No funding from pharmaceutical entities was used in the preparation and/or maintenance of these guidelines or the Web site www.tn.gov/mental.

Pursuant to the State of Tennessee’s policy of nondiscrimination, the Tennessee Department of Mental Health and Developmental Disabilities (TDMHDD) does not discriminate on the basis of race, sex, religion, color, national or ethnic origin, age, disability, or military service in its policies, or in the admission or access to, or treatment or employment in, its programs, services or activities.

Contact the Department’s Equal Employment Opportunity/Affirmative Action (EEO/AA) Coordinator at (615) 532-6700, the Title VI Coordinator at (800) 560-5767, or the Americans with Disabilities Act (ADA) Coordinator at (615) 532-6510 for inquiries, complaints or further information.
Acknowledgments

Virginia Trotter Betts, MSN, JD, RN, FAAN
Commissioner, Tennessee Department of Mental Health and Developmental Disabilities (TDMHDD)

Division of Clinical Leadership
Central Office Staff

Howard Burley, Jr. MD
Assistant Commissioner, Medical Director and Executive Editor

Jason Carter, PharmD
Chief of Pharmacy Services

Gwen Hamer, MA, CPC
Director of Education and Development

Edwina Chappell, PhD
Statistical Research Director and Licensed Psychologist

Danette Wilson
Administrative Services Assistant

Jessica Carter
Undergraduate Intern, Fisk University Psychology Department

Interdivision Consultants

Freida H. Outlaw, PhD, RN, FAAN
Assistant Commissioner, Division of Special Populations and Minority Services

Bruce Emery, MEd, MSW
Assistant Commissioner, Division of Alcohol and Drug Abuse Services

Marie Williams, LCSW
Assistant Commissioner, Division of Recovery Services and Planning

Marthagem Whitlock, MSW
Assistant Commissioner, Division of Policy, Legislation, and Regulation

Sandra Braber-Grove, Esq
Assistant General Counsel, Office of Legal Counsel

Rodney Bragg, MA, MDiv
Director, Addiction Treatment and Recovery Services, Division of Alcohol and Drug Abuse Services

Ken Horvath, MS, LADAC
Co-Occurring Disorders Specialist, Division of Alcohol and Drug Abuse Services

Melissa Sparks, BSN, RN
Director of Crisis Services

Lisa Ragan, MSSW
Director, Office of Consumer Affairs and Peer Support Services
## Workgroup Contributors/Reviewers

### Adult Best Practice Guidelines

**Anxiety Disorders**
- **Jon Webb, PhD, Chairperson**, East Tennessee State University
- Carol Hersh, MD, Magellan Health Services
- Dennis Wenner, TDMHDD
- Rodney Bragg, TDMHDD
- Mary-Linden Salter, AmeriChoice
- Shawn Smith, AmeriChoice
- Mary Shelton, PhD, Tennessee State University

**Dual Diagnosis – MH/ID Issues**
- **Bonnie Haynes, PhD, Chairperson**, Western MHI
- Adadot Hayes, MD, Tennessee Department of Finance and Administration, Division of Intellectual Disabilities Services (DIDS)
- Becki Poling, TDMHDD
- Cliff Tennison, Jr., MD, Helen Ross McNabb Center, Inc.
- John Jackson, MD, Private Practice

**Eating Disorders**
- **Kayla Fisher, MD, Chairperson**, Memphis MHI
- Lloyd Elam, MD (Deceased)
- Mohammad Jahan, MD, Middle Tennessee MHI
- Edna Lockert, PhD, Meharry Medical College
- Rhonda Cunningham-Burley, PhD, Meharry Medical College

**Mood Disorders**
- **William Wood, MD, Chairperson**, Amerigroup
- Bert Simpson, MD, Lakeshore MHI
- Freida Outlaw, PhD, TDMHDD
- James K. Hirsch, PhD, East Tennessee State University
- Karen Rhea, MD, Centerstone of Tennessee, Inc.
- Stacy Park, Ridgeview Outpatient Services

**Schizophrenia**
- **Charles Freed, MD, Chairperson**, AmeriChoice
- Bert Simpson, MD, Lakeshore MHI
- Bonnie Haynes, PhD, Western MHI
- Debra Dillon, Southeast Mental Health Centers
- Gregg Perry, MD, Cherokee Health Systems
- Terry Holmes, MD, Moccasin Bend MHI
- William Wood, MD, Amerigroup

**Substance Abuse and Co-Occurring Disorders – Mental Health/Substance Abuse Issues**
- **Alan Lynch, Chairperson**, Mental Health Cooperative
- Albert L. Richardson, Cocaine and Alcohol Awareness Program, Inc., Memphis
- Bruce Emery, TDMHDD/DADAS
- Debbie Hillin, Buffalo Valley, Inc.
- Jon Webb, PhD, East Tennessee State University
- Michael Myszka, PhD, Bureau of TennCare
- Paula DeWitt, TDMHDD
- Sharon Trammell (Deceased)

**Traumatic Brain Injury**
- **Teny Holmes, MD, Chairperson**, Moccasin Bend MHI
- Bruce Miner, Center for Comprehensive Services
- C. Terry Moore (Deceased)
- Theresa R. Shelton, Magellan Health Services
- Howard L. Burley, MD, TDMHDD

### Special Thanks

This document was shared with the following agencies for external review: AmeriChoice by UnitedHealthcare; Amerigroup Tennessee, Inc.; Bureau of TennCare; Centerstone of Tennessee, Inc.; Cherokee Health Systems; Helen Ross McNabb Center, Inc.; Mental Health Cooperative of Middle Tennessee; Ridgeview Psychiatric Hospital and Center; Tennessee Association of Alcohol, Drug & Other Addiction Services (TADAAS); Tennessee Association of Mental Health Organizations (TAMHO); and ValueOptions, Inc. Comments were received from Amerigroup Tennessee, Inc.; the Bureau of TennCare; and TAMHO’s Quality Assurance and Compliance Committee. We have done our best to take those comments into consideration.
# Table of Contents

- **Contact Information** ............................................................. ii
- **Acknowledgments** ............................................................. iii
- **Workgroup Contributors/ Reviewers** ................................. iv
- **Table of Contents** ............................................................. 1
- **Foreword** ................................................................. 5
  - **Introduction** ......................................................... 6

- **Special Issues** ........................................................... 7
  - **Informed Consent** ...................................................... 8
    - **Capacity to Give Informed Consent** ............................. 8
  - **Recovery and Resiliency** .......................................... 10
  - **Case Management** .................................................. 12
  - **Psychotropic Medication Precautions** ......................... 15
  - **Cultural and Linguistic Competence** ............................ 16
    - **CLAS Standards** ................................................ 16
  - **Mental Health Professional Shortage Areas** .................... 20
  - **References** .......................................................... 22

- **Mood Disorders** ......................................................... 25
  - **Mood Disorders in Adults** ........................................ 26
    - **Major Depressive Disorder** .................................... 27
      - **Screening Procedures and Tools** ............................. 31
        - Center for Epidemiologic Studies Depression Scale (CES-D) ........................................ 34
        - Clinically Useful Depression Outcome Scale (CUDOS) ................................................. 35
        - Patient Health Questionnaire (PHQ) ................................................................. 36
        - PHQ-15 ...................................................................... 40
        - PHQ-9 ...................................................................... 41
        - PHQ-4 ...................................................................... 43
Table of Contents (continued)

- Treatment .................................................................................................................. 44
  - Bipolar Disorder ...................................................................................................... 52
  - Screening Procedures and Tools ............................................................................... 55
    ♦ The Mood Disorder Questionnaire (MDQ) ......................................................... 57
    ♦ Brief Bipolar Disorder Symptom Scale (BBDSS) ............................................... 59
- Treatment .................................................................................................................. 69
- Bipolar Algorithm ..................................................................................................... 74

➢ References .................................................................................................................. 79

❖ Anxiety Disorders .................................................................................................... 85
  ➢ Anxiety Disorder in Adults ....................................................................................... 86
    - Screening Procedures and Tools ........................................................................... 95
      ♦ Clinically Useful Anxiety Outcome Scale (CUXOS) ........................................... 98
      ♦ Generalized Anxiety Disorder-7 (GAD-7) .......................................................... 99
      ♦ PHQ-4 DA ............................................................................................................. 100
      ♦ Posttraumatic Adjustment Scale (PAS) ............................................................... 101
    - Treatment .............................................................................................................. 102

➢ References .................................................................................................................. 107

❖ Schizophrenia ............................................................................................................ 111
  ➢ Schizophrenia in Adults .......................................................................................... 112
    - Screening Procedures and Tools ........................................................................... 116
      ♦ Brief Psychiatric Rating Scale (BPRS) ................................................................. 117
    - Treatment .............................................................................................................. 119
    - IPAP Schizophrenia Algorithm ............................................................................... 124

➢ References .................................................................................................................. 128

❖ Substance Use Disorders .......................................................................................... 131
  ➢ Substance-Related Disorders in Adults .................................................................... 132

2
Table of Contents (continued)

- Screening Procedures and Tools ..................................................... 138
  † CAGE Questionnaire ........................................................................ 140
  † CAGE-Adapted to Include Drugs (CAGE-AID) .............................. 141
  † TWEAK Questionnaire ................................................................. 142
  † UNCOPE Questionnaire ............................................................... 143
- Treatment ............................................................................................ 144
  ➢ Co-Occurring Disorders ................................................................. 155
  ➢ References ....................................................................................... 159
¬ Appendices ......................................................................................... 163
  ➢ Appendix A – Guidelines for Miscellaneous Disorders ................ 164
    • Eating Disorders ............................................................................. 165
      † References .................................................................................. 172
    • Traumatic Brain Injury ................................................................. 174
      † References .................................................................................. 177
    • Intellectual Disabilities (ID) and Comorbid Psychiatric Disorders .. 178
      † References .................................................................................. 185
  ➢ Appendix B – Departmental Resources ........................................ 187
    • Alcohol and Drug Addiction Treatment (ADAT) Program .......... 188
    • Problem Gambling Program ......................................................... 189
    • Crisis Services ............................................................................... 190
    • Assisted Living Permanent Supportive Housing Program .......... 191
      † Supportive Living Housing Program ........................................... 191
    • Creating Homes Initiative (CHI) ................................................ 192
      † Housing Within Reach ............................................................... 192
    • Regional Housing Facilitators ..................................................... 193
    • Peer Specialist Services ............................................................... 194
# Table of Contents (continued)

- References ........................................................................................................ 195
- What is a System of Care? .................................................................................. 196
- Appendix C – Listing of Free Treatment Improvement Protocols ................. 198
- Appendix D – Service Maps ............................................................................ 204
  - Map of Regional Mental Health Institutes (RMHIs) ........................................ 205
  - Map of Methadone Service ............................................................................. 206
  - Map of Mental Health Shortage Areas .......................................................... 207
Foreword
Commissioner and Medical Director

The Tennessee Department of Mental Health and Developmental Disabilities (TDMHDD), through the Division of Clinical Leadership (DCL), is delighted to release its current, expanded version of Behavioral Health Services for Adults: Best Practice Guidelines. The Department is committed to ensuring that providers of mental health and substance abuse services in our state have access to the best evidence available so that the people of Tennessee with severe and persistent mental illness (SPMI) and/or substance use disorders can realize improvements in outcomes and quality of life.

Working groups of public and private clinicians collaborated on the development of the best practice guidelines. Screening tools are incorporated to assist with better and more efficient diagnosis. Both pharmacological and nonpharmacological approaches are included as possible best practice treatment options for persons with mental and/or substance use disorders. Moreover, these guidelines are designed to complement and not supplant sound clinical judgment. Safety and other factors that impinge upon the best interest of the consumer must always be considered by clinicians when exercising clinical judgment regarding screening, diagnostic, and treatment decisions.

A select number of mental and substance use disorders are found in the guidelines. Specifically, mood disorders, anxiety disorders, schizophrenia, and substance use disorders, including co-occurring, are discussed in substantial detail. Information on dual diagnosis, eating disorders, and traumatic brain injuries are provided in the appendices. It should also be noted that using these guidelines has no bearing on service authorization for reimbursement.

It is our hope that the guidelines will be beneficial for a variety of mental health and addiction professionals, including psychiatrists, primary care physicians, psychologists, physician extenders, nurses, physician extenders, social workers, alcohol and drug counselors, and other health care professionals across the state. Please direct any questions or comments relative to these guidelines via the United States postal system, telephone, fax, or email:

TDMHDD/DCL
Office of Statistical Research
425 5th Avenue North
Cordell Hull Building, 5th Floor
Nashville, TN 37243
615-741-9476 (Phone)
615-741-6602 (Fax)
edwina.chappell@tn.gov (Email)
This document focuses on best practices in behavioral health. It represents the best thinking in behavioral healthcare at the time of this writing. In addition to best practices, every effort has been made to include evidence-based treatment practices to the extent possible.

These guidelines were specifically designed to provide clinicians with resources to assist them in their work with persons who have behavioral health disorders. Clinicians may be mental health professionals, substance abuse professionals, or primary healthcare professionals that serve clients who have behavioral health issues. The “guidelines are only meant to be a starting place for decision making about individual patients” (Fletcher & Fletcher, 2005, p. 225). They can and often will likely be modified by clinical judgment.

Resources for selected behavioral health disorders as they apply to adults, i.e., individuals 19 years of age or older, are included in these guidelines. Separate guidelines are available for clinicians that work with children and adolescents that have mental health and/or substance use disorders. Further, it should be noted that these guidelines do not address special issues that may be encountered by clinicians serving adults with developmental disabilities.

Included in these guidelines are behavioral health disorders that tend to show up fairly often in adult populations. Disorders that may be more discriminating in the type of individual in which they manifest have been placed in the appendices. Nevertheless, the guidelines provide discussion on the following:

- Anxiety disorders
- Dual diagnosis (mental health and intellectual disabilities)
- Eating disorders
- Mood disorders
- Psychotic disorders
- Substance abuse disorders
- Co-occurring disorders (mental health and substance use)
- Traumatic brain injuries

Screening instruments are contained in the main body of the guidelines, where possible, along with symptom and treatment issues. Any comorbidity with other behavioral health disorders, physical health issues, or conditions associated with the elderly is also presented. Further, the document emphasizes issues surrounding informed consent, as enumerated in Title 33; recovery and resiliency; case management; precautions involving psychotropic medications; cultural competence; and mental health professional shortage areas.

Reference

SPECIAL ISSUES
INFORMED CONSENT

Per TDMHDD Rule 0940—1—1—.02, informed consent is defined as “consent voluntarily given in writing after sufficient explanation and disclosure of the subject matter involved to enable the person whose consent is sought to make a knowing and willful decision without any element of force, fraud, deceit, duress, or other form of constraint or coercion” (January 1999 revision). Informed, voluntary consent, based upon appropriate information, must be obtained from the service recipient, if he or she has the capacity to give it, or otherwise from a legally authorized representative. Capacity refers to the individual’s ability to understand the significant risks, benefits, and alternatives to the healthcare being proposed, as well as his/her ability to make and communicate decisions about such healthcare, as defined in the Tennessee Health Care Decisions Act, Section 68-11-1702, which took effect July 1, 2004 (Tennessee Code Annotated, 2004).

Capacity to Give Informed Consent

Clinicians should determine whether the service recipient, if age 16 years or over, is capable of giving informed consent, prior to rendering services, and, if applicable, determine who is legally authorized to make decisions about the service recipient’s care. (While youths aged 16 years and older have the legal right to consent to behavioral health treatment in our state, these guidelines focus exclusively on persons 19 years of age and older.)

There are three Declaration for Mental Health Treatment (DMHT) documents. One document, revised in 2008, is specifically designed to help individuals make choices about their mental health treatment. It allows persons receiving services to plan ahead and it may also help service providers in giving appropriate treatment (TDMHDD, 2008a). The second document is a guide for mental health service providers. Developed in 2002, this guide addresses provider responsibilities, penalties, exclusionary circumstances, how to complete the declaration, and information on forms and where to find them (TDMHDD, 2002). The final document, revised in 2008, is a brochure that addresses questions and answers about completing a DMHT (TDMHDD, 2008b).

All documents are based on Tennessee Code Annotated Title 33, Chapter 6, Part 10. The Declaration tells how the service recipient wants to be treated when he/she no longer has the capacity to make informed decisions about his/her mental health treatment. If a conservator is appointed by the court to make mental health treatment decisions for an individual, the Declaration for Mental Health Treatment (DMHT) will remain in effect, hence overriding the conservator with respect to mental health treatment covered under the Declaration (TDMHDD, 2008).

There are circumstances when providers do not have to honor the Declaration for Mental Health Treatment (DMHT). Those circumstances are as follow:

- When an emergency arises that endangers the person’s life or health, the mental health service provider has the right to choose not to follow the preference described in the Declaration completed by the service recipient;
- When, as a matter of conscience, the mental health service provider cannot implement the decisions in the Declaration, the provider may choose not to treat the individual; or
- When the service recipient has been involuntarily committed to an inpatient treatment facility and the Treatment Review Committee has authorized treatment, the mental
health service provider may choose not to follow the preferences as described in the Declaration of the service recipient (TDMHDD, 2002).
RECOVERY AND RESILIENCY

With an emphasis on "life in the community" for consumers, the Substance Abuse and Mental Health Services Administration (SAMHSA) has adopted a mission focused on facilitating recovery and building resiliency for people at risk for or with mental and/or substance use disorders (Cline, 2004). In 2006, SAMHSA released a consensus statement that outlined the principles it deemed necessary to achieve mental health recovery. Consumers of behavioral health services could utilize the principles to build resilience and facilitate recovery. The fundamental components of recovery include the following:

1. **Self-Direction**: Consumers exercise choice over, control, lead, and determine their own path of recovery by optimizing independence, autonomy, and control of resources to fulfill a self-determined life. By definition, the recovery process must be self-directed by the individual. It is the individual that will define his/her own life goals and design a unique path toward the achievement of those goals.

2. **Person-Centered and Individualized**: There are multiple pathways to recovery based on an individual’s unique resiliencies and strengths as well as his/her preferences, experiences (including past trauma), needs, and cultural background in all of its diverse representations. Individuals also identify recovery as being an ongoing journey and an end result as well as an overall model for achieving optimal mental health and wellness.

3. **Empowerment**: Consumers have the authority to choose from an array of options and to be participants in all decisions, including allocation of resources, which will affect their lives and are educated and supported in so doing. They have the opportunity to join with other consumers to effectively and collectively speak for themselves about their wants, desires, needs, and aspirations. Through empowerment, an individual gains control of his/her own destiny and influences the organizational and societal structures in his/her life.

4. **Holistic**: Recovery encompasses an individual’s whole life, including body, spirit, mind, and community. Recovery embraces all aspects of life, including employment, education, housing, mental health and healthcare treatment and services, complementary and naturalistic services (e.g., libraries, museums, recreational services, etc.), addictions treatment, creativity, spirituality, social networks, community participation, and family supports as determined by the person. Families, providers, organizations, systems, communities, and society play crucial roles in creating and maintaining meaningful opportunities for consumer entree to these supports.

5. **Non-Linear**: Recovery is not a step-by-step process. Instead, it is based on continual growth, occasional setbacks, and learning from experience. Recovery begins with an initial stage of awareness in which a person recognizes that positive change is possible. It is through awareness that the consumer is enabled to move on to fully engage in the work of recovery.
6. **Strengths-Based.** Recovery focuses on valuing and building on the multiple capacities, talents, coping abilities, resiliencies, and inherent worth of individuals. By building on these strengths, consumers leave stymied life roles behind and engage in new life roles (e.g., partner, friend, caregiver, employee, student). The process of recovery moves forward through interaction with others in trust-based, supportive relationships.

7. **Peer Support.** Mutual support, which includes the sharing of experiential skills and knowledge and social learning, plays an invaluable role in recovery. Consumers engage and encourage other consumers in recovery, providing each other with a sense of belonging, valued roles, supportive relationships, and community.

8. **Respect.** Community, system, and societal appreciation and acceptance of consumers, including protection of their rights and the elimination of stigma and discrimination, are crucial in achieving recovery. Self-acceptance and regaining belief in one’s own self are particularly vital. Respect ensures the full participation and inclusion of consumers in all aspects of their lives.

9. **Responsibility.** Consumers have a personal responsibility for their own self-care and journeys of recovery. Taking steps towards their goals will likely require great courage. Consumers must strive to give meaning to and understand their experiences and identify healing processes and coping strategies that promote their own wellness.

10. **Hope.** Recovery provides the essential and motivating message of a better future, that people do and can overcome the obstacles and barriers that confront them. Hope is internalized; but it can be fostered by families, friends, peers, providers, and others. Hope is the catalyst of the recovery process (Medical News Today, 2006).

Recovery involves the process through which people are able to work, learn, live, and participate fully in their communities. For some people, it is being able to live a productive and fulfilling life despite having a disability. For other individuals, recovery implies complete remission or reduction of symptoms. “Hope,” however, is the essential contributor to any person’s recovery (Grotberg, 2006).

Resilience is intricately connected to recovery. It encompasses the community and personal qualities that enable individuals to rebound from trauma, tragedy, adversity, threats, or other stressors, and to go on with life having a sense of competence, mastery, and hope (Grotberg, 2006). Resilience is what happens when people are able to adapt to minimal disruption in their lives or when persons are able to recover to their baseline level of functioning following some traumatic event (Alim, 2008),
Mental health case managers strive to connect persons with severe and persistent mental illness to needed resources and services such as Social Security Disability Income and Supplemental Security Income, primary medical care, employment and housing programs. There are a variety of ways through which individuals can be referred to case management including crisis response services, community-based service providers, or hospitals. In addition, individuals can even refer themselves.

