Clinical Learning Objectives Guide for Psychiatry Education of Medical Students

Association of Directors of Medical Student Education in Psychiatry (ADMSEP) www.admsep.org

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Preamble: As work on the Psychiatry Learning Objectives project progressed, the ADMSEP Taskforce expanded its focus from delineating learning objectives to be achieved during a traditional psychiatry clerkship to laying out psychiatry clinical learning objectives, with supportive subtext, that should be achieved prior to completion of an undergraduate medical curriculum. It is recognized that traditionally clinical learning objectives are achieved in the third-year clerkships. However, innovative curricula are in place and being developed that permit students to achieve clinical learning objectives throughout the four years of medical school. Hence, the title of this document was changed from Psychiatry Clerkship Learning Objectives to the Clinical Learning Objectives Guide for Psychiatry Education of Medical Students. A precedent for this approach has been set by other medical specialties in recent revisions of their learning objectives endorsed by national organizations.

The Clinical Learning Objectives Guide is presented here in a form that has been reviewed and endorsed by the ADMSEP membership in June 2007. Rather than a prescriptive curriculum for a psychiatry clerkship, this guide is intended to be a comprehensive and evolving resource to assist clinical educators in developing, refining, and managing psychiatry educational programs at their own institutions. Based on need and inclination, educators can adopt and adapt selected learning objectives from this guide and set the time frame for achievement in their programs of learning (e.g., pre-clerkship, clerkship, prior to program completion, etc.).

Background: In line with ongoing efforts in other medical specialties, the ADMSEP Taskforce on Learning Objectives has worked to develop a prioritized, cogent set of psychiatry learning objectives that are relevant to all medical students regardless of their future specialty career choices. This work began by using the Psychiatry Clerkship Learning Objectives that were originally endorsed by ADMSEP in 1995. The goal has not been to simply rewrite previous learning objectives but to be comprehensive in scope and create a meaningful organizational format that prioritizes psychiatry learning objectives, emphasizes clinical skills, and links learning objectives to the Accreditation Council on Graduate Medical Education (ACGME) competency domains.

The Taskforce envisions this Clinical Learning Objectives Guide to be dynamic and expects and encourages ongoing contributions from educators and learners. Although the current focus is clinical, the scope is beyond the traditional third-year clerkship. We look forward to this learning objectives guide stimulating curriculum innovation and development, which will benefit medical student education in psychiatry at every level of training in an undergraduate

curriculum. A hope is that the Clinical Learning Objectives Guide will evolve into a Psychiatry Curriculum Resource Guide and become a central depository for educational resources that will facilitate communication and sharing of educational resource material that supports the learning objectives.

Organizational Key: The Clinical Learning Objectives are conceptualized to fall into one of four (4) main **UNITS**:

- I. Clinical Skills
- II. Psychopathology and Psychiatric Disorders
- III. Disease Prevention, Therapeutics and Management
- IV. Professionalism, Ethics and the Law

Each **UNIT** is composed of several major **Topic Areas.** A Rationale, Recommended Prerequisites, and specific Learning Objectives support each Topic Area. The Learning Objectives are prioritized as **Core** or essential topics recommended for inclusion in psychiatry clerkships and undergraduate curriculum, and **Enhancement** topics that could be included to enrich a psychiatry clerkship or clinical curriculum as program resources permit. Each learning objective is keyed to ACGME competency domains (reference Appendix 2).

Utilizing the Clinical Learning Objectives Guide: The ADMSEP Taskforce on Learning Objectives recognizes the increasing demands on clinical educators to explicitly state what is being learned, how it is being learned, and how educational outcomes are being determined. To address these needs and augment use of the Learning Objectives Guide, the Taskforce has developed an optional template for educators, which facilitates linking each learning objective to a) the Accreditation Council on Graduate Medical Education (ACGME) competency domains; b) a level of achievement or mastery that is the desired outcome; c) useful instructional methods; d) assessment strategies for evaluation; and e) educational resource materials. A series of appendices (Appendix 1-4) delineating the six ACGME competency domains, Levels of Performance and Achievement (Miller 1990), and Instructional and Assessment Methods for Clinical Education (ACGME 2000) have been adapted for undergraduate medical education and included for reference. Clinical educators can select the specific learning objectives that meet their program needs and then reference the appendices and link these objectives to the desired level of achievement, instructional methods and assessment strategies that are relevant.

Space is provided in the template for a potential supplementary link for each learning objective to relevant educational resources and support materials. This resource link is essentially a space holder until the evolution of the Clinical Learning Objectives Guide to a Psychiatry Curriculum Resource Guide is completed. In the interim, the Clinical Learning Objectives Guide will be web-based and freely available to clinical educators in both PDF and WORD formats along with the optional template and appendices for individual programs to link resources to the learning objectives.

In the future development of a Psychiatry Curriculum Resource Guide, the Taskforce envisions an ADMSEP Educational Resource Review Committee that will provide peer-review of educational resources submitted by clinical educators to support the learning objectives. In this

way educators will receive recognition for their scholarly work and development and sharing of high quality resources will be facilitated.

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Unit I: Clinical Skills

Topic Area A: History-Taking, Examination and Medical Interviewing

Rationale: To evaluate and care for any patient, the clinician must be skillful with developmentally and culturally competent communication methods in obtaining relevant historical information and performing a complete examination. Although the comprehensiveness of an examination may vary based on the situation, in addition to a general physical exam, physicians should be able to perform a mental status exam and accurately describe the findings.

For effective history taking and patient evaluation, a clinician must have an understanding, ability, and self-awareness to flexibly use a range of empathic interviewing techniques with patients a) across the lifespan including children, adolescents, adults, and the elderly; b) across cultures; and c) with persons afflicted with mental illness or experiencing considerable distress.

Prerequisites: In the pre-clinical/pre-clerkship curriculum, the student should be introduced to 1) the basic elements of a comprehensive History and Physical Exam, including the Mental Status Exam; 2) basic interviewing techniques; and 3) the importance and complexity of the physician-patient relationship and variables relevant to a range of patient populations.

Learning Objectives: Core

- 1. Elicit and accurately document a complete psychiatric history, including the identifying data, chief complaint, history of the present illness, past psychiatric history, medications (psychotropic and non-psychotropic), general medical history, review of systems, substance use history, family history, and personal and social history (PC-1a,b;CS-4b);
- 2. Perform an appropriate physical exam on patients with presumed psychiatric disorders as described below (PC-1a,f;MK-2a,b;CS-4a;P-5a):
- a) Recognize and discuss bodily signs and symptoms that accompany classic psychiatric disorders (e.g., tachycardia and hyperventilation in panic disorder);
- b) Discuss the extent to which a general medical illness may contribute to the signs and symptoms of a psychiatric disorder;
- c) Recognize and discuss the possible manifestations of psychotropic drugs (e.g., medications and drugs of abuse) in the physical exam, and
- d) make recommendations for further evaluation including appropriate laboratory, imaging, psychometric and other medical testing;
- 3. Recognize the importance of, and be able to obtain and interpret, historical data from multiple sources including family members, community mental health resources, primary care providers, religious and spiritual leaders, old records, child's teachers, primary care physician, indigenous and complementary/alternative providers, etc. (PC-1a,b;CS-4a,b;MK-2a);
- 4. Perform and accurately describe the components of the comprehensive Mental Status Examination (e.g., including general appearance and behavior, motor activity, speech, affect, mood, thought processes, thought content, perception, sensorium and cognition, abstraction, intellect, judgment, and insight.) Describe variations in presentation according to age, stage of development and cultural background (PC-1a,b,f,h;MK-2a,b;CS-4a,b);

5. Describe common abnormalities, and their causes, for each component of the Mental Status Exam (MK-2a,b);

- 6. Perform common screening exams for common psychiatric disorders (e.g., CAGE, MMSE, etc.) (PC-1a,b,f;P-5a,c);
- 7. Discuss and use basic strategies for engaging and putting patients at ease in challenging interviews (e.g., with patients who are disorganized, cognitively impaired, hostile/resistant, mistrustful/fearful, circumstantial/hyperverbal, unspontaneous/hypoverbal, potentially assaultive; when being assisted by an interpreter). Describe different interviewing techniques for different ages (PC-1a,b;CS-4a,b;P-5a.c);
- 8. Demonstrate an effective repertoire of interviewing skills including: appropriate initiation of the interview; establishing rapport; the appropriate use of open-ended and closed questions; techniques for asking "difficult" questions; the appropriate use of facilitation, empathy, clarification, confrontation, reassurance, silence, summary statements; soliciting and acknowledging expression of the patient's ideas, concerns, questions, and feelings about their illness and its treatment; communicating information to patients in a clear fashion; appropriate closure of the interview; and be able to perform these basic interviewing skills in performing a family assessment (PC-1a,b;CS-4a,b;P-5a,c);
- 9. Discuss and avoid the common pitfalls in interviewing technique including: interrupting the patient unnecessarily; asking long, complex questions; using jargon; asking questions in a manner suggesting the desired answer; asking questions in an interrogatory manner; ignoring patient verbal or nonverbal cues; making sudden inappropriate changes in topic; indicating patronizing or judgmental attitudes by verbal or nonverbal cues (PC-1a,b;CS-4a,b;P-5a,c);
- 10. Discuss indications, challenges and methods for successfully eliciting an accurate history and performing a mental status exam with patients across the lifespan, those with communication impairments (e.g., deafness), and those from diverse ethnic, linguistic and cultural backgrounds;

Learning Objectives: Enhancement

- 11. Explain the value of skillful interviewing to the satisfaction of both the patient and the doctor and how this increases the likelihood of an optimal clinical outcome (PC-1a,b;CS-4a,b;P-5a,c);
- 12. Identify strengths and weaknesses in personal interviewing skills and discuss with a colleague or supervisor (PBI-3a);
- 13. Identify verbal and nonverbal expressions of affect in a patient's responses, and apply this information in assessing and treating the patient (PC-1a,b,c;MK-2a;CS-4a,b;P5a,c);
- 14. Discuss the indications, challenges, and methods for the optimal use of an interpreter when performing a psychiatric evaluation (CS-4a,b;P-5a);

Topic Area B: Documentation and Communication

Rationale: Regardless of the clinical specialty, a physician must be able to properly document clinical findings, diagnostic impressions, and clinical reasoning. The physician must be able to communicate clearly and concisely to other professionals and to patients and their families, in both written and oral formats. These skills are particularly important for communicating about psychiatric disorders where obvious laboratory or physical findings may not be present.

