient and make clinical decisions and medication adjustments may happen on an expedited schedule when the patient is an inpatient. Although psychotropic medications do not work faster when a patient is hospitalized, the clinician does have an ongoing opportunity to evaluate the patient's response to treatment. Therefore, critical decision points to evaluate the need for mood stabilizer dosage adjustment or medication change can be made at shorter intervals. In general, if a patient is tolerating usual effective doses of a mood stabilizer, dose titration should occur on a weekly basis if needed.

Accelerated movement to advanced treatment stage – If a patient has not demonstrated at least partial response in manic symptoms after 2-3 weeks treatment, with appropriate dose titration, then the clinician should consider a change in algorithm stage. In bipolar depression, symptoms may improve more slowly, but assuming appropriate dose titration, the clinician should consider a change in algorithm stage if there has been no improvement in depressive symptoms within four weeks and adequate medication doses.

Patients experiencing partial response should receive medication dose titration as tolerated and continued treatment for 2-3 more weeks.

Use of adjunctive medications – Symptoms of agitation, aggression, excessive anxiety or insomnia may necessitate the use of adjunctive medications for these symptoms. Although it is anticipated that adjunctive medications may be used more commonly in the hospital, their use is still typically time limited, and this intent needs to be communicated to the outpatient treating clinician. For example, at the time of discharge, include instructions for follow-up procedures, including intended taper of short-term medications. Providing the outpatient clinician with the last 1 or 2 inpatient CRFs can be extremely helpful in communicating clinical information.

Use of loading doses – Clinicians may utilize more assertive dosing with inpatients. Oral loading of valproate sodium can be utilized for quick stabilization of manic patients (20 mg/kg is the standard formula).

Please note rate of lamotrigine titration remains the same regardless of setting (please refer to *Appendix C* for recommended titration schedules using lamotrigine).

Inpatient to Outpatient Transition

The transition between inpatient and outpatient care is often problematic. Most inpatient clinicians have dealt with the frustration of discharging a patient only to see him or her return to the hospital within a few weeks as a result of not receiving outpatient follow-up and/or not filling or taking prescriptions. Brief hospital stays may further aggravate the problem because patients are discharged before they are truly stabilized. By the same token, outpatient clinicians must constantly revise their treatment plans when their long-term treatment intentions are not followed by the inpatient physician. The following three strategies may improve transitions between the two treatment settings:

1. **Document the treatment plan.** It is imperative that all clinicians document the rationale for treatment decisions and outline the expected treatment plan. This includes detailing expected changes in medications, such as “I expect Mr. Doe will discontinue use of Zolpidem for sleep once manic symptoms are controlled by increased dosing of olanzapine and valproate into recommended therapeutic ranges.” Inpatient clinicians may want to start notes to their outpatient colleagues with “transfer” rather than “discharge” (I am ‘transferring’ the acute care of this patient...) because the former term implies a continuation of care while the latter suggests a disruption.
2. **Ensure that patients leave the hospital with enough medication** to see them through to the first follow-up appointment. Administrative policies should not prevent patients from receiving adequate medication to last until the first outpatient clinician appointment.
3. **Establish communication between the inpatient and outpatient treatment teams.** Clinicians working in both arenas should get to know each other and brainstorm about ways to improve coordination between the two settings. Two possible strategies for improving communication are (1) having a team member (on each side) whose job it is to coordinate and follow-up on transfers and (2) organizing regular meetings with key inpatient and outpatient staff members.
4. **Use of clinical report form (CRF):** If the clinician documents pharmacotherapy care on the CRF, then a transfer of copies of the last 1 or 2 completed CRFs to the clinician assuming care of the patient can be helpful in communicating the treatment the patient has received as well as the clinical status the last time the patient was seen

Outpatient to Inpatient Treatment

Communication and transition in care is equally important when a patient is admitted to the hospital. The outpatient treating clinician should be contacted when patients are hospitalized, and copies of the last two CRFs should be FAXed to the hospital. The outpatient clinician should be asked about the patient’s response to medication and potential reasons for illness exacerbation. It should not necessarily be assumed that a patient relapsed because of medication treatment failure. Not taking medications appropriately and alcohol or other substance use are common factors leading to hospitalization. These as well as other factors (e.g, family or other environmental stress) should be considered in deciding whether to continue the patient on the same medication regimen being used in the outpatient setting or to move to a new treatment stage.

Appendix A: Process Measures

- Brief Bipolar Disorder Symptom Scale (BDSS)
- BDSS Scoring Sheet
- Tactics and Critical Decision Points (CDPs) for the Treatment of Bipolar Disorder
- Scoring Criteria for Physician- and Patient-Rated Overall Symptom and Side Effect Ratings

Brief Bipolar Disorder Symptom Scale

1. **HOSTILITY:** Animosity, contempt, belligerence, threats, arguments, tantrums, property destruction, fights and any other expression of hostile attitudes or actions. Do not infer hostility from neurotic defenses, anxiety or somatic complaints. Do not include incidents of appropriate anger or obvious self-defense.

How have you been getting along with people (family, co-workers, etc.)?

Have you been irritable or grumpy lately? (How do you show it? Do you keep it to yourself?)

Were you ever so irritable that you would shout at people or start fights or arguments? (Have you found yourself yelling at people you didn't know?)

Have you hit anyone recently?

NA Not assessed

1 Not Present

2 Very Mild

Irritable or grumpy, but not overtly expressed.

3 Mild

Argumentative or sarcastic.

4 Moderate

Overtly angry on several occasions OR yelled at others excessively.

5 Moderately Severe

Has threatened, slammed about or thrown things.

6 Severe

Has assaulted others but with no harm likely, e.g., slapped or pushed, OR destroyed property, e.g., knocked over furniture, broken windows.

7 Extremely Severe

Has attacked others with definite possibility of harming them or with actual harm, e.g., assault with hammer or weapon.

2. **ELEVATED MOOD:** A pervasive, sustained and exaggerated feeling of well-being, cheerfulness, euphoria (implying a pathological mood), optimism that is out of proportion to the circumstances. Do not infer elation from increased activity or from grandiose statements alone.

Have you felt so good or high that other people thought that you were not your normal self?

Have you been feeling cheerful and "on top of the world" without any reason?

[If patient reports elevated mood/euphoria, ask the following]:

Did it seem like more than just feeling good? How long did that last?

NA Not assessed

1 Not Present

2 Very Mild

Seems to be very happy, cheerful without much reason.

3 Mild

Some unaccountable feelings of well-being that persist.

4 Moderate

Reports excessive or unrealistic feelings of well-being, cheerfulness, confidence or optimism inappropriate to circumstances, some of the time. May frequently joke, smile, be giddy or overly enthusiastic OR few instances of marked elevated mood with euphoria.

5 Moderately Severe

Reports excessive or unrealistic feelings of well-being, confidence or optimism inappropriate to circumstances much of the time. May describe "feeling on top of the world," "like everything is falling into place," or "better than ever before," OR several instances of marked elevated mood with euphoria.

6 Severe

Reports many instances of marked elevated mood with euphoria OR mood definitely elevated almost constantly throughout interview and inappropriate to content.

7 Extremely Severe

Patient reports being elated or appears almost intoxicated, laughing, joking, giggling, constantly euphoric, feeling invulnerable, all inappropriate to immediate circumstances.

- 3. GRANDIOSITY:** Exaggerated self-opinion, self-enhancing conviction of special abilities or powers or identity as someone rich or famous. Rate only patient's statements about himself, not his demeanor. Note: If the subject rates a "6" or "7" due to grandiose delusions, you must rate Unusual Thought Content at least a "4" or above.

Is there anything special about you? Do you have any special abilities or powers? Have you thought that you might be somebody rich or famous?

[If the patient reports any grandiose ideas/delusions, ask the following]:

How often have you been thinking about [use patient's description]? Have you told anyone about what you have been thinking? Have you acted on any of these ideas?

NA Not assessed

1 Not Present

2 Very Mild

Feels great and denies obvious problems, but not unrealistic.

3 Mild

Exaggerated self-opinion beyond abilities and training.

4 Moderate

Inappropriate boastfulness, claims to be brilliant, insightful, or gifted beyond realistic proportions, but rarely self-discloses or acts on these inflated self-concepts. Does not claim that grandiose accomplishments have actually occurred.

5 Moderately Severe

Same as 4 but often self-discloses and acts on these grandiose ideas. May have doubts about the reality of the grandiose ideas. Not delusional.

6 Severe

Delusional--claims to have special powers like ESP, to have millions of dollars, invented new machines, worked at jobs when it is known that he was never employed in these capacities, be Jesus Christ, or the President. Patient may not be very preoccupied.