Mental health case management services are comprised of the following components:

- **Assessment and prioritization of needs.** This component includes examination of the individual’s current situation, aspirations, strengths, needs and prioritized goals in the life domains of behavioral health, physical health, financial and social support, living arrangements, vocation/education and recreation.

- **Assistance in daily living.** Assistance in daily living includes ongoing development and support of individual skills needed to enhance the person’s ability to live independently (e.g., aid in prompting for caring for cleaning, grooming, hygiene, nutrition habits, etc.).

- **Crisis response.** Case managers provide direct crisis assistance during working hours and are also available to work with crisis services to meet the needs of the consumer. Case managers assist the individual in developing skills that will enable him/her to deal effectively with crises and prevent the need for more restrictive services.

- **Linkage, referral, and advocacy to other community services.** Case managers assess and mobilize resources to meet the individual’s needs, including referring and insuring that needed services are provided. All types of services and resources are included such as income, primary health care, social support, housing, and legal/criminal justice services.

- **Monitoring overall service delivery plan.** Case managers have responsibility for monitoring delivery of all services in the plan and assessing the extent to which services that are delivered assist the individual in achieving his/her goals.

- **Service planning.** The case management service plan is a written action plan mutually developed by the case manager and the consumer. Moreover, the plan is part of an ongoing assessment/monitoring/evaluation process. It addresses prioritized areas of service; needs and skill development; short- and long-term measurable goals; strategies to meet defined goals; identification of agencies and contacts necessary to accomplish strategies; and examination of barriers to service delivery. (TDMHDD, 2006)

**Relevant Terms**

- **Case management agencies (MH).** Organizations that provide case management services.

- **Case management service plan (plan of care/ individualized service plan) (MH).** A plan developed by a case manager to get resources and services necessary to help the individual in care.
Case manager (MH). A type of mental health care provider that assists individuals in getting basic human services, such as housing, employment, and social and medical services. The case manager's role is to: 1) assess needs; 2) plan the type of services needed; 3) connect the individual with those resources; 4) help with crisis; 5) assist with activities of daily living; and 6) evaluate overall use of service. Case managers advocate with other service providers on behalf of the consumer.

Care coordination (MH). Care coordination focuses primarily on individuals that receive intensive services. The case coordinator (employed by a Managed Care Organization (MCO)/insurance company) directs the process of health care delivery by matching the patient to the most appropriate clinician, level of care, and intensity of services, and follows this patient through the care episode or until all needed systems are in place. The MCOs have a level of case management as well as disease management program. Involvement in the se programs is based upon referrals as well as an assessment of the needs of the member.

Clinically related groups (CRG) (MH). Categories of need for service levels based on an assessment that is typically conducted by a case manager.

Continuous Treatment Team (CTT) (MH). A group of mental health professionals that might include, but not be limited to, case managers, nurses, or physicians, who provide intensive case management and a range of clinical treatment, rehabilitation, and support services. Through clinical management and teaching of coping skills, CTT staff help consumers achieve the best quality of life possible. Staff members are available twenty-four (24) hours a day. Further, no consumer is terminated because of failure to agree with a specific service or treatment intervention. As often as possible, services are provided in the consumer’s own environment rather than in an office or clinic.

Program for Assertive Community Treatment (PACT) (MH). An intensive community-based program that incorporates case management, medication management, therapy, and supported employment for persons with serious mental illness.

Transitional services (MH). Transitional services comprise independent living programs, counseling, and case management. Young people can transition from the children’s case management system to the adult case management system. (TDMHDD, 2006)

Findings from Recent Research on Community Case Management

The State of Missouri recently investigated the efficacy of community mental health case management (CMHCM). CMHCM was defined as an ongoing individual relationship between a bachelor’s level case manager, in most cases, and people with severe mental illness. The case manager would primarily provide direct face-to-face assistance in the client’s home, as well as in various community settings. This individual would assist clients with eligibility for various benefits, activities of daily living, maintaining housing, and adherence to medication. The case manager’s responsibilities would also include coordination of care between healthcare providers and attendance at clinic visits.

The targeted CMHCM population included persons with schizophrenia because this illness is most highly linked to disability and multiple chronic medical illnesses such as diabetes, obesity,
hypertension, etc. The researchers conducted a simple compare/contrast of two different groups of clients, one receiving CMHCM and the other not, and further analyzed the CMHCM group into intensity levels based on annual service costs. Low intensity CMHCM clients had annual case-management services costing less than $1,000; medium-intensity clients showed annual costs between $1,000 and $5,000; and high-intensity clients had annual costs in excess of $5,000.

Findings for the CMHCM group, compared to the non-CMHCM group, were positive, indicating lower overall healthcare costs for the CMHCM group. In addition, the findings showed significant effectiveness for CMHCM in reducing total healthcare expenditures in people with severe mental illness in the low-to-medium intensity groups. As a result, community mental health case managers across the state have been trained and instructed to help clients in scheduling and keeping general healthcare appointments, obtaining a primary healthcare home, and adhering to medications for treatment of medical conditions (Parks, Swinfard, & Stuve, 2010).
PSYCHOTROPIC MEDICATION PRECAUTIONS

There are numerous factors that should be considered when prescribing medications for behavioral health disorders. Among them are the following:

- Age
- Body size
- Comorbid conditions
- Diet
- Gender
- Genetics
- Habits like drinking and smoking
- Kidney and liver function
- Medication compliance status
- Physical illnesses
- Possible side effects
- Use of other medications, including over-the-counter (OTC), minerals, herbal, and/or vitamin supplements (NIMH, 2008).

In addition, the newer, atypical antipsychotic medications tend to cause weight gain and metabolic changes, thus placing individuals at increased risk of getting high cholesterol and/or diabetes. As a result, glucose levels, lipid levels, and weight should be regularly monitored by the prescribing physician when treatment involves atypical antipsychotics. It is further possible that side effects related to physical movement may become problematic. These side effects might include:

- Persistent muscle spasms;
- Restlessness;
- Rigidity; and
- Tremors.

Finally, there are serious precautions for older persons that have dementia. Death rates are higher for such individuals when they are taking antipsychotic medications. Similar risks have been found for first-generation antipsychotics as well. Therefore, the Food and Drug Administration (FDA) has not approved antipsychotic medications for the treatment of behavioral disorders in persons with dementia (NIMH, 2008).
CULTURAL AND LINGUISTIC COMPETENCE

Cultural competence is more than cognitive and intellectual understanding. You cannot acquire it strictly through book learning and skills training alone (Tracey, 2006). It should be central to the work of clinicians that seek to most effectively empower their clients (Brown, 2009). Many organizations with memberships of mental health professionals provide guidelines and recommend adherence to cultural competence when working with clients, including the American Psychiatric Association, the American Psychological Association, the American Counseling Association, and the National Association of Social Workers (Hankins, 2008; Lim, Luo, Suo, & Hales, 2008; Watson, Etzel, & Loughran, n.d.).

Brown (2009) defines cultural competence as a set of variables used by clinicians that include the capacity for the clinician to be self-aware about his/her own cultural norms and identities, sensitive to the realities of differences in human beings, and overtaken by an epistemology of difference that allows for creative responses to the ways in which strengths and capabilities to bounce back that are inherent in identities transform, inform, and distort by dysfunction and distress. However, Brown (2003) thinks that it is a standard that is rarely, if ever, met, even by the most well–intentioned clinician. In fact, many people assume that clinicians are effectively culturally and linguistically competent if they have accommodated or translated the client’s language.

Cultural competency is an extremely important concept in the world of behavioral healthcare. Providing culturally appropriate services positively influences accessibility of services by consumers and by people of color in particular. Also knowing whom the client views as natural and traditional helpers in his/her community will facilitate development of trust and enhance the consumer’s investment and continued participation in treatment (Saldana, 2001).

The emotionality of words in Spanish sometimes differs from the emotional context in English. Thus, an example of cultural and linguistic competence in a clinician would be his/her familiarity with the dynamics of language in both English and Spanish (Schwartz et al., 2010).

A collective set of culturally and linguistically appropriate services (CLAS) guidelines, mandates, and recommendations has been issued by the United States Department of Health and Human Services, Office of Minority Health (OMH). CLAS was designed to inform, guide, and facilitate required and recommended practices related to culturally and linguistically appropriate health (physical and behavioral) services (DHHS, OMH, 2005).

CLAS Standards

CLAS includes 14 standards that are organized by themes. They were developed primarily for health care organizations, but individual providers, including behavioral health agencies, are also encouraged to use them to make their practices more culturally and linguistically accessible. CLAS principles and activities should be integrated throughout an organization, as well as undertaken in partnership with the communities being served. Per CLAS standards, health care organizations and providers:
• Standard 1
Should ensure that patients/consumers receive effective, understandable, and respectful care from all staff members. This care should be provided in a manner that is compatible with their cultural health beliefs and practices and preferred language.

• Standard 2
Should implement strategies to recruit, retain, and promote a diverse staff and leadership that is representative of the demographic characteristics of the service area. This diversity should be visible at all levels of the organization.

• Standard 3
Should ensure that staff at all levels and across all disciplines receive ongoing education and training in culturally and linguistically appropriate service delivery.

• Standard 4
Must offer and provide language assistance services, including but not limited to bilingual staff and interpreter services, at no cost to each patient/consumer with limited English proficiency at all points of contact and in a timely manner during all hours of operation.

• Standard 5
Must render to patients/consumers in their preferred language both verbal offers and written notices informing them of their right to receive language assistance services.

• Standard 6
Must assure the competence of language assistance provided to limited English proficient patients/consumers by interpreters and bilingual staff. Except on request by the patient/consumer, family and friends should not be used to provide interpretation services.

• Standard 7
Must make available easily understood and post signs and patient-related materials in the languages of the commonly encountered groups and/or groups represented in the service area.

• Standard 8
Should develop, implement, and promote a written strategic plan that outlines clear goals, operational plans, policies, and management accountability/oversight mechanisms to provide culturally and linguistically appropriate services.

• Standard 9
Should conduct initial and ongoing organizational self-assessments of CLAS-related activities. They are also encouraged to integrate cultural and linguistic competence-related measures into their internal audits, patient satisfaction assessments, performance improvement programs, and outcomes-based evaluations.

• Standard 10
Should make every reasonable effort to ensure that data on the individual patient's/consumer's race, ethnicity, and spoken and written language are collected in health records, integrated into the organization's management information systems, and periodically updated.
• Standard 11
Should maintain a current cultural, demographic, and epidemiological profile of the community as well as a needs assessment to accurately plan for and implement services that respond to the cultural and linguistic characteristics of the service area.

• Standard 12
Should develop collaborative, participatory partnerships with communities and utilize a variety of informal and formal mechanisms to facilitate community and patient/consumer involvement in designing and implementing CLAS-related activities.

• Standard 13
Should ensure that conflict and grievance resolution processes are culturally and linguistically sensitive and capable of preventing, identifying, and resolving cross-cultural complaints or conflicts by patients/consumers.

• Standard 14
Are encouraged to regularly make available to the public information about their progress and successful innovations in implementing the CLAS standards. In addition, they should provide public notice in their communities about the availability of this information.

Standards 1, 2, 3, 8, 9, 10, 11, 12, and 13 are guidelines. This means that they are activities that have been recommended by OMH for adoption as mandates by Federal, State, and national accrediting agencies. Standards 4, 5, 6, and 7, however, are mandates that are current federal requirements for all recipients of federal funds. Finally, Standard 14 is a recommendation that has been suggested by OMH for voluntary adoption by health care organizations (ACHPF, 2007).

It should also be noted that linguistic competence does not successfully guarantee cultural competence. The clinician may be fluent in the Spanish language, for instance, but be very naive regarding the historical, geographic, and sociopolitical contexts, including specific life experiences of various subgroups. Clinicians must seek knowledge of each group and subgroup in terms of history, migration experiences, and language nuances. In short, clinicians need to look beyond language. Sometimes clinicians that have bilingual skills are additionally asked to translate agency documents for patients. There is an assumption that translation is an easy process for anyone that can speak the language. Yet factors such as the consumer’s reading level, any regional variants of the language, and the conceptual meaning of words must be taken into account. Moreover, translated documents should be “back-translated” multiple times to ensure that the content and subtle meanings have not been lost in the translation (Schwartz et al., 2010).

Brown (2009) identified two major components of 21st-century cultural competence paradigms. First, they involve a multiplicity of social location, interpersonalism, and identity variables. For example, the ADDRESSING model by Pamela Hays stands for Age, Disability, Religion, Ethnicity, Social Class, Sexual Orientation, Indigenous Origins, National Origin, and Gender. Second, these variables intersect in a multiplicity of ways. Understanding the intersection piece is actually the first step toward cultural competence.

It should be clear by now that cultural competence is a process that, over time, takes effort. It starts with the willingness to try, becoming as familiar as possible with what is known about individuals from backgrounds different from that of the clinician. Becoming culturally competent involves collecting and applying information about client differences that assist in
the development of an effective consulting/therapeutic relationship and implementation of interventions that will, in most cases, be useful to the clients with whom you as the clinician are working. The process is not easy (Watson et al., n.d), but Sue & Sue (2003) provide practical do’s and don’ts to help clinicians start and maintain a culturally competent focus with clients.

**DO**

- Regularly examine your helping and communication styles.
- Think holistically and broadly regarding client concerns.
- Expand your definition of consultation and helping.
- Expose yourself to other groups and cultures.
- Seek regular supervision and training on the topic.
- Take time to ask respectful questions of other people.

**DON’T**

- Rely on your clients to educate you about their identity/culture.
- Make assumptions about people based on their identity/cultural status.
- Rely on the “same-old, same-old” interventions/strategies.
MENTAL HEALTH PROFESSIONAL SHORTAGE AREAS

The Health Resources and Services Administration (HRSA) Shortage Designation Branch formulates shortage designation criteria and uses them to determine whether a geographic area, population group or facility is a Health Professional Shortage Area (HPSA) or a Medically Underserved Area or Population. HPSAs may be designated as having a shortage of primary medical care, dental, or mental health professionals. The HPSAs can be urban or rural areas, population groups, or medical or other public facilities. Procedures and criteria for the designation of shortage areas are established by the Public Health Service Act.

Geographic areas are designated as having a shortage of mental health professionals if the following criteria are met:

1. The area is a rational area for delivery of mental health services;
2. One of the following conditions exists within the area:
   (a) There is a population-to-psychiatrist ratio greater than or equal to 20,000:1 and population-to-core mental health professional ratio greater than or equal to 6,000:1; or
   (b) a population-to-core-professional ratio greater than or equal to 9,000:1; or
   (c) a population-to-psychiatrist ratio greater than or equal to 30,000:1.

Core mental health professionals include psychiatrists, clinical psychologists, clinical social workers, psychiatric nurse specialists, and marriage and family therapists (HRSA, 2009). One of the service maps in Appendix D of these guidelines shows areas of the state that are designated as mental health shortage areas as of October 2010. (See Appendix D.)

Designation as a mental health shortage area provides substantial benefit for mental health professionals and providers. This benefit, in the form of loan repayment, serves as leverage in recruitment and retention of much needed mental health staff.

On November 23, 2010, Department of Health and Human Services (DHHS) Secretary Kathleen Sebelius announced the launch of the new application cycle for the National Health Service Corps (NHSC) Loan Repayment Program. This opportunity provides eligible clinicians up to $60,000 to repay student loans in exchange for two years of service at approved facilities in medically underserved areas. Investment in the program for this federal fiscal year includes $290 million from the Affordable Care Act (ACA). ACA further gives more flexibility in how the NHSC administers the loan repayment program. The flexibility includes higher monetary awards than in previous years; the option for eligible clinicians to work half-time to fulfill their service obligation; and the provision of credit for some teaching hours.

This fiscal year is the first time that clinicians from eligible disciplines can make application to the NHSC loan repayment program online. Eligible disciplines encompass physician, dentist (pediatric or general), psychiatrist, nurse practitioner (primary care), physician assistant, certified nurse-midwife, dental hygienist, psychologist (health service), licensed clinical social worker, psychiatric nurse specialist, licensed professional counselor, and marriage and family therapist. The online site has tutorials, in addition to information that will assist in the application process (DHHS Press Office, November 2010).

Loan repayment is available only when the mental health professional works for providers that have NHSC-site designation. To begin the process, providers should become familiar with the designated State Primary Care Officer (PCO). The PCO for our state is:
The PCO will help with navigation through the process, prior to and following application as an NHSC site. It is likely that your facility can become an NHSC-approved site if it:

- Is located in a federally designated mental health professional shortage area.
- Does not restrict services based on ability to pay and publicizes/advertises this fact.
- Does not discriminate in the way that it provides services.
- Makes available a supportive work environment for the clinician to foster retention and an ongoing commitment to service.
- Accepts clients that are covered by Medicaid, Medicare, and the Children’s Health Insurance Program.
- Follows sound fiscal management.
- Has mental health professionals on staff for at least 40 hours per week (if full-time NHSC service) or at least 20 hours per week (if half-time NHSC service) (HRSA, 2010).
References


Alliance of Community Health Plans Foundation (ACHPF). (2007). Making the business case for culturally and linguistically appropriate services in health care: Case studies from the field. Whitehouse Station, NJ: Merck Company Foundation.


MOOD DISORDERS
A person’s mood can be normal, depressed, or elevated. Mood is an internal experience that influences the way that a person behaves and his/her perception of the world. Affect is the way that people externally express their mood(s). Normal, healthy individuals exhibit a full spectrum of moods and have an extensive repertoire of affective expressions. Further, such persons are in control of their moods and affects (Sadock & Sadock, 2007).

Individuals with mood disorders, on the other hand, overwhelmingly feel a loss of control or great distress. Loss of energy, guilt feelings, decreased appetite, difficulty concentrating, etc., are typical signs of depressed mood. Behaviors such as flight of ideas, decreased sleep, and grandiose ideas most often manifest when a person’s mood becomes elevated. Individuals with mood disorders nearly always exhibit impairments in their interpersonal, occupational, and social functioning (Sadock & Sadock, 2007).

In the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR), mood disorders are divided into Depressive (Unipolar) Disorders and Bipolar Disorders, along with two disorders based on etiology—Mood Disorder Due to a General Medical Condition and Substance-Induced Mood Disorder. The predominant feature for any mood disorder, as expected, is some disturbance in the mood of the individual. Other displays that may signal a mood disorder include changes in speech, activity level, and/or cognitive abilities. Depressive Disorders can be further subdivided into Major Depressive Disorder, Dysthymic Disorder, and Depressive Disorder Not Otherwise Specified. Likewise, Bipolar Disorders include Bipolar I Disorder, Bipolar II Disorder, Cyclothymic Disorder, and Bipolar Disorder Not Otherwise Specified (Sadock & Sadock, 2007).

Mood disorders are fairly common (Sadock & Sadock, 2007). According to the National Institute on Mental Health (NIMH, 2010), nearly 21 million adults in the United States—approximately 10 percent—are affected by a mood disorder. (Adults are defined as persons at least 18 years of age.) The median age of onset is around 30 years of age. The most common mood disorder is depression, affecting approximately 15 million adults in this country—almost seven percent of the adult population in the U.S. Bipolar disorder is only about half as common and affects only about six million (3%) of U.S. adults. In addition, mood disorders cost employers billions of dollars in lost work time each year (Depression Facts and Statistics, 2009).

For these guidelines, the discussion of mood disorders will focus on Major Depressive Disorder and Bipolar Disorder, as they are the most prevalent.
Depression is a major healthcare problem that impacts the lives of millions of Americans (Valenstein, Vijan, Zeber, Boehm, & Buttar, 2001). It is the most common of the mental disorders, affecting all people regardless of geographic location, age, demographic or social position (Depression Facts and Figures, 2009). The disorder is easy to diagnose, but fewer than one in four receive effective treatment (World Health Organization [WHO], 2010). Projections from the WHO suggest that, by the year 2020, depression will be the second leading cause of disability in developed countries (Williams et al., 2007).

Nearly seven (7) percent of the U.S. adult population suffers from major depressive disorder. The typical age of onset is 32 years of age, though episodes can occur at any age. It is also the leading cause of disability in the United States for persons 15-44 years of age (National Institute of Mental Health [NIMH], 2010). The lifetime prevalence is 12 percent, with a range of five to 17 percent (Sadock & Sadock, 2007). Moreover, major depression shows up less in males than in females. Often major depressive disorder co-occurs along with substance abuse and/or anxiety disorders (NIMH, 2010).

**DSM-IV-TR Criteria**

### Major Depressive Disorder (MDD)

- At least five of the following symptoms have been present during the same two-week period and represent a change from previous functioning. One of the symptoms must include either 1) depressed mood or 2) loss of interest or pleasure in usual activities, as distinguished in the first two bullets below. **Exclude any symptoms unmistakably caused by a medical condition or mood incongruent delusions or hallucinations.**
  - Depressed mood most of the day, nearly every day, based on self report or observation from others
  - Markedly diminished pleasure or interest in almost all activities nearly every day for most of the day
  - Significant weight loss (when not purposeful as on a diet) or gain, or change in appetite nearly every day.
  - Hypersomnia or insomnia nearly every day
  - Psychomotor retardation or agitation nearly every day (as observed by others, not just subjective feelings of being slowed down or restless).
  - Loss of energy or fatigue nearly every day
  - Feelings of inappropriate or excessive guilt (which may be delusional) or worthlessness nearly every day (not merely guilt or self-reproach about being sick)
  - Diminished ability to concentrate, think, or make decisions nearly every day (either as observed by others or by subjective account).
  - Recurrent thoughts of death (not just fear of dying), a suicide attempt/specific plan for committing suicide, or recurrent suicidal ideation minus a specific plan.
- Symptoms do not meet criteria for mixed episode.
• Symptoms create clinically significant distress/impairment in occupational, social, or other important areas of functioning.
• Symptoms are not due to the direct result of the physiological effects of a substance (e.g., drug abuse) or general medical condition.
• Symptoms are not better explained by bereavement. For example, they persist in excess of two months and are characterized by marked functional impairment, suicidal ideation, psychotic symptoms, morbid preoccupation with worthlessness, or psychomotor retardation following the loss of a loved one.