Prerequisites: In the pre-clinical/pre-clerkship curriculum, the student should be introduced to the standard formats for documenting comprehensive evaluations, focused examinations, and daily patient progress. The student should have opportunities to present clinical data and reasoning in an oral format.

Learning Objectives: Core

By completion of the clerkship/medical school, the student will be able to:

- 1. Accurately document a complete psychiatric history and appropriate examination and accurately record and communicate the components of a comprehensive mental status examination (PC-1b,h;MK-2a;SBP-6a);
- 2. Accurately document the daily or periodic progress of patients psychiatric disorders recording mental status changes and diagnostic impressions (PC-1b,c,h;MK-2a);
- 3. Provide a clear and concise oral presentation of a) a complete psychiatric evaluation including relevant history, mental status findings and diagnostic impressions, and b) the daily or periodic progress of patients being treated for psychiatric disorders (PC-1c,h;MK-2a:PBI-3e);
- 4. Communicate clinical impressions, treatment recommendations including risks and benefits, and other relevant education to assigned patients and their families (PC-1e;CS-4a,b;P-5a,c);
- 5. Document assessment of patient's degree of risk to self and others and assessment of competency to participate in medical decision-making (See section I.D.)(PC-1b,h;MK-2a;SBP-6a);

Topic Area C: Clinical Reasoning and Differential Diagnosis

Rationale: Accurately identifying a patient's problems and the relevant signs and symptoms is basic to establishing a diagnosis in any field of medicine. In psychiatry patients may lack insight into the problems they are having and insist that nothing is wrong. Hence, to be skillful at discerning signs and symptoms of psychiatric disorders the physician must have a heightened level of suspicion, be knowledgeable about symptom clusters that are suggestive of specific disorders, and be able to formulate reasonable diagnostic hypotheses with plans for further evaluation. To be successful, the physician must also be able to incorporate knowledge about the range of normal behaviors at various ages and stages of development.

Prerequisites: In the pre-clinical/pre-clerkship curriculum, the student should be introduced to basic principles of patient examination and differential diagnosis. They should be introduced to signs and symptoms of common psychiatric disorders in psychopathology coursework.

Learning Objectives: Core

By the end of the clerkship/medical school, students will be able to:

- 1. Use the DSM-IV to identify signs and symptoms that comprise specific syndromes or disorders and construct diagnoses using the five axes system (PC-1c;MK-2a,b;PBI-3c,b);
- 2. Formulate a differential diagnosis and plan for assessment of common presenting signs and symptoms of psychiatric disorders (e.g., insomnia, behavioral dyscontrol, confusion, hallucinations, delusions, etc.) including appropriate laboratory, imaging, psychometric and other medical testing (PC-1c,d;MK-2a,b;PBI-3b,c);

- 3. Discuss the indications for, how to order, and the limitations of common medical tests for evaluating patients with psychiatric symptoms including laboratory, imaging, psychometric and other psychological and medical tests (PC-1c,d,h;MK-2a,b;PBI-3b,c,d);
- 4. Interpret basic test results and consultant reports relevant to working through a differential diagnosis of designated patients with psychiatric disorders and general medical conditions with psychiatric manifestations (PC-1b,c,h;MK-2a,b;PBI-3b,c,d);
- 5. Assess, record and interpret mental status changes of designated patients, and alter diagnostic hypotheses and management recommendations in response to these changes (PC-1b,c,d,h;MK-2a,b;PBI-3b,c,d);

Learning Objectives: Enhancement

6. Discuss the different types of neuropsychological testing, and state indications for each(MK-2a,b);

Topic Area D: Assessment of Psychiatric Emergencies

Rationale: Psychiatric emergencies may occur in any clinical or non-clinical setting and are life threatening. An effective physician must be able to recognize potential psychiatric emergencies and initiate an intervention. Although suicide is the most common psychiatric emergency the list of emergent conditions is lengthy and diverse ranging from suicidality and homicidality, to catatonia, intoxication, delirium, and severe drug reactions. It is important for physicians to be able to perform risk assessments, evaluate patients with altered mental status or behavioral dyscontrol, and recognize signs of potential assaultive behavior.

Prerequisites: In the pre-clinical/pre-clerkship curriculum, the student should be introduced to the possible emergent presentations of patients with psychiatric disorders and particular risks associated with psychotropic pharmacotherapy.

Learning Objectives: Core

- 1. Identify and discuss risk factors for suicide across the lifespan (PC-1c,g;MK-2a,b;PBI-3b);
- 2. Conduct diagnostic and risk assessments of a patient with suicidal thoughts or behavior and make recommendations for further evaluation and management (PC-1a,b,c,d,e,f,h;MK-2a,b;PBI-3b;CS-4a,b;P5a,c);
- 3. Identify and discuss risk factors for violence and assaultive behavior (PC-1c;MK-2a,b;PBI-3b);
- 4. Discuss signs of escalating violence and review the appropriate safety precautions and interventions (PC-1c,d,g;MK-2a;PBI-3b;CS-4a,b);
- 5. Discuss the differential diagnosis and conduct of a clinical assessment of a patient with potential or active violent behavior and make recommendations for further evaluation and management including appropriate laboratory, imaging, psychometric and other medical testing (PC-1a-h;MK-2a;CS-4a,b;P-5c);
- 6. Discuss the clinical assessment and differential diagnosis of a patient presenting with psychotic symptoms such as perceptual disturbance, bizarre ideation and thought disorder, and make recommendations for further evaluation and management including appropriate laboratory,

imaging, psychometric and other medical testing (PC-1a,b,c,d,f,h;MK-2a,b;PBI-3b;CS-4a,b;P-5a,c);

- 7. Discuss the clinical assessment and differential diagnosis of a patient with impaired attention, altered consciousness and/or other cognitive abnormalities and make recommendations for further evaluation and management including appropriate laboratory, imaging, psychometric and other medical testing (PC-1a,b,c,d,h;MK-2a,b;PBI-3b,c;CS-4a,b;P-5a,c);
- 8. Analyze risk factors and make recommendations for psychiatric hospitalization versus an ambulatory disposition in the management of designated patients (PC-1c,d,h;MK-2a,b;PBI-3b,c);

Learning Objectives: Enhancement

- 9. Discuss the indications, precautions and proper use of physical restraint (PC-1c,d,g,h;MK-2a;P-5a,b,c);
- 10. Discuss the indications, precautions and proper use of pharmacotherapy for violent behavior (PC-1c,d,g,h;MK-2a;P-5a,b,c);
- 11. Recognize and differentiate the common signs and symptoms of psychotropic drug toxicity (e.g., hyponatremia, Stevens-Johnson syndrome, serotonin syndrome, neuroleptic malignant syndrome, lithium toxicity, etc.) (see III.B. Pharmacologic Therapies) and discuss treatment interventions (PC-1c,f;MK-2a,b;PBI-3b,c);
- 12. Be able to assess survivors of trauma (e.g., rape, natural disaster, terrorism, war, political persecution), discuss differential diagnosis, and make recommendations for further evaluation and management (PC-1a-f,f;MK-2a,b;CS-4a,b;P-5a,c);

Unit II: Psychopathology and Psychiatric Disorders

The typical signs and symptoms of common psychiatric disorders as outlined below should be learned and understood at each phase of the life cycle (i.e., children, adolescent, adult, and geriatric populations) and across language and cultural groups. The clerkship learning experiences should build on an established understanding of basic principles of neurobiology and psychopathology derived from the pre-clerkship curriculum.

Topic Area A: Cognitive Disorders

Rationale: Cognitive impairment is a presenting sign or symptom for many medical conditions. Regardless of medical specialty, a physician should be able to make an initial assessment of cognition with attention to possible emergent underlying conditions, be able to appropriately use cognitive assessment tools accounting for language and cultural variations, be familiar with the common causes of cognitive impairment, and proceed with or refer patients for further evaluation and management.

Prerequisites: In the pre-clinical/pre-clerkship curriculum, the student should be introduced to common conditions associated with disturbance of cognition and be familiar with normal developmental stages of cognition.