7 Extremely Severe

Delusional--Same as 6 but subject seems very preoccupied and tends to disclose or act on grandiose delusions.

4. **DEPRESSION:** Include sadness, unhappiness, anhedonia, and preoccupation with depressing topics (can't attend to TV, conversations due to depression), hopelessness, loss of self-esteem (dissatisfied or disgusted with self or feelings of worthlessness). Do not include vegetative symptoms, e.g., motor retardation, early waking, or the amotivation that accompanies the deficit syndrome.

How has your mood been recently? Have you felt depressed (sad, down, unhappy as if you didn't care)?

Are you able to switch your attention to more pleasant topics when you want to?

Do you find that you have lost interest in or get less pleasure from things you used to enjoy, like family, friends, hobbies, watching TV, eating?

[If subject reports feelings of depression, ask the following]:

How long do these feelings last? Has it interfered with your ability to perform your usual activities/work?

NA Not assessed

1 Not Present

2 Very Mild

Occasionally feels sad, unhappy or depressed.

3 Mild

Frequently feels sad or unhappy but can readily turn attention to other things.

4 Moderate

Frequent periods of feeling very sad, unhappy, moderately depressed, but able to function with extra effort.

5 Moderately Severe

Frequent, but not daily, periods of deep depression OR some areas of functioning are disrupted by depression.

6 Severe

Deeply depressed daily but not persisting throughout the day OR many areas of functioning are disrupted by depression.

7 Extremely Severe

Deeply depressed daily OR most areas of functioning are disrupted by depression.

5. **ANXIETY:** Reported apprehension, tension, fear, panic or worry. Rate only the patient's statements, not observed anxiety that is rated under **TENSION**.

Have you been worried a lot during [mention time frame]? Have you been nervous or apprehensive? (What do you worry about?)

Are you concerned about anything? How about finances or the future?

When you are feeling nervous, do your palms sweat or does your heart beat fast (or shortness of breath, trembling, choking)?

[If patient reports anxiety or autonomic accompaniment, ask the following];

How much of the time have you been [use patient's description]?

Has it interfered with your ability to perform your usual activities/work?

NA Not assessed

1 Not Present

2 Very Mild

Reports some discomfort due to worry OR infrequent worries that occur more than usual for most normal individuals.

3 Mild

Worried frequently but can readily turn attention to other things.

4 Moderate

Worried most of the time and cannot turn attention to other things easily but no impairment in functioning OR occasional anxiety with autonomic accompaniment but no impairment in functioning.

5 Moderately Severe

Frequent, but not daily, periods of anxiety with autonomic accompaniment, OR some areas of functioning are disrupted by anxiety or worry.

6 Severe

Anxiety with autonomic accompaniment daily but not persisting throughout the day OR many areas of functioning are disrupted by anxiety or constant worry.

7 Extremely Severe

Anxiety with autonomic accompaniment persisting throughout the day OR most areas of functioning are disrupted by anxiety or constant worry.

6. **UNUSUAL THOUGHT CONTENT:** Unusual, odd, strange or bizarre thought content. Rate the degree of unusualness, not the degree of disorganization of speech. Delusions are patently

absurd, clearly false or bizarre ideas that are expressed with full conviction. Consider the patient to have full conviction if he/she has acted as though the delusional belief were true. Ideas of reference/persecution can be differentiated from delusions in that ideas are expressed with much doubt and contain more elements of reality. Include thought insertion, withdrawal and broadcast. Include grandiose, somatic and persecutory delusions even if rated elsewhere. Note: If Somatic Concern, Guilt, Suspiciousness, or Grandiosity are rated "6" or "7" due to delusions, then Unusual Thought Content must be rated a "4" or above.

Have you been receiving any special messages from people or from the way things are arranged around you? Have you seen any references to yourself on TV or in the newspapers?

Can anyone read your mind?

Do you have a special relationship with God?

Is anything like electricity, X-rays, or radio waves affecting you?

Are thoughts put into your head that are not your own?

Have you felt that you were under the control of another person or force?

[If patient reports any odd ideas/delusions, ask the following]:

How often do you think about [use patient's description]?

Have you told anyone about these experiences? How do you explain the things that have been happening [specify]?

NA Not assessed

1 Not Present

2 Very Mild

Ideas of reference (people may stare or may laugh at him), ideas of persecution (people may mistreat him). Unusual beliefs in psychic powers, spirits, UFOs, or unrealistic beliefs in one's own abilities. Not strongly held. Some doubt.

3 Mild

Same as 2, but degree of reality distortion is more severe as indicated by highly unusual ideas or greater conviction. Content may be typical of delusions (even bizarre), but without full conviction. The delusion does not seem to have fully formed, but is considered as one possible explanation for an unusual experience.

4 Moderate

Delusion present but no preoccupation or functional impairment. May be an encapsulated delusion or a firmly endorsed absurd belief about past delusional circumstances.

5 Moderately Severe

Full delusion(s) present with some preoccupation OR some areas of functioning disrupted by delusional thinking.

6 Severe

Full delusion(s) present with much preoccupation OR many areas of functioning are disrupted by delusional thinking.

7 Extremely Severe

Full delusions present with almost total preoccupation OR most areas of functioning are disrupted by delusional thinking.

Rate the following items on the basis of observed behavior and speech.

7. **EXCITEMENT:** Heightened emotional tone, or increased emotional reactivity to interviewer or topics being discussed, as evidenced by increased intensity of facial expressions, voice tone, expressive gestures or increase in speech quantity and speed.

NA Not assessed

1 Not Present

2 Very Mild

Subtle and fleeting or questionable increase in emotional intensity. For example, at times, seems keyed-up or overly alert.

3 Mild

Subtle but persistent increase in emotional intensity. For example, lively use of gestures and variation in voice tone.

4 Moderate

Definite but occasional increase in emotional intensity. For example, reacts to interviewer or topics that are discussed with noticeable emotional intensity. Some pressured speech.

5 Moderately Severe

Definite and persistent increase in emotional intensity. For example, reacts to many stimuli, whether relevant or not, with considerable emotional intensity. Frequent pressured speech.

6 Severe

Marked increase in emotional intensity. For example reacts to most stimuli with inappropriate emotional intensity. Has difficulty settling down or staying on task. Often restless, impulsive, or speech is often pressured.

7 Extremely Severe

Marked and persistent increase in emotional intensity. Reacts to all stimuli with inappropriate intensity, impulsiveness. Cannot settle down or stay on task. Very restless and impulsive most of the time. Constant pressured speech.

8. **MOTOR HYPERACTIVITY:** Increase in energy level evidenced in more frequent movement and/or rapid speech. Do not rate if restlessness is due to akathisia.

NA Not assessed

1 Not Present

2 Very Mild

Some restlessness, difficulty sitting still, lively facial expressions, or somewhat talkative.

3 Mild

Occasionally very restless, definite increase in motor activity, lively gestures, 1-3 brief instances of pressured speech.

4 Moderate

Very restless, fidgety, excessive facial expressions or nonproductive and repetitious motor movements. Much pressured speech, up to one third of the interview.

5 Moderately Severe

Frequently restless, fidgety. Many instances of excessive non-productive and repetitious motor movements. On the move most of the time. Frequent pressured speech, difficult to interrupt. Rises on 1-2 occasions to pace.

6 Severe

Excessive motor activity, restlessness, fidgety, loud tapping, noisy, etc., throughout most of the interview. Speech can only be interrupted with much effort. Rises on 3-4 occasions to pace.

7 Extremely Severe

Constant excessive motor activity throughout entire interview, e.g., constant pacing, constant pressured speech with no pauses, interviewee can only be interrupted briefly and only small amounts of relevant information can be obtained.

9. **EMOTIONAL WITHDRAWAL:** Deficiency in patient's ability to relate emotionally during interview situation. Use your own feeling as to the presence of an "invisible barrier" between patient and interviewer. Include withdrawal apparently due to psychotic processes.

NA Not assessed

1 Not Present

2 Very Mild

Lack of emotional involvement shown by occasional failure to make reciprocal comments, occasionally appearing preoccupied, or smiling in a stilted manner, but spontaneously engages the interviewer most of the time.

3 Mild

Lack of emotional involvement shown by noticeable failure to make reciprocal comments, appearing preoccupied, or lacking in warmth, but responds to interviewer when approached.

4 Moderate

Emotional contact not present much of the interview because subject does not elaborate responses, fails to make eye contact, doesn't seem to care if interviewer is listening, or may be preoccupied with psychotic material.

5 Moderately Severe

Same as "4" but emotional contact not present most of the interview.