Major Depressive Disorder (MDD) can be a single episode or recurrent. Recurrent requires at least two major depressive episodes, with an interval of at least two consecutive months in which criteria are not met for a major depressive episode (American Psychiatric Association [APA], 2000).

Relationship between Depression and Other Behavioral Health Concerns

• Suicidal ideation is a grave problem among persons experiencing depression. Nearly 67 percent of them contemplate suicide.
• Between 10 and 15 percent of depressed persons actually effect suicide.
• As many as nine out of 10 persons with depression also exhibit symptoms of anxiety (Sadock & Sadock, 2007).
• Anxiety often accompanies depression. In one study 85 percent of persons with major depression also presented with generalized anxiety disorder. Thirty-five (35) percent of persons in this same study suffered from both depression and panic disorder.
• Anxiety exacerbates the depression and places individuals experiencing both disorders at much higher risk for suicide than when depression is the only culprit. As many as 92 percent of depressed persons that attempted suicide were also plagued by worsening anxiety (Healthyplace.com, 2009).
• Symptoms of depression are associated with the onset of schizophrenia. Only nine percent of patients with schizophrenia and no medication changes or no recent hospitalizations report depressive symptoms (Brichford, 2010).

Relationship between Depression and Physical Health

• Changes in eating and sleeping habits can aggravate coexisting medical conditions like hypertension, heart disease, and diabetes (Sadock & Sadock, 2007).
• Depression takes an extremely serious course in diabetic patients. The relapse rate is eight times greater and there are greater medical complications.
• The risk of dying from coronary heart disease increases 600 percent when the person is also depressed (Carney & Freedland, 2007; NIMH, 2003).
• Functional recovery from a stroke is significantly impacted by depression. Such patients have a more limited but prolonged, recovery from the stroke. Research suggests that as many as 20 percent of stroke patients fall into major depression (NIMH, 2003). More recent reports say up to half of all stroke victims develop major depression (Stein, 2010). Further, their risk of mortality increases.
• Depression severely impacts motor symptoms, cognitive functioning, and quality of life in persons with Parkinson’s disease (NIMH, 2003). Often prevalence is 17 percent, with 35% having clinically significant depressive symptoms (Anderson, 2010).
**Relationship between Depression and Aging**

Depression is not as common in the elderly as in the general population. That may be due, in part, to the fact that it is often underdiagnosed and undertreated in older persons. For many clinicians, depression has become an acceptable feature of aging (Sadock & Sadock, 2007). It is additionally true that a diagnosis of depression is more complex in the elderly because of the myriad of medical conditions and medications that can mask depressive symptoms (O’Connor, Whitlock, Gaynes, & Beil, 2009).

The prevalence of geriatric depression is even higher in medical settings than in community settings. When the older, depressed medical patients also have a chronic disease like hypertension or diabetes, research shows that they tend to stay in bed more days than their counterparts without depression. Moreover, the elderly that are depressed typically have twice as many doctors’ appointments during any given year compared to their nondepressed peers. Further, twice as many older individuals with depression have more than five medications, compared to those who are not depressed (NIMH, 2003).

**Differential Diagnosis**

- Adjustment Disorder with Depressed Mood
- Anorexia Nervosa
- Attention Deficit Hyperactivity Disorder
- Bereavement
- Bipolar Disorder
- Chronic Fatigue Syndrome
- Conduct Disorder
- Dementia
- Depressive Syndromes Caused by General Medical Conditions or Medications
- Disruptive Disorder
- Post-traumatic Stress Disorder
- Separation Anxiety Disorder
- Seasonal Affective Disorder
- Substance-Induced Mood Disorder
- Personality Disorders
- Premenstrual Dysphoric Disorder

(APA, 2000; DHHS, 1999; Hawk, Jason, & Torres-Harding, 2006; Sadock & Sadock, 2007)

**Screening**

Depression is costly, common, and disabling, but it is very treatable (Margolis, Solberg, Asche, & Whitebird, 2007; Pomerantz, 2005). Unfortunately many individuals with depression remain undetected or go untreated (Sharp & Lipsky, 2002). Consistent with other mental illnesses, patients experiencing symptoms of depression are generally seen by primary care physicians, not mental health professionals. Research says that as many as 5% to 13% of the patients seen in primary care settings have major depression and that depressive symptoms fail to be recognized in up to half of them. These facts are especially troubling given that 40% of suicide completers have visited their primary care physician in the month before their death (Pomerantz, 2005; USPSTF, 2009).
The following risk factors increase an individual’s chance for depression during his/her lifetime:

- Being female;
- Having other psychiatric disorders, including issues with substances;
- Being unemployed;
- In the low socioeconomic group;
- Having chronic medical conditions; and/or
- Having a family history of depression (USPSTF, 2009).

However, screening can improve health outcomes if properly conducted.

The United States Preventive Services Task Force (USPSTF) publishes recommendations regarding the screening of depression in adults. USPSTF is the leading independent panel of private-sector experts in primary care and prevention. The group carries out impartial, rigorous assessments of scientific evidence for the effectiveness of a wide range of clinical preventive services, including screening, preventive medications, and counseling. USPSTF’s recommendations are deemed the “gold standard” for clinical preventive services (USPSTF, 2010).

Earlier recommendations (USPSTF, 2002) contended that screening for depression should be routine for all adults. Yet research showed that screening used alone was ineffective in the management of depression (Williams et al., 2007). More recent studies have supported that position only if staff-assisted depression care supports are in place. At the highest level, these supports include screening; monetary commitment from the institution; staff/clinician training that involves one-to-two day workshops; manuals for clinical staff; monthly training lectures; academic detailing; an initial visit with a nurse specialist for assessment, education, and discussion of patient expectations and goals, at the very least; a visit with this nurse specialist for follow-up assessment and ongoing support for medication adherence; a visit from a trained therapist for CBT; and reduced co-pay when patients are referred to psychotherapy. At bare minimum, staff-assisted depression care supports include screening by a nurse that informs resident physicians of positive screening results, along with a protocol that facilitates referral to behavioral treatment (USPSTF, 2009).

Screening for depression may be particularly relevant and important for vulnerable populations, such as ethnic minorities and older adults, and for use in “point of capture” settings where individuals may seek medical, rather than psychiatric, treatment (Chen, Huang, Chang, & Chung, 2006). Depression screening is also an important strategy in the reduction of suicidal thoughts and behaviors in adults (Oyama, Koida, Sakashita, & Kudo, 2004), and any symptoms suggestive of suicidal or harmful behaviors necessitate immediate attention by a trained clinician.

There are several good depression screeners. Most instruments can be administered in five (5) minutes or less and they are extremely easy to use. Some instruments ask just two questions—one about anhedonia and another about depressed mood. These questions are typically successful in identifying the most depressed patients. In fact, asking these two questions often result in a better screen than if the full instrument from which the questions were derived was administered (USPSTF, 2009).

When conducting depression screening on elderly patients, it is important to take into account the level of cognitive impairment in conjunction with visual deficits. The validity of many screens drops significantly when older persons score less than 16 on the Mini-Mental State Examination (MMSE) (RCMAR, 2006).
Screening Procedures and Tools

The U.S. Preventive Services Task Force (USPSTF) recommends screening adults for depression in clinical practices that have systems in place to assure accurate diagnosis, effective treatment, and follow-up. Further, the USPSTF suggests that a positive screening indicating the presence of depressive symptoms should lead to a full diagnostic evaluation to determine if specific depressive disorders, such as major depression, are present. Such an evaluation should also include, as defined in the Diagnostic and Statistical Manual of Mental Disorders, manic phases that occur in the context of bipolar disorder or a depressive episode (USPSTF, 2002; 2009).

If depression is suspected based on the presence of risk factors or symptoms, consider the use of a standardized instrument to document and assess depressive symptoms. Positive endorsement of depression on any screening instrument may signal the need for a more comprehensive evaluation by a mental health professional. If symptoms are sufficient, a diagnosis of major depression may be warranted and a full clinical interview and assessment should be conducted (Institute for Clinical Systems Improvement, 2007). Information gathered in a comprehensive evaluation should include: complete history of psychiatric symptoms and presenting problem; substance abuse; health, illness and treatment status; thoughts of death or suicide; current life stressors; familial physical and mental health history; interpersonal and social functioning; and current mental status. Informant interviews about the depressed patient may also be helpful, when available.

Following the comprehensive evaluation, the clinician should develop a formulation that describes the adult’s problems, explaining them in layperson terms and combining biological, psychological and social components of the problem with current functioning, history and coping strengths of the patient.

It should be noted that screening itself does not reliably improve the outcome of mood disorders in some groups, such as patients already receiving routine care, but may be of more benefit to groups that are prone to being undertreated otherwise. To enhance effectiveness, screening efforts should be paired with solution-focused intervention and prevention strategies (Coyne & Sullivan, 2003).

Screening for current suicide ideation and past suicide attempt(s) is an important step in determining risk for suicidal thoughts and behaviors. Age, gender, presence of bipolar disorder, and level of hostility are also important factors contributing to suicide risk and are included in validated models of suicide risk assessment (Galfalvy, Oquendo, & Mann, 2008).

The following caveats should be kept in mind when using screening tools or rating scales: 1) A diagnosis is not produced merely because the clinician uses instruments; in fact, most screening or evaluation instruments only indicate presence and severity of mood disorder symptoms; 2) a particular “score” on an instrument does not guarantee that the individual has a particular disorder; and, 3) diagnoses should only be made by trained clinicians after they conduct thorough evaluations.

Self-report and interviewer or rater-administered measures are the most common approaches to screening; however, computerized and internet-based evaluation tools and telehealth assessments may be useful in the detection of depressive symptoms (Lin et al., 2007), particularly in rural areas (Hirsch, 2006). Several public access measures have been developed that adhere
to DSM-IV-TR and/or ICD-10 diagnostic criteria and that combine brevity with reliability and validity.

**Quick Inventory of Depressive Symptomatology-Self Report (QIDS-SR)**

One instrument is the *Quick Inventory of Depressive Symptomatology-Self Report (QIDS-SR)*. The QID-SR contains 16 items which are self administered. The questionnaire can be taken and scored on such web sites as [http://counsellingresource.com/quizzes/qids-depression/](http://counsellingresource.com/quizzes/qids-depression/) where the administration and scoring are quickly accomplished. Ratings of No Depression, Mild Depression, Moderate Depression, and Severe Depression can be obtained. This rating scale derives from the 30-item Inventory of Depressive Symptomatology (IDS) scale (Rush, 2003).

**Center for Epidemiological Studies Depression Scale (CES-D)**

Another useful screening tool is the *Center for Epidemiological Studies Depression Scale (CES-D)*. The CES-D contains 20 items and is designed for epidemiological use to detect depressive symptomatology in general populations. Its reliability, validity, and factor structure have been found to be similar in different age groups and in general U.S. population samples. It has been a very popular screening test for helping individuals determine their depression quotient, the quick self test asks about depressive behaviors and feelings during the past week. *A paper version of the instrument is included in this section of the guidelines. The CES-D is in the public domain.*

Like many other screening instruments, the CES-D can be taken online at [http://counsellingresource.com/quizzes/cesd/index.html](http://counsellingresource.com/quizzes/cesd/index.html). Each of the questions must be answered for the online version to be scored correctly. The CES-D was developed by Lenore Radloff (1977) while she was a researcher at NIMH. Almost 85% of those found to have depression after an in-depth structured interview with a psychiatrist will have a high score on the CES-D. However, about one in five of those who score high will have rapid resolution of their symptoms and not meet full criteria for major or clinical depression. Further, research has found it to be significantly associated with a diagnosis of major depressive disorder (Zimmerman, Chelminski, McGlinchey, & Posternak, 2008).

**Clinically Useful Depression Outcome Scale (CUDOS)**

The CUDOS or *Clinically Useful Depression Outcome Scale* can also be taken online. From [www.outcometracker.org](http://www.outcometracker.org), consumers can use a confidential, secure, HIPAA compliant website free of charge. The CUDOS was designed to be reliable, valid, sensitive to change, brief (can be completed in less than three minutes), clinically useful (covers the full range of DSM-IV-TR symptoms of major depressive disorder), and quickly scored (in less than 15 seconds). It has been proven to be a valid measure of symptom change and correlates highly with clinician ratings, interviewer ratings of the severity of depression, and other depression-measuring tools than with measures of other mental disorders. As clinicians, you can access results of your clients in an appropriately secure and confidential manner. *A print version of the CUDOS is included in this section of the guidelines, along with recommended scoring criteria* (Zimmerman, Chelminski, McGlinchey, & Posternak, 2008; Zimmerman, Posternak, & Chelminiski, 2004).

**Geriatric Depression Scale (GDS)**

The Geriatric Depression Scale (GDS) has been used extensively in community, acute and long-term care settings and has been touted as the preferred screening instrument for older persons. Available in both a short (15-item) and long (30-item) version, the GDS assesses depressive symptoms occurring in the last week. It is also suitable for use with physically ill and mildly to
moderately demented patients who have short attention spans and/or feel easily fatigued. The GDS takes about five to seven minutes to complete. Questions range from ‘Do you feel that your life is empty?’ to ‘Do you frequently get upset at little things?’ (ACP, 2006).

**Patient Health Questionnaire (PHQ)**
The Patient Health Questionnaire (PHQ) is a unique mental health screening tool. It was originally designed to facilitate the recognition and diagnosis of the most common mental disorders, including depression, primarily in primary care settings. A PHQ Depression Severity Index score can be calculated and repeated over time to monitor change for patients with depressive disorders. The PHQ is recommended for use with all new patients, all patients who did not complete the questionnaire in the last year, and all patients suspected of having a mental disorder. Because the PHQ is a self-report measure, definitive diagnoses must be verified by clinicians, factoring in how well the patient understood the questions in conjunction with other relevant information obtained from the patient, his/her family, or other sources.

**These guidelines include the full version of the PHQ as well as several brief versions.** Perhaps the most widely used version currently is the PHQ-9, which consists of nine items that tap depressive symptoms occurring during the previous two weeks. However, psychometric properties for all abbreviated versions, including the two-item version (PHQ-2), are good. Refer to Gilbody, Richards, Brealey, & Hewitt (2007); Kroenke & Spitzer (2002); Kroenke, Spitzer, & Williams (1999, 2001, 2002, 2003); Kroenke, Spitzer, Williams, & Lowe, (2009); Lowe, Kroenke, Herzog, & Gräfe (2004); Lowe, Unutzer, Callahan, Perkins, & Kroenke (2004); Martin et al. (2006); and Spitzer, Williams, Kroenke, Hornyak, & McMurray (2000) for specifics on the psychometric qualities of the various versions. The full version and abbreviated versions follow. Scoring and interpretation aids are also provided. Any of the PHQ measures may be copied and used with patients in clinical practice, education, and/or research. Proper citation, as provided at the bottom of the last page of each PHQ scale, should be included on all versions whenever they are used.
Center for Epidemiologic Studies Depression Scale (CES-D), NIMH*

Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past week.

<table>
<thead>
<tr>
<th>During the Past Week</th>
<th>Rarely or none of the time (less than 1 day)</th>
<th>Some or a little of the time (1-2 days)</th>
<th>Occasionally or a moderate amount of time (3-4 days)</th>
<th>Most or all of the time (5-7 days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I was bothered by things that usually don’t bother me.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2. I did not feel like eating; my appetite was poor.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3. I felt that I could not shake off the blues even with help from my family or friends.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4. I felt I was just as good as other people.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5. I had trouble keeping my mind on what I was doing.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6. I felt depressed.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>7. I felt that everything I did was an effort.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>8. I felt hopeful about the future.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>9. I thought my life had been a failure.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>10. I felt fearful.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>11. My sleep was restless.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>12. I was happy.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>13. I talked less than usual.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>15. People were unfriendly.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>16. I enjoyed life.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>17. I had crying spells.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>18. I felt sad.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>19. I felt that people dislike me.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>20. I could not get “going.”</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

SCORING: Zero for answers in the first column, 1 for answers in the second column, 2 for answers in the third column, 3 for answers in the fourth column. The scoring of positive items is reversed. Possible range of scores is zero to 60, with the higher scores indicating the presence of more symptomatology.

*Research efforts identify this tool as a product of the National Institute of Mental Health (NIMH). All NIMH documents are in the public domain and may be provided free of charge.
**CUDOS**

**INSTRUCTIONS**
This questionnaire includes questions about symptoms of depression. For each item please indicate how well it describes you during the PAST WEEK, INCLUDING TODAY. Circle the number in the columns next to the item that best describes you.

**RATING GUIDELINES**
- 0 = not at all true (0 days)
- 1 = rarely true (1-2 days)
- 2 = sometimes true (3-4 days)
- 3 = often true (5-6 days)
- 4 = almost always true (every day)

### During the PAST WEEK, INCLUDING TODAY....

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I felt sad or depressed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I was not as interested in my usual activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. My appetite was poor and I didn’t feel like eating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. My appetite was much greater than usual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I had difficulty sleeping</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I was sleeping too much</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I felt very fidgety, making it difficult to sit still</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I felt physically slowed down, like my body was stuck in mud</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. My energy level was low</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. I felt guilty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. I thought I was a failure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. I had problems concentrating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. I had more difficulties making decisions than usual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. I wished I was dead</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. I thought about killing myself</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. I thought that the future looked hopeless</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

17. Overall, how much have symptoms of depression interfered with or caused difficulties in your life during the past week?
   - 0) not at all
   - 1) a little bit
   - 2) a moderate amount
   - 3) quite a bit
   - 4) extremely

18. How would you rate your overall quality of life during the past week?
   - 0) very good, my life could hardly be better
   - 1) pretty good, most things are going well
   - 2) the good and bad parts are about equal
   - 3) pretty bad, most things are going poorly
   - 4) very bad, my life could hardly be worse

**CUDOS Score**

<table>
<thead>
<tr>
<th>Depression Range</th>
<th>CUDOS Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nondepressed</td>
<td>0 to 10</td>
</tr>
<tr>
<td>Minimal depression</td>
<td>11 to 20</td>
</tr>
<tr>
<td>Mild depression</td>
<td>21 to 30</td>
</tr>
<tr>
<td>Moderate depression</td>
<td>31 to 45</td>
</tr>
<tr>
<td>Severe depression</td>
<td>46 and above</td>
</tr>
</tbody>
</table>

_Table Source:_ Zimmerman, Chelminski, McGlinchey, & Posternak, 2008.

*Permission to include and/or print the CUDOS obtained from Mark Zimmerman, M.D.*
**Patient Health Questionnaire**

This questionnaire is an important part of providing you with the best health care possible. Your answers will help in understanding the problems that you may have. Please answer every question to the best of your ability unless you are requested to skip over a question.

<table>
<thead>
<tr>
<th>Name________________________</th>
<th>Age_____</th>
<th>Sex:</th>
<th>Female</th>
<th>Male</th>
<th>Today's Date_____________</th>
</tr>
</thead>
</table>

1. **During the last 4 weeks, how much have you been bothered by any of the following problems?**

<table>
<thead>
<tr>
<th>Problem</th>
<th>Not bothered</th>
<th>Bothered a little</th>
<th>Bothered a lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Stomach pain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Back pain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Pain in your arms, legs, or joints (knees, hips, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Menstrual cramps or other problems with your periods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Pain or problems during sexual intercourse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Headaches</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Chest pain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Dizziness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Fainting spells</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. Feeling your heart pound or race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>k. Shortness of breath</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>l. Constipation, loose bowels, or diarrhea</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>m. Nausea, gas, or indigestion</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. **Over the last 2 weeks, how often have you been bothered by any of the following problems?**

<table>
<thead>
<tr>
<th>Problem</th>
<th>Not at all</th>
<th>Several days</th>
<th>More than half the days</th>
<th>Nearly every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Little interest or pleasure in doing things</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Feeling down, depressed, or hopeless</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Trouble falling or staying asleep, or sleeping too much</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Feeling tired or having little energy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Poor appetite or overeating</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Feeling bad about yourself — or that you are a failure or have let yourself or your family down.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Trouble concentrating on things, such as reading the newspaper or watching television</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Thoughts that you would be better off dead or of hurting yourself in some way</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FOR OFFICE CODING: Som Dis if at least 3 of #1a-m are “a lot” and lack an adequate biological explanation.
Maj Dep Syn if answers to #2a or b and five or more of #2a-i are at least “More than half the days” (count #2i if present at all).
Other Dep Syn if #2a or b and two, three, or four of #2a-i are at least “More than half the days” (count #2i if present at all).
3. Questions about anxiety.
   a. In the last 4 weeks, have you had an anxiety attack — suddenly feeling fear or panic?……. NO YES

   If you checked “NO”, go to question #5.
   b. Has this ever happened before?………..
   c. Do some of these attacks come suddenly out of the blue — that is, in situations where you don’t expect to be nervous or uncomfortable?………………………….
   d. Do these attacks bother you a lot or are you worried about having another attack?………

4. Think about your last bad anxiety attack
   a. Were you short of breath?…………
   b. Did your heart race, pound, or skip?…….
   c. Did you have chest pain or pressure?……
   d. Did you sweat?…………………………
   e. Did you feel as if you were choking?……
   f. Did you have hot flashes or chills?………
   g. Did you have nausea or an upset stomach, or the feeling that you were going to have diarrhea?……
   h. Did you feel dizzy, unsteady, or faint?……
   i. Did you have tingling or numbness in parts of your body?...
   j. Did you tremble or shake?………………
   k. Were you afraid you were dying?………

5. Over the last 4 weeks, how often have you been bothered by any of the following problems?
   a. Feeling nervous, anxious, on edge, or worrying a lot about different things…….. Not at all Several days More than half the days

   If you checked “Not at all”, go to question #6.
   b. Feeling restless so that it is hard to sit still..
   c. Getting tired very easily………………
   d. Muscle tension, aches, or soreness……..
   e. Trouble falling asleep or staying asleep…
   f. Trouble concentrating on things, such as reading a book or watching TV………….
   g. Becoming easily annoyed or irritable……

FOR OFFICE CODING: Pan Syn if all of #3a-d are ‘YES’ and four or more of #4a-k are ‘YES’.
Other Anx Syn if #5a and answers to three or more of #5b-g are “More than half the days”.