Learning Objectives: Core

- 1. Differentiate and discuss the cognitive, emotional and behavioral manifestations of common Cognitive Disorders including Delirium and Dementia syndromes (MK-2a,b);
- 2. Perform cognitive assessments to evaluate new patients and monitor patients with identified cognitive impairment, and discuss challenges to assessment related to the patient's cultural background and developmental level (PC-1a,b;CS-4a,b;P-5a,c);
- 3. Recognize the prevalence of Delirium in various clinical settings and across the lifespan, and discuss the clinical features and differential diagnosis of the delirious patient with recommendations for evaluation and management (PC-1c,d;MK-2a,b);
- 4. Differentiate the clinical features and course of the common types of Dementia including Alzheimer's, Vascular, Lewy Body and those syndromes caused by other neurodegenerative and infectious diseases (e.g., Parkinson's, HIV infection, Huntington's, Pick's, Creutzfeldt-Jakob, etc.)(PC-1c;MK-2a,b);
- 5. Recognize the clinical features and discuss the differential diagnosis of a patient presenting with cognitive impairment and make recommendations for diagnostic evaluation and management including appropriate laboratory, imaging, psychometric and other medical testing (PC-1b,c,d,h;MK-2a,b);

Learning Objectives: Enhancement

- 6. Discuss the clinical features, differential diagnosis, evaluation and management of Amnestic Disorders due to common general medical conditions including seizure disorders, substance use disorders, and head injuries (PC-1c,d,f,h;MK-2a,b);
- 7. Maintain a high index of suspicion that disordered cognition and behavior may have an underlying reversible cause and make recommendations for comprehensive evaluation including appropriate laboratory, imaging, psychometric and other medical testing (MK2a,b;PBI-3b);

Topic Area B: Substance Use Disorders

Rationale: Substance use disorders are prevalent among patients in all clinical settings. There is a particularly high comorbidity between substance use disorders and other psychiatric disorders and medical conditions, which has a negative affect on clinical course and prognosis. Regardless of medical specialty the clinician should be able to recognize signs and symptoms of possible Substance Use Disorders, make initial assessment with attention to possible underlying emergent conditions (e.g., withdrawal delirium), and proceed with or refer the patient for further evaluation and management.

Prerequisites: In the pre-clinical/pre-clerkship curriculum the student should be introduced to the phenomenology, pathophysiology, and relevant treatment interventions for substance use disorders

Learning Objectives: Core

By completion of the clerkship/medical school, the student will be able to:

1. Obtain a thorough substance use history through the use of empathic, nonjudgmental interviewing techniques and established screening instruments (e.g., CAGE), accounting for the patient's developmental stage and cultural background, and gather and incorporate information from collateral sources (PC-1a,b,f;CS-4a,b;P-5a,c);

2. Compare and contrast diagnostic criteria for substance abuse versus dependence (MK-2a,b;PBI-3b);

- 3. Know the clinical features of intoxication with cocaine, amphetamines, hallucinogens, cannabis, phencyclidine, barbiturates, opiates, caffeine, nicotine, benzodiazepines, alcohol and anabolic steroids (MK-2a,b;PBI-3b);
- 4. Recognize the clinical signs and recommend management strategies for substance withdrawal from sedative hypnotics including alcohol, benzodiazepines and barbiturates (PC-1c,d,f,h;MK-2a,b);
- 5. Discuss the epidemiology, course of illness, and the medical and psychosocial complications of common substance use disorders (MK-2a,b;PBI-3b);
- 6. Discuss typical presentations of substance use disorders in general medical and psychiatric clinical settings (PC-1c;MK-2a,b;PBI-3b);
- 7. Discuss management strategies for substance abuse and dependence including detoxification, 12-step programs, support groups (e.g., AA, NA, ALANON), pharmacotherapy, rehabilitation programs, psychotherapies, and family support (PC-1d,g,h;MK-2a,b;SBP-6a);

Learning Objectives: Enhancement

8. Discuss the characteristic presenting features and approach to managing the drug-seeking patient (PC-1a,b,c,d;MK-2a,b;CS-4a,b;P-5a,c);

Topic Area C: Psychotic Disorders

Rationale: Patients with symptoms of psychosis can present in any clinical setting. By their very nature the signs and symptoms of psychosis are often associated with impaired insight, considerable distress for the patient and their families, and the potential to evolve into an emergent, life-threatening situation. Regardless of medical specialty, clinicians should be able to recognize the signs and symptoms of possible Psychotic Disorders, make initial assessment with attention to possible emergent underlying conditions, and proceed with or refer for further evaluation and management.

Prerequisites: In the pre-clinical/pre-clerkship curriculum the student should be introduced to the phenomenology, pathophysiology, and relevant treatment interventions for psychotic disorders

Learning Objectives: Core

- 1. Define the term psychosis and discuss the clinical manifestations and presentation of patients with psychotic symptoms (MK-2a,b;PBI-3b);
- 2. Recognize that psychosis is a syndrome and discuss the broad differential diagnosis, including both primary psychiatric as well as other types of medical conditions, which necessitates a thorough medical evaluation for all patients presenting with signs and symptoms of psychosis (MK-2a,b;PBI-3b);
- 3. Develop a differential diagnosis and plan for further evaluation of patients presenting with signs and symptoms of psychosis including appropriate laboratory, imaging, psychometric and other medical testing (PC-1b,c,d,f,h;MK-2a,b);

4. Compare and contrast the clinical presentation of psychotic disorders in children and adolescents, adults, the elderly, patients in a general medical practice setting, the developmentally disabled, and accounting for cultural diversity (i.e., distinguishing psychotic disorders from culturally appropriate spiritual experiences and healing traditions such as shamanism and faith healing) (PC-1c;MK-2a,b;PBI-3b);

- 5. Compare and contrast the clinical features and course of common psychiatric disorders that present with associated psychotic features (PC-1c;MK-2a,b;PBI-3b);
- 6. Discuss epidemiology, clinical course, prodromal stages, subtypes, and the positive, negative and cognitive symptoms of Schizophrenia (PC-1c;MK-2a,b;PBI-3b);
- 7. Recommend management of patients with Schizophrenia and other psychotic disorders including all relevant interventions (i.e., biological, psychological, social) (PC-1d,f,h;MK-2a,b;PBI-3b,c;SBP-6a);

Learning Objectives: Enhancement

- 8. Discuss the theories of etiology and pathophysiology of Schizophrenia and other psychotic disorders (MK-2a,b);
- 9. Discuss the magnitude of the public health issues posed by Schizophrenia and related disorders (e.g., homelessness, loss of human potential) (P-5a,b,c;SBP-6a,d);

Topic Area D: Mood Disorders

Rationale: Mood Disorders are prevalent, serious and highly treatable conditions encountered in all clinical settings. Although sometimes difficult to diagnose, unrecognized and untreated mood disorders are associated with considerable morbidity and mortality. A physician should be able to recognize signs and symptoms of possible Mood Disorders, make initial assessment with attention to possible emergent underlying conditions and risk of suicidal and/or homicidal behavior, and proceed with or refer for further evaluation and management.

Prerequisites: In the pre-clinical/pre-clerkship curriculum the student should be introduced to the phenomenology, pathophysiology, and relevant treatment interventions for mood disorders.

Learning Objectives: Core

- 1. Discuss the epidemiology of mood disorders with special emphasis on the prevalence of depression in the general population and in non-psychiatric clinical settings among patients with other medical-surgical illness (e.g., cardiovascular disease, cancer, neurological conditions) and the impact of depression on the morbidity and mortality of other medical-surgical illness (PC-1c;MK-2a,b;PBI-3b);
- 2. Compare and contrast the features of unipolar and bipolar mood disorders with regard to clinical course, comorbidity, family history, prognosis and associated complications (e.g., suicide) (PC-1c;MK-2a,b;PBI-3b);
- 3. Discuss the differential diagnosis for patients presenting with signs and symptoms of mood disturbance, including primary mood disorders (e.g., Bereavement, Major Depressive Disorder, Bipolar Disorders, Adjustment Disorder, etc.) and mood disorders secondary to other conditions (e.g., substance use, underlying medical-surgical illness) with regard to clinical course,

comorbidity, family history, prognosis, associated complications (e.g., suicide), and plan for further evaluation including appropriate laboratory, imaging, psychometric and other medical testing (PC-1c,d,f,h;MK-2a,b;PBI-3b);

- 4. Discuss the subtypes of primary mood disorders including unipolar versus bipolar, melancholic versus atypical depressive features, psychotic features, seasonal pattern, postpartum onset, etc.(PC-1c;MK-2a,b;PBI-3b);
- 5. Compare and contrast the prevalence and clinical presentation of mood disorders in children and adolescents, adults, the elderly, patients in a general medical practice setting, the developmentally disabled, and across cultural, economic, and gender groups (PC-1c;MK-2a,b;PBI-3b;P-5c);
- 6. Discuss the high risk of suicide in patients with mood disorders, risk assessment and management strategies (See Unit I. D. Assessment of Psychiatric Emergencies)(PC-1c,d,h;MK-2a,b;PBI-3b);
- 7. Recommend management of patients with primary or secondary mood disorders including all relevant interventions (i.e., biological, psychological, social) (PC-1d,f,h;MK-2a,b;PBI-3b,c;SBP-6a);

Learning Objectives: Enhancement

8. Discuss the theories of etiology and pathophysiology of mood disorders (MK-2a,b);

Topic Area E: Anxiety Disorders

Rationale: Anxiety Disorders are considered one of the most prevalent classes of psychiatric disorders and as such are likely to be encountered in all clinical settings. It is important for clinicians not only to recognize signs and symptoms of anxiety but also to be familiar with the diagnostic criteria for various anxiety disorders, be able to make an initial assessment with some precision and with attention to possible emergent underlying conditions, and proceed with or refer the patient for further evaluation and management.