6 Severe

Actively avoids emotional participation. Frequently unresponsive or responds with yes/no answers (not solely due to persecutory delusions). Responds with only minimal affect.

7 Extremely Severe

Consistently avoids emotional participation. Unresponsive or responds with yes/no answers (not solely due to persecutory delusions). May leave during interview or just not respond at all.

- 10. BLUNTED AFFECT:** Restricted range in emotional expressiveness of face, voice, and gestures. Marked indifference or flatness even when discussing distressing topics. In the case of euphoric or dysphoric patients, rate Blunted Affect if a flat quality is also clearly present.

Use the following probes at end of interview to assess emotional responsivity:

Have you heard any good jokes lately? Would you like to hear a joke?

NA Not assessed

1 Not Present

2 Very Mild

Emotional range is slightly subdued or reserved but displays appropriate facial expressions and tone of voice that are within normal limits.

3 Mild

Emotional range overall is diminished, subdued, or reserved, without many spontaneous and appropriate emotional responses. Voice tone is slightly monotonous.

4 Moderate

Emotional range is noticeably diminished, patient doesn't show emotion, smile, or react to distressing topics except infrequently. Voice tone is monotonous or there is noticeable decrease in spontaneous movements. Displays of emotion or gestures are usually followed by a return to flattened affect.

5 Moderately Severe

Emotional range very diminished, patient doesn't show emotion, smile or react to distressing topics except minimally, few gestures, facial expression does not change very often. Voice tone is monotonous much of the time.

6 Severe

Very little emotional range or expression. Mechanical in speech and gestures most of the time. Unchanging facial expression. Voice tone is monotonous most of the time.

7 Extremely Severe

Virtually no emotional range or expressiveness, stiff movements. Voice tone is monotonous all of the time.

In the past 7 days...

Sources of information (check all applicable):

- Patient
- Parents/Relatives
- Mental Health Professionals
- Chart

Confidence in assessment:

1 = Not at all - 5 = Very confident

Explain here if validity of assessment is questionable:

- Symptoms possibly drug-induced
- Underreported due to lack of rapport
- Underreported due to negative symptoms
- Patient uncooperative
- Difficult to assess due to formal thought disorder
- Other _____

Texas Medication Algorithm Project

Brief Bipolar Disorder Symptom Scale

Visit Date: _____ Overall Side Effect Severity (from Clinical Record Form): _____

Instructions: Indicate the score for each item in the appropriate cell to the right of the item. Evaluate the pattern and severity of symptom(s) to guide clinical decision-making.

Presence of **Mild to Moderate Symptoms** may indicate need for medication adjustment.

Any score >4 is within the range of **Severe Symptoms**, and indicates a need to make treatment changes.

		Not assessed	Not present	Very Mild	Mild	Moderate	Moderately Severe	Severe	Extremely Severe
Symptom Group	Symptoms	NA	1	2	3	4	5	6	7
Manic/Hypomanic	Hostility								
	Elevated Mood								
	Grandiosity								
	Excitement								
	Motor Hyperactivity								
Major Depressive	Depressed Mood								
	Anxiety								
	Emotional Withdrawal								
	Blunted Affect								
Psychotic	Unusual Thought Content								

Scale Total: _____

Tactics and Critical Decision Points (CDPs) For the Treatment of Bipolar Disorder*

Instructions: To identify the recommendations for the appropriate CDP, trace to the right to the degree of symptom severity indicated by the BDSS Chart

		Not assessed	Not present	Very Mild	Mild	Moderate	Moderately Severe	Severe	Extremely Severe
Critical Decision Point		NA	1	2	3	4	5	6	7
Week 0: CDP #1	Symptomatic			Start medications			Start medications		
Week 2: CDP #2	Order serum concentrations (if applicable) to adjust dose.	Continue current dose		Continue current dose. Consider increasing dose if medication tolerability is good.			Increase dose if medication tolerability is good.		
Week 4: CDP #3	Order serum concentrations (if applicable) to adjust dose.	Continue current dose		Increase dose if medication tolerability is good or consider next stage.			Increase dose if medication tolerability is good or consider next stage.		
Week 6: CDP #4	All serum concentrations should be within therapeutic range.	Continue current dose [†]		Increase dose if medication tolerability is good or consider next stage.			Increase dose if medication tolerability is good or consider next stage.		
Week 8: CDP #5		Continue current dose [†]		Increase dose if medication tolerability is good or consider next stage.			Go to next stage.		

* Side Effects: Treatment recommendations assume that side effects are tolerable. Refer to the Side Effects Management section of the physician manual. Intolerable, unmanageable side effects may warrant changing to a different stage of treatment. Tolerability should be evaluated at all Critical Decision Points.

[†] Once a patient sustains a full response to medication for at least four weeks, a transition to continuation treatment occurs. In general, the patient should have full response for two consecutive visits before beginning continuation treatment. After maintaining a full response for 4-6 months, the clinician should consider medication dosage reduction or regimen simplification in maintenance phase treatment.

**Scoring Criteria
for Physician and Patient
Overall Symptom and
Side Effect Ratings**

- 0 = No Symptoms**
- 1 = Borderline**
- 2 = Mild**
- 3 = Mild – Moderate**
- 4 = Moderate**
- 5 = Moderate – Marked**
- 6 = Marked**
- 7 = Marked – Severe**
- 8 = Severe**
- 9 = Severe – Extreme**
- 10 = Extreme**

Appendix B: Communications

TMAP Information

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Appendix C: Medication Charts

Medications Included in Algorithms for Most Recent Episode Hypomanic/Manic/Mixed and Most Recent Episode Depressed

(Please refer to the Physicians' Desk Reference, FDA approved product labeling, or other sources for more complete information.)

<i>Mood Stabilizers, Anticonvulsants</i> -----	40
<i>Antipsychotics, Atypical</i> -----	42
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Appendix C: Medication Charts

Mood Stabilizers, Anticonvulsants

Drug	Starting Dose	Titration	Target Dose or Range	Maximum Daily Dose	Schedule	Patient Monitoring Parameters	Side Effects	Selected Drug Interactions
Carbamazepine <i>Generic available</i> Tegretol® Tegretol® XR Carbatrol® Equetro®	200-600 mg/day	200 mg/day every 2-4 days	400-1600 mg/day	1600 mg/day ¹	2 - 3 times daily	1) CBC with platelets – baseline and 1 to 2 weeks after each dose increase and as clinically indicated 2) Hepatic function panel and electrolytes; baseline and as clinically indicated 3) Pregnancy Test – as clinically indicated 4) Carbamazepine Levels – 1-2 weeks after dose adjustment, then as clinically indicated Therapeutic Serum Concentration ² : 4-12 mcg/ml Frequency of Serum concentration Monitoring: • Day 5-7 • Weekly until stable • Every 3-6 months	<ul style="list-style-type: none"> • Ataxia • Diplopia • Dizziness • Dysarthria • GI upset • Hyponatremia • Leukopenia • Nystagmus • Rash • Sedation 	<ul style="list-style-type: none"> • Antipsychotics • Benzodiazepines • Cimetidine • Corticosteroids • Valproate • Erythromycin • Lamotrigine³ • Oral contraceptive pill • SSRIs • Tricyclic antidepressants • Warfarin • Induces its own metabolism. May require close dose titration.
Divalproex Sodium (Valproate) Depakote®	500 - 1000 mg/day	500 mg/day every 1 – 2 weeks	750-2000 mg/day	60 mg/kg/day ¹	Twice daily or nightly	1) CBC – with differential and platelet count – baseline then one (1) to two (2) weeks after each dosage increase, and as clinically indicated 2) Hepatic function panel – baseline and as clinically indicated 3) Pregnancy Test – baseline and as clinically indicated 4) Valproic acid level – 1-2 weeks after initiation and dosage change, then as clinically indicated. 5) Serum creatinine and BUN at baseline and as clinically indicated Therapeutic Serum Concentration ² : 50-150 mcg/ml Frequency of Serum concentration Monitoring: • Day 7-14 • At dosage change • As clinically indicated	<ul style="list-style-type: none"> • Alopecia • Ataxia • Cognitive impairment • Dizziness • GI upset • Hepatitis • Pancreatitis • Polycystic ovarian syndrome • Rash • Somnolence • Thrombocytopenia • Tremor • Weight gain 	<ul style="list-style-type: none"> • Antipsychotics • Benzodiazepines • Carbamazepine • Lamotrigine⁴ • Lithium • MAOIs • Phenytoin • Tricyclic antidepressants • Warfarin

¹ Maximum daily dosage should be based upon the medication serum concentration in the individual patient in the context of clinical response and tolerability.