37
6. Questions about eating.
   a. Do you often feel that you can’t control what or how much you eat? .................................
   b. Do you often eat, within any 2-hour period, what most people would regard as an unusually large amount of food? .................................

   If you checked ‘NO’ to either #a or #b, go to question #9.

   c. Has this been as often, on average, as twice a week for the last 3 months? .................................

7. In the last 3 months have you often done any of the following in order to avoid gaining weight? .................................
   a. Made yourself vomit? .................................
   b. Took more than twice the recommended dose of laxatives? .................................
   c. Fasted — not eaten anything at all for at least 24 hours? .................................
   d. Exercised for more than an hour specifically to avoid gaining weight after binge eating? .................................

8. If you checked ‘YES’ to any of these ways of avoiding gaining weight, were any as often, on average, as twice a week?...........

9. Do you ever drink alcohol (including beer or wine)? .................................

   If you checked “NO” go to question #11.

10. Have any of the following happened to you more than once in the last 6 months? .................................
   a. You drank alcohol even though a doctor suggested that you stop drinking because of a problem with your health..........
   b. You drank alcohol, were high from alcohol, or hung over while you were working, going to school, or taking care of children or other responsibilities....................
   c. You missed or were late for work, school, or other activities because you were drinking or hung over....
   d. You had a problem getting along with other people while you were drinking........................................
   e. You drove a car after having several drinks or after drinking too much........................................

11. If you checked off any problems on this questionnaire, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

   Not difficult at all .................................
   Somewhat difficult .................................
   Very difficult .................................
   Extremely difficult .................................

FOR OFFICE CODING: Bul Ner if #6a,b, and-c and #8 are all ‘YES’; Bin Eat Dis the same but #8 either ‘NO’ or left blank.
Alc Abu if any of #10a-e is ‘YES’.

*The PHQ and all its versions are adapted from PRIME MD TODAY, developed by Drs. Robert L. Spitzer, Kurt Kroenke, and Janet B.W. Williams. Copyright © 1999, Pfizer Inc. The names PRIME-MD® and PRIME-MD TODAY® are trademarks of Pfizer Inc.
How to Interpret the Full Version PHQ

All clinically significant responses are found in the column farthest to the right. (The only exception is for suicidal ideation when diagnosing a depressive syndrome.) At the bottom of each page, beginning with "FOR OFFICE CODING", in small type, are criteria for diagnostic judgments for summarizing the responses on that page. Category names are abbreviated, e.g., Major Depressive Syndrome is Maj Dep Syn.

**Page 1**

Somatoform Disorder if at least 3 of #1a-m bother the patient “a lot” and lack an adequate biological explanation.
Major Depressive Syndrome if #2a or b and five or more of #2a-i are at least “More than half the days” (count #2i if present at all).
Other Depressive Syndrome if #2a or b and two, three, or four of #2a-i are at least “More than half the days” (count #2i if present at all).

**Note:** The diagnoses of Major Depressive Disorder and Other Depressive Disorder require ruling out normal bereavement (mild symptoms, duration less than 2 months), a history of a manic episode (Bipolar Disorder) and a physical disorder, medication or other drug as the biological cause of the depressive symptoms.

**Page 2**

Panic Syndrome if #3a-d are all ‘YES’ and 4 or more of #4a-k are ‘YES’.
Other Anxiety Syndrome if #5a and answers to three or more of #5b-g are “More than half the days”.

**Note:** The diagnoses of Panic Disorder and Other Anxiety Disorder require ruling out a physical disorder, medication or other drug as the biological cause of the anxiety symptoms.

**Page 3**

Bulimia Nervosa if #6a,b, and c and #8 are ‘YES’; Binge Eating Disorder the same but #8 is either ‘NO’ or left blank.
Alcohol abuse if any of #10a-e are “YES”.

Additional Clinical Considerations

The following clinical considerations may affect decisions about management and treatment after making a provisional diagnosis with the PHQ – Full Version.

- Have current symptoms been triggered by psychosocial stressor(s)?
- What is the duration of the current disturbance and has the patient received any treatment for it?
- To what extent are the patient’s symptoms impairing his or her usual work and activities?
- Is there a history of similar episodes, and were they treated?
- Is there a family history of similar conditions?
**PHQ-15 Somatic Symptom Severity Score.** Sum scores for each of the 15 items. Scores of 5, 10, and 15 represent cutpoints for low, medium, and high somatic symptom severity, respectively.

*The PHQ and all its versions are adapted from PRIME MD TODAY, developed by Drs. Robert L. Spitzer, Kurt Kroenke, and Janet B.W. Williams. Copyright © 1999, Pfizer Inc. The names PRIME-MD® and PRIME-MD TODAY® are trademarks of Pfizer Inc.*
Over the last 2 weeks, how often have you been bothered by any of the following problems? 
(Circle the number of your answer.)

<table>
<thead>
<tr>
<th>Problem</th>
<th>Not at all</th>
<th>Several days</th>
<th>More than half the days</th>
<th>Nearly every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Little interest or pleasure in doing things...</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Feeling down, depressed, or hopeless...</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. Trouble falling or staying asleep, or sleeping too much...</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. Feeling tired or having little energy...</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Poor appetite or overeating...</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down...</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. Trouble concentrating on things, such as reading the newspaper or watching television...</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual...</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9. Thoughts that you would be better off dead or of hurting yourself in some way...</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

(For office coding: Total Score  __ = ____ + ____ + ____ )

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

<table>
<thead>
<tr>
<th>Difficulty Level</th>
<th>Not difficult at all</th>
<th>Somewhat difficult</th>
<th>Very difficult</th>
<th>Extremely difficult</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

*The PHQ and all its versions are adapted from PRIME MD TODAY, developed by Drs. Robert L. Spitzer, Kurt Kroenke, and Janet B.W. Williams. Copyright © 1999, Pfizer Inc. The names PRIME-MD® and PRIME-MD TODAY® are trademarks of Pfizer Inc.
Example: Diagnosing Major Depressive Disorder & Calculating PHQ-9 Depression Severity

**Patient:** A 43-year-old woman who looks sad and complains of fatigue for the past month.

2. **Over the last 2 weeks, how often have you been bothered by any of the following:**

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Several days</th>
<th>More than half the days</th>
<th>Nearly every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>(0)</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td></td>
</tr>
<tr>
<td>a. Little interest or pleasure in doing things?...</td>
<td></td>
<td></td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>b. Feeling down, depressed, or hopeless?........</td>
<td>(x)</td>
<td></td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>c. Trouble falling or staying asleep, or sleeping too much?</td>
<td></td>
<td></td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>d. Feeling tired or having little energy?.............</td>
<td></td>
<td></td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>e. Poor appetite or overeating?....................</td>
<td></td>
<td>(x)</td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>f. Feeling bad about yourself—or that you are a failure or have let yourself or your family down?</td>
<td></td>
<td></td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>g. Trouble concentrating on things, such as reading the newspaper or watching television?</td>
<td></td>
<td></td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>h. Moving or speaking so slowly that other people could have noticed? Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual?</td>
<td>(x)</td>
<td></td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>i. Thoughts that you would be better off dead or of hurting yourself in some way? ..........</td>
<td>(x)</td>
<td></td>
<td>(x)</td>
<td></td>
</tr>
</tbody>
</table>

FOR OFFICE CODING: Maj Dep Syn if #2a or b and five or more of #2a-i are at least “More than half the days” (count #2i if present at all). Other Dep Syn if #2a or b and two, three, or four of #2a-i are at least “More than half the days” (count #2i if present at all).

**PHQ-9 Depression Severity Score.** This score is the total for the nine items, ranging from 0 to 27. In the above case, the PHQ-9 depression severity score is 16 (3 items scored 1, 2 items scored 2, and 3 items scored 3). Scores of 5, 10, 15, and 20 represent cutpoints for mild, moderate, moderately severe and severe depression, respectively. Sensitivity to change has also been confirmed.

**Major Depressive Disorder Diagnosis.** The criteria for Major Depressive Syndrome were met because “nearly every day” was checked for #2a and five of items #2a to i were checked “more than half the days” or “nearly every day”. Note that #2i, suicidal ideation, is counted whenever it is present.

In this case, the diagnosis of Major Depressive Disorder (not Syndrome) was made. Questioning by the physician indicated no history of a manic episode; no evidence that a physical disorder, medication, or other drug caused the depression; and no indication that the depressive symptoms were normal bereavement. Questioning about the suicidal ideation indicated no significant suicidal potential.
### PHQ-4*

**Over the last 2 weeks, how often have you been bothered by the following problems?**
*(Circle the number of your answer.)*

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Several days</th>
<th>More than half the days</th>
<th>Nearly every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Feeling nervous, anxious or on edge</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Not being able to stop or control worrying</td>
<td>0 1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3. Little interest or pleasure in doing things</td>
<td>0 1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4. Feeling down, depressed, or hopeless</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

The PHQ-4 is a combination of the first two items of the PHQ-9 and the Generalized Anxiety Disorder (GAD)-7. Thus, the PHQ-4 is a four-item screening measure that provides a score range between 0 and 12. The score serves as a good measure of “caseness,” i.e., the higher the score, the more likely there is an underlying depressive or anxiety disorder.

Separately, the PHQ-4 comprises the PHQ-2 and the GAD-2. The PHQ-2 consists of the last two items on the PHQ-4. These are the two core DSM-IV-TR items for major depressive disorder. Scores for the PHQ-2 range from 0 to 6 and the operating characteristics of this ultra-brief measure are quite good. The recommended cutpoint is a score of 3 or greater. (Further discussion of the GAD-2 can be found in the section on Anxiety Disorder in these guidelines.)

#### Using Screening Tools in Diagnosis: Examples

Results from many of the screening tools presented and/or discussed in these guidelines can be used to aid in the diagnosis of depression. Once a diagnosis of major depression has been established, current evidence supports the assessment of the severity of depressive symptoms in guiding treatment options (ACP, 2006).

An example of how to use results from screening instruments to assist in diagnosing and making treatment decisions can be gleaned from the following table that shows the range of PHQ-9 scores, depression severity, and proposed treatment actions.
### PHQ-9 Scores and Proposed Treatment Actions *

<table>
<thead>
<tr>
<th>PHQ-9 Score</th>
<th>Depression Severity</th>
<th>Proposed Treatment Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 4</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>5 – 9</td>
<td>Mild</td>
<td>Watchful waiting; repeat PHQ-9 at follow-up</td>
</tr>
<tr>
<td>10 – 14</td>
<td>Moderate</td>
<td>Treatment plan, considering counseling, follow-up and/or pharmacotherapy</td>
</tr>
<tr>
<td>15 – 19</td>
<td>Moderately Severe</td>
<td>Immediate initiation of pharmacotherapy and/or psychotherapy</td>
</tr>
<tr>
<td>20 – 27</td>
<td>Severe</td>
<td>Immediate initiation of pharmacotherapy and, if severe impairment or poor response to therapy, expedited referral to a mental health specialist for psychotherapy and/or collaborative management</td>
</tr>
</tbody>
</table>

Source: Kroenke & Spitzer, 2002.

### Treatment

#### Nonpharmacological Treatments

**Psychotherapy**

There are many reasons why persons experiencing symptoms of depression may need treatment that does not involve medication. Some individuals just don’t want to add “a pill” to their treatment regimen. Other times, people experience difficulty in tolerating the prescribed medication. Then there are persons for whom medication simply may not be the most appropriate form of treatment for depression.

Fortunately, research continues to support the effectiveness of counseling or “talk therapy” in the treatment of depression. In fact, findings show the combination of therapy and medication to be more effective than medication minus therapy for more severe depression (ACP, 2006; Adams, Miller, & Zylstra, 2008). Regardless of type, all psychotherapies focus on treating persons about their depression, helping them to understand, express, and control their feelings more appropriately and to transform their negative thoughts, attitudes, behaviors, and relationships more positively. Psychotherapy can be conducted by a variety of professionals, including psychiatrists, psychologists, trained nurses, counselors, psychoanalysts, and social workers (Nemade, Reiss, & Dombeck, 2010).

**Interpersonal therapy** (IPT) has shown to be equally as effective as medication in the treatment of depression (Adams, Miller, & Zylstra, 2008). It is a manualized, time-limited psychotherapy specifically designed for the treatment of depression in adults. As originally developed, the therapy incorporates three phases over a 12-16 week period. Weekly sessions are structured and generally run one hour. Session goals involve alleviating the depressive symptoms and improving the individual’s social functioning. Focusing on social factors and current
interpersonal problems, IPT uses interpersonal relationships as the point of intervention (Ravitz, 2003). Yet it is not a behavior therapy like cognitive behavioral therapy (CBT). This therapy places emphases on understanding how personal relationships can lead someone to become depressed or make existing depressive symptoms worse by shifting blame from the patient onto the illness and to some extent, onto the patient’s interpersonal situation (Nemade, Reiss, & Dombeck, 2010b). Using a biopsychosocial model, IPT frames depression as a medical illness that occurs within a social context. The roles of genetics, biochemical developmental and personality factors in the cause and vulnerability of depression are also recognized (Ravitz, 2003). IPT has been found to be most useful for individuals who are in the midst of recent conflicts with significant others and/or have experienced problems adjusting to stressful life transitions.

In Phase 1 of IPT, the ‘formulation’ phase, the therapist diagnoses the depression and then determines the interpersonal context in which the depressive episode came about, usually through examination of the patient’s history for the following potential trouble areas: 1) grief over a recent death or loss; 2) role transition such as being promoted or demoted, getting married or divorced; 3) interpersonal disputes such as struggle with a significant other like a spouse or friend; and interpersonal deficits that promote social withdrawal and impairments in communication and social skills, e.g., say that the person never attend social functions for work. These deficits cannot be the result of life changes such as losing a job or buying a house, e.g. Phase 2, the middle phase, focuses on no more than two of the four interpersonal trouble areas. It should be noted that a particular set of strategies must be overcome for each of the trouble areas. The final or “termination” phase of IPT is like a graduation for the patient. Occurring during the last few therapy sessions, the focus is to reinforce an individual’s sense of independence and competence. IPT is not viable for patients that are either unwilling or unable to practice skills taught in therapy sessions ((Nemade, Reiss, & Dombeck, 2010b).

Another useful evidence-based therapy in the treatment of depression is cognitive behavioral therapy (CBT). The underlying premise of CBT in treating depression is that the disorder is the result of unhelpful dysfunctional thought processes and the maladaptive behaviors that are motivated by those processes. The cognitive component involves the identification of distorted patterns of thinking and forming judgments. Behaviorally, maladaptive behaviors are replaced with healthier ones. The idea behind CBT is that positive changes in thoughts and behaviors will lead to positive changes in mood. Typically offered in both inpatient and outpatient settings, as well as in both individual and group formats, CBT often runs 12-16 weeks in duration, with an appointment each week. However, therapy time frames can be tailored to fit the needs of the patient. It is an especially good fit for people who are verbal, goal-oriented, and desire symptom-focused, short-term strategies (Nemade, Reiss, & Dombeck, 2010a). Meta-analyses have shown CBT to be similar in effectiveness to antidepressant medication across all severities of depression. Research further supports the value of CBT in relapse prevention (Adams, Miller, & Zylstra, 2008). It has additionally been shown that, for patients with severe or very severe depression, CBT appears to be better tolerated than antidepressants and its benefits are longer lasting than antidepressant medications (Working Group, 2008).

As part of CBT, therapists teach their patients to identify, debate, and then correct their irrational ideas. This “disputing” process includes teaching the patients to orderly ask and answer a set of questions designed to uncover whether particular ideas have any basis. The following might be used as disputing questions:
Patients later learn to monitor their own thoughts and perform the disputing process on their own outside of therapy sessions; however, they must first have participated in multiple CBT training sessions. Another helpful strategy used by CBT therapists is to help patients learn how to break complex, seemingly insurmountable tasks into smaller, more manageable parts. As in IPT, CBT patients also are assigned homework throughout the course of their therapy. CBT is not a good fit for people that are put off by Socratic-style questioning; have difficulty thinking about their own thinking process; are interested in a less directive therapist; or are unwilling to monitor their thinking behavior, and feelings outside of therapy sessions (Nemade, Reiss, & Dombeck, 2010a).

Electroconvulsive Therapy

Another treatment that does not involve medication is electroconvulsive therapy (ECT). In our State, ECT or other convulsive therapies are treatments for depression that use electric shock or chemical agents to induce mild seizures. Thus, ECT is also known as shock therapy. This means that persons covered by these guidelines, i.e., individuals 18 years of age and older, must make an informed mental health treatment decision regarding the its use or use of other types of convulsive therapies (TDMHDD, 2001). The procedure itself takes about 10-15 minutes, though an additional 30-45 minutes is required for preparation and recovery. It can be performed in the hospital or as an outpatient procedure. The majority of patients that undergo ECT receive 6 to 12 treatments over the course of several weeks. Patients generally have to be treated two to three times a week until symptom improvement is noted. Maintenance treatments are recommended as well (Nemade, Reiss, & Dombeck, 2010c).

Treatment effects associated with ECT are not long lasting. Moreover, cognitive impairment shows up as one of the side effects. However, when no other treatments have worked in patients that are morbidly depressed and are refractory to other treatments, ECT may dramatically improve their symptoms (Adams, Miller, & Zylstra, 2008). This treatment has also proven helpful for people that require nonpharmaceutical treatment of depression such as pregnant women and nursing mothers that have depression (Nemade, Reiss, & Dombeck, 2010c).

Pharmacological Treatments

Most individuals having symptoms of major depression will likely be under the care of a primary care physician rather than a behavioral health professional. They will often seek treatment for physical symptoms such as joint pain, muscle aches, chest pain, back pain, fatigue, exhaustion, digestive problems, or sleeping problems instead of emotional symptoms (Trivedi, 2004). Nevertheless, initial pharmacological treatment should involve antidepressants. The issue becomes which antidepressant for which patient (ACP, 2006; Adams, Miller, & Zylstra, 2008). Second-generation antidepressants are the first-line recommendation because of their safety and tolerability (Adams, Miler, & Zylstra, 2008). Cost, patient preferences, and adverse effect profiles should additionally be factors in antidepressant selection (ACP, 2006). Table 1 below can assist clinicians in identifying the best antidepressant treatment for their patients.
Table 1: Costs and Dosages of Selected Antidepressants

<table>
<thead>
<tr>
<th>Medication</th>
<th>Typical dosage range per day</th>
<th>Cost*</th>
<th>Lower dose in renal/liver diseases</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Selected SSRIs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citalopram (Celexa)</td>
<td>20 to 60 mg</td>
<td>$9 to 78† (20 mg, #30)</td>
<td>No/yes</td>
</tr>
<tr>
<td>Escitalopram (Lexapro)</td>
<td>10 to 20 mg</td>
<td>81 (10 mg, #30)</td>
<td>No/yes</td>
</tr>
<tr>
<td>Fluoxetine (Prozac)</td>
<td>20 to 80 mg</td>
<td>9 to 80† (20 mg, #30)</td>
<td>No/yes</td>
</tr>
<tr>
<td>Paroxetine (Paxil, Paxil CR)</td>
<td>20 to 50 mg (25 to 62.5 mg [CR])</td>
<td>50 to 82† (20 mg, #30), 104 (25 mg [CR], #30)</td>
<td>Yes/yes</td>
</tr>
<tr>
<td>Sertraline (Zoloft)</td>
<td>50 to 200 mg</td>
<td>13 to 86† (50 mg, #30)</td>
<td>No/yes</td>
</tr>
<tr>
<td><strong>SNRIs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duloxetine (Cymbalta)</td>
<td>30 to 90 mg</td>
<td>121 (30 mg, #30)</td>
<td>Yes/avoid</td>
</tr>
<tr>
<td>Venlafaxine, extended release (Effexor XR)</td>
<td>37.5 to 225 mg</td>
<td>110 (75 mg, #30)</td>
<td>Yes/yes</td>
</tr>
<tr>
<td><strong>Other second-generation antidepressants</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bupropion SR (Wellbutrin SR)</td>
<td>100 to 200 mg, twice daily</td>
<td>94 to 120† (150 mg, #60)</td>
<td>Yes/yes</td>
</tr>
<tr>
<td>Bupropion XL (Wellbutrin XL)</td>
<td>150 to 450 mg</td>
<td>164† (300 mg, #30)</td>
<td>Yes/yes</td>
</tr>
<tr>
<td>Mirtazapine (Remeron)</td>
<td>15 to 45 mg</td>
<td>78 to 81† (15 mg, #30)</td>
<td>Yes/yes</td>
</tr>
<tr>
<td>Nefazodone (Serzone, brand no longer available in the United States)</td>
<td>100 to 300 mg, twice daily</td>
<td>92† (100 mg, #60)</td>
<td>No/‡</td>
</tr>
<tr>
<td>Trazodone (Desyrel, brand no longer available in the United States)</td>
<td>150 to 600 mg</td>
<td>44 to 85† (150 mg, #30)</td>
<td>No/yes</td>
</tr>
<tr>
<td><strong>Selected TCAs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amitriptyline (Elavil, brand no longer available in the United States)</td>
<td>25 to 300 mg</td>
<td>1 to 19† (50 mg, #30)</td>
<td>No/yes</td>
</tr>
<tr>
<td>Imipramine (Tofranil)</td>
<td>25 to 200 mg</td>
<td>2 to 37† (50 mg§, #30)</td>
<td>No/yes</td>
</tr>
<tr>
<td>Nortriptyline (Pamelor)</td>
<td>25 to 150 mg</td>
<td>24† (25 mg, #30)</td>
<td>Yes/yes</td>
</tr>
</tbody>
</table>

SSRIs = selective serotonin reuptake inhibitors; SNRIs = serotonin norepinephrine reuptake inhibitors; TCAs = tricyclic antidepressants.
*— Estimated cost to the pharmacist based on average wholesale prices (rounded to the nearest dollar) in Red Book. Montvale, N.J.: Medical Economics Data, 2007. Cost to the patient will be higher, depending on prescription filling fee.
†— Denotes generic.
‡— Contraindicated if history of nefazodone-induced liver disease. Precaution in active liver disease. Black box warning for hepatotoxicity.
§— The brand name of this medication is no longer available in 50-mg tablets.
Antidepressant medications are often equally effective between and within classes of medications, but selective serotonin reuptake inhibitors (SSRIs) are generally used as first-line agents due to less anticipated side effects and the enhanced safety and tolerability of side effects. In fact, there are more similarities than differences among the SSRIs. Each has slightly different pharmacological and pharmacokinetic characteristics, though all SSRIs have the same mechanism of action. The differences in pharmacological and pharmacokinetic characteristics lead to differences in clinical activity, side effects, half lives, and drug interactions among the SSRIs. The SSRIs further have very different molecular structures (eMedExpert, 2009).