Prerequisites: In the pre-clinical/pre-clerkship curriculum the student should be introduced to basic theories of learning and the phenomenology, pathophysiology, and relevant treatment interventions for anxiety disorders.

Learning Objectives: Core

- 1. Discuss the epidemiology of anxiety disorders with special emphasis on the prevalence of anxiety in the general population and in non-psychiatric clinical settings and its effect on total health care expenditures in the U.S. (MK-2a,b;PBI-3b;SBP-6b);
- 2. Discuss the differential diagnosis for patients presenting with anxiety, including primary anxiety disorders (e.g., Phobias, Panic Disorder, Adjustment Disorder, etc.) and anxiety disorders secondary to other conditions (e.g., substance use, underlying medical-surgical illness) with regard to developmental stage, developmental disability, cultural background, medical practice setting, clinical course, comorbidity, family history, prognosis, associated complications, and plan for further evaluation including appropriate laboratory, imaging, psychometric and other medical testing (PC-1c,d,f,h;MK-2a,b);

- 3. Discuss the epidemiology and distinguish the clinical course, co-morbidity, family history and prognosis of Obsessive Compulsive Disorder (PC-1c,f;MK-2a,b;PBI-3b);
- 4. Discuss the epidemiology and distinguish the clinical course, co-morbidity, family history and prognosis of Acute and Post-traumatic Stress Disorders (PC-1c,f;MK-2a,b;PBI-3b);
- 5. Recommend management of patients with primary or secondary anxiety disorders including all relevant interventions psychotherapies (e.g., relaxation, exposure-response prevention, etc), pharmacotherapies, etc.(PC-1d,f,h;MK-2a,b;PBI-3b,c);

Learning Objectives: Enhancement

6. Discuss the theories of etiology and pathophysiology of anxiety disorders (MK-2a,b);

Topic Area F: Somatoform Disorders, Factitious Disorder and Malingering

Rationale: By their very nature, Somatoform Disorders frequently present in non-psychiatric settings. If the physician does not have an understanding of Somatoform Disorders, patients with these conditions are likely to be misdiagnosed, receive unnecessary treatments or become a focus of hostility. All physicians should be able to recognize signs and symptoms of possible Somatoform Disorders, Factitious Disorder and Malingering, make initial assessment with attention to actual underlying pathology, and proceed with or refer patients for further evaluation and management.

Prerequisites: In the pre-clinical/pre-clerkship curriculum the student should be introduced to the phenomenology, pathophysiology, and relevant treatment interventions for Somatoform Disorders and Factitious Disorder.

Learning Objectives: Core

By completion of the clerkship/medical school, the student will be able to:

- 1. Compare and contrast the signs, symptoms, clinical characteristics and course, and prognosis of specific Somatoform Disorders including Somatization Disorder, Conversion Disorder, Pain Disorder, Body Dysmorphic Disorder, and Hypochondriasis (PC-1c;MK-2a,b;PBI-3b);
- 2. Compare and contrast the characteristic features of Factitious Disorder and Malingering and distinguish these conditions from the Somatoform Disorders (PC-1c;MK-2a,b;PBI-3b);
- 3. Discuss the principles and challenges to physicians of ongoing evaluation and management of patients with Somatoform Disorders, Factitious Disorder and Malingering (PC-1c,d,h;PBI-3a;P-5a,b,c;SBP-6a,b);

Topic Area G: Dissociative and Amnestic Disorders

Rationale: Persons who experience trauma and patients with personality disorders may suffer dissociative symptoms. These persons may present in any clinical setting. Despite the disability associated with dissociative disorders they may go undetected and untreated. All physicians should be able to recognize signs and symptoms suggestive of a dissociative disorder and refer patients for further evaluation and treatment.

Prerequisites: In the pre-clinical/pre-clerkship curriculum, the student should be introduced to common neurobiological and psychological models of human development and to the phenomenology, pathophysiology, and relevant treatment interventions for dissociative disorders.

Learning Objectives: Core

By completion of the clerkship/medical school, the student will be able to:

- 1. Define "dissociation" (MK-2a,b);
- 2. Discuss the hypothesized role of psychological trauma in the development of disorders characterized by dissociation and altered memory (e.g., Acute Stress Disorder, PTSD, Borderline Personality, Dissociative Identity Disorder) (MK-2a,b;PBI-3b);

Learning Objectives: Enhancement

- 3. List a differential diagnosis for patients presenting with amnesia and propose a plan for further evaluation including appropriate laboratory, imaging, psychometric and other medical testing, referral and management (PC-1c,d,f,h;MK-2a,b;PBI-3b);
- 4. Compare and contrast the clinical features of Dissociative Amnesia, Dissociative Fugue, Depersonalization Disorder and Dissociative Identity Disorder (PC-1c;MK-2a,b);

Topic Area H: Eating Disorders

Rationale: Eating Disorders are potentially life-threatening conditions. These conditions occur across the life span and despite their prevalence may go undetected and unaddressed. Patients with eating disorders may present in any clinical setting. Hence, all physicians should be able to recognize the signs and symptoms suggestive of an eating disorder and refer patients for further evaluation and treatment.

Prerequisites: In the pre-clinical/pre-clerkship curriculum the student should be introduced to the phenomenology, pathophysiology, and relevant treatment interventions for eating disorders.

Learning Objectives: Core

By completion of the clerkship/medical school, the student will be able to:

- 1. Discuss the clinical features, course, complications including mortality, and prognosis of common Eating Disorders (e.g., Anorexia Nervosa, Bulimia, Obesity) (PC-1c;MK-2a,b);
- 2. Propose plans for further evaluation, referral, and management, including discussion of clinical features suggesting the need for hospitalization of patients with possible Eating Disorders (PC-1c,d,f,h;MK-2a,b;PBI-3b,c);

Learning Objectives: Enhancement

- 3. Differentiate Eating Disorders based on DSM-IV diagnostic criteria (MK-2a,b;PBI-3b);
- 4. Discuss the role of the primary care physician in the prevention and early detection of Eating Disorders (PC-1h;MK-2a,b;PBI-3b;SBP-6a);

Topic Area I: Sexual Disorders

Rationale: Sexual Disorders are diverse and prevalent. Patients with sexual disorders may present in any clinical setting. Despite the considerable morbidity associated with sexual disorders, they may go undetected because of their sensitive nature. All physicians should be able to obtain an accurate sexual history, recognize signs and symptoms suggestive of sexual disorders, and refer patients for further evaluation and treatment.

Prerequisites: In the pre-clinical/pre-clerkship curriculum, the student should be introduced to 1) the anatomy and physiology of the male and female sexual response cycles, 2) normal sexual development including gender identity and gender role, and 3) the important components and process of obtaining a comprehensive sexual history.

Learning Objectives: Core

By completion of the clerkship/medical school, the student will be able to:

1. Obtain and document a sexual history and interpret findings to formulate a differential diagnosis accounting for patient age, developmental stage, sexual orientation, and cultural background (PC-1a,b,c;MK-2a,b;CS-4a,b;P-5a,c);

Learning Objectives: Enhancement

- 2. Discuss primary versus secondary sexual dysfunction related to other clinical disorders and make recommendations for further evaluation, referral, and management (PC-1c,d,f,h;MK-2a,b;PBI-3b);
- 3. Define "paraphilia", list common paraphilias, and make recommendations for further evaluation, referral, and management (PC-1c,d,f,h;MK-2a,b);
- 4. Evaluate patients with dysphoria related to gender identity and make recommendations for referral for further evaluation and management (PC-1a-d,f,h;MK-2a,b;CS-4a,b;P5a,c);

Topic Area J: Sleep Disorders

Rationale: Sleep Disorders are prevalent, treatable conditions associated with considerable morbidity. Persons with sleep disorders may present in any clinical setting. Hence all physicians should be able to obtain an accurate sleep history, recognize signs of sleep disorders, and recommend management or referral for further evaluation and management.

Prerequisites: In the pre-clinical/pre-clerkship curriculum the student should be introduced to basic principles of sleep physiology, sleep architecture, and circadian rhythms.

Learning Objectives: Core

- 1. Obtain a complete sleep history and interpret findings to formulate a differential diagnosis (PC-1a,b,c;MK-2a,b);
- 2. Discuss the signs and symptoms of common sleep disturbances that accompany psychiatric disorders and substance use including dyssomnias and parasomnias (MK-2a,b;PBI-3b);
- 3. Discuss the effects of common psychotropic medications on sleep (PC-1d;MK-2a,b;PBI-3b);

4. Discuss the principles of sleep hygiene and how to counsel patients with sleep complaints (PC-1d;MK-2a,b;PBI-3b);

Learning Objectives: Enhancement

- 5. Compare and contrast the clinical features and evaluation strategies for common primary sleep disorders (MK-2a,b;PBI-3b);
- 6. Recommend management of patients with primary or secondary sleep disorders including all relevant interventions and be able to refer for specialty evaluation (PC-1d,f,h;MK-2a,b;PBI-3b,c;SBP-6a);

Topic Area K: Personality Disorders

Rationale: Personality Disorders are highly prevalent, chronic conditions. Patients with personality disorders present in all clinical settings and by virtue of their personality disorders are often particularly challenging and frustrating for the treating physician. Unrecognized or unaddressed personality disorders can complicate the course of any medical condition and lead to unsatisfactory outcomes. Hence all physicians should be able to recognize signs and symptoms suggestive of personality disorders, be alert to how these disorders may complicate treatment efforts, and be able to refer patients for further evaluation and treatment.