² Therapeutic serum concentration monitoring of mood stabilizers should be drawn 12-hours after the last dose.

³ Recommended dose titration of lamotrigine for patients taking carbamazepine (or other enzyme-inducing drugs) and not taking valproate: 50mg daily for weeks 1 & 2; 100 mg daily (in divided doses) for weeks 3 & 4; 200 mg daily (in divided doses) for week 5; 300 mg daily (in divided doses) for week 6; up to 400 mg daily (in divided doses) for week 7 and thereafter.

⁴ Recommended dose titration of lamotrigine for patients taking valproate or other forms of valproic acid: 25 mg every other day for weeks 1 & 2; 25 mg daily for weeks 3 & 4; 50 mg daily for week 5; 100mg daily for week 6 and thereafter.

Appendix C: Medication Charts

Mood Stabilizers, Anticonvulsants

Drug	Starting Dose	Titration	Target Dose or Range	Maximum Daily Dose	Schedule	Patient Monitoring Parameters	Side Effects	Selected Drug Interactions
Lamotrigine <i>Generic available</i> Lamictal®	25 mg/day	25 mg/day every 14 days	200 mg/day	400 mg/day	Once or twice daily	1) Renal Function Test – baseline and as clinically indicated 2) Hepatic Function Test – baseline, yearly and as clinically indicated 3) Pregnancy Test – as clinically indicated	<ul style="list-style-type: none"> • Ataxia • Dizziness • Headache • Nausea • Rash • Somnolence • Stevens Johnson Syndrome 	<ul style="list-style-type: none"> • Carbamazepine² • Valproate³
Lithium <i>Generic available</i> Eskalith® Eskalith® CR Lithobid®	900 mg/day	check serum concentration at 3-4 days and adjust (linear kinetics)	900-2400 mg/day	3600 mg/day ⁵	Once or twice daily	1) EKG (mandatory for everyone – baseline, yearly and as clinically indicated) 2) CBC – baseline, yearly and as clinically indicated 3) Thyroid studies – baseline; then TSH every 6 months and as clinically indicated 4) BUN, creatinine, glucose and electrolytes; baseline and as clinically indicated 5) UA – baseline and as clinically indicated 6) Pregnancy test – as clinically indicated 7) Lithium Levels – one week after initiation or dosage change and as clinically indicated Therapeutic Serum Concentration ¹ : 0.6-1.5 mEq/L Frequency of Serum concentration Monitoring: <ul style="list-style-type: none"> • Day 7 • At dosage change • As clinically indicated 	<ul style="list-style-type: none"> • Acne • Acute renal dysfunction • Cognition • Diarrhea • Dizziness • ECG changes • GI upset • Hypothyroidism • Nausea • Polyuria • Sedation • Thirst • Tremor • Weight gain 	<ul style="list-style-type: none"> • ACE-inhibitors • Caffeine • NSAIDs • Osmotic diuretics • Theophylline • Thiazide diuretics
Oxcarbazepine Trileptal®	600 mg/day	600 mg/day every 7 days	600-2100 mg/day	2400 mg/day	2 - 3 times daily	1) Electrolytes – baseline and as clinically indicated 2) Pregnancy test – as clinically indicated	<ul style="list-style-type: none"> • Ataxia • Diplopia • Dizziness • GI upset • Hyponatremia • Somnolence • Tremor 	<ul style="list-style-type: none"> • Antipsychotics • Dihydropyridine calcium antagonists • Oral contraceptive pill • Vitamin D

⁵ Maximum daily dosage should be based upon the medication serum concentration in the individual patient in the context of clinical response and tolerability.

Appendix C: Medication Charts

Antipsychotics, Atypical								
Drug	Starting Dose	Titration	Target Dose or Range	Maximum Daily Dose	Schedule	Patient Monitoring Parameters	Side Effects	Selected Drug Interactions
Aripiprazole Abilify®	15 mg/day	5-15 mg/day	15-30 mg/day	30 mg/day	Once daily	<p>1) Pregnancy test – as clinically indicated</p> <p>2) BMI measurement – when a new antipsychotic is initiated, at every visit (monthly for inpatients) for 6 months after the new antipsychotic is initiated and quarterly when the antipsychotic dose is stable.</p> <p>3) Fasting plasma glucose level or hemoglobin A1c – before initiating a new antipsychotic, then yearly.</p>	<ul style="list-style-type: none"> • Agitation • Constipation • EPS • Insomnia • Nausea • Somnolence 	<ul style="list-style-type: none"> • Carbamazepine • Fluoxetine • Ketoconazole • Paroxetine • Quinidine • St John's Wort
Olanzapine Zyprexa®	5-10 mg/day	5 mg/day	5-20 mg/day	20 mg/day	Once daily	<p>If a patient has significant risk factors for diabetes and for those that are gaining weight – before initiating a new antipsychotic, 4 months after starting an antipsychotic, and then yearly.</p> <p>4) Lipid screening [total cholesterol, low-and high-density lipoprotein (LDL and HDL) cholesterol, and triglycerides] – Every 2 years or more often if lipid levels are in the normal range, every 6 months if the LDL level is > 130 mg/dl</p>	<ul style="list-style-type: none"> • Constipation • Dizziness • Dry Mouth • Glucose dysregulation • Hyperlipidemia • Increased appetite • Sedation • Weight Gain 	<ul style="list-style-type: none"> • Carbamazepine • Fluvoxamine • Rifampin • Smoking • St. John's Wort
Quetiapine Seroquel®	100 mg/day	100 mg/day x 3 days, then 200 mg/day	300-800 mg/day 550-800 mg/day: mania 300-800 mg/day: depression	800 mg/day	Twice daily	<p>5) EKG – before initiating treatment with ziprasidone (Geodon®) and subsequently if the patient demonstrates symptoms (e.g., syncope) associated with QT interval prolongation.</p> <p>6) Sexual function inquiry – inquire yearly for evidence of galactorrhea/gynecomastia, menstrual disturbance, libido disturbance or erectile/ejaculatory disturbances in males.</p> <p>If a patient is receiving an antipsychotic known to be associated with Prolactin elevation, then at each visit (quarterly for inpatients) for the first 12 months after starting an antipsychotic or until the medication dose is stable and then yearly.</p>	<ul style="list-style-type: none"> • Cataract Formation • Dry mouth • Glucose dysregulation • Headache • Hyperlipidemia • Increased appetite • Orthostatic hypotension • Sedation • Weight gain 	<ul style="list-style-type: none"> • Erythromycin • Fluconazole • Ketoconazole • Phenytoin • St. John's Wort • Thioridazine • Valproate
Risperidone Risperdal®	1-2 mg/day	1-2 mg/day	4-6 mg/day	8 mg/day ⁶	Once or twice daily	<p>7) Prolactin level – if there is evidence of galactorrhea/gynecomastia, menstrual disturbance, libido disturbance or erectile/ejaculatory disturbances in males.</p> <p>8) EPS Evaluation (examination for rigidity, tremor, akathisia) – before initiation of any antipsychotic medication, then weekly for the first 2 weeks after initiating treatment with a new antipsychotic or until the dose has been stabilized and weekly for 2 weeks after a dose increase</p> <p>9) Tardive dyskinesia evaluation – every 6 months.</p> <p>For high-risk patients (including the elderly) every 3 months.</p> <p>10) Vision questionnaire – ask whether the patient has experienced a change in vision and should specifically ask about distance vision and blurry vision – yearly.</p> <p>11) Ocular evaluations – yearly for patients older than age 40 years; every 2 years for younger patients</p>	<ul style="list-style-type: none"> • EPS • Glucose dysregulation • Galactorrhea • Hyperlipidemia • Menstrual irregularity • Orthostatic hypotension • Prolactin elevation • Sedation • Sexual dysfunction • Tardive dyskinesia • Weight gain 	<ul style="list-style-type: none"> • Carbamazepine • Cimetidine • Fluoxetine • Paroxetine • Phenytoin • Rifampin • Tricyclic antidepressants

⁶ Use of risperidone > 6 mg/day is associated with an increased risk of EPS.

