DSH PSYCHOTROPIC MEDICATION Operational Procedures

POLYPHARMACY:

Polypharmacy carries a risk of increased morbidity and mortality due to risks of multiple medication interactions and synergistic additive adverse effects. Whenever multiple medications are used, it is important to weigh the overall risks of using multiple pharmacological agents against the benefits provided by the group of medications employed. The goal must always be to provide the maximum benefit with the fewest risks possible in each clinical situation.

I. Definitions:

A. For the purposes of this policy, polypharmacy is defined in two domains:

1. prescription of two or more psychotropic medications from the same therapeutic class (intraclass polypharmacy)

2. prescription of a number of psychotropic medications that exceeds the limit set below (interclass polypharmacy).

Meeting the definition of polypharmacy in either domain requires consultation or review by the facility's Medication Review Committee (MRC) or Therapeutic Review Committee (TRC).

B. For the purposes of this polypharmacy policy, psychotropic medications are those medications being used to treat mental diseases, defects, or disorders. For example, an anticonvulsant or antiepileptic medication being used to treat a seizure disorder not manifested predominantly by mental signs and symptoms would not be considered to be a psychotropic medication, while the same anticonvulsant being used as a mood stabilizer or to inhibit aggressive or impulsive behavior would be considered a psychotropic medication.

In corollary, medications used to treat psychotropic medication side effects but do not alter thinking, emotional processes, or behavior would not be considered psychotropic medications. Examples would include, but would not be limited to insulin for antipsychotic-induced diabetes mellitus or thyroid hormone for lithium-induced hypothyroidism.

An important exception to this logic is medications used to treat antipsychotic-induced neurological syndromes. By both custom and per this policy, anticholinergic medications are counted as psychotropic medications.

Finally, a medication used to treat both mental and physical problems (e.g., topiramate when used to reduce weight gain and decrease impulsiveness) would be counted as a psychotropic medication.

II. Polypharmacy Due to Total Number of Psychotropic Medications

A. Polypharmacy requiring MRC or TRC consultation or review shall be deemed to exist when more than 6 psychotropic medications are routinely prescribed for

more than ninety (90) days to a given individual treated by a California Department of State Hospitals (DSH) facility.

B. Psychotropic medications shall be exempted if they are ordered as a single administration order (e.g., single STAT order). Also, as needed or PRN psychotropic medications are exempted from being counted toward the total number of psychotropic medications.

III. Intraclass Polypharmacy:

A. Intra-class polypharmacy is deemed to exist whenever 2 or more psychotropic medications within the same therapeutic class are concurrently prescribed, and one or more of the exemptions listed below is not applicable.

B. Psychotropic Medication Transition: Intraclass polypharmacy shall not be deemed to exist when two psychotropic medications within the same class are prescribed concurrently and one of the medications is tapered and discontinued within ninety (90) days (i.e., cross-titration). Note that a prolonged transition may be desirable in many clinical circumstances to minimize rebound effects or risk of decompensation.

C. Evidence-Based Combinations (Exemptions):

1. **Antidepressants:** Combined prescription of an activating antidepressant (e.g., sertraline or venlafaxine) and an evening dose of mirtazapine or trazodone given for the purpose of sedation shall not be defined as intraclass polypharmacy.

   [NOTE: This exemption does not apply to concurrent prescription of a tricyclic antidepressant and other antidepressants, as those antidepressants that inhibit cytochrome P450 iso-enzymes may increase tricyclic plasma concentrations to toxic levels.]

2. **Mood Stabilizers:** Combined prescription of lithium plus anticonvulsants given as mood stabilizers or two or more anticonvulsants given as mood stabilizers shall not be deemed to be intraclass polypharmacy.

3. **Antipsychotics:** Use of two antipsychotics shall not be deemed to be polypharmacy provided they differ sufficiently in properties or mechanism of action to make that combination rational.

   NOTE: Published data have supported the combined use of [clozapine + aripiprazole] and [clozapine + risperidone], as well as [olanzapine + risperidone]. However, additional benefit derived from use of an adjunctive antipsychotic has typically been small (i.e., small effect size).

4. **Ambiguous Cases:** When cases arise in which there is question as to whether an MRC or TRC consultation or review is required by this policy (e.g., due to one or more medications being used for multiple purposes).

The issue may be discussed by the treating physician with the Chair of the MRC or TRC. In such cases, the Chair shall have the authority to interpret this policy and to determine whether MRC or TRC consultation or review of the case is required. If the Chair of the MRC or TRC is unavailable or is unable to resolve the question, such authority shall be referred to (in this order):

a. Chair of the Pharmacy and Therapeutics Committee

b. Chair of the Department of Psychiatry

c. Chief Psychiatrist

d. Chief of Staff

e. Medical Director

References:

Christoph U, et al.. 2008. Antipsychotic Combinations Versus Monotherapy in Schizophrenia: A Meta-analysis of Randomized Controlled Trials. Schiz Bull: 35, 2, 443-457.

Gallego JA, et al.. 2012. Safety and Tolerability of Antipsychotic Polypharmacy. Expert Opin Drug Saf: 11, 4, 527-542.

Galling B, et al.. 2017. Antipsychotic Augmentation Versus Monotherapy in Schizophrenia: Suystematic Review, Meta-analysis and Meta-regressin Analysis. Word Psychiatry: 16, 77-89.