Prerequisites: In the pre-clinical/pre-clerkship curriculum the student should be introduced to the common neurobiological and psychological models of human development including basic principles of personality, temperament, and regression under stress.

Learning Objectives: Core

By completion of the clerkship/medical school, the student will be able to:

- 1. Discuss the concepts and relevance of personality traits and disorders in providing patient care (MK-2a,b);
- 2. Discuss the three cluster conceptualization of personality disorders as outlined in the DSM-IV-TR and describe typical features of each disorder (MK-2a,b);
- 3. Recognize and discuss common clinical features and maladaptive behaviors suggestive of a personality disorder and make recommendations for further evaluation, referral, and management (PC-1d,f,h;MK-2a,b;PBI-3b,c;SBP-6a);
- 4. Summarize the principles of management of patients with personality disorders in any clinical setting, particularly those with the most challenging behaviors (i.e., Borderline and Antisocial), including self-awareness of one's own response to the patient, the benefit of outside consultations, the use of both support and non-punitive limit setting, and the indications for various forms of psychotherapy (PC-1d,h;MK-2a,b;PBI-3a,b;CS-4a,b;P-5a,b,c);

Learning Objectives: Enhancement

- 5. Discuss the current understanding of interaction between heritable and environmental factors leading to the development of personality disorders (MK-2a,b;PBI-3b);
- 6. Discuss the common potential relationships between personality disorders and other psychiatric disorders (e.g., Cluster A and Psychotic Disorders, Cluster B and Mood Disorders, Cluster C and Anxiety Disorders) (MK-2a,b;PBI-3b);

7. Discuss the epidemiology, clinical course, prognosis, response to stress, and likely need for ongoing, long-term treatment of patients with personality disorders (MK-2a,b;PBI-3b,c;SBP-6a);

Topic Area L: Disorders in Childhood and Adolescence

Rationale: Many psychiatric disorders are first manifested or diagnosed in infancy, childhood or adolescence. These disorders are diverse ranging from mental retardation and behavioral disturbances to mood disorders and psychosis. Children and adolescents manifesting signs and symptoms of these disorders often present in a primary care setting. Hence all physicians should be knowledgeable about child development and be able to obtain an accurate developmental history and perform an age-appropriate mental status exam as part of a thorough medical assessment. Clinicians should be able to recognize signs and symptoms suggestive of a psychiatric disorder and manage or refer patients for further evaluation and management.

Prerequisites: In the pre-clinical/pre-clerkship curriculum the student should be introduced to the common neurobiological and psychological models of human development, common developmental abnormalities encountered in medical practice, and the phenomenology, pathophysiology and treatment interventions for common psychiatric disorders first diagnosed in childhood and adolescence.

Learning Objectives: Core

- 1. Compare and contrast the process of performing a psychiatric evaluation of children and adolescents with that of adults, including the need for systems-based assessment and treatment of children within family contexts (PC-1a,b;MK-2a,b;CS-4a,b;P-5a,c);
- 2. Recognize and distinguish the difference between behavior that is culturally appropriate and developmentally normal from behavior that suggests psychopathology (e.g., stranger anxiety versus Panic Disorder) (PC-1c;MK-2a,b;PBI-3b);
- 3. Discuss the clinical assessment and differential diagnosis for children and adolescents presenting with disruptive behavior and make recommendations for further evaluation including appropriate laboratory, imaging, psychometric and other medical testing, referral, and management (PC-1c,d,f,h;MK-2a,b;PBI-3b;P-5a,c);
- 4. Discuss the clinical assessment and differential diagnosis for children and adolescents presenting with developmental concerns including dysmorphia, delayed intellectual/social/motor/language skills, and/or failure to thrive and make recommendations for further evaluation including appropriate laboratory, imaging, psychometric and other medical testing, referral, and management (PC-1c,d,f,h;MK-2a,b;PBI-3b;P-5a,c);
- 5. Discuss the clinical assessment and differential diagnosis for children and adolescents presenting with school performance problems and make recommendations for further evaluation including appropriate laboratory, imaging, psychometric and other medical testing, referral, and management (PC-1c,d,f,h;MK-2a,b;PBI-3b;P-5a,c);
- 6. Discuss the epidemiology, clinical course, family history and prognosis of common psychiatric disorders in childhood and adolescence including Attention Deficit and Disruptive Behavioral Disorders, Learning Disability, Autistic Spectrum Disorders, Mood and Anxiety Disorders, Eating Disorders, and Substance Use Disorders (MK-2a,b;PBI-3b);

- 7. Recommend management of common psychiatric disorders in childhood and adolescence including all relevant interventions (PC-1d;MK-2a,b;PBI-3b,c);
- 8. Discuss the physician's role in diagnosing, managing and reporting suspected abuse of children and adolescents (PC-1h;MK-2a;P-5a,b,c;SBP-6a);

Topic Area M: Geriatric Psychiatry

Rationale: The percentage of the US population over 65 years old is increasing dramatically and becoming more culturally diverse. There are many predisposing risk factors for psychiatric illness associated with aging. As such, mental disorders in the elderly, ranging from cognitive to mood disorders are prevalent and the risk for suicide is particularly high in this age group. Geriatric patients with psychiatric disorders may present in any clinical setting. Hence all physicians should be able to assess mental status in elderly patients and recognize the signs and symptoms suggestive of mental disorders in a culturally competent manner. Physicians should incorporate knowledge of the physiological, psychological and sociocultural changes accompanying aging into treatment planning and be able to refer patients for further evaluation and treatment.

Prerequisites: In the pre-clinical/pre-clerkship curriculum the student should be introduced to the common neurobiological and psychological models of human development and what constitutes the normal aging process.

Learning Objectives: Core

By completion of the clerkship/medical school, the student will be able to:

- 1. Describe issues unique to the psychiatric evaluation of the elderly (e.g., changing sensory perception) and the need for a comprehensive approach to assessment including physical and mental status exam and appropriate laboratory, imaging, psychometric and other medical testing (PC-1d;MK-2a,b;PBI-3b;P-5c);
- 2. Compare and contrast the clinical presentation of psychiatric disorders in the elderly versus other adults (e.g., somatic focus in depression) (PC-1a,b;MK-2a,b;CS-4a,b;P-5a,c);
- 3. Discuss the vulnerability and increased incidence of certain psychiatric conditions in the elderly (e.g., cognitive disorders, mood disorders) (See Unit II. A. Cognitive Disorders) ((MK-2a,b:PBI-3b):
- 4. Discuss and assess the heightened risk of suicide in elderly patients in various cultural groups (MK-2a,b;PBI-3b);
- 5. Discuss the physiology of aging relevant to the prescribing of psychotropic medications (MK-2a,b;PBI-3b,c);
- 6. Discuss the effect of losses in the elderly relevant to the incidence, course and management of psychiatric disorders (MK-2a,b;PBI-3b;P-5c);
- 7. Discuss the physician's role in diagnosing, managing and reporting suspected elder abuse (PC-1h;MK-2a;P-5a,b,c;SBP-6a);

Topic Area N: Adjustment Disorders

Rationale: Adjustment Disorders are clinically significant reactions to stress. Patients with adjustment disorders may present in any clinical setting in crisis with diverse symptomatology. All physicians should be able to recognize signs and symptoms suggestive of an adjustment disorder, provide support, and be able to provide or refer patients for further evaluation and crisis intervention.

Prerequisites: In the pre-clinical/pre-clerkship curriculum the student should be introduced to the common neurobiological and psychological models of human development, which includes concepts of personality traits, coping skills or defense mechanisms, and regression under stress.

Learning Objectives: Core

By completion of the clerkship/medical school, the student will be able to:

- 1. Describe the essential features and course of Adjustment Disorders (MK-2a,b);
- 2. Compare and contrast Adjustment Disorders with major Mood, Anxiety and Conduct Disorders and normal Bereavement (MK-2a,b;PBI-3b);
- 3. Recommend plans for further evaluation and management of patients diagnosed with Adjustment Disorders (PC-1d,f,h;MK-2a,b;SBP-6a);

Unit III: Disease Prevention, Therapeutics, and Management

Topic Area A: Prevention

Rationale: Prevention is fundamental to medical practice. Physicians must keep in mind the goals of decreasing the occurrence of illness, reducing illness duration, and minimizing the associated disability of medical conditions. Preventive medicine is a particular challenge in psychiatry where the etiology and pathophysiology of many disorders is as yet unknown and patients may lack insight into their illness.

Prerequisites: Pre-clinical/pre-clerkship coursework in clinical epidemiology, psychopathology and normal development (including attachment theory).