Appendix C: Medication Charts

Antipsychotics, Atypical								
Drug	Starting Dose	Titration	Target Dose or Range	Maximum Daily Dose	Schedule	Patient Monitoring Parameters	Side Effects	Selected Drug Interactions
Risperidone Risperdal Consta®	25 mg (IM)	N/A	25 – 50 mg (IM)	50 mg (IM)	Every 2 weeks	See Previous Page	<ul style="list-style-type: none"> • EPS • Glucose dysregulation • Galactorrhea • Hyperlipidemia • Menstrual irregularity • Orthostatic hypotension • Prolactin elevation • Sedation • Sexual dysfunction • Tardive dyskinesia • Weight gain 	<ul style="list-style-type: none"> • Carbamazepine • Cimetidine • Fluoxetine • Paroxetine • Phenytoin • Rifampin • Tricyclic antidepressants
Ziprasidone Geodon®	80 mg/day	20-40 mg/day	120 mg/day	200 mg/day	Twice daily ⁷	See Previous Page	<ul style="list-style-type: none"> • Dizziness • ECG changes • EPS • Rash • Sedation • Vomiting 	<ul style="list-style-type: none"> • Carbamazepine • Diuretics • Moxifloxacin • Quinidine • Sotalol • Thioridazine • Tricyclic antidepressants

⁷ The presence of food can increase ziprasidone's absorption up to two-fold.

Appendix C: Medication Charts

Antipsychotics, Atypical								
Drug	Starting Dose	Titration	Target Dose or Range	Maximum Daily Dose	Schedule	Patient Monitoring Parameters	Side Effects	Selected Drug Interactions
Clozapine <i>Generic available</i> Clozaril® Fazaclo®	12.5-25 mg/day	25 mg/day every 2-3 days	100-400 mg/day	900 mg/day	1 - 3 times daily	1) CBC as indicated by guidelines approved by the FDA in the product labeling. 2) Pregnancy test – as clinically indicated 3) BMI measurement – when a new antipsychotic is initiated, at every visit (monthly for inpatients) for 6 months after the new antipsychotic is initiated, and quarterly when the antipsychotic does is stable. 4) Fasting plasma glucose level or hemoglobin A1c - before initiating a new antipsychotic, then yearly. If a patient has significant risk factors for diabetes and for those that are gaining weight – before initiating a new antipsychotic, 4 months after starting an antipsychotic, and then yearly. 5) Lipid screening [total cholesterol, low-and high-density lipoprotein (LDL and HDL) cholesterol, and triglycerides] – Every 2 years or more often if lipid levels are in the normal range, every 6 months if the LDL level is > 130 mg/dl 6) Sexual function inquiry – inquire yearly for evidence of galactorrhea/gynecomastia, menstrual disturbance, libido disturbance or erectile/ejaculatory disturbances in males. If a patient is receiving an antipsychotic known to be associated with Prolactin elevation, then at each visit (quarterly for inpatients) for the first 12 months after starting an antipsychotic or until the medication dose is stable and then yearly. 7) EPS Evaluation (examination for rigidity, tremor, akathisia) – before initiation of any antipsychotic medication, then weekly for the first 2 weeks after initiating treatment with a new antipsychotic or until the dose has been stabilized and weekly for 2 weeks after a dose increase. 8) Tardive Dyskinesia evaluation – every 12 months. For high risk patients (including the elderly), every 6 months. 9) Vision questionnaire – ask whether the patient has experienced a change in vision and should specifically ask about distance vision and blurry vision – yearly 10) Ocular evaluations – yearly for patients older than age 40 years; every 2 years for younger patients	<ul style="list-style-type: none"> • Agranulocytosis • Excess salivation • Fever • Glucose dysregulation • Hyperlipidemia • Increased appetite • Myocarditis • Orthostatic hypotension • Sedation • Seizures • Tachycardia • Weight gain 	<ul style="list-style-type: none"> • Barbiturates • Caffeine • Carbamazepine • Cimetidine • Erythromycin • Phenytoin • Rifampin • Ritonavir • Smoking • SSRIs • St. John's Wort

Appendix C: Medication Charts

Antipsychotics, Typical								
Drug	Starting Dose	Titration	Target Dose or Range	Maximum Daily Dose	Schedule	Patient Monitoring Parameters	Side Effects	Selected Drug Interactions
Low Potency						1) Pregnancy test – as clinically indicated 2) BMI measurement – when a new antipsychotic is initiated, at every visit (monthly for inpatients) for 6 months after the new antipsychotic is initiated, and quarterly when the antipsychotic dose is stable 3) Fasting plasma glucose level or hemoglobin A1c – before initiating a new antipsychotic, then yearly If a patient has significant risk factors for diabetes and for those that are gaining weight – before initiating a new antipsychotic, 4 months after starting an antipsychotic, and then yearly 4) Lipid screening [total cholesterol, low-and high-density lipoprotein (LDL and HDL) cholesterol, and triglycerides] – Every 2 years or more often if lipid levels are in the normal range, every 6 months if the LDL level is > 130 mg/dl		<ul style="list-style-type: none"> • Guanethidine • Meperidine • Paroxetine • Pindolol • Quinolones • Beta-Blockers • Ziprasidone
Chlorpromazine <i>Generic available</i> Thorazine®	300 mg/day	100-200 mg/day	400-1000 mg/day	2000 mg/day	Three times daily			
Mid Potency						5) Sexual function inquiry – inquire yearly for evidence of galactorrhea/gynecomastia, menstrual disturbance, libido disturbance or erectile/ejaculatory disturbances in males. If a patient is receiving an antipsychotic known to be associated with Prolactin elevation, then at each visit (quarterly for inpatients) for the first 12 months after starting an antipsychotic or until the medication dose is stable and then yearly 6) Prolactin level – if there is evidence of galactorrhea/gynecomastia, menstrual disturbance, libido disturbance or erectile/ejaculatory disturbances in males.	<ul style="list-style-type: none"> • Constipation • Dry mouth • EPS • Orthostatic hypotension • Photosensitivity • Sedation • Tachycardia • Tardive dyskinesia 	<ul style="list-style-type: none"> • Paroxetine • Quinolones
Perphenazine <i>Generic available</i> Trilafon®	6-8 mg/day	4-8 mg/day	24 mg/day	64 mg/day	Three times daily			
High Potency						7) EPS Evaluation (examination for rigidity, tremor, akathisia) – before initiation of any antipsychotic medication, then weekly for the first 2 weeks after initiating treatment with a new antipsychotic or until the dose has been stabilized and weekly for 2 weeks after a dose increase 8) Tardive dyskinesia evaluation – every 6 months For high risk patients (including the elderly), every 3 months.		<ul style="list-style-type: none"> • Guanethidine • Paroxetine • Quinolones
Fluphenazine <i>Generic available</i> Prolixin®	2.5 mg	2.5-5 mg/day	2.5-20 mg/day	40 mg/day	Three times daily			

Appendix C: Medication Charts

Antipsychotics, Typical								
Drug	Starting Dose	Titration	Target Dose or Range	Maximum Daily Dose	Schedule	Patient Monitoring Parameters	Side Effects	Selected Drug Interactions
Fluphenazine D <i>Generic available</i> Prolixin Decanoate®	12.5-25 mg IM every 1-3 weeks ⁸	12.5 mg per injection	6.25-50 mg IM every 2-4 weeks	100mg IM (per 4 weeks)	Every 1-3 weeks	9) Vision questionnaire –ask whether the patient has experienced a change in vision and should specifically ask about distance vision and blurry vision – yearly 10) Ocular evaluations – yearly for patients older than age 40 years; every 2 years for younger patients See Previous Page	See Previous Page	<ul style="list-style-type: none"> • Guanethidine • Paroxetine • Quinolones
Haloperidol <i>Generic available</i> Haldol®	2 mg/day	2-5 mg/day	2-20 mg/day	40 mg/day	1 - 3 times daily			<ul style="list-style-type: none"> • Azole antifungals • Carbamazepine • Rifabutin • Rifampin
Haloperidol D <i>Generic available</i> Haldol Decanoate®	25-50 mg IM every 2-4 weeks ^{9,10,11}	N/A	50-200 mg IM every 2-4 weeks	450 mg (per 4 weeks)	Every 3-4 weeks			<ul style="list-style-type: none"> • Azole antifungals • Carbamazepine • Rifabutin • Rifampin

⁸ Starting dose generally 1.2 times the patient's oral dose

⁹ The maximum volume per injection site should not exceed 3 mL.

¹⁰ Multiple injections can be given at 1-7 day intervals to provide total loading dose.

¹¹ Starting dose generally 10-20 times the patient's oral dose. Dose of first injection should not exceed 100 mg.