Serotonin norepinephrine reuptake inhibitors (SNRIs) and atypical agents are usually second line. These newer antidepressants appear to have particularly robust effects on both the serotonin and norepinephrine systems. SNRIs, also known as dual-action antidepressants, show great promise in the treatment of the more severe and chronic cases of depression (Dryden-Edwards & Lee, 2009). Several reports have shown that these agents tend to be associated with higher rates of remission (Trivedi, 2004). Atypical antidepressants, on the other hand, are not SSRIs, SNRIs, or tricyclics (TCAs). They increase the level of certain neurochemicals in the brain synapses and have been shown to treat depression for many people. Unfortunately, TCAs have more side effects and tend to be less safe in overdoses (ACP, 2006). Monoamine oxidase inhibitors (MAOIs) were the earliest developed antidepressants. However, they tend to cause serious drug and food interactions that lead to dangerous high blood pressure levels, for example. Therefore, MAOIs are usually only prescribed for atypical and treatment resistant forms of depression (ACP, 2006). A patient that uses an SSRI or SNRI instead of a TCA is twice as likely to complete 90 days of treatment (Adams, Miller, & Zylstra, 2008).

Ultimately the choice of antidepressants must be based on a history of prior response to a medication as well as the presence of comorbid psychiatric and general medical conditions. Medication choices should be reevaluated if there is no improvement in 4 – 8 weeks (ACP, 2006).

**Changes in Treatment**

Responding to treatment has been quantified as a 50 percent reduction in depressive symptoms as measured by an appropriate measurement tool (ACP, 2006). There will be cases where patients exhibit poor response rates. In those situations, it may be necessary to change to a medication within the same class or to one in a different class. Augmenting treatment with a second drug may be the more appropriate choice, especially when symptoms appear to linger though the patient has begun to feel better on the current medication (Adams, Miller, & Zylstra, 2008). Table 2 below shows selected medications that might be considered for treatment augmentation.
<table>
<thead>
<tr>
<th>Medication</th>
<th>Typical dosage range per day</th>
<th>Cost*</th>
<th>Lower dose in renal/liver disease</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antidepressants</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bupropion SR (Wellbutrin SR)</td>
<td>100 to 200 mg, twice daily</td>
<td>$94 to 120† (150 mg, #60)</td>
<td>Yes/yes</td>
</tr>
<tr>
<td>Trazodone (Desyrel, brand no longer available in the United States)</td>
<td>50 to 600 mg</td>
<td>44 to 85† (150 mg, #30)</td>
<td>No/yes</td>
</tr>
<tr>
<td><strong>Atypical antipsychotics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aripiprazole (Abilify)</td>
<td>10 to 30 mg</td>
<td>393 (10 mg, #30)</td>
<td>No/no</td>
</tr>
<tr>
<td>Olanzapine/fluoxetine (Symbyax)</td>
<td>6 mg/25 mg</td>
<td>295 (6 mg/25 mg, #30)</td>
<td>No/yes</td>
</tr>
<tr>
<td>Olanzapine (Zyprexa)</td>
<td>5 to 20 mg</td>
<td>246 (5 mg, #30)</td>
<td>No/no</td>
</tr>
<tr>
<td>Quetiapine (Seroquel)</td>
<td>50 to 800 mg</td>
<td>107 (50 mg, #30)</td>
<td>No/yes</td>
</tr>
<tr>
<td>Risperidone (Risperdal)</td>
<td>0.25 to 6 mg</td>
<td>120 (0.5 mg, #30)</td>
<td>Yes/yes</td>
</tr>
<tr>
<td>Ziprasidone (Geodon)</td>
<td>20 to 80 mg twice daily</td>
<td>331 (20 mg, #60)</td>
<td>No/yes</td>
</tr>
<tr>
<td><strong>Other agents</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buspirone (Buspar)</td>
<td>5 to 30 mg three times daily</td>
<td>27 to 76† (5 mg, #90)</td>
<td>Yes/yes</td>
</tr>
<tr>
<td>Lamotrigine (Lamictal)</td>
<td>25 to 300 mg</td>
<td>192† (25 mg, #60)</td>
<td>Yes/yes</td>
</tr>
<tr>
<td>Levothyroxine</td>
<td>50 to 100 mcg</td>
<td>9 to 10† (50 mcg, #30)</td>
<td>No/no</td>
</tr>
<tr>
<td>Liothyronine (Cytomel)</td>
<td>25 to 50 mcg</td>
<td>29 (25 mcg, #30)</td>
<td>No/no</td>
</tr>
<tr>
<td>Lithium</td>
<td>600 to 900 mg per day divided</td>
<td>16 to 19† (300 mg, #90)</td>
<td>Yes/no</td>
</tr>
</tbody>
</table>

Note: Augmentation therapy or antidepressants used in combination are not approved by the U.S. Food and Drug Administration as treatment strategies.

*— Estimated cost to the pharmacist based on average wholesale prices (rounded to the nearest dollar) in Red Book. Montvale, N.J.: Medical Economics Data, 2007. Cost to the patient will be higher, depending on prescription filling fee.

†— Denotes generic.


If one medication does not work, optimism should continue to prevail. The Sequenced Treatment Alternatives to Relievert Depression (STAR*D) study, funded by NIMH, found that persons with treatment-resistant depression have improved chances of getting better if a change is made to a new medication or a second medication is added to the treatment regimen (NIMH, 2008).
Every reasonable effort should be made to involve a psychiatrist in the treatment of depression. At the very least, a psychiatrist should be consulted when not directly assigned to the case. In any case, patients should always be referred to a psychiatrist when:

- There is a suicide plan.
- Complex couple or family problems exist.
- There is a family history of bipolar disorder and symptoms suggesting mania are present or a history of diagnosed or possible bipolar affective disorder.
- A complex comorbid mental condition such as posttraumatic stress disorder or psychotic disorder and substance abuse are present, in conjunction with the depression.
- Primary psychotic disorder is suspected or psychotic symptoms are present.
- Difficult-to-control side effects occur.
- Therapy with medications you’re familiar with fails.
- Therapy with different drug agents fails (ACP, 2006).

Finding the right drug for the right patient is not always a simple affair. Patients may become impatient and resistant if they don’t see and/or feel positive changes in their mood and they way they feel quickly. Thus, finding the right drug for the right patient at the right dosage may take more time than the patient wants to give. At a minimum, clinicians should institute the following treatment plan for their patients:

- Assess adverse effects of drug therapy, patient status, and therapeutic response regularly, starting within the first or second week of therapy.
- Allow six to eight weeks for the patient to response adequately to initial drug therapy before modifying treatment.
- For patients with a satisfactory response after a first episode of MDD, continue treatment for four to nine additional months.
- For patients that have experienced at least two episodes of depression, a longer duration of drug therapy should be considered (Qaseem et al., 2008).

There is further evidence that follow-up after remission carries positive benefits. Fewer depressive symptoms and fewer relapses were outcomes for primary care patients with complete symptom resolution due to an antidepressant when they also received two additional physician visits and three phone calls in a one-year period (ACP, 2006).

Getting patients to adhere to treatment is not always easy. Among the risk factors for failing to adhere to depression treatment are addiction; coexisting medical illness; coexisting psychiatric illness; cognitive impairment; family history of treatment failure; genetic polymorphisms in serotonin transporter proteins; history of physical or sexual abuse; inadequate medication dose; inadequate treatment duration; incorrect diagnosis; severity of depression; and treatment nonadherence (ACP, 2006).

Many patients that choose pharmacotherapy assume that the medications will work to put them back on track right away. However, it usually takes time to get the depression medication right. That is why patients should receive counseling in the form of patient education, along with antidepressant medications, to help them remain compliant over the necessary treatment period. Patient education is most effective when conducted during the first month of treatment. The following information should be discussed with patients during patient education sessions:

- Taking the medication everyday and why it is important to do so.
- Anticipating a two- to four-week wait before starting to feel better.
• Continuing to take the medication even if they have not started to feel better within the expected time period.
• Checking with medical staff prior to stoppage of medication.
• Being aware of potential symptoms and/or triggers that might lead the patient to want to stop his/her medication.
• Knowing the potential side effects of the medication (ACP, 2006).

Antidepressant Warnings

The Food and Drug Administration (FDA) required a “black box” label, the most serious type of warning, on all antidepressant medications for children and adolescents in 2005. However, the warning was extended to include young adults up through age 24 in 2007. This warning further indicates monitoring of patients of all ages that are taking antidepressants, especially during the early weeks of treatment. Possible side effects include suicidal thinking or behavior, unusual changes in behavior such as agitation or withdrawal from normal situations, or depression that gets worse.

Another serious warning involving antidepressant medications deals with a life-threatening illness called “serotonin syndrome.” Individuals experiencing symptoms of this illness are typically taking a newer SSRI or SNRI antidepressant in conjunction with a commonly used triptan medication. Triptans are typically used to treat migraine headaches and include sumatriptan, naratriptan, zolmitriptan, rizatriptan, eletriptan, and almotriptan. Persons exhibiting serotonin syndrome may start to see or hear things that are not real, have unusual blood pressure changes, become agitated, or have a high temperature. Serotonin syndrome can also show up in patients on first-generation MAOIs for depression. Problems with the newer antidepressants are a function of combining them with triptans (American Headache Society, 2007; NIMH, 2008).
A range of moods are evident in bipolar disorder—a disease sometimes referred to as manic-depressive disorder (Mayo Clinic Staff, 2010). There are two primary types of bipolar disorder. Bipolar I has a clinical course of at least one manic episode; sometimes major depressive episodes are evident. Bipolar II disorder is a kind of bipolar disorder that is characterized by episodes of major depression and hypomania rather than mania. Mixed episodes are also possible. They involve both manic and depressive episodes that occur nearly everyday for at least a week (Sadock & Sadock, 2007). Bipolar disorder is linked to significant mortality and morbidity. Though mania is a symptom of bipolar disorder, most patients spend 33 percent of their adult lives in the depressive phase, three to five times longer than the time they spend in the manic phase. Bipolar disorder also results in severe social and familial problems (Kang, Kim, An, Joo, & Kim, 2009). People with bipolar disorder are five times as likely to be arrested, jailed, or convicted of a crime and more than twice as likely to have work-related problems (Pomerantz, 2004). Moreover, their negative behaviors, like becoming physically or verbally abusive, make it extremely difficult for even the most loving family member or caregiver to be objective and remain sympathetic (Simon, 2005).

Nearly three (3) percent of the U.S. adult population suffers from bipolar disorder. The typical age of onset is 25 years of age (NIMH, 2010). The lifetime prevalence of bipolar I disorder is slightly better than two percent while upper range for bipolar II disorder is close to five percent (Sadock & Sadock, 2007.) Over a lifetime, a typical patient with bipolar disorder averages eight to ten manic or depressive episodes. Further, around 15% of these patients go through a complicated phase known as rapid cycling. At minimum, patients alternate through the manic and depressive episodes four times yearly, though severe cases can experience several cycles daily. The rapid cycling phase is more common in women and in individuals with bipolar II disorder (Simon, 2005).

**DSM-IV-TR Criteria**

**Bipolar Disorder**

Prior to diagnosis of a specific mood disorder, criteria must be met for a mood episode. The mood episode may be a major depressive episode and/or a manic episode. Criteria for major depression were presented in the previous section on depressive disorders. Only criteria for a manic episode will be discussed here.

**Manic Episode**

- There is a distinct period of abnormally and persistently elevated, expansive, or irritable mood that lasts at least one week
- At least three of the following symptoms persist and have been present to a significant degree during the mood disturbance period
  - Inflated self-esteem/grandiosity
  - Decreased need for sleep
  - More loquacious than usual or pressure to keep talking
  - Flighty ideas or subjective experience that thoughts are racing
  - Distractibility
- Increase in goal-directed activity or psychomotor agitation
- Excessive involvement in pleasurable activities that have a high potential for painful consequences
- Symptoms do not meet criteria for mixed episode
- Mood disturbance is sufficiently severe to cause marked impairment in occupational functioning, usual social activities or relationships with others or to necessitate hospitalization to prevent harm to self or others or there are psychotic features.
- Symptoms not due to direct physiological effect of substance or general medical condition

Early onset should be specified if first occurrence is prior to age 18 and first occurrence before age 13 should be designated very early onset. Manic, mixed or hypomania episodes lend themselves to a diagnosis of Bipolar disorder. The manic episode should not be better accounted for as Schizoaffective Disorder and should not be superimposed on Schizophrenia, Schizophreniform Disorder, Delusional Disorder or Psychotic Disorder Not Otherwise Specified. Manic-like episodes clearly caused by somatic antidepressant treatment, e.g., medication, should not count toward diagnosis of Bipolar I Disorder (APA, 2000). Among the symptoms of bipolar disorder include disrobing in public places, strange combinations of clothing and jewelry that are worn, inattention to small details like forgetting to hang up the telephone, and pathological gambling (Sadock & Sadock, 2007).

**Relationship between Bipolar Disorder and Other Behavioral Health Concerns**

- Having bipolar disorder makes it 20 times more likely that an individual will commit suicide than for the general population.
- Seven in 10 of the suicides occur during the depressive phase of the disorder (Kang et al., 2009).
- Bipolar disorder is linked to the highest suicide rate of all the major psychiatric disorders (Pomerantz, 2004).
- As many as 60% abuse other substances, most commonly alcohol, followed by cocaine or marijuana during the course of their illness (Simon, 2005).
- Bipolar patients tend to more frequently show comorbidity for anxiety and substance use disorders than do patients with depressive disorders. The comorbidity with these mental disorders worsens the prognosis of the bipolar disorder and substantially increases the risk of suicide among such patients.
- Bipolar disorder II patients are at greater risk of attempting and completing suicide than patients diagnosed as bipolar I.
- Men tend to present more often with comorbid substance use disorders and females more frequently present with comorbid eating and/or anxiety disorders (Sadock & Sadock, 2007).
- Some research says that bipolar often shows up in the same family as schizophrenia. It seems that genetic abnormalities for both illnesses are visible on the same chromosomes (Simon, 2005).
Relationship between Bipolar Disorder and Physical Health

- Migraine headaches are particularly common in individuals with bipolar disorder, as nearly three fourths are diagnosed with bipolar II.
- Diabetes tends to be diagnosed about three times as frequently in individuals with bipolar disorder, compared to the general population.
- It is possible that hypothyroidism will be a risk factor for bipolar disorder in some patients (Simon, 2005).
- An inability to stay asleep or to sleep is a common problem for persons with bipolar disorder.
- Persons with bipolar disorder often have a loss of appetite that causes weight loss, sometimes to dangerously low levels.
- Sex drives tend to be lowered or nonexistence in persons that have bipolar disorder (Warner, 2010).

Relationship between Bipolar Disorder and Aging

Bipolar disorder is a significant public health problem among the elderly. It may lead to substantial use of health care resources as well as functional impairment. Bipolar disorder accounts for 5% to 19% of the mood disorders in older persons (Sajatovic, 2002). There is some evidence to suggest that later onset of the illness is associated with lower family history of affective disorder (Depp & Jeste, 2004).

Differential Diagnosis

<table>
<thead>
<tr>
<th>Major Depression/Dysthymic Disorder</th>
<th>Medical Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjustment Disorder</td>
<td>Medications</td>
</tr>
<tr>
<td>Anorexia Nervosa</td>
<td>Substance Use Disorders</td>
</tr>
<tr>
<td>Disruptive Disorder</td>
<td>Personality Disorders</td>
</tr>
<tr>
<td>Post-traumatic Stress Disorder</td>
<td>Chronic Fatigue Syndrome</td>
</tr>
<tr>
<td>Separation Anxiety Disorder</td>
<td>Bereavement</td>
</tr>
<tr>
<td>Seasonal Affective Disorder</td>
<td>Premenstrual Dysphoric Disorder</td>
</tr>
</tbody>
</table>

(APA, 2000, Sadock & Sadock, 2007)

Screening and Assessment

Bipolar is a recurring disease that is often unpredictable (NIMH, 2008; NY Times Health Guide, 2009). Thus, it is critical that persons with the disease be appropriately identified. Misdiagnosis can be costly. For example, failing to correctly diagnose bipolar disorder can prevent receipt of the right medications to treat the illness, as well as result in the prescribing of antidepressants instead of mood stabilizers—a situation that can destabilize the bipolar disorder and precipitate a manic episode (Hirschfeld, Cass, Holt, & Carlson, 2005). It is believed that many patients that fail to achieve full remission of depressive symptoms actually have bipolar disorder versus depression (Hirschfeld, 2002).
Risk factors associated with bipolar disorder include the following:

- Experiencing high periods of stress;
- Abusing alcohol or other drugs;
- Being between the ages of 15 and 30 years old;
- Having blood relatives such as parents or siblings with the disorder; and
- Going through major life changes, such as the death of a loved one (Mayo Clinic Staff, 2010).

However, screening and/or assessment can improve health outcomes if properly conducted. Workups for bipolar disorder focus a lot on ruling out other conditions that may interfere with accurate diagnosis. Among the workups include physical examinations that check vital signs and examine the abdomen, as well as lab tests involving urine and/or blood tests (Mayo Clinic Staff, 2010).

Much research indicates that bipolar disorder frequently shows up in patients being treated with antidepressants, many times in primary care settings. It is also evident that many patients with bipolar disorder are more likely to seek treatment for the depressive versus manic states (Hirschfeld et al., 2005).

**Screening Procedures and Tools**

Bipolar is an extremely complex and difficult disorder to diagnose. Its dual nature, sometimes manic and sometimes depressive, creates this complication. In the manic state, individuals are “high on life” and seldom seek treatment. It is typically when they fall into the depressive episode that they seek out treatment and often the depressive symptoms are the only signs communicated to the clinician. Presentation of this limited picture most commonly results in an incorrect diagnosis of depression instead of bipolar disorder. Moreover, bipolar shares many of the signs and symptoms associated with other psychiatric disorders such as schizophrenia and anxiety.

In diagnosing bipolar disorder, the clinician should start with a complete psychiatric history that details not only the current and past symptoms, but also the diagnosis or symptoms of immediate family members and relatives. This recommendation is based on the fact that bipolar has a strong genetic component. Further, a complete physical exam and medical history should be conducted in an effort to rule out any physical conditions that could be contributing to or mimicking the symptoms of the bipolar disorder. Diabetes, epilepsy, lupus, AIDS, multiple sclerosis, a brain tumor or head injury, salt imbalance, or a thyroid disorder can produce symptoms that look like bipolar disorder.

Because there are no laboratory tests to detect bipolar disorder, using the Mood Disorder Questionnaire (MDQ) is often a recommended starting point. The MDQ is a checklist-type tool that can help clinicians identify bipolar-related symptoms (Croft, 2009). A brief description of the MDQ and a more thorough evaluation tool, the Brief Bipolar Disorder Symptom Scale (BDSS), follow.