Learning Objectives: Core

- 1. Discuss the role of parenting, families, society and elements of attachment theory in the cause and disability of psychiatric disorders (MK-2a,b;PBI-3b;SBP-6d);
- 2. Assess the effects of socioeconomic factors (e.g., language, culture, family stability, divorce, finances, lifestyle, insurance status, poverty, etc.) on the course of psychiatric illness and adherence to treatment and counsel assigned patients and their families (PC-1c,d,e,g;MK-2a,b;PBI-3b;CS-4a,b;P-5c);
- 3. Describe the genetic and environmental risk factors for psychiatric illness including emotional, physical and sexual abuse, domestic violence, and co-morbid substance abuse (MK-2a,b;PBI-3b;P-5a;SBP-6d);
- 4. Discuss the risks of untreated psychiatric illness and the importance of early identification of major psychiatric disorders in at-risk youth (MK-2a,b;SBP-6a);

- 5. Perform a behavioral health risk assessment of patients with and without established psychiatric diagnoses and identify and counsel patients regarding behavioral and lifestyle changes to promote mental health (PC-1a,b,c,e,g;CS-4a,b;P-5a,c);
- 6. Discuss factors that suggest need for psychiatric hospitalization and inpatient care (MK-2a,b;PBI-3b,c);
- 7. Provide education about psychiatric illness and treatment options to designated patients (PC-1a,e;CS-4a,b;P5a,c);
- 8. Discuss concerns related to polypharmacy and methods to increase the safety and effectiveness of psychotropic pharmacotherapy (MK-2a,b;PBI-3b,c);

Topic Area B: Pharmacological Therapies

Rationale: Knowledge of psychopharmacology is critical to the practice of all medical specialties. The field of psychopharmacology is best characterized as dynamic and the product of ongoing research and new drug development. Students must be knowledgeable about indications, contraindications, presumed mechanism of action, pharmacodynamics, pharmacokinetics, and common and serious adverse effects of psychotropic drugs. Students must also be knowledgeable about factors that will impact the use of psychotropic medications including drug-drug interactions, drug-disease interactions, and important considerations for drug use in special populations across the lifespan (e.g., children, pregnancy and lactation, the elderly). During the psychiatry clinical rotations, students should review, prioritize and update the important principles first learned in the pre-clinical pharmacology, physiology and pathology curriculum. Students should also become competent at accessing relevant information (e.g., results of large population based clinical trials, consensus algorithms, etc.) and maintaining an up-to-date knowledge base in the area of psychotropic pharmacotherapy.

Prerequisites: Pre-clinical/pre-clerkship curriculum in pharmacology, physiology and pathology.

Learning Objectives: Core

- 1. Discuss the common, currently available psychotropic medications with regard to clinical indications and contraindications, presumed mechanism of action and relevant pharmacodynamics, common and serious adverse effects, pharmacokinetics, evidence for efficacy, cost, risk of drug-drug interactions and drug-disease interactions, and issues relevant to use in special populations (e.g., pregnancy and lactation, childhood and adolescence, the elderly, persons using herbal and over-the-counter treatments) (MK-2a,b;PBI-3b,c);
- 2. Propose selected psychotropic pharmacotherapy for designated patients and provide clinical reasoning that includes discussion of factors influencing treatment selection (e.g., patient-specific and drug-specific variables, scientific evidence) (PC-1c,d,h;MK-2a,b;SBP-6c);
- 3. Discuss the factors relevant to implementing, monitoring and discontinuing psychotropic pharmacotherapy including drug dosing, treatment duration, and adherence, and make management recommendations for dealing with an unsuccessful treatment trial (e.g., lack of efficacy, intolerability) (PC-1c,d,h;MK-2a,b;SBP-3b,c);

- 4. Counsel patients about psychotropic pharmacotherapy including risks and benefits of recommended treatment, treatment alternatives, and no treatment (PC-1e;CS-4a,b;P-5a,c);
- 5. Identify and discuss resources to maintain an up-to-date knowledge of psychotropic pharmacotherapy (PBI-3a,d,e);
- 6. Discuss special issues and concerns related to specific psychotropic drug classes including metabolic, hematologic, hepatic, etc. (MK-2a,b;PBI-3b,c,d):

Antidepressant Agents: Be able to discuss the risks, early detection, relevance and interventions for adverse drug effects (e.g., seizures, electrolyte disturbance, Hyperserotonergic Syndrome, Hypertensive Crisis, suicidality, cardiac arrhythmias, etc;

Antipsychotic Agents: Be able to discuss the risks, early detection, relevance and interventions for adverse drug effects (e.g., acute Extrapyramidal Side Effects/EPS, Tardive Dyskinesia, Neuroleptic Malignant Syndrome, metabolic derangements, cardiac arrhythmias, anticholinergic toxicity, etc;

Mood Stabilizing Agents: Be able to discuss the risks, early detection, relevance and interventions for adverse drug effects of lithium, anticonvulsants, and selected antipsychotic drugs used as "mood stabilizers" (e.g., Stevens-Johnson syndrome, hepatitis, electrolyte disturbance, etc) and the relevance of laboratory tests including plasma level monitoring; **Anxiolytics and Sedative-Hypnotic Agents**: Be able to discuss the risks, early detection, relevance and interventions for drug toxicity, dependence and consequences of abrupt discontinuation;

Stimulant Agents: Be able to discuss the risks, early detection, relevance and interventions for toxicity and abuse;

Cognitive Enhancers: Be able to discuss the clinical use, drug interactions and potential adverse effects;

Topic Area C: Brain Stimulation Therapies

Rationale: Electroconvulsive therapy (ECT) remains one of the most effective treatments for mood disorders. It is used widely and in many cases is considered to offer the most favorable risk: benefit ratio among available antidepressant interventions. A variety of alternative "brain stimulation therapies" are either being approved for general use to treat psychiatric disorders or are in various stages of development. Since patients with mood disorders may present in any clinical setting, all physicians should be able to refer patients for further evaluation for ECT. A knowledge of alternative brain stimulation therapies, as they become accepted for general use, is desirable.

Prerequisites: Pre-clinical/pre-clerkship coursework in neuroscience and psychopathology.

Learning Objectives: Core

By completion of the clerkship/medical school, the student will be able to:

1. Discuss electroconvulsive therapy (ECT) with regard to clinical indications and contraindications, presumed mechanism of action, common and serious adverse effects, evidence for efficacy, cost, and issues relevant to use in special populations (e.g., pregnancy, childhood and adolescence, the elderly) (PC-1c;MK-2a,b;PBI-3b,c);

Learning Objectives: Enhancement

2. Discuss alternative forms of electromagnetic brain stimulation therapy including Light Therapy, Vagal Nerve Stimulation (VNS), and those treatments for psychiatric disorders that are in various stages of development such as Repetitive Transcranial Magnetic Stimulation (rTMS), Deep Brain Stimulation (DBS), etc.(PC-1c;MK-2a,b;PBI-3b,c);

Topic Area D: Psychotherapies

Rationale: Evidence-based interventions for many disorders encountered in medical practice include psychotherapy. Although a psychiatry clerkship does not provide adequate time for a student to learn to conduct psychotherapy, it does present an opportunity for students to gain familiarity with and develop an understanding of psychotherapy. At the most essential level, psychotherapy is the process of helping people overcome problems by talking about them. There are many types of psychotherapy, each with a theoretical construct that aims to help us understand human behavior and treat disturbances of emotion and behavior. Regardless of medical specialty, an effective practitioner should have a basic understanding of psychotherapy, recognize the relevance of psychotherapy principles to the doctor-patient relationship, be aware of those psychotherapies with evidence-based efficacy for particular disorders, and be able to refer patients for psychotherapy.

Prerequisites: In the pre-clinical/pre-clerkship curriculum, the student should be introduced to basic principles of the behavioral and social sciences including psychodynamic theory, learning theory, human development, and the complexity of the physician-patient relationship.

Learning Objectives: Core

By completion of the clerkship/medical school, the student will be able to:

- 1. Discuss general features of common psychotherapies and recommend specific psychotherapy for designated patients in conjunction with or instead of other forms of treatment and provide clinical reasoning that includes discussion of factors influencing treatment selection (e.g., patient-specific and treatment-specific variables, scientific evidence) (PC-1c,d;MK-2a,b;PBI-3b,c);
- 2. Counsel patients, promote the use of healthy coping strategies, provide education about psychotherapy and make appropriate referral for this modality of treatment (PC-1e,g;CS-4a,b;P-5a,c);
- 3. Identify and discuss the relevance of potential levels of verbal and non-verbal communication occurring in the uniquely intimate relationship between doctor and patient that occurs regardless of the medical setting or type of medical care being provided including therapeutic boundaries, therapeutic stance, therapeutic alliance, transference and countertransference (PC-1a;PBI-3a;CS-4a,b;P-5a,b,c);

Learning Objectives: Enhancement

4. Discuss the relevance, basic principles, and approaches for the use of behavioral medicine across medical specialties including promotion of behavioral change, processing patient reactions to illness, assessing family dynamics, etc.(PC-1b,e,g;MK-2a,b;PBI-3b,c;CS-4a,b;P-5a);

- 5. Discuss the concept of evidence-based treatment as it applies to psychotherapies and psychosocial interventions citing current examples (PC-1c;MK-2a,b;PBI-3b,c);
- 6. Discuss the range of psychotherapeutic approaches to treating children in family contexts, including Cognitive Behavioral Therapy, parent education, play therapy, marital and family therapy, etc.(PC-1e,g;MK-2a,b;PBI-3b,c;P-5a;SBP-6a);
- 7. Discuss the range of psychotherapeutic approaches with regard to the treatment of individuals and families from diverse cultural backgrounds (PC-1e,g;MK-2a,b;PBI-3b,c;P-5a;SBP-6a);

Topic Area E: Multidisciplinary Treatment Planning and Collaborative Management

Rationale: Regardless of medical specialty, because of the complexity of our healthcare system, the complexity of peoples' lives, and the impact of psychosocial variables on health and illness, it is critical that a physician be able to collaborate effectively with other physicians in different specialties and with other healthcare workers in different disciplines. The effective collaborations necessary to bring about an optimal clinical outcome require an understanding and appreciation of what each discipline contributes to patient care. An effective physician recognizes the importance of collaboration with the patient's family and others in their life to increase the likelihood of a successful treatment outcome.