Appendix C: Medication Charts

Antidepressants, SSRI								
Drug	Starting Dose	Titration	Target Dose or Range	Maximum Daily Dose	Schedule	Patient Monitoring Parameters	Side Effects	Selected Drug Interactions
Citalopram <i>Generic available</i> Celexa®	20 mg/day	10 mg every 2 weeks	20-40 mg/day	60 mg/day	Once daily	1) Pregnancy test – as clinically indicated	<ul style="list-style-type: none"> • Agitation • Constipation • Diarrhea • Dizziness • Dry Mouth • Fatigue • Headache • Insomnia • Loss of appetite • Nausea • Nervousness • Sexual dysfunction • Somnolence • Sweating 	<ul style="list-style-type: none"> • Clozapine • Cyclosporine • Linezolid • MAOIs • NSAIDs • Pimozide • St. John's Wort • Sympathomimetics • Tramadol • Triptans
Escitalopram Lexapro®	10 mg/day	10 mg every 2 weeks	10-20 mg/day	20 mg/day	Once daily			<ul style="list-style-type: none"> • Cyclosporine • Linezolid • MAOIs • NSAIDs • St. John's Wort • Sympathomimetics • Tramadol • Triptans
Fluoxetine <i>Generic available</i> Prozac®	20 mg/day	10-20 mg every 4 weeks	20-40 mg/day	80 mg/day	Once daily			<ul style="list-style-type: none"> • Carbamazepine • Clozapine • Cyclosporine • Hydantoins • Linezolid • MAOIs • NSAIDs • St. John's Wort • Sympathomimetics • Thioridazine • Tramadol • Triptans • Tricyclic antidepressants

Appendix C: Medication Charts

Antidepressants, SSRI								
Drug	Starting Dose	Titration	Target Dose or Range	Maximum Daily Dose	Schedule	Patient Monitoring Parameters	Side Effects	Selected Drug Interactions
Fluvoxamine <i>Generic available</i> Luvox®	50 mg/day	50-100 mg every 2 weeks	100-200 mg/day	300 mg/day	Once or twice daily	See Previous Page	See Previous Page	<ul style="list-style-type: none"> • Carbamazepine • Clozapine • Cyclosporine • Grapefruit • Hydantoins • Linezolid • MAOIs • Methadone • NSAIDs • Ropivacaine • St. John's Wort • Sympathomimetics • Tacrine • Theophyllines • Thioridazine • Tizanidine • Tramadol • Triptans • Tricyclic antidepressants
Paroxetine <i>Generic available</i> ¹² Paxil® Paxil CR®	20 mg/day	10-20 mg every 2 weeks	20-40 mg/day	50 mg/day	Once daily			<ul style="list-style-type: none"> • Cyclosporine • Linezolid • MAOIs • NSAIDs • Phenothiazines • St. John's Wort • Sympathomimetics • Tramadol • Triptans • Tricyclic antidepressants
Sertraline <i>Generic available</i> Zoloft®	50 mg/day	50-100 mg every 2 weeks	50-150 mg/day	200 mg/day	Once daily			<ul style="list-style-type: none"> • Carbamazepine • Clozapine • Cyclosporine • Grapefruit • Hydantoins • Linezolid • MAOIs • NSAIDs • Phenothiazines • Pimozide • St. John's Wort • Sympathomimetics • Tramadol • Triptans • Tricyclic antidepressants

¹² Generic only available for immediate release formulation

Appendix C: Medication Charts

Antidepressants, Miscellaneous

Drug	Starting Dose	Titration	Target Dose or Range	Maximum Daily Dose	Schedule	Patient Monitoring Parameters	Side Effects	Selected Drug Interactions
Bupropion <i>Generic available</i> Wellbutrin SR® Wellbutrin XL®	150 mg/day	150 mg/day at 3-7 days	300 mg/day	400 mg/day 450 mg/day(XL)	Twice daily (SR) Once daily (XL)	1) Pregnancy test – as clinically indicated	<ul style="list-style-type: none"> Constipation Dry mouth Headache Insomnia Nausea Seizures 	<ul style="list-style-type: none"> Carbamazepine Cyclosporine Linezolid MAOIs Ritonavir Tricyclic antidepressants
Venlafaxine <i>Generic available</i> ¹³ Effexor Effexor XR®	37.5 mg/day	37.5 – 75 mg/day every 5-7 days	150-225 mg/day	375 mg/day	Once daily	1) Pregnancy test – as clinically indicated. 2) Blood pressure during dosage titration and as clinically necessary	<ul style="list-style-type: none"> Anxiety Decreased appetite Dizziness Insomnia Nausea Sweating 	<ul style="list-style-type: none"> Linezolid MAOIs St. John's Wort Sympathomimetics Tramadol Triptans
Phenelzine Nardil®	45 mg/day	15 mg/week	60-90 mg/day	90 mg/day	2 - 3 times daily	1) Blood chemistries with emphasis on hepatic and renal functions; baseline, yearly and as clinically indicated during prolonged or high dose therapy 2) Pregnancy test – as clinically indicated	<ul style="list-style-type: none"> Edema Insomnia Orthostatic hypotension Sexual dysfunction Weight gain 	<ul style="list-style-type: none"> Atomoxetine Bupropion Carbamazepine Dextromethorphan Insulins Levodopa Linezolid Meperidine SSRIs St. John's Wort Sulfonylureas Sympathomimetics Tramadol Triptans Tricyclic antidepressants Tyramine foods Venlafaxine
Tranlycypromine <i>Generic available</i> Parnate®	20-30 mg/day	10 mg/week	20-40 mg/day	60 mg/day	2 - 3 times daily	3) Blood pressure at baseline and during dosage adjustments and as clinically indicated. Therapeutic ranges for the lab used should be listed on the report		

¹³ Generic only available for immediate release formulation

Appendix C: Medication Charts

Antidepressants, Miscellaneous

Drug	Starting Dose	Titration	Target Dose or Range	Maximum Daily Dose	Schedule	Patient Monitoring Parameters	Side Effects	Selected Drug Interactions
Amitriptyline <i>Generic available</i> Elavil®	25-75 mg/day	25-50 mg/day every 1-2 days	150 mg/day	300 mg/day	Once daily	1) EKG – baseline and as clinically indicated 2) Pregnancy test – as clinically indicated 3) Blood levels as clinically indicated. **Amitriptyline + Nortriptyline: 120-250 ng/mL	<ul style="list-style-type: none"> • Blurred Vision • Constipation • Dry Mouth • Orthostatic hypotension • Sedation • Tachycardia • Urinary retention • Weight gain 	<ul style="list-style-type: none"> • Carbamazepine • Ciimetidine • Clonidine • Fluoxetine • Guanethidine • Linezolid • MAOIs • Paroxetine • Procainamide • Quinidine • Quinolones • Rifabutin • Rifampin • St. John's Wort • Sympathomimetics • Valproate • Ziprasidone
Desipramine <i>Generic available</i> Norpramin® Pertofrane®	25-75 mg/day	25-50 mg/day every 1-2 days	150 mg/day	300 mg/day	Once daily	1) EKG – baseline and as clinically indicated 2) Pregnancy test – as clinically indicated 3) Blood levels as clinically indicated. ** Desipramine: 100-300 ng/mL		
Doxepin <i>Generic available</i> Sinequan®	25-75 mg/day	25-50 mg/day every 1-2 days	150 mg/day	300 mg/day	Once or twice daily	1) EKG – baseline and as clinically indicated 2) Pregnancy test – as clinically indicated 3) Blood levels as clinically indicated. **Doxepin + Nordoxepin: 150-250 ng/mL		
Nortriptyline <i>Generic available</i> Pamelor® Aventyl®	25 mg/day	25 mg/day every 2 days	75 mg/day	200 mg/day	Once daily	1) EKG – baseline and as clinically indicated 2) Pregnancy test – as clinically indicated 3) Blood levels as clinically indicated. ** Nortriptyline: 50-150 ng/mL		

** Therapeutic drug monitoring of tricyclic antidepressants can be performed after 5-7 days of consistent dosing. Dosing adjustments should be made to achieve 12-hour blood levels within a therapeutic range.