**Mood Disorder Questionnaire (MDQ)**
The Mood Disorder Questionnaire (MDQ) was developed by Robert Hirschfeld, M.D., and his colleagues in the Department of Psychiatry at the University of Texas Medical Branch at Galveston as a self-report screening inventory for bipolar I and II disorder. It has been validated in psychiatric outpatient settings as well as in the general population, and is the most widely
used and studied screening scale for bipolar disorder (Zimmerman et al., 2010). The MDQ contains 13 items in Question 1 to which individuals respond “yes” or “no.” The questions ask about self confidence, mood, sociability, interest in sex, energy, and other behaviors. Additionally, there is a question (Question 2) that helps identify the co-occurrence of symptoms during the same period of time. Question 3 on the MDQ taps the severity of functional impairment caused by the symptoms and is measured on a four-point scale from “no problem” to “serious problem.” A response of “Yes” to at least 7 of the 13 symptom items (Question 1) and the co-occurrence of two or more symptoms item (Question 2) plus a moderate to severe score on Question 3 are indicative of a positive screen. Two additional questions that focus on the genetic and prior history risk factors are included on the screener and usually asked when administered to patients. Positive screens cannot be used to make a diagnosis of bipolar disorder, however. A more thorough evaluation should be conducted when an MDQ screen is positive (Hirschfeld, 2005).

Recent work by Mark Zimmerman and his colleagues (2010) at the Rhode Island Hospital has begun to call into question the clinical utility of the MDQ as a valid screening tool for bipolar disorder. That research supports the high false-positive rates on the MDQ and shows that as many of the false positives will be diagnosed with borderline personality disorder as with bipolar disorder. At this time, however, there still exists solid evidence in support of the MDQ as an appropriate screening instrument for patients with bipolar disorder. Hirschfeld (2006) has repeatedly cautioned clinicians about the limitations of the MDQ, particularly warning that positive screens on the MDQ do not automatically translate into a bipolar disorder diagnosis. The MDQ was designed as a screener for individuals that clinicians would consider prescribing antidepressants for depression—an action that could be detrimental in the long run because their problem is bipolar disorder and not major depression. Hirschfeld (2006) promoted additional evaluation of individuals that receive positive screens. A copy of the MDQ is contained within this subsection of the guidelines thanks to permission from its author.

**Brief Bipolar Disorder Symptom Scale (BDSS)**

A more effective barometer in the assessment and diagnosis of bipolar disorder can be accomplished with the Brief Bipolar Disorder Symptom Scale (BDSS). The BDSS was developed for clinical use in settings where systematic evaluation was desired yet constrained by brief visits. Its psychometric properties were evaluated as part of the Texas Medication Algorithm Project (TMAP). The BDSS is a 10-item measure of symptom severity that was derived from the longer 24-item Brief Psychiatric Rating Scale (BPRS). The scale as well as other associated tools, including scoring and strategies, are copyrighted by and incorporated within these guidelines with the express permission of the Texas State Department of Health Services.
THE MOOD DISORDER QUESTIONNAIRE

Instructions: Please answer each question to the best of your ability.

1. Has there ever been a period of time when you were not your usual self and...
   ...you felt so good or so hyper that other people thought you were not your normal self or you were so hyper that you got into trouble?  ○  ○
   ...you were so irritable that you shouted at people or started fights or arguments? ○  ○
   ...you felt much more self-confident than usual? ○  ○
   ...you got much less sleep than usual and found you didn't really miss it? ○  ○
   ...you were much more talkative or spoke much faster than usual? ○  ○
   ...thoughts raced through your head or you couldn't slow your mind down? ○  ○
   ...you were so easily distracted by things around you that you had trouble concentrating or staying on track? ○  ○
   ...you had much more energy than usual? ○  ○
   ...you were much more active or did many more things than usual? ○  ○
   ...you were much more social or outgoing than usual, for example, you telephoned friends in the middle of the night? ○  ○
   ...you were much more interested in sex than usual? ○  ○
   ...you did things that were unusual for you or that other people might have thought were excessive, foolish, or risky? ○  ○
   ...spending money got you or your family into trouble? ○  ○

2. If you checked YES to more than one of the above, have several of these ever happened during the same period of time? ○  ○

3. How much of a problem did any of these cause you - like being unable to work; having family, money or legal troubles; getting into arguments or fights?  Please circle one response only:
   No Problem  Minor Problem  Moderate Problem  Serious Problem

4. Have any of your blood relatives (i.e. children, siblings, parents, grandparents, aunts, uncles) had manic-depressive illness or bipolar disorder? ○  ○

5. Has a health professional ever told you that you have manic-depressive illness or bipolar disorder? ○  ○

© 2003 by The University of Texas Medical Branch. Reproduced with permission. This instrument is designed for screening purposes only and is not to be used as a diagnostic tool.
SCORING THE MOOD DISORDER QUESTIONNAIRE (MDQ)

The MDQ was developed by a team of psychiatrists, researchers and consumer advocates to address a critical need for timely and accurate diagnosis of bipolar disorder, which can be fatal if left untreated. The questionnaire takes about five minutes to complete, and can provide important insights into diagnosis and treatment. Clinical trials have indicated that the MDQ has a high rate of accuracy; it is able to identify seven out of ten people who have bipolar disorder and screen out nine out of ten people who do not.¹

A recent National DMDA survey revealed that nearly 70% of people with bipolar disorder had received at least one misdiagnosis and many had waited more than 10 years from the onset of their symptoms before receiving a correct diagnosis. National DMDA hopes that the MDQ will shorten this delay and help more people to get the treatment they need, when they need it.

The MDQ screens for Bipolar Spectrum Disorder, (which includes Bipolar I, Bipolar II and Bipolar NOS).

If the patient answers:

1. “Yes” to seven or more of the 13 items in question number 1; AND

2. “Yes” to question number 2; AND

3. “Moderate” or “Serious” to question number 3;

you have a positive screen. All three of the criteria above should be met. A positive screen should be followed by a comprehensive medical evaluation for Bipolar Spectrum Disorder.

ACKNOWLEDGEMENT: This instrument was developed by a committee composed of the following individuals. Chairman, Robert M.A. Hirschfeld, MD – University of Texas Medical Branch; Joseph R. Calabrese, MD – Case Western Reserve School of Medicine; Laurie Flynn – National Alliance for the Mentally Ill; Paul E. Keck, Jr, MD – University of Cincinnati College of Medicine; Lydia Lewis – National Depressive and Manic-Depressive Association; Robert M. Post, MD – National Institute of Mental Health; Gary S. Sachs, MD – Harvard University School of Medicine; Robert L. Spitzer, MD – Columbia University; Janet Williams, DSW – Columbia University and John M. Zajecka, MD – Rush Presbyterian-St. Luke’s Medical Center.


*Permission to include the MDQ and scoring instructions in these guidelines, as shown at http://www.dbsalliance.org/pdfs/MDQ.pdf, was obtained from Dr. Robert Hirschfeld, Primary author.
**Brief Bipolar Disorder Symptom Scale (BDSS)**

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

- How have you been getting along with people (family, co-workers, etc.)?
- Have you been irritable or grumpy lately? (How do you show it? Do you keep it to yourself?)
- Were you ever so irritable that you would shout at people or start fights or arguments? (Have you found yourself yelling at people you didn’t know?)
- Have you hit anyone recently?

**NA = Not assessed**

**1 = Not Present**

**2 = Very Mild**
Grumpy or irritable, but not overtly expressed.

**3 = Mild**
Sarcastic or argumentative.

**4 = Moderate**
Yelled at others excessively OR overtly angry on several occasions.

**5 = Moderately Severe**
Has threatened, slammed about or thrown things.

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

**7 = Extremely Severe**
Has attacked others with actual harm, e.g., assault with hammer or weapon, or with definite possibility of harming them.

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

- Have you felt so good or high that other people thought that you were not your normal self?
- Have you been feeling cheerful and “on top of the world” without any reason?
- [If patient reports elevated mood/euphoria, ask the following]:
  - Did it seem like more than just feeling good? How long did that last?

*Copyrighted by and permission to use obtained from the Texas Department of State Health Services.*
Brief Bipolar Disorder Symptom Scale (BDSS)

In the past 7 days...

NA = Not assessed

1 = Not Present

2 = Very Mild
Seems to be very cheerful or happy without much reason.

3 = Mild
Some unaccountable feelings of well-being that persist.

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

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

6 = Severe
Reports many instances of markedly elevated mood with euphoria OR mood definitely elevated almost constantly throughout interview and inappropriate to content.

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

3. GRANDIOSTY: Exaggerated self-opinion, self-enhancing conviction of special abilities or identity or powers as someone famous or rich. Rate only patient’s statements about himself/herself, not his/her demeanor. Note: If the subject rates a “6” or “7” due to grandiose delusions, you must rate UNUSUAL THOUGHT CONTENT at least a “4” or above.

- Is there anything special about you? Do you have any special abilities or powers? Have you thought that you might be somebody rich or famous?
  - [If the patient reports any grandiose ideas/delusions, ask the following]:
- How often have you been thinking about [use patient’s description]? Have you told anyone about what you have been thinking? Have you acted on any of these ideas?

NA = Not assessed
1 = Not Present

2 = Very Mild
Feels great and denies obvious problems, but not unrealistic.

3 = Mild
Exaggerated self-opinion beyond abilities and training.
Brief Bipolar Disorder Symptom Scale (BDSS)

**In the past 7 days...**

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

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

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

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

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

- How has your mood been recently? Have you felt depressed (sad, down, unhappy as if you didn’t care)?
- Are you able to switch your attention to more pleasant topics when you want to?
- Do you find that you have lost interest in or get less pleasure from things you used to enjoy, like family, friends, hobbies, watching TV, eating?
  
  **[If subject reports feelings of depression, ask the following]:**
- How long do these feelings last? Has it interfered with your ability to perform your usual activities/work?

**NA = Not assessed**

**1 = Not Present**

**2 = Very Mild**
Occasionally feels unhappy, sad, or depressed.

**3 = Mild**
Frequently feels unhappy or sad but can readily turn attention to other things.

**4 = Moderate**
Frequent periods of feeling unhappy, very sad, moderately depressed, but able to function with extra effort.
**Brief Bipolar Disorder Symptom Scale (BDSS)**

**In the past 7 days...**

**5 = Moderately Severe**
Frequent, but not daily, periods of deep depression OR some areas of functioning are disrupted by depression.

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

**7 = Extremely Severe**
Deeply depressed daily OR most areas of functioning are disrupted by depression.

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

- Have you been worried a lot during [mention time frame]? Have you been nervous or apprehensive? (What do you worry about?)
- Are you concerned about anything? How about finances or the future?
- When you are feeling nervous, do your palms sweat or does your heart beat fast (or shortness of breath, trembling, choking)?

  **[If patient reports anxiety or autonomic accompaniment, ask the following]:**
  - How much of the time have you been [use patient’s description]?
  - Has it interfered with your ability to perform your usual activities/work?

**NA = Not assessed**

**1 = Not Present**

**2 = Very Mild**
Reports some discomfort due to worry OR infrequent worries that occur more than usual for most normal individuals.

**3 = Mild**
Worried frequently but can readily turn attention to other things.

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

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

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

**7 = Extremely Severe**
Anxiety with autonomic accompaniment persisting throughout the day OR most areas of functioning are disrupted by constant worry or anxiety.
6. **UNUSUAL THOUGHT CONTENT**: Unusual, odd, strange or bizarre thought content. Rate the degree of unusualness, **not** the degree of disorganization of speech. Delusions are clearly false, patently absurd, or bizarre ideas that are expressed with full conviction. Consider the patient to have full conviction if he/she has acted as though the delusional belief were true. Ideas of reference/persecution can be differentiated from delusions in that ideas are expressed with much doubt and contain more elements of reality. Include thought insertion, broadcast, and withdrawal. Include grandiose, persecutory, and somatic delusions even if rated elsewhere. **Note**: If Somatic Concern, Suspiciousness, Guilt, or Grandiosity are rated “6” or “7” due to delusions, then **USUAL THOUGHT CONTENT must** be rated a “4” or above.

- Have you been receiving any special messages from people or from the way things are arranged around you? Have you seen any references to yourself on TV or in the newspapers?
- Can anyone read your mind?
- Do you have a special relationship with God?
- Is anything like X-rays, electricity, or radio waves affecting you?
- Are thoughts put into your head that are not your own?
- Have you felt that you were under the control of another person or force?

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

- How often do you think about ________ [use patient’s description]?
- Have you told anyone about these experiences? How do you explain the things that have been happening? [Specify.]

**NA = Not assessed**

1 = Not Present

2 = Very Mild

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

3 = Mild

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

4 = Moderate

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

5 = Moderately Severe

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

6 = Severe

Full delusion(s) present with much preoccupation OR many areas of functioning are disrupted by delusional thinking.
Brief Bipolar Disorder Symptom Scale (BDSS)

In the past 7 days...

7 = Extremely Severe
Full delusion(s) present with almost total preoccupation OR most areas of functioning are disrupted by delusional thinking.

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

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

NA = Not assessed

1 = Not Present

2 = Very Mild
Subtle and fleeting or questionable increase in emotional intensity, e.g., at times, seems keyed-up or overly alert.

3 = Mild
Subtle but persistent increase in emotional intensity, e.g., lively use of gestures and variation in voice tone.

4 = Moderate
Definite but occasional increase in emotional intensity, e.g., reacts to interviewer or topics that are discussed with noticeable emotional intensity. Some pressured speech.

5 = Moderately Severe
Persistent and definite increase in emotional intensity, e.g., reacts to many stimuli, whether relevant or not, with considerable emotional intensity. Frequent pressured speech.

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

7 = Extremely Severe
Persistent and marked increase in emotional intensity. Reacts to all stimuli with inappropriate intensity, impulsiveness. Cannot stay on task or settle down. Very restless and impulsive most of the time. Constant pressured speech.

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

NA = Not assessed

1 = Not Present

2 = Very Mild
Some restlessness, difficulty sitting still, lively facial expressions, or somewhat talkative.
**Brief Bipolar Disorder Symptom Scale (BDSS)**

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

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

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

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

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

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

**NA = Not assessed**

**1 = Not Present**

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

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

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

**5 = Moderately Severe**
Same as “4” but emotional contact not present most of the interview.
Brief Bipolar Disorder Symptom Scale (BDSS)

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

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

10. **BLUNTED AFFECT**: Restricted range in emotional expressiveness of voice, face, and gestures. Marked indifference or flatness even when discussing distressing topics. In the case of dysphoric or euphoric patients, rate **BLUNTED AFFECT** if a flat quality is also clearly present. Use the following probes at end of interview to assess emotional responsivity:

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

NA = **Not assessed**

1 = **Not Present**

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

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

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

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

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

7 = **Extremely Severe**  
Virtually no emotional range or expressiveness, stiff movements. Voice tone is monotonous all of the time.
In the past 7 days...

**Brief Bipolar Disorder Symptom Scale (BDSS)**

Sources of information (check all applicable):
- [ ] Patient
- [ ] Parents/Relatives
- [ ] Mental Health Professionals
- [ ] Chart

Confidence in assessment:
- [ ] 1 = Not at all - 5 = Very confident

Explain here if validity of assessment is questionable:
- [ ] Symptoms possibly drug-induced
- [ ] Underreported due to lack of rapport
- [ ] Underreported due to negative symptoms
- [ ] Patient uncooperative
- [ ] Difficult to assess due to formal thought disorder
- [ ] Other:


# Texas Medication Algorithm Project

## Brief Bipolar Disorder Symptom Scale

**Visit Date:**

**Overall Side Effect Severity (from Clinical Record Form):**

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

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

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

<table>
<thead>
<tr>
<th>Symptom Group</th>
<th>Symptoms</th>
<th>NA</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manic/Hypomanic</td>
<td>Hostility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elevated Mood</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grandiosity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Excitement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Motor Hyperactivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Depressive</td>
<td>Depressed Mood</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Anxiety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emotional Withdrawal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Blunted Affect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychotic</td>
<td>Unusual Thought Content</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Scale Total:***************

*Copyrighted by and permission to use obtained from the Texas Department of State Health Services.*
**Treatment**

Individuals who have bipolar disorder tend to be severely underrepresented in treatment contexts. Perhaps one of the best explanations for this underrepresentation is the fact that patients with bipolar disorder are not being properly diagnosed. In fact, some evidence exists that a bipolar diagnosis does not happen for eight years subsequent to the emergence of symptoms (Brickman, LoPiccolo, & Johnson, 2002).

Getting appropriate treatment for bipolar is extremely important because the disorder becomes more difficult to treat as it progresses. Unfortunately, many consumers do not even realize that they have the disorder. Some individuals with the disorder are ashamed to acknowledge that they have it. Still others have been incorrectly diagnosed with other illnesses such as depression. If appropriate treatment is administered, it is likely that the following risks can be alleviated:

- Alcohol and substance abuse;
- Becoming alienated from family and/or friends;
- Divorce;
- Suicide; and/or
- The inability to function at work or school (Croft, 2009).

Perhaps the first and most critical decision that the physician must make is whether to hospitalize the person exhibiting symptoms of bipolar disorder. The clearest indications of hospitalization are risk of homicide or suicide, a grossly diminished ability to get shelter or food, and need for diagnostic procedures. History of rapidly progressing symptoms and rupture of usual support systems are further signs of hospitalization.

Persons with mood disorders are typically unwilling to submit to hospitalization voluntarily, so commitment may have to be involuntary. This is particularly true for persons in the manic phase; hospitalization likely seems absurd to them because of their complete lack of insight (Sadock & Sadock, 2007).

**Nonpharmacological Treatments**

Psychotherapy

To date, there are no definitive studies of psychotherapies as monotherapy in bipolar disorder. As a result, psychological interventions are only recommended in conjunction with pharmacological therapy. Among the psychotherapies recommended as conjunctive therapies in bipolar disorder include cognitive behavioral therapy (CBT), interpersonal and social rhythm therapy (IPSRT), and family focused therapy (FFT). However, psychotherapy is not recommended during the acute phase of the disorder if the individual has psychotic features or severe psychomotor impairment (Malhi et al., 2009).

**CBT** is a structured and conscious therapy that focuses on helping patients not only recognize negative thoughts and behaviors, but to change them. A variety of large and small clinical trials have provided evidence of notable effects of adjunctive CBT on the course of bipolar disorder (Miklowitz & Otto, 2008). One useful technique of the therapy is helping the patient predict or recognize impending episodes. Here patients likely use a graph/diary to record
information about their energy level and physical activity as it affects their mental state. The ultimate goal is to identify patterns as well as triggers of the bipolar episodes (Simon, 2005). Mood charts can be utilized for this purpose.

Mood charts serve to assist both the patient and the clinician to better monitor the disorder (Croft, 2010). These tools bring together information about the patient’s daily mood, events happening in the patient’s life, as well as information regarding sleep patterns and medications that the patient is currently taking. Mood charts become a diary for the patient and offer the clinician more valid information about what has been going on with the patient. Often remembering events can be difficult for persons with bipolar disorder. A blank mood chart, an example of a completed mood chart, and instructions for completing a mood chart can be downloaded from http://www.healthyplace.com/bipolar-disorder/diagnosis/bipolar-mood-chart/menu-id-929/.

**Interpersonal and social rhythm therapy** (IPSRT) focuses on problems such as family disputes and other disruptions in the daily routines of the person having bipolar disorder and any impact they may have in making these individuals more susceptible to new episodes of their illness. Patients should maintain a regular schedule of their daily activities in an effort to reduce these potential triggers and hence improve their emotional stability. IPSRT additionally helps patients learn how to avoid problems with personal relationships (Simon, 2005). Derived from the interpersonal psychotherapy of depression, IPSRT is a present-focused, short-term individual therapy. Manic symptoms are viewed as being precipitated by the introduction of “time disturbers” such as a new baby or a job with variable hours, or the loss of important “time keepers" like the regular presence of a spouse (Miklowitz & Otto, 2008).

**FFT** or family focused therapy is essentially a hybrid of two forms of psychotherapy. It includes family therapy along with psychoeducation. The family therapy component is included because it builds on the fact that individuals and their illnesses are not independent entities—they are separate from the family systems that contain them. The psychoeducational part, on the other hand, is designed to teach patients and their families about the nature of the illness (Nemade & Dombeck, 2009). In fact, FFT is the most well-studied family intervention for bipolar disorder (Miklowitz & Otto, 2008).

In FFT, therapists work to identify difficulties and conflicts within the family that may be creating patient and family stress, which in turn can lead to assisting the involved family members in finding ways to resolve those difficulties and conflicts (Nemade & Dombeck, 2009). Activities for family members might include supporting the patient by using tough love and/or simply listening attentively or boosting their own energy levels through exercise, meditation, and/or other relaxation techniques, e.g.

Electroconvulsive Therapy

**Electroconvulsive therapy** (ECT) is highly recommended as a treatment option when there is an elevated risk of harm to the patient himself/herself, psychotic features are present, or there has been a previous positive response to ECT (Malhi et al., 2009). Research has shown ECT to be particularly beneficial for the patients that fit the following categories:

- Need immediate stabilization of their condition and cannot wait for medications to work
- Have mania and especially if they are elderly with severe mania
- Suffer suicidal thoughts and guilt during the depressive phase of the illness
• Are pregnant
• Have poor tolerability for drug treatments
• Have certain types of heart problems (Simon, 2005).

ECT is often performed on an outpatient basis and will not require hospitalization (Simon, 2005). In our State, there is a requirement that patients covered by these guidelines, i.e., individuals 18 years of age and older, make an informed mental health treatment decision regarding the use of ECT or other types of convulsive therapies (TDMHDD, 2001).

Pharmacological Treatments

Pharmacological treatments for bipolar disorders can be subdivided into acute and maintenance phases. Patients might also be experiencing hypomanic or manic episodes or depression. Some medications have approval from the FDA for the treatment of bipolar disorders. Each has its own unique side effects and safety profiles. Further, no one drug is predictably effective for all patients. Many times it may be necessary to try several different medications and/or dosages before an optimal treatment is reached (Sadock & Sadock, 2007).