Prerequisites: In the pre-clinical/pre-clerkship curriculum students should be introduced to the roles played by non-physician healthcare professionals, the concept of multidisciplinary treatment planning, and the relevance of communication with patient's families.

Learning Objectives: Core

By completion of the clerkship/medical school, the student will be able to:

- 1. Discuss the roles of different physician specialties and non-physician healthcare disciplines (e.g., case managers, addiction counselors, interpreters, cultural liaisons, etc), demonstrate respect for these colleagues, and work collaboratively in the care of patients and their families (PC-1h;MK-2a,b;PBI-3e;SBP-6a);
- 2. Discuss the importance of working successfully with patient's families and other agencies in the patient's life (e.g., schools, employers, etc) accounting for cultural diversity, to bring about an optimal clinical outcome (PC-1h;MK-2a,b;CS-4a,b;P5a,b,c);
- 3. Discuss indications for psychiatric consultation and how to appropriately request and respond to such a consultation (PC-1c,d,h;MK-2a,b;PBI-3e;SBP-6a);
- 4. Discuss and propose appropriate community resources as part of a comprehensive treatment plan for assigned patients (e.g., support groups, residential facilities, vocational rehabilitation, etc) (PC-1c,d,h;MK-2a,b;P-5c;SBP-6a);
- 5. Discuss the impact of mental illness on access to appropriate healthcare and make recommendations for addressing these issues in planning treatment for assigned patients (PC-1h;PBI-3e;P-5a;SBP-6a-d);

Topic Area F: Complementary and Alternative Treatments

Rationale: The use of interventions commonly referred to as Complementary and Alternative treatment modalities (CAM) are very popular in are present society and their use crosses all

cultures and age groups. These CAM are diverse, ranging from acupuncture, massage, body work and exercise to vitamins and herbal supplements. Some are evidence-based. Many are not without potential adverse effects and may interact with conventional medical treatments. Hence all patient evaluations should include inquiry about the use of CAM.

Prerequisites: The pre-clinical/pre-clerkship curriculum should include an introduction to the popularity of CAM in our society and pharmacology coursework should include discussion of commonly used supplements.

Learning Objectives: Core

By completion of the clerkship/medical school, the student will be able to:

1. Discuss the popular use of Complementary and Alternative Modalities (CAM) of treatment and gather and analyze this information when performing a psychiatric evaluation (PC-1b,c;MK-2a,b;PBI-3b,c);

Learning Objectives: Enhancement

2. Discuss and recommend integration of CAM therapies that have an evidence-base (e.g., light therapy for seasonal affective disorder, T'ai Chi for improving balance in elderly patients, etc.) (MK-2a,b;PBI-3b,c);

Unit IV: Professionalism, Ethics and the Law

Topic Area A: Professionalism

Rationale: Professionalism is a broadly defined, critical component of medical practice and should be fundamentally present in all clerkship curricula and throughout undergraduate medical education. Elements of professionalism include integrity, honesty, responsibility, dedication to the best interests of the patient, and sensitivity to the diversity of patients and their disabilities. Physician effectiveness, patient safety, and quality health care require a high level of professionalism.

Prerequisites: Elements of professionalism should be introduced and explicitly discussed throughout the pre-clinical/pre-clerkship curriculum.

Learning Objectives: Core

- 1. Identify and account for personal emotional responses to patients (PBI-3a;P-5a);
- 2. Demonstrate respect, empathy, responsiveness, and concern regardless of the patient's problems, personal characteristics, or cultural background (P-5a,b,c);
- 3. Demonstrate sensitivity to medical student-patient similarities and differences in gender, cultural background, sexual orientation, socioeconomic status, level of disability, educational level, political views, and personality traits (PBI-3a;P-5a);

- 4. Discuss the prevalence and barriers to recognition of psychiatric illnesses in general medical settings and recognition of general medical conditions in patients with known psychiatric illness (MK-2a,b;PBI-3e;SBP-6a,b,d);
- 5. Discuss the physician's role in advocacy for services for the mentally ill (P-5a,b,c;SBP-6d);
- 6. Discuss the concept of boundaries in the doctor-patient relationship and boundary violations (P-5a,b);
- 7. Demonstrate integrity, responsibility and accountability in the care of assigned patients (P-5a,b);
- 8. Demonstrate scholarship in the form of contributing to a positive learning environment, collaborating with colleagues, and performing self-assessment and self-directed learning (PBI-3a;P-5a);
- 9. Be able to assess one's strengths, weaknesses and health (physical and emotional), and be willing to seek and accept supervision and constructive feedback (PBI-3a;P-5a;SBP-6a);

Topic Area B: Medical Ethics

Rationale: All physicians confront ethical issues in medical practice. In caring for patients with altered mental status, physicians must deal with the conflict between beneficence and autonomy, psychological development and personal history in the lives of patients. In caring for patients with significant emotional disturbance, a physician must refrain from rejecting a patient or getting over involved. A thorough understanding of the ethical issues of confidentiality, informed consent, caring for special populations and the right to refuse treatment is critical to appropriate clinical practice. For clinical excellence, a physician must be able to identify ethical features in a patient's care, utilize self-observation and self-scrutiny, and implement focused strategies for approaching ethical issues.

Prerequisites: Introduction to ethical issues in medicine throughout the pre-clinical/pre-clerkship curriculum.

Learning Objectives: Core

By completion of the clerkship/medical school, the student will be able to:

- 1. Identify and discuss issues of ethical concern in the care of assigned patients (e.g., autonomy versus beneficence and interpersonal boundaries) (See IV.C. Medical-Legal Issues) (PC-1c:P-5a,b,c;SBP-6c,d);
- 2. Identify and discuss ethically risky and problematic situations encountered in healthcare (e.g., duty to warn, reporting child abuse) (PC-1c;MK-2b;P-5a,b,c;SBP-6a);

Learning Objectives: Enhancements

- 1. Discuss how one's own life story, attitudes, and knowledge may influence care of assigned patients (PBI-3a;P-5a,b,c);
- 2. Identify and describe one's area of clinical competence, working within those boundaries, and when to seek consultation (PC-1d,h;SBP-6a,e);

Topic Area C: Medical-Legal Issues in Psychiatry

Rationale: All physicians must be knowledgeable about the legal obligations associated with medical practice. Important legal obligations for physicians include duty to report, duty to warn, and least restrictive alternative treatments. Particularly relevant in psychiatry are the issues of involuntary commitment, assessment of competency, seclusion and restraints, and criminal responsibility.

Prerequisites: Introduction to the interaction of healthcare, legal and court systems throughout the pre-clinical/pre-clerkship curriculum.

Learning Objectives: Core

By completion of the clerkship/medical school, the student will be able to:

- 1. Discuss the risk factors, screening methods and reporting requirements for suspected abuse, neglect and domestic violence in vulnerable populations including children, adults, and the elderly (PC-1c,d,h;MK-2a,b;P-5a,b,c;SBP-6a);
- 2. Discuss the physician's role in screening for, diagnosing, reporting and managing victims of abuse (CS-4a,b;P-5a;SBP-6a);
- 3. Discuss the principles, process and physician's role in civil commitment, recognizing that there are variations in state law, and the implications of voluntary versus involuntary status of a patient (MK-2a,b;P-5a;SBP-6a,d);
- 4. Discuss the elements of informed consent and evaluation of decision-making capacity (i.e., the right to refuse treatment, assent versus consent in children and adolescents) (MK-2a,b;PBI-3b;P-5a,b;SBP-6a);
- 5. Discuss the principles and process of the physicians "duty to warn" obligation (P-5a;SBP-6a);
- 6. Discuss and give examples of when confidentiality may be breached including when treating children and adolescents (P-5a,b,c;SBP-6a);

Topic Area D: Cultural Competence and Mental Health Disparities

Rationale: Culture influences how individuals experience, attribute meaning to, and communicate about illness. Discrimination and bias contribute to treatment inequality leading to mental health and mental health care disparities. Physicians need to practice in a culturally competent manner in order to adequately address the general health and mental health needs of our increasingly culturally diverse communities.

Prerequisites: Elements of cultural competence should be introduced and explicitly discussed throughout the pre-clinical/pre-clerkship curriculum.