Appendix C: Medication Charts

Adjunctive Agents								
Drug	Starting Dose	Titration	Target Dose or Range	Maximum Daily Dose	Schedule	Patient Monitoring Parameters	Side Effects	Selected Drug Interactions
Pramipexole Mirapex®	0.375 mg/day	0.375 mg/day every 7 days	1-3 mg/day	5 mg/day	1 - 3 times daily	None	<ul style="list-style-type: none"> • Constipation • Insomnia • Nausea • Psychosis • Somnolence 	<ul style="list-style-type: none"> • Cimetidine • Diltiazem • Ranitidine • Triamterene • Verapamil
Inositol	6 g/day	6 g/day at 7 days	12-14 g/day	None	Three times daily	None	<ul style="list-style-type: none"> • Diarrhea • Nausea 	Unknown
Amphetamine Mixed Salts Generic available Adderall XR®	10 mg/day	None	10-60 mg/day	60 mg/day	2 - 3 times daily	1) Height and weight in children (baseline and as clinically indicated)	<ul style="list-style-type: none"> • Anorexia • Insomnia • Nervousness • Psychosis • Tachycardia 	<ul style="list-style-type: none"> • Guanethidine • MAOIs • SSRIs • Urinary Alkalinizers
Methylphenidate Generic available ¹⁴ Ritalin® Ritalin SR® Concerta®	20 mg/day	None	20-40 mg/day	60 mg/day	2 - 3 times daily		<ul style="list-style-type: none"> • Anorexia • Insomnia • Nervousness • Psychosis • Tachycardia 	<ul style="list-style-type: none"> • Guanethidine • Hydantoins • MAOIs • Tricyclic antidepressants
T₃ (Liothyronine) Generic available Cytomel® Triostat®	25 mcg/day	None	25-50 mcg/day	160 mg/day	Once daily	None	<ul style="list-style-type: none"> • Diarrhea • Headache • Irritability • Nervousness • Sweating • Tachycardia 	<ul style="list-style-type: none"> • Anticoagulants • Hypoglycemics • Oral contraceptives • Tricyclic antidepressants
T₄ (Levothyroxine) Generic available Synthroid® Levoxyl®	50 mcg/day	50 mcg/day every 3 days	300-500 mcg/day	500 mcg/day	Once daily	None	<ul style="list-style-type: none"> • Diarrhea • Headache • Irritability • Nervousness • Sweating • Tachycardia 	<ul style="list-style-type: none"> • Anticoagulants • Cholestyramine • Digoxin • Estrogens • Iron • Theophyllines

¹⁴ Generic only available in IR and SR formulations

Additional References for Drug Information

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- Drug Product Labeling – see specific FDA approved drug prescribing information
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Appendix D: Side Effect and Associated or Co-Existing Symptom Management

Treatment-Emergent Side Effects

In general, treatment emergent side effects should be addressed first by dose reduction or medication switching. Prescribing medications for side effects may lead to new side effects.

Benzodiazepines are best avoided in patients with prior history of substance abuse/dependence or who are at risk for substance abuse. Nonaddicting agents are preferred.

Side Effect	Recommendations
GI Upset	<ul style="list-style-type: none">- Nausea and diarrhea are usually transient side effects with antidepressants, and improvement should occur within 2-3 weeks after initiation or dose increases.- Administer medication with food and large quantities of liquid.- Consider lowering dose, if possible, or slowing the dose titration.- Persistent GI upset may require changing to an alternative medication or adding an adjunctive agent, such as an H₂ blocker (e.g., famotidine, ranitidine).
Tremor	<ul style="list-style-type: none">- Enhanced physiologic tremor – A fine tremor of approximately 8-10 Hz; made worse with outstretched hands.<ul style="list-style-type: none">• Check blood levels of medication, if applicable.• Decrease dose, divide dose, or change to slow release preparation of the medication.• Propranolol can be given at 20-30 mg three times a day.- Parkinsonian tremor – Coarse tremor at rest of approximately 4-6 Hz.<ul style="list-style-type: none">• See treatment recommendations under Extrapyrarnidal Symptoms (EPS) below.
Sedation	<ul style="list-style-type: none">- A thorough evaluation of sleep behaviors should be performed, including a patient assessment of sleep quality.- May try dosing medication at bedtime.- Decrease dose if possible.- Substitute a less sedating alternative medication.- Adjunctive medications may be considered. However, in patients with psychosis, adjunctive treatment is not recommended as it may possibly worsen the course of the episode.

Side Effect	Recommendations
Extrapyramidal Symptoms (EPS) – Parkinsonian Tremor, Akathisia, and Dystonia	<ul style="list-style-type: none"> - Usually seen with typical antipsychotics or higher doses of risperidone. - Parkinsonian tremor – coarse tremor at rest of approximately 4-6 Hz. <ul style="list-style-type: none"> • Decrease dose, divide dosing, use bedtime dosing, or switch to alternate medication. • Pharmacological treatments include benztropine 1-2 mg twice daily, diphenhydramine 25-50 mg two or three times daily, or propranolol 20-30 mg three times daily. - Akathisia may respond to propranolol 20-30 mg three times a day. If this is not effective, alternatives include clonidine 0.1 mg three times a day, lorazepam 1 mg two or three times a day, or clonazepam 0.5-1mg twice a day. - Dystonic reactions can often be prevented by benztropine 1 mg two or three times a day for the first few days of antipsychotic therapy. Acute dystonic reactions are generally managed with benztropine 1-2 mg IM or lorazepam 1-2 mg IM.
Tardive Dyskinesia	<ul style="list-style-type: none"> - Prescribe typical antipsychotics in the lowest dose necessary for the shortest time possible. Mid-potency typical agents may be preferred if typical antipsychotic is selected. - Use atypical antipsychotic medications. - Consider clozapine which has an extremely low risk of TD. - Consider other treatment modalities, including ECT.
Neuroleptic Malignant Syndrome (NMS)	<ul style="list-style-type: none"> - Patients with a history of NMS should be educated about the need to stay well hydrated and avoid strenuous physical activity when outside during hot weather. - If the patient has been on a FGA, changing to a SGA is reasonable.
Sexual Dysfunction	<ul style="list-style-type: none"> - May consider switching to an alternative medication with lower propensity to cause sexual dysfunction. - If SSRI-induced sexual dysfunction, may consider adding bupropion 75-150mg daily. - Alternatives for the management of sexual dysfunction secondary to psychotropic medications is to add a selective phosphodiesterase (PDE) type 5 inhibitor. Use is contradicted with concurrent nitrates. Caution use with concomitant C4P3A4 inhibitors. Data available for use in females is limited to small, open label trials. <ul style="list-style-type: none"> • Sildenafil 25-100mg one-half to 1 hour before sexual activity. • Tadalafil 10-20mg one-half to 1 hour before sexual activity. • Vardenafil 5-20mg one-half to 1 hour before sexual activity. - Other alternative is cyproheptadine 4-8 mg, given shortly before sexual intercourse. However, cyproheptadine is also a serotonin receptor antagonist, and frequent use in patients with affective symptoms should proceed with caution.

Side Effect	Recommendations
Insomnia	<ul style="list-style-type: none"> - Promote good sleep hygiene: <ul style="list-style-type: none"> • Encourage regular aerobic exercise at least four hours before bedtime. • Avoid alcoholic beverages. • Encourage regular sleep cycles. • Eliminate noises and distracting lights. • Engage in relaxing activities before bed (reading, sex, meditation, etc). • Try a glass of warm milk. - If due to concomitant antidepressant use: reduce the dose of antidepressant, if possible. - Try moving the dosing of the medication to the morning. - Adjunctive medications: <ul style="list-style-type: none"> • Zolpidem 5-10 mg once daily at bedtime. • Zaleplon 5-20 mg (10 mg recommended dose) once daily at bedtime. • Eszopiclone 2-3 mg once daily at bedtime. • Benzodiazepine, such as temazepam 15-30 mg once daily at bedtime or lorazepam 0.5-2mg once daily at bedtime. • Trazodone 25-100mg once daily at bedtime. • Low-dose tricyclic antidepressant, such as amitriptyline 10-50 mg once daily at bedtime. - Brief, targeted cognitive therapy.
Weight Gain	<ul style="list-style-type: none"> - Exercise (walking, jogging, swimming) for at least 3 times weekly, and for at least 30 minutes each time. - Diet: <ul style="list-style-type: none"> • Eat smaller portions of 3 meals per day. • Decrease excess fats (decrease fried foods, eat lean meats, increase vegetables, salads, and fruits). • Decrease excessive low nutritional content carbohydrate (soft drinks, deserts, candy, gravies, potatoes, white bread). - Avoid snacking, and particularly, no evening snacks.

Associated or Co-Existing Symptoms

Benzodiazepines are best avoided in patients with prior history of substance abuse/dependence or who are at risk for substance abuse. Nonaddicting agents are preferred.