Mood Stabilizers

The first choice treatment for bipolar disorder usually involves mood stabilizing medications. Most of these medications are anticonvulsants, except for lithium.

• Lithium (sometimes known as Lithobid or Eskalith) tends to be very effective in controlling symptoms of mania and further preventing the recurrence of depressive and manic episodes. It was the first mood-stabilizing medication approved by the FDA for the treatment of mania.
• Divalproex sodium or valproic acid (Depakote) has become a popular alternative to lithium in the treatment of bipolar disorder. It has proven as effective as lithium and also has FDA approval.
• Lamotrigine (Lamictal) recently received FDA approval for the maintenance treatment of bipolar.
• Other anticonvulsant medications such as topiramate (Topamax), oxcarbazepine (Trileptal), and gabapentin (Neurontin) are sometimes prescribed. However, these medications have not shown to be more effective than mood stabilizers in large studies (NIMH, 2008).

Atypical Antipsychotics

Most often, these medications are used in conjunction with other medications to treat symptoms of bipolar disorder.

• Olanzapine (Zyprexa) may help relieve symptoms of severe mania or psychosis when given with an antidepressant medication. This medication often quickly treats agitation associated with manic or mixed episodes in its injectable form. Olanzapine can also be use for maintenance treatment, even when psychotic symptoms are not present. Patients taking this medication should be carefully monitored because of the weight gain and other side effects that can increase the risk of heart disease and diabetes.
• Aripiprazole (Abilify), like Olanzapine, has FDA approval for treatment of manic or mixed episodes. It too can be used to maintain treatment after a sudden or severe episode. There is also an injectable form.
• Quetiapine (Seroquel) was the first atypical antipsychotic medication to also receive FDA approval for the treatment of bipolar depressive episodes. It relieves the symptoms of sudden and severe manic episodes.
• Ziprasidone (Geodon) and Risperidone (Risperdal) can be prescribed for treatment of manic or mixed episodes (NIMH, 2008).

Antidepressants

Most often, patients take antidepressant medications in conjunction with a mood stabilizer. This procedure is used to reduce the patient’s risk of switching to mania or hypomania, or developing symptoms of rapid cycling that may result from taking only an antidepressant. Fluoxetine (Prozac), sertraline (Zoloft), paroxetine (Paxil), and bupropion (Wellbutrin) are typically prescribed antidepressants in treating symptoms of bipolar depression. However, recent studies show no greater effectiveness for adding an antidepressant medication to a mood stabilizer than using only mood-stabilizing medication. In fact, lamotrigine is showing promise in controlling depressive symptoms of bipolar disorder (NIMH, 2008). Symbax, a combination of olanzapine, fluoxetine, and quetiapine, has also been specifically approved by the FDA in the treatment of bipolar disorder (NY Times Health Guide, 2009).

Algorithms

Two bipolar algorithms from the Texas Medication Algorithm Project (TMAP) are provided on subsequent pages. These algorithms came from a 2007 revision and only include medication and medication combination recommendations for persons diagnosed with Bipolar I disorder. There was insufficient evidence to construct evidence-based algorithms for individuals having Bipolar II disorder at the time of the revision. One algorithm focuses on patients in manic or hypomanic phases of the disorder. The other algorithm focuses on patients in the depressive phase of the disorder.

Also included is a chart of tactics or strategies and critical decision points. This chart can be used to assess severity of symptoms as well as the need to change strategies (Crismon, Argo, Bendele, & Suppes, 2007). The Tactics and Critical Decision Points chart might best be evaluated as part of treatment team meetings.
Maintenance Phases

**General Principles**

All treatment strategies for bipolar disorders should be used to achieve the following:

- **Maximize** engagement, social and/or occupational functioning, and psychoeducation/family support.
- **Monitor** clinical response to medications, adherence, side effects, mental state, and safety.
- **Manage** comorbidities, especially substance abuse.
- **Maintain** stable mental state.
- **Minimize** any subsyndromal depressive symptoms if present.
- **Modify** any psychosocial stressors (Malhi et al., 2009).
Bipolar Disorder Algorithms

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

**Stage 1**

*Monotherapy*

- **Euphoric**
  - Li, VPA, ARP, QTP, RIS, ZIP
  - 1b, OLZ or CBZ

- **Mixed**
  - VPA, ARP, RIS, ZIP

Nonresponse: Try alternate monotherapy

Full Response → CONT
Partial Response → CONT

**Stage 2**

*Two-Drug Combination*

- Li, VPA, AAP
  - Choose 2 (not 2 AAP’s, not ARP or CLOZ)

Full Response → CONT
Partial Response or Nonresponse

**Stage 3**

*Two-Drug Combination*

- Li, VPA, AAPs, CBZ, OXC, TAP
  - Choose 2 (Not 2 AAPs, not CLOZ)

Full Response → CONT
Partial Response or Nonresponse

**Stage 4**

- ECT or Add CLOZ or LI + (VPA, CBZ or OXC) + AAP

CONT = continue treatment
AAP = atypical antipsychotic
ARP = aripiprazole
CBZ = carbamazepine
CLOZ = clozapine
ECT = electroconvulsive therapy
Li = lithium
OLZ = olanzapine
OXC = oxcarbazepine
RIS = risperidone
QTP = quetiapine
TAP = typical antipsychotic
VPA = valproate
ZIP = ziprasidone

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

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

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

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

*Copyrighted by and permission to use obtained from the Texas Department of State Health Services.*
Bipolar Disorder Algorithms

Algorithm for the Treatment of Bipolar Disorder – Currently Depressed

On Li | On other antimanic | On no antimanic, with history of severe and/or recent mania | On no antimanic, without history of severe and/or recent mania

On Li ↓ | On other antimanic ↓ (Continue) ↓
Increase to ≥ 0.8mEq/L

Stage 1

Antimanic + LTG

Full Response
Partial Response or Nonresponse
CONT

Stage 2

QTP* or OFC*

Full Response
Partial Response or Nonresponse
CONT

Stage 3

Combination from Li, LTG, QTP, or OFC

Full Response
Partial Response or Nonresponse
CONT

Stage 4

((Li, LTG†, QTP, OFC, VPA, or CBZ)* (SSRI, BUP, or VEN)) or ECT

Full Response
Partial Response or Nonresponse
CONT

Stage 5

MAOIs, Tricyclics, Pramipexole, other AAPs*, OXC, Other Combinations of Drugs at Earlier Stages, Inositol, Stimulants, Thyroid

CONT = continue treatment
AAP = atypical antipsychotic
BUP = bupropion
CBZ = carbamazepine
ECT = electroconvulsive therapy
Li = lithium
LTG = lamotrigine
MAOI = monoamine oxidase inhibitor
OFC = olanzapine/fluoxetine combination
OXC = oxcarbazepine
QTP = quetiapine
SSRI = citalopram, escitalopram, fluoxetine, paroxetine, sertraline, fluvoxamine
VPA = valproate
VEN = venlafaxine

* Routine monitoring should occur for patients receiving atypical or typical antipsychotic treatment
† LTG has limited antimanic efficacy and in combination with an antidepressant may require the addition of an antimanic.

*Copyrighted by and permission to use obtained from the Texas Department of State Health Services.
Tactics and Critical Decision Points (CDPs) for the Treatment of Bipolar Disorder*

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

<table>
<thead>
<tr>
<th>Critical Decision Point</th>
<th>NA</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Week 0: CDP #1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Symptomatic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Week 2: CDP #2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Order serum concentrations (if</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>applicable) to adjust dose.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Week 4: CDP #3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Order serum concentrations (if</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>applicable) to adjust dose.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Week 6: CDP #4</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All serum concentrations should</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>be within therapeutic range.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Week 8: CDP #5</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Order serum concentrations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(if applicable) to adjust dose.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

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

*Copyrighted by and permission to use obtained from the Texas Department of State Health Services.
Scoring Criteria for Physician and Patient Overall Symptom and Side Effect Ratings

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

*Copyrighted by and permission to use obtained from the Texas Department of State Health Services.*
Even during periods when patients are feeling better, bipolar disorder requires lifelong treatment. Most evidence points to the fact that bipolar disorder is better treated by psychiatrists than by primary care physicians. This may be due, at least in part, to the fact that patients with bipolar disorder tend not to be properly diagnosed. Some studies have shown that, on average, bipolar is not diagnosed for eight years following the appearance of symptoms (Brickman, LoPiccolo, & Johnson, 2002). At the very least, treatment should be guided by a psychiatrist skilled in treating the disorder. Sometimes treatment may involve a treatment team comprised of psychiatrists, psychologists, social workers, and psychiatric nurses (Mayo Clinic Staff, 2010).

Each patient can respond differently to medications. Therefore, patients should communicate any side effects to their physician as soon as possible. At that time, the physician may change the dosage or prescribe a different medication. Additionally, different medications produce different side effects. If a patient is being treated with lithium, it is imperative that he/she visit the clinician regularly to check lithium levels in the blood and to ensure that the thyroid and the kidneys are functioning normally (NIMH, 2008). In practice, however, bipolar typically manifests with significant comorbidities and polypharmacy is generally warranted. This issue must be considered in line with reviews of concurrent psychiatric comorbidities, medical problems, or substance misuse (Malhi et al., 2009).

Changes in Treatment

All medications should be taken as prescribed by the physician. He/she will guide the change whenever changes in medication are warranted. At no time should a patient stop taking a medication without physician consultation.

Though treatment works best when it is continuous, mood changes can occur even when patients are compliant with their medications. Thus, patients should be honest and open with their physician in talking about treatment. Family members might also be involved in treatment decisions (NIMH, 2008). Consistent with other psychiatric disorders, no changes in medication should be made without consideration of safety, tolerability, and symptom relief (Crismon, Argo, Bendele, & Suppes, 2007).

Warnings about Anticonvulsant Medications

Lamotrigine, valproic acid, and other anticonvulsants carry an FDA warning that states that their use may increase the risk of suicidal behaviors and thoughts. Patients taking these medications for bipolar disorder or other illnesses should be closely monitored for new or worsening symptoms of depression, any unusual changes in behavior or mood, or suicidal behavior or thoughts. However, patients should not effect changes in taking these medications without having a conversation with their health care professional (NIMH, 2008).

Warnings about Adjunctive Treatment

Bipolar depression responds in a variety of ways to treatment involving adjunctive antidepressants, thereby elevating the risk of manic switching. As a result, antidepressant medications should be discontinued within eight (8) weeks following improvement to euthymia (Kang et al., 2009).
Warnings for Pregnant Women or Women Who May Become Pregnant

Special challenges abound for women with bipolar disorder who are pregnant or may become pregnant. Mood stabilizers can harm a developing fetus or nursing infant. Yet stopping these medications, either gradually or suddenly, substantially increase the risk that bipolar symptoms will recur during pregnancy. Thus, lithium is the more preferred mood-stabilizing medication for pregnant with bipolar. However, it can lead to heart problems in the future. Pregnant women and nursing mothers with bipolar disorder should talk to their doctors about the benefits and risks of available treatments (NIMH, 2008).

References


ANXIETY DISORDERS
Anxiety disorders cause people to be extremely uncertain and fearful. They are debilitating, often lasting up to six months (NIMH, 2009), and are among the most prevalent psychiatric disorders in the general population (Sadock & Sadock, 2007). Several disorders are subsumed under the category of anxiety disorders. They include generalized anxiety disorder (GAD), post-traumatic stress disorder (PTSD), panic disorder, obsessive-compulsive disorder (OCD), and a variety of phobias—agoraphobia, social phobia, and specific phobia (NIMH, 2010). However, only GAD, social phobia, and PTSD will be specifically discussed in this section.

Among the U.S. adult population, almost 20 percent have been diagnosed with an anxiety disorder. About 75 percent of these individuals have their first episode shortly following their 21st birthday. Panic disorders are experienced by roughly three (3) percent of the adult population and typically develop in early adulthood, around age 24. Only about one (1) percent of adult Americans have obsessive-compulsive disorder (OCD) and onset is usually earlier than for most anxiety disorders. OCD may begin during adolescence, or even childhood, but the typical age of onset is 19 years. Generalized anxiety disorder (GAD) is problematic for about 3.1 percent of adults and has the latest onset, around 31 years of age. Post-traumatic stress disorder (PTSD) affects between three and four percent of American adults and, though it can develop at any age, including childhood, research places the median age of onset around 23 years. The percentage of veterans that experience PTSD following war is closer to 20 percent, however. Of the phobias, specific phobia is most common, affecting nearly nine (9) percent of the adult population. Usually this type of phobia starts in childhood and onset is very early, around age 7 (NIMH, 2010).

A national comorbidity study reported a 12-month prevalence rate of 17.7 percent for anxiety disorder. Not surprising, women are one and a half times more likely to have an anxiety disorder than men. It should further be noted that prevalence decreases with higher socioeconomic status (Sadock & Sadock, 2007).

### DSM-IV-TR Criteria

**Generalized Anxiety Disorder (GAD)**

- Frequently occurring more days than not for six (6) months or more, excessive worry and anxiety (apprehensive expectation) about a several activities or events (such as school or job performance).
- The individual experiences difficulty controlling the worry.
- The worry and anxiety are associated with at least three (3) of the following six (6) symptoms (with some symptoms being present for more days than not for the past six months).
  - feeling keyed up or on edge or restless
  - mind going blank or difficulty concentrating
  - being easily fatigued
  - muscle tension
  - sleep disturbance (difficulty staying or falling asleep, or restless unsatisfying sleep)
  - irritability
• The focus of the anxiety and worry is not confined to features of an Axis I disorder, e.g., the anxiety or worry is not about being contaminated (as in OCD), being away from home or close relatives (as in Separation Anxiety Disorder), having a panic attack (as in Panic Disorder), being embarrassed in public (as in Social Phobia), gaining weight (as in Anorexia Nervosa), having multiple physical complaints (as in Somatization Disorder), or having a serious illness (as in Hypochondriasis), and the worry and anxiety do not just show up during PTSD.

• The worry, anxiety, or physical symptoms cause clinically significant distress or impairment in occupational, social, or other important areas of functioning.

• The disturbance is not due to the direct physiological effects of a substance (e.g., a medication or a drug of abuse) or a general medical condition (e.g., hyperthyroidism) and does not occur solely during a Psychotic Disorder, a Mood Disorder, or a Pervasive Developmental Disorder (APA, 2000).

Panic Attack*

A discrete period of intense fear or discomfort, in which at least four (4) of the following symptoms developed abruptly and reached a peak within 10 minutes:

• accelerated heart rate, palpitations, or pounding heart
• sweating
• shaking or trembling
• smothering or sensations of shortness of breath
• feeling of choking
• discomfort or chest pain
• abdominal distress or nausea
• feeling faint, lightheaded, dizzy, or unsteady
• depersonalization (being detached from oneself) or derealization (feelings of unreality)
• going crazy or fear of losing control
• fear of dying
• paresthesias (tingling sensations or numbness)
• hot flushes or chills

*Note: This is not a codable disorder. The specific diagnosis in which the panic attack occurs is what should be coded, e.g., panic disorder without agoraphobia (APA, 2000).

Panic Disorder

A. Both (a) and (b)
   a. unexpected recurrent panic attacks
   b. one (1) or more of the attacks has been followed by at least one (1) month of one or more of the following:
      i. persistent concern about having additional attacks
      ii. worry about the implications of the attack or its consequences (e.g., having a heart attack, "going crazy," losing control,)
      iii. a significant change in behavior related to the attacks

B. The panic attacks are not the result of direct physiological effects of a general medical condition (e.g., hyperthyroidism) or a substance (e.g., a medication, a drug of abuse).

C. The panic attacks are not better accounted for by another mental disorder, such as Posttraumatic Stress Disorder (e.g., in response to stimuli associated with a severe stressor), Obsessive-Compulsive Disorder (e.g., on exposure to dirt in someone with an
obsession about contamination), Social Phobia (e.g., occurring on exposure to feared social situations), Specific Phobia (e.g., on exposure to a specific phobic situation), or Separation Anxiety Disorder (e.g., in response to being away from home or close relatives).

Panic Disorder can occur with or without agoraphobia. Criteria for agoraphobia are as follows:

- Anxiety about being in situations or places from which escape might be difficult (or embarrassing) or in which help may not be available in the event of having a situationally predisposed or unexpected panic attack or panic-like symptoms. Agoraphobic fears typically involve characteristic clusters of situations that include being on a bridge; being in a crowd or standing in a line; being outside the home alone; and traveling in a bus, train, or automobile. (Note: If the avoidance is limited to one or only a few specific situations, consider the diagnosis of specific phobia. If the avoidance is limited to social situations, consider the diagnosis of social phobia.)

- The situations are avoided (e.g., travel is restricted) or else are endured with anxiety about having a panic attack or panic-like symptoms or with marked distress or require the presence of a companion.

- The phobic or anxiety avoidance is not better accounted for by another mental disorder, such as Posttraumatic Stress Disorder (e.g., avoidance of stimuli associated with a severe stressor), Obsessive-Compulsive Disorder (e.g., avoidance of dirt in someone with an obsession about contamination), Social Phobia (e.g., avoidance limited to social situations because of fear of embarrassment), Specific Phobia (e.g., avoidance limited to a single situation like elevators), or Separation Anxiety Disorder (e.g., avoidance of leaving home or relatives) (APA, 2000).

**Obsessive Compulsive Disorder (OCD)**

- Either obsessions or compulsions:
  - Obsessions are defined by all of the following:
    - Recurrent, persistent, intrusive, and inappropriate thoughts, impulses, or images that cause distinct anxiety or distress;
    - Such things are not excessive worries regarding real-life problems;
    - Attempts are made to ignore or neutralize such things;
    - Such things are recognized by the individual as a product of their own mind, rather than imposed by some external force.
  - Compulsions are defined by both of the following:
    - The individual feels compelled to perform repetitive behaviors and/or mental acts as a response to the obsessions and/or according to rules in need of rigid application;
    - Such exercises are designed and intended to prevent or minimize the anxiety and/or distress associated with the obsessions or preventing some dreaded event or situation associated with the obsessions. However, such exercises are unrealistic and/or excessive and often recognized as such by the individuals engaged therein.
  - The individual recognizes that the obsessions and/or compulsions are excessive, unreasonable, and unnecessary;
  - The obsessions and/or compulsions cause distinct distress, take more than one hour per day, and/or significantly interfere with daily functioning;
  - If another Axis I disorder is present, the obsessions and/or compulsions are not restricted to it.
  - The obsessions and/or compulsions are not directly related to the physiological effects of a substance or a general medical condition (APA, 2000).
**Social Phobia**

A. Persistent and marked fear of at least one performance or social situation in which the individual is exposed to possible scrutiny by others or to unfamiliar people. The person fears that he/she will act in a way (or show anxiety symptoms) that will be embarrassing or humiliating.

B. Exposure to the feared social situation almost invariably provokes anxiety, which may take the form of a situationally predisposed or situationally bound Panic Attack.

C. The individual recognizes that the fear is unreasonable or excessive.

D. The feared performance or social situations are avoided or else are endured with intense distress or anxiety.

E. The anxious anticipation, avoidance, or distress in the feared performance or social situation(s) interferes significantly with the person's occupational (including academic) functioning, normal routine, or social activities or relationships, or there is marked distress about having the phobia.

F. In persons younger than 18 years of age, the duration is six months or more.

G. The avoidance or fear is not due to the direct physiological effects of a substance (e.g., a medication, a drug of abuse,) or a general medical condition and is not better accounted for by another mental disorder (e.g., Body Dysmorphic Disorder, Panic Disorder With or Without Agoraphobia, Separation Anxiety Disorder, a Pervasive Developmental Disorder, or Schizoid Personality Disorder).

H. If another mental disorder or a general medical condition is present, the fear in Criterion A is unrelated to it, e.g., the fear is not of Stuttering, trembling in Parkinson's disease, or exhibiting abnormal eating behavior in Bulimia Nervosa or Anorexia Nervosa.

**NOTE**: Specify “Generalized” if the fears include most social situations. The additional diagnosis of Avoidant Personality Disorder should also be considered (APA, 2000).

**Post Traumatic Stress Disorder (PTSD)**

A. A person has been exposed to a traumatic event in which both of the following have been present:
   a. The individual witnessed, experienced, or was confronted with an event(s) that involved serious injury or threatened or actual death, or a threat to the physical integrity of self or others
   b. The individual’s response involved horror, helplessness, or intense fear.

B. The traumatic event is persistently reexperienced in at least one (1) of the following ways:
   a. Intrusive and recurrent distressing recollections of the event, including thoughts, images, or perceptions.
   b. Recurrent distressing dreams of the event.
   c. Feeling or acting as if the traumatic event were over and over again (includes a sense of reliving the experience, hallucinations, illusions, and dissociative flashback episodes, including those that occur when intoxicated or upon awakening).
   d. Intense psychological distress at exposure to external or internal cues that resemble or symbolize an aspect of the traumatic event.
   e. Physiological reactivity on exposure to external or internal cues that resemble or symbolize an aspect of the traumatic event.

C. Persistently avoiding stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by at least three of the following:
a. Efforts to avoid feelings, thoughts, or conversations associated with the trauma.
b. Efforts to avoid places, activities, or people that arouse recollections of the trauma.
c. Unable to recall an important aspect of the trauma.
d. Markedly diminished participation or interest in significant activities.
e. Feeling of estrangement or detachment from others.
f. Restricted range of affect (e.g., an inability to have loving feelings)
g. Sense of a foreshortened future (e.g., does not expect to have a marriage, children, career, or a normal life span)

D. Persistent symptoms of increased arousal (not present before the trauma), as indicated by at least two of the following:
a. Difficulty staying or falling asleep
b. Outbursts of anger or irritability
c. Difficulty concentrating
d. Overly vigilant
e. Exaggerated startle response

E. Symptoms for B-D above must occur longer than a month.
F. The disturbance causes clinically significant impairment or distress in occupational, social, or other important areas of functioning.