Learning Objectives: Core

- 1. Discuss the mental health and mental health care disparities experienced by racial and ethnic groups and the factors that contribute to them (MK-2a;PBI-3a,b,c;P-5a,c;SBP-6a,b);
- 2. Discuss how to elicit the cultural beliefs, preferences and practices that are relevant to making diagnostic assessments and treatment recommendations utilizing various resources (e.g., the patient, family, cultural experts, written literature, etc.) (PC-1b,h;MK-2a;PBI-3b,c,d,e;CS-4a,b);

- 3. Collect and incorporate cultural information in the assessment and treatment planning of assigned patients while avoiding stereotyping (PC-1d,e,g;MK-2a;PBI-3a;CS-4a,b);
- 4. Identify and account for stereotypes, personal bias and prejudices towards patients from various cultural groups (PC-1a;P-5a,b;SBP-6a);

Learning Objectives: Enhancement

- 5. Discuss the culture of psychiatry and medicine including its history of bias and discrimination towards underrepresented groups (e.g., ethnic and sexual minorities) (P-5a,b,c;SBP-6a,b);
- 6. Describe and incorporate the five elements of the DSM-IV-TR Outline for Cultural Formulation in the assessment of assigned patients (PC-1a-h;MK-a;P-5a,b,c;SBP-6a,b);

APPENDIX 1:

Recommended Levels of Competence/Achievement/Performance - Adapted from MillerGE (Acad Med 1990; 65:S63-7) for the Clinical Curriculum Resource Guide for Psychiatry Education

Knows - K (can state)

Shows – S (discuss application)

Shows How – SH (application under simulation)

Does – D (perform under actual conditions)

APPENDIX 2:

ACGME Competency Domains (ACGME 2000) - Adapted for the Clinical Curriculum Resource Guide for Psychiatry Education

1. PATIENT CARE (PC)

- a. Communicate effectively and demonstrate caring and respectful behaviors
- b. Gather essential and accurate information about assigned patients
- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- d. Develop, recommend and/or carry out under supervision patient management plans
- e. Counsel and educate patients and their families
- f. Recommend and/or perform under supervision essential examinations and procedures
- g. Provide health care services aimed at preventing health problems or maintaining health
- h. Work within a team of health care professionals, including those from other disciplines, to provide patient-focused care

2. MEDICAL KNOWLEDGE (MK)

- a. Demonstrate an investigative and analytic thinking approach to clinical situations
- b. Be able to discuss and apply the basic and clinically supportive sciences

3. PRACTICE-BASED LEARNING AND IMPROVEMENT (PBI)

a. Analyze practice experience and perform practice-based improvement activities

- b. Locate, appraise, and assimilate evidence from scientific studies related to assigned patients and patient populations
- c. Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness
- d. Use information technology to manage information, access on-line medical information; and support their own education
- e. Facilitate the learning of other health care professionals

4. INTERPERSONAL AND COMMUNICATION SKILLS (CS)

- a. Create and sustain a therapeutic and ethically sound relationship with patients
- b. Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills

5. PROFESSIONALISM (P)

- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development
- b. Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
- c. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities

6. SYSTEMS-BASED PRACTICE (SBP)

- Discuss the interactions of their patient care with other health care professionals, health care organizations, and the larger society
- b. Explain how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources
- c. Recommend and/or practice cost-effective health care and resource allocation that does not compromise quality of care
- d. Advocate for quality patient care and assist patients in dealing with system complexities.
- e. Discuss how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance

APPENDIX 3:

ACGME Glossary of Instructional Methods for Clinical Education (ACGME 2000) - Adapted for the Clinical Curriculum Resource Guide for Psychiatry Education

- 1. **Clinical Teaching** teaching that occurs in the clinic, EDs, ORs, laboratories, or other medical settings and addresses issues related to students' current patient cases or clinical responsibilities.
- 2. **Clinical Experiences** direct, hands-on clinical or patient care activities. This may include surgery, patient exams and documentation, the reading of radiographs and preparation of pathology assays.
- 3. **Performance Feedback** information provided to a student that describes what (s)he has done well or poorly and provides specific guidance as to how performance might be improved.
- 4. **Departmental Conferences, Lectures or Discussions** formal, classroom instruction on a specific topic or method, led by one or more faculty, residents, or staff, etc.
- 5. Institutional Conferences, Lectures, or Discussions formal educational events involving institution-sponsored grand rounds, lectures, discussions, or workshops; may be part of an institutional core curriculum (i.e. a set or course of learning activities arranged to impart knowledge and skills in fundamental domains, for example, communication skills, legal issues, ethics).
- 6. **Individual or Group Projects** tasks performed as vehicles for learning and applying knowledge and skills. Projects should result in a product. Examples are literature reviews, case reports, research, clinical quality improvement projects, and community health advocacy work.

- Computer Modules computer-based instructional units that present medical knowledge or clinical tasks, etc, that
 students work through independently. These modules are developed either by the institution/program or purchased
 from commercial vendors.
- Standardized Patients professional actors or real patients trained to present realistically and reliably a medical
 condition and/or specific patient behaviors; the standardized patient provides instruction to the student or feedback
 about his/her performance
- 9. **High-Tech Simulators/Simulations** 3-dimensional, high tech, computerized devices that represent human anatomy and physiological responses (simulators) are used by students to learn procedures and operations. Or realistic patient care scenarios are generated using high tech/virtual reality devices (video simulations). Students engage in the scenario as in real life to learn or apply clinical or teamwork skills.
- 10. **Anatomic or Animal Models** non-computerized, 3-dimensional devices that replicate the properties of human anatomical structures are used by students to learn procedures.
- 11. **Role Play or Simulations** staged replicas of potentially real situations (clinical case scenarios) are engaged in by students to learn, practice or rehearse skills needed in those situations. This method is often used in difficult or highrisk situations, e.g. mobilization of a medical team in a multi-victim accident or confrontation of an "impaired" colleague.
- 12. Games informal activities with goals, rules, rewards and penalties for various courses of action. Games may be computerized, played individually or in groups, facilitated or self-paced.
- 13. Role Modeling portrayal of desired professional behaviors, communication skills, or clinical skills, etc. by attending/supervising physician with the expectation that students will learn these behaviors and skills by observing the role modles.

APPENDIX 4:

ACGME Glossary of Assessment Methods for Clinical Education (ACGME 2000) - Adapted for the Clinical Curriculum Resource Guide for Psychiatry Education

- 1. Clinical Performance Ratings Weekly, monthly, end-of-rotation ratings of student overall performance
- 2. **Direct Observation and Evaluation** Supervisor/attending observation of individual student-patient encounters, operations, specimen preparation, etc., and concurrent (same day) evaluation
- 3. **360** Assessments Evaluation by MDs (supervisors, residents, medical students) and non-MDs (nurses, technicians, social workers, PAs) using the same or similar evaluation forms
- Evaluation Committee Evaluation of student performance in a small group discussion format, e.g., Evaluation Committee
- 5. **Structured Case Discussions** An informal structured mini-oral exam consisting of a small set of pre-determined questions; the exam occurs during a student's case presentation to his/her supervisor
- 6. **Stimulated Chart Recall** Uses a student's patient records in an oral exam-like format to explore decisions made and patient management; is conducted "after the fact" using patient charts to stimulate memory of the case
- 7. **Standardized Patient** The student provides care to an SP as if (s)he were a real patient and is evaluated concurrently by the SP or another trained observer; the SP is a well person or actual patient trained to present a case in a standardized way
- 8. **OSCE** A multi-station exam of simulated clinical tasks, which might include SPs, anatomical models, X-ray interpretation, lab test interpretation, etc.; a student performs the tasks and is evaluated concurrently by a trained observer
- 9. **High Tech Simulators/Simulations** Students' performance of procedures on a high-tech simulator (e.g., Harvey) is evaluated; this may involve built-in evaluation by the simulator or observation and concurrent evaluation.
- 10. Anatomic or Animal Models Students' performance of procedures on non-computerized, 3-dimensional models that replicate the properties of human anatomical structures is observed and evaluated concurrently
- 11. Role-play or Simulations Students are evaluated based on their performance on assigned responsibilities in a staged replica of a potentially real situation, e.g., mobilization of medical team in a multi-victim accident, confrontation of an "impaired" colleague, negotiation with administration regarding facilities and equipment upgrade
- 12. **Formal Oral Exam** "Mock" oral exam in which an examiner asks students questions about what to do in a clinical scenario presented verbally or role played by the examiner
- 13. In-training Exams A multiple-choice exam developed by an external vendor
- 14. **In-house Written Exams** A multiple choice exam developed by program faculty

- 15. **Multimedia Exam** A computer based multiple choice or branching question exam in which authentic visual and auditory patient information is presented as question information
- 16. **Practice/Billing Audit** Educational equivalent of physician profiling; this data-based process benchmarks individual student billing data against peers in the office, hospital, or managed care setting
- 17. **Review of Case or Procedure Log** Review of number of cases or procedures performed and comparison against minimum numbers required
- 18. **Review of Patient Chart/Record** Involves abstraction of information from patient records, such as tests ordered, and comparison of findings against accepted patient care standards
- Review of Patient Outcomes Aggregation of outcomes of patients cared for by a student and compared against a standard
- 20. **Review of Drug Prescribing** Systematic review of drug prescribing for selected conditions to determine adherence to protocol
- 21. **Student Project Report (Portfolio)** Evaluation of student work products, such as examples of clinical documentation including progress notes and History and Physical Exams, reports of research studies, practice improvement, or systems-based improvement
- 22. **Student Experience Narrative (Portfolio)** Evaluation of performance based on students' narratives of critical incidences or other experiences, usually accompanied by reflection on the event, e.g., what happened, why, what could have been done differently
- 23. Other Portfolio Evaluation of student performance based on other work/performance products not included above, e.g., audiotapes, slide presentations

APPENDIX 5:

Specific Reviewers Providing Comments for Document Development and Revision

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