Co-Existing Symptom	Recommendations
Agitation/ Excitement	<ul style="list-style-type: none"> - Consider adjunctive medications, including as needed use of oral and intramuscular medications including benzodiazepines, typical antipsychotics, and atypical antipsychotics: <ul style="list-style-type: none"> • Lorazepam 1-4 mg or clonazepam 0.5-2 mg may be used in treating acute agitation. In emergent situations where rapid reduction of agitation is necessary, lorazepam 1-2 mg given intramuscularly may be preferable to oral dosing. The dose may be repeated every 1-2 hours as needed, and onset of effect is generally seen within 15-30 minutes. • Haloperidol 5 mg orally or intramuscularly may be given every 30-60 minutes until patient is calm. • Atypical antipsychotics in intramuscular or oral formulations may be given on an as needed basis to control acute agitation. If oral dosing is used, doses should be initiated at the low end of the dosing range. Intramuscular olanzapine, risperidone oral solution, and intramuscular ziprasidone act more rapidly than their oral counterparts and their use may be warranted in cases where the patient can not tolerate or does not respond to typical antipsychotic agents and/or benzodiazepines. <ul style="list-style-type: none"> ○ Intramuscular olanzapine 2.5-10 mg, may repeat 2 hours after initial dose and 4 hours after second dose, with a maximum of 30 mg daily. ○ Intramuscular ziprasidone 10-20 mg as needed to a maximum dose of 40 mg daily. The 10 mg dose may be given every 2 hours, and the 20 mg dose may be given every 4 hours. ○ Intramuscular aripiprazole 5.25 – 9.75 mg as needed every two hours to a maximum of 30 mg daily. • Risperidone oral solution is available in 1mg/mL. - Failure of the first trial of pharmacotherapy should be followed by a second trial of an alternative agent above. - After failure of multiple trials of agents to control acute agitation/excitement, consider moving treatment to the next algorithm stage.
Persistent symptoms of Aggression/Hostility/ Mood Lability	<ul style="list-style-type: none"> - Lithium, valproate and carbamazepine are all therapeutic options for the management of aggression and hostility associated with acute exacerbations in schizophrenia - If there is no discernible change in the clinical picture after 1-3 weeks, the clinician should discontinue the adjuvant mood stabilizer and consider switching the patient to clozapine.
Depression	<ul style="list-style-type: none"> - Medication treatments for depression in schizophrenia are the same as those used in major depressive disorder. - SSRIs, venlafaxine XR, bupropion SR/XL, duloxetine and mirtazapine are recommended as first line treatments.

Co-Existing Symptom	Recommendations
Insomnia	<ul style="list-style-type: none"> - Promote good sleep hygiene: <ul style="list-style-type: none"> • Encourage regular aerobic exercise at least four hours before bedtime. • Avoid alcoholic beverages. • Encourage regular sleep cycles. • Eliminate noises and distracting lights. • Engage in relaxing activities before bed (reading, sex, meditation, etc.). • Try a glass of milk. - Adjunctive medications: <ul style="list-style-type: none"> • Zolpidem 5-10 mg once daily at bedtime. • Zaleplon 5-20 mg (10 mg recommended dose) once daily at bedtime. • Eszopiclone 2-3 mg once daily at bedtime. • Benzodiazepine, such as temazepam 15-30 mg once daily at bedtime or lorazepam 0.5-2mg once daily at bedtime. • Trazodone 25-100mg once daily at bedtime. • Low-dose tricyclic antidepressant, such as amitriptyline 10-50 mg once daily at bedtime. - Brief, targeted cognitive therapy.

Appendix E: Overlap and Taper Guidelines

Considerable evidence in patients with bipolar disorder suggests that a sudden discontinuation of lithium maintenance treatment is associated with a greater relapse of affective illness than a gradual taper¹. Some evidence in patients with schizophrenia suggests that the abrupt discontinuation of maintenance antipsychotic treatment is also associated with a greater risk of relapse than is a gradual taper². Thus, a gradual tapering of psychotropic medications in persons with bipolar disorder is strongly recommended when possible to minimize exacerbation or relapse of mood symptoms. Exceptions to this rule would be when severe or potentially life-threatening side effects occur or if manic symptoms develop during antidepressant therapy.

In general, if a medication is to be discontinued, the new medication should be started and titrated to a therapeutic dose. Then the medication to be discontinued is tapered at a maximum of 25% the dose every 1-2 weeks.

If during the increasing dose period of the second medication, presumptive side effects from the first medication increase, it would be reasonable to begin tapering the first medication prior to reaching full therapeutic dose of the second new medication. If a patient's clinical status improves during the overlap and taper period, it is impossible to determine whether the improvement occurred due to the second medication or to the combination. The clinician should continue with the overlap and taper in order to evaluate clinical response on the second medication monotherapy. If clinical status deteriorates with discontinuation of the first medication, it can be restarted in combination with the second medication.

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Appendix F: TMAP Publications

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Appendix G: Minimum Data Set for Documentation

The following information should be entered on the Clinical Record Form at each patient visit:

1. Patient identification information

Indicate information required by the health care organization.

2. Date

Date of visit (month/day/year)

3. Service activity code

Service activity or billing code for this visit

4. Physician/clinician code or identification

5. Duration of visit

Record start and end times of visit (hour:minute am/pm).

6. Current diagnoses

Record the current psychiatric diagnoses using DSM IV-TR codes. Please place primary diagnosis first.

7. Current algorithm

Check box of the specific algorithm that is being used.

8. Current stage in algorithm at beginning of visit and weeks in this current stage

Record current stage in algorithm at the beginning of this visit and how many weeks the patient has been in this stage.

9. Vital signs

Record current vital signs: weight, height, blood pressure; pulse rate.

10. Most recent drug levels

Most recent values (as applicable) with date

11. Has patient taken medications as prescribed?

Check appropriate box.

12. Any other medications taken during the past week?

Include any prescriptions, over-the-counter medications, or complementary medications taken in addition to medications prescribed by this physician.

13. Patient global self report

Record patient's results, including symptom severity and side effects.

14. Clinical rating scales

Record the scores of any and all appropriate clinical rating scales, including POS SX, NEG SX, QIDS (SR or C), BDSS, AIMS, and any others. Although only the total score is required for the Minimum Data Set, greater clinical utility is achieved by listing each item score for the scale or scales used. The individual rating scale items can be preprinted on the CRF if desired.

These items provide a global impression of the clinician's impression of the severity of each of these symptoms as observed at the visit as well as during the week prior to the visit.

For items 15 – 17, a scale of 0 – 10 should be used:

- 0 = No symptoms
- 5 = Moderate symptoms
- 10 = Extreme symptoms

15. Core symptoms

These are the severity of the core symptoms for the three adult disorders for which algorithms have been developed: mania, depression, positive psychotic symptoms, and negative symptoms.

16. Other symptoms

These include other symptoms that are commonly seen in individuals with mental disorders and include: irritability, mood lability, agitation, anxiety, level of interest, appetite, energy, and insomnia. A space is left in case the clinician wishes to add additional symptoms that may be present in a given patient.

17. Overall side effect severity

Rate the overall level of side effect severity from all medications being taken by the patient.

18. Suicidal or homicidal

Indicate if the patient is presently suicidal or homicidal and, if yes, please comment in the progress note section.

19. Overall functioning

Rate from 0 – 10 (0 = Low and 10 = High) your overall impression of the patient's ability to function on a daily basis. Please note: this is not a GAF score, but the clinician's overall impression of how the patient has been functioning during the last week.

20. Are serum concentrations needed?

This provides a prompt for the clinician to order medication serum concentrations if they are needed. If yes, please specify in the progress note section.

21. Rationale for diagnostic and other services

The rationale for ordering diagnostic and other services should be clearly documented.

22. Medication response

Please indicate the patient's response to the medication since the beginning of the current stage. Check the box that applies. Please note that this is medication response and, depending on comorbidity and the patient's psychosocial situation, this may not necessarily represent the patient's overall improvement in mental health status.

23. Rationale for change in medication

If medication is being changed (including dose changes), please note rationale by checking all boxes that apply.

24. Prescription information

- This information should be completed regardless of whether a patient is getting a new prescription for ongoing medications.
- List all medications being taken by the patient for the core syndrome, other symptoms, or side effects.
- Indicate via check mark, if this is a new medication, continuation of a previous medication, or medication being discontinued at this visit.
- Provide the following information: dose, frequency, duration the medication is to be taken, titration (or tapering) schedule, and any other pertinent information describing the medication or use of this medication.
- Indicate via check mark the following:
 - S = Core symptoms
 - OS = Other symptoms
 - SE = Side effects of S or OS medications

25. Algorithm State at End of Visit

A change in core disorder medications during the visits dictates a change in the algorithm stage.

26. Progress note

Use the progress note to indicate additional information, assessments, or impressions not addressed elsewhere or to expand on information already given. This section should also address any variation from algorithm-based treatment. Clinics may use preprinted templates for this section if they wish.

27. Next visit

The treating clinician indicates the recommended number of weeks until the patient should return to the clinic. Clinic staff should record the actual date of the next scheduled visit.

28. Signature and title

Treating clinician should sign name and degree designation or title.