**NOTE:** Specify the disorder as acute if the symptoms last less than three months. However, duration of at least three months identifies a chronic disorder. Delayed onset should also be noted and is evident when the disturbance occurs at least six (6) months after the stressor (APA, 2000).

**Relationship between Anxiety and Other Behavioral Health Concerns**

- Anxiety disorders typically co-exist with at least one other mental disorder (Evans, 2007).
- Generalized anxiety disorder most frequently co-occurs with another mental disorder, generally panic disorder, social phobia, specific phobia, or a depressive disorder. Estimates range between 50 – 90 percent of GAD patients.
- About one fourth of patients with generalized anxiety disorder experience panic disorder.
- Dysthymic disorder and substance-related disorders are also typically associated with generalized anxiety disorder (Sadock & Sadock, 2007).
- Most commonly, social phobia occurs with GAD, MDD, and substance abuse (Varon, 2003).
- It is estimated that approximately one third of patients with social phobia also have major depressive disorder.
- Avoidant personality disorder often occurs in persons that have social phobia (Sadock & Sadock, 2007).
- OCD often accompanies anorexia nervosa, where the compulsive behavior focuses on thinness and food restriction (Simon, 2010).

**Relationship between Anxiety and Physical Health**

- Migraine headaches and arthritis are linked to anxiety disorders (Sareen, Cox, Slara, & Asmundson, 2005; Robert, 2006).
- A link has been observed between anxiety disorders and the development of heart disease and coronary events in people already diagnosed with heart disease (Harvard Medical School, 2008).
Anxiety disorders have additionally been linked with gastrointestinal diseases, allergies, thyroid diseases, and respiratory diseases (Nauert, 2006). Research shows a correlation between anxiety in patients with obstructive lung conditions and more frequent relapses. There is evidence that anxiety disorders may lead to obesity and that the reverse may also be true (Simon, 2010).

**Relationship between Anxiety and Aging**

Clearly anxiety disorders are not a normal part of the aging process. Yet anxiety disorders occur twice as frequently as depression in older adults. Among the risk factors are medications, psychological stressors, chronic medical conditions, lack of adequate support network, and negative life events such as the death of a significant other. Older persons (at least 55 years of age) tend to attach negative stigma to problematic “anxieties” and water them down as ‘nerves’ or being ‘upset’ (Fitzwater, 2010). Additionally, GAD appears as the most common anxiety disorder among the older age group (Simon, 2010).

There further appears to be a high comorbid rate of anxiety disorders in elderly patients that have also been diagnosed with major depression. Using clinical samples, Lenze et al. (2000) observed this phenomenon in both inpatients and outpatients in primary care and psychiatric settings. The average patient age was 71 years. The observed high comorbid anxiety disorders (other than generalized anxiety disorder) were associated with very poor social function and higher levels of somatic symptoms. For patients with GAD during the depressive episode, there was a link to more severe depressive symptoms, including suicidal ideation.

Because the elderly often mask or deny anxiety disorders, the Anxiety Disorder Association of America has suggested asking the following questions of such patients:

- “Do you find that you have a hard time putting things out of your mind?”
- “Have you been concerned about or fretted over a number of things?”
- “Is there anything going on in your life that is causing you concern?” (Fitzwater, 2010)
<table>
<thead>
<tr>
<th><strong>Differential Diagnosis</strong></th>
</tr>
</thead>
</table>

**GAD:**  
Adjustment Disorder  
Anxiety Disorder Due to Medical Condition  
Disorders Involving Specific Rather Than Generalized Fears  
Elevated but Subclinical Generalized Worry  
Endocrinological Disorders  
Medication-Related Disorders  
Metabolic Disorders  
Mood Disorders  
Neurological Disorders  
Obsessive-Compulsive Disorder  
Panic Disorder  
Phobias  
Post-traumatic Stress Disorder  
Psychotic Disorders  
PTSD  
Substance-Induced Anxiety Disorder  
(APA, 2000; Sadock & Sadock, 2007)

**Panic Attack/Panic Disorder:**  
Social Phobia  
Specific Phobia  
PTSD  
OCD  
Hypo/Hyperthyroid States  
Hyperparathyroidism  
Episodic hypoglycemia  
Seizure Disorders  
Vestibular Dysfunction  
NeoplasmsArrhythmias  
Chronic Obstructive Pulmonary Disease  
Asthma  
(APA, 2000; Sadock & Sadock, 2007)

**OCD:**  
Anxiety Disorder Due to a General Medical Condition  
Substance-Induced Anxiety Disorder, Body Dysmorphic Disorder  
Specific Phobia  
Social Phobia  
Trichotillomania  
Major Depressive Episode  
GAD  
Hypochondriasis  
Delusional Disorder  
Psychotic Disorder Not Otherwise Specified  
Schizophrenia  
Tic Disorder  
Stereotypic Movement Disorder  
Eating Disorders  
Sexual Behavior  
Gambling  
Substance use  
Obsessive-Compulsive Personality Disorder  
Superstitions  
Repetitive Checking Behaviors  
(APA, 2000; Sadock & Sadock, 2007)

**Social Phobia:**  
Appropriate Fear  
Avoidant Personality Disorder  
GAD  
Major Depressive Disorder  
Normal Shyness  
Panic Disorder without Agoraphobia  
Schizoid Personality Disorder  
(APA, 2000; Sadock & Sadock, 2007)

Panic Disorder with Agoraphobia

92
Anxiety disorders are as disabling and prevalent as depressive disorders, though they are more often undiagnosed and untreated. Sixty (60) percent or more of patients with anxiety disorders seek treatment in primary care settings. Some of these patients present with symptoms that exist in the absence of an identified stressor, that have been problematic for an extended period of time, and that are accompanied by a deterioration of overall functioning. These patients, in particular, likely have an anxiety disorder for which treatment is warranted.

There are many risk factors for anxiety disorders, among which are found the following:

- Maladaptive coping strategies or lack of such strategies.
- Unresolved grief.
- Past family or personal history of anxiety disorders.
- Chronic or acute pain.
- Lack of a social support network.
- An increase in stressful psychosocial life events.
- Terminal or advanced illness (Khouzam, 2009).

People with GAD display a lot of body symptoms, including but not limited to sweating; nausea; headaches; difficulty swallowing; hot flashes; feeling out of breath; irritability; and trembling. In addition, people with GAD:

- Are easily startled.
- Have difficulty staying asleep or falling asleep.
- Cannot relax.
- Know that they worry much more than they should.
- Worry too much about everyday things for no less than six (6) months (NIMH, 2007a).

Panic attacks (i.e., periodic attacks of anxiety or terror) characterize panic disorder. These attacks generally last 15-30 minutes, but residual effects can persist much longer. While panic attacks can occur in almost every anxiety disorder, there is usually no trigger or cue in panic disorder. Common symptoms in men include sweating and abdominal pain. Women, on the other hand, are more likely to exhibit nausea, shortness of breath, and feelings of being smothered. Some individuals will experience frequent attacks that last for months. Still others may have clusters of attacks each day, followed by weeks or months of remission (Simon, 2010).
Although everybody double-checks things on occasion, people with OCD feel the need to check things over and over, or perform routines and rituals or have certain thoughts over and over. These rituals and thoughts are distressful and interfere with daily life. The upsetting, repeated thoughts of OCD are referred to as obsessions. In an effort to try to control them, people with OCD repeat behaviors or rituals, which have become compulsions. On most days, people with OCD have thoughts and do rituals for at least an hour, often longer. Trying to deal with the thoughts and rituals gets in the way of the lives of people with OCD so they sometimes miss work, school, or even meetings with friends. Typical symptoms for people with OCD are as follows:

- Have repeated images or thoughts about a lot of different things, such as hurting loved ones; sexual acts; religious beliefs; being overly neat; or fear of intruders, dirt, or germs.
- Do the same rituals over and over such as keeping unneeded items, washing hands, counting, locking and unlocking doors, or repeating the same steps again and again.
- Have unwanted behaviors and thoughts that they cannot control.
- Do not get pleasure from the rituals or behaviors, though they do experience brief relief from the anxiety that the thoughts create.
- Spend at minimum an hour daily on the thoughts and rituals, which cause much distress and affect their ability to go about their daily lives (NIMH, 2009b).

It should be noted, however, that more than 50 percent of patients with OCD have the obsessive thoughts without the ritualistic behaviors. Some patients have symptoms that subside over time, while others experience a continued worsening of symptoms (Simon, 2010).

Individuals with social phobia, on the other hand, have an exaggerated fear of being judged by others and of being highly embarrassed. Typically these individuals are constantly dealing with a fear that gets in the way of going to work, going to school, or doing other everyday things. Some of the most common symptoms for people with social phobia are that they:

- Are extremely anxious about being with other people.
- Worry for days or weeks before an event where the other people will be.
- Avoid places where there are other people.
- Are overly self-conscious, especially in front of other people.
- Have difficulty making and keeping friends.
- Are overly concerned about being embarrassed in front of other people.
- May exhibit body symptoms when they are with other people, e.g., trembling, blushing, difficulty speaking (NIMH, 2007b).

PTSD is much more devastating than the normal “fight-or-flight” response that is elicited to protect individuals from harm. In PTSD, this “healthy reaction” has been altered or damaged. Risk factors might include, but not be limited to, the following:

- Getting hurt.
- Seeing people hurt or killed.
- Dealing with extra stress after the event, such as loss of a loved one or loss of a job or home.
- Feelings of helplessness, horror, or extreme fear.
- Living through dangerous events and traumas.
- Having little or no social support after the event.
- Having a history of mental instability.
While possible triggers, these risk factors do not guarantee that a person will develop PTSD. Some people who experience traumatic and/or dangerous events cope just fine. They demonstrate resilience. However, there are people that are not and will not be resilient in the face of trauma and in whom PTSD will manifest (NIMH, 2008).

**Screening Procedures and Tools**

A limited number of tools are available to assist with screening for anxiety disorders. Unfortunately not many of those instruments meet appropriate criteria as screeners. The following measures, however, have been tested and demonstrated acceptable psychometric properties for screening.

**Acute Stress Disorder Scale (ASDS)**

Since Acute Stress Disorder (ASD) was included as a new diagnosis in the DSM-IV, a need for standardized instruments to measure the disorder became necessary. Hence, the Acute Stress Disorder Scale (ASDS) was developed in response to that need. It is a self-report measure that provides identification of ASD and predicts subsequent PTSD (Bryant, Moulds, & Guthrie, 2000). The ASDS correlates highly with symptom clusters on the Acute Stress Disorder Interview (ASDI), which is the only structured clinical interview validated against DSM-IV criteria for the disorder. The ASDS has acceptable test-retest reliability, internal consistency, and construct validity (Gibson, 2007).

**Clinically Useful Anxiety Outcome Scale (CUXOS)**

The Clinically Useful Anxiety Outcome Scale (CUXOS) was designed to be a quickly scored (in less than 15 seconds), brief (completed in less than 2 minutes), clinically useful measure that is valid, reliable, and sensitive to change. Based on results from a large validation study involving 1,000 psychiatric patients, the CUXOS was shown to be a valid and reliable measure of anxiety that is feasible to incorporate into routine clinical practice. The scale actually took less than two minutes to complete, on average, and had high test-retest reliability and internal consistency. The CUXOS was also more highly correlated with other self-report measures of anxiety than with measures of other psychiatric disorders such as depression, etc., which means it has good convergent and discriminant validity (Zimmerman, Chelminski, Young, and Dalrymple, 2010).

Conceptualized as a general measure of somatic and psychic symptoms rather than a disorder specific scale, content of the CUXOS was derived from DSM-IV-TR descriptions and the Hamilton Rating Scale for Anxiety. The initial version contained 25 items. However, five items occurred too infrequently in persons with anxiety, so the final outcome scale only comprised 20 items (Zimmerman, 2009).

The CUXOS or Clinically Useful Anxiety Outcome Scale can also be taken online at [www.outcometracker.org](http://www.outcometracker.org). Clinicians can use this website free of charge. It can be used to assess the somatic symptoms of anxiety, not any specific DSM-IV-TR anxiety disorder. The online version is confidential, secure, and HIPAA compliant. A print version of the CUXOS is included in this section of the guidelines, along with recommended scoring criteria.

**Generalized Anxiety Disorder (GAD)-7 and Briefer Versions**

The Generalized Anxiety Disorder (GAD)-7’s development is the result of the paucity of brief clinical measures for assessing GAD, despite GAD being one of the more common mental disorders. Initial development included 13 items. Four (4) items were selected on the basis of a review of existing anxiety scales. The remaining nine (9) items reflected all of the DSM-IV-TR
symptom criteria for GAD. Additionally, an item was included to assess the duration of anxiety symptoms. The final instrument consisted of the seven (7) items that showed the highest correlation with the e13-item scale score. (Spitzer et al., 2006).

Until the GAD-7, only a minority of patients with anxiety was recognized in primary care settings in particular (Kroenke et al., 2007). Psychometric properties were good for the GAD-7. Test-retest reliability was 0.83 while internal consistency was an excellent 0.92. (Spitzer et al., 2006). The GAD-2, which consists of the first two (2) items of the GAD-7, has also performed well as a screening tool for the four (4) major anxiety disorders: GAD, panic disorder, social anxiety disorder, and PTSD. Since the successful validation of the GAD-7, GAD-2, and similar screeners, screening efficiency and monitoring of anxiety has much improved. They help improve mental health of underrecognized populations by identifying patients who may benefit from psychotherapy and/or pharmacological treatments. Screening recommendations further emphasize the fact that clinicians should not look for anxiety or depression alone because of the high frequency with which the two disorders co-occur (Kroenke et al., 2007). Copies of the GAD-7 and PH-4 are contained within this subsection of the guidelines thanks to permission from the authors. (The PH-4 is a combination brief version of the GAD-7 and the PH-9. It contains includes two essential questions from the GAD-7, the anxiety screener, in addition to two critical questions from the PH-9, a depression screener.)

Posttraumatic Adjustment Scale (PAS)

Often patients that end up manifesting PTSD have previously been hospitalized. They sustain injury that requires hospitalization and then sometime later develop symptoms of PTSD. Because the acute hospital environment provides a window of opportunity for identifying trauma patients at risk for posttrauma psychopathology, O’Donnell et al. (2008) sought to develop and validate a screening instrument that would identify adults at high risk for developing PTSD and MDD during hospitalization. The researchers observed that there was clear evidence of the multiplicity of factors—pretrauma, peritrauma, and posttrauma—that actually contribute to the development of PTSD. Moreover, they acknowledged the fact that most available screens were designed to identify individuals currently exhibiting the disorder, not those that would likely present with the disorder at a later time. Further, the few screeners that yielded future prediction regarding the presence of PTSD were somewhat lengthy and time consuming.

Thus, O’Donnell et al. (2008) set forth to construct a brief, yet simple, screening instrument for predicting PTSD in the future. The result was the Posttraumatic Adjustment Scale (PAS), a scale that could routinely be administered during acute hospital admission to assess the risk of both PTSD and MDD. The PAS is a 10-item measure where each item can be scored either “1” or “2.” For identification of risk for PTSD, all 10 items are considered. A PAS-P score is calculated for this purpose by summing across all 10 items. A summary score of at least 16 identifies high risk for the later development of PTSD, especially following a traumatic injury. (The MDD risk is measured using only five of the 10 items on the PAS. Risk of MDD yields a PAS-D score, which is a summary score of four or higher.)

The PAS is the first adult screen to identify, with high sensitivity, persons at high risk for two of the most common mental health problems that arise following traumatic injury. Its predictability is as good as that for the Acute Stress Disorder Interview (ASDI), which is longer. (The ASDI has 19 items while the PAS only has 10.) In short, the PAS was specifically designed to identify the risk of poor psychological adjustment after trauma/traumatic events. It represents an acceptable, reliable, and useful instrument. The development of the PAS is actually a giant step in the process of developing public health models of early intervention after traumatic events.
(O’Donnell et al., 2008). A print version is available in this section with permission from the author.
Name _________________________________ Date _______________  

**ANXIETY SCALE**

**INSTRUCTIONS**
This questionnaire includes questions about symptoms of anxiety. For each item please indicate how well it describes you during the PAST WEEK, INCLUDING TODAY. Circle the number in the columns next to the item that best describes you.

**RATING GUIDELINES**
0=not at all true (0 days)  
1=rarely true (1-2 days)  
2=sometimes true (3-4 days)  
3=often true (5-6 days)  
4=almost always true (every day)

**During the PAST WEEK, INCLUDING TODAY....**

<table>
<thead>
<tr>
<th>Question</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I felt nervous or anxious</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>2. I worried a lot that something bad might happen</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>3. I worried too much about things</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>4. I was jumpy and easily startled by noises.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>5. I felt &quot;keyed up&quot; or &quot;on edge&quot;</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>6. I felt scared</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>7. I had muscle tension or muscle aches</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>8. I felt jittery</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>9. I was short of breath</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>10. My heart was pounding or racing</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>11. I had cold, clammy hands</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>12. I had a dry mouth</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>13. I was dizzy or lightheaded</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>14. I felt sick to my stomach (nauseated)</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>15. I had diarrhea</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>16. I had hot flashes or chills</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>17. I urinated frequently</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>18. I felt a lump in my throat</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>19. I was sweating</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>20. I had tingling feelings in my fingers or feet</td>
<td>0 1 2 3 4</td>
</tr>
</tbody>
</table>

**CUDOS Score**

<table>
<thead>
<tr>
<th>Depression Range</th>
<th>0 to 10</th>
<th>11 to 20</th>
<th>21 to 30</th>
<th>31 to 40</th>
<th>41 and above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonanxious</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimal anxiety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mild anxiety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate anxiety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Severe anxiety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Permission to include and/or print the CUDOS obtained from Mark Zimmerman, M.D.
GAD-7

**Over the last 2 weeks, how often have you been bothered by the following problems?**

*Use “” to indicate your answer*

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Several days</th>
<th>More than half the days</th>
<th>Nearly every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Feeling nervous, anxious or on edge</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Not being able to stop or control worrying</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. Worrying too much about different things</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. Trouble relaxing</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Being so restless that it is hard to sit still</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. Becoming easily annoyed or irritable</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. Feeling afraid as if something awful might happen</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

*(For office coding: Total Score ___ = ___ + ___ + ___)*

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

- Not difficult at all
- Somewhat difficult
- Very difficult
- Extremely difficult

**GAD-7 Anxiety Severity.** This index is calculated by assigning scores of 0, 1, 2, and 3, to the response categories of “not at all,” “several days,” “more than half the days,” and “nearly every day,” respectively. The GAD-7 total score for the seven items ranges from 0 to 21. Scores of 5, 10, and 15 represent cutpoints for mild, moderate, and severe anxiety, respectively. Though designed primarily as a screening and severity measure for generalized anxiety disorder, the GAD-7 also has moderately good operating characteristics for three other common anxiety disorders—social anxiety disorder, panic disorder, and post-traumatic stress disorder. When screening for anxiety disorders, a recommended cutpoint for further evaluation is a score of at least 10. The first two (2) items comprise the GAD-2 scale.

*The GAD-7 was developed by Drs. Robert L. Spitzer, Kurt Kroenke, Janet B.W. Williams, and Bernd Lowe. The scale is used with permission of the authors.*
PHQ-4 DA*

<table>
<thead>
<tr>
<th>Over the last 2 weeks, how often have you been bothered by the following problems?</th>
<th>Not at all</th>
<th>Several days</th>
<th>More than half the days</th>
<th>Nearly every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Circle the number of your answer.)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>1. Feeling nervous, anxious or on edge</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. Not being able to stop or control worrying</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Little interest or pleasure in doing things</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. Feeling down, depressed, or hopeless</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

**GAD-2 and PHQ-2 Severity.** This is a combined set of four (4) items, the first two items of the GAD-7 and the PHQ-9 respectively. They constitute the two core DSM-IV-TR items for generalized anxiety disorder and major depressive disorder. Each ranges from a score of 0 to 6. The operating characteristics of these ultra-brief measures are quite good. The recommended cutpoints for each when used as screeners is a score of 3 or greater.

When used together, they are referred to as the **PHQ-4 DA** as shown above, a 4-item screening measure which ranges from a score of 0 to 12, and serves as a good measure of “caseness” (i.e., the higher the score, the more likely there is an underlying anxiety or depressive disorder.

*The PHQ and all its versions are adapted from PRIME MD TODAY, developed by Drs. Robert L. Spitzer, Kurt Kroenke, and Janet B.W. Williams. Copyright © 1999, Pfizer Inc. The names PRIME-MD® and PRIME-MD TODAY® are trademarks of Pfizer Inc.*
### Questionnaire:

This questionnaire asks you questions that relate to factors that occurred before, during or after the traumatic event. Circle the response that best describes how much you agree with the following statements.

<table>
<thead>
<tr>
<th>Q</th>
<th>Question</th>
<th>Not at all</th>
<th>To a small extent</th>
<th>To a moderate extent</th>
<th>To a large extent</th>
<th>Totally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I have needed professional help to deal with emotional problems in the past.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Previously traumatic events have impacted negatively on my life in the past (e.g., assault, sexual abuse, previous combat duty, natural disasters, witnessing traumatic events).</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>In the past I was able to talk about my thoughts and feelings with my family members or friends.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>In the past I was satisfied with the support that I had from my friends and family.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>At the time of the event, I felt terrified, helpless or horrified.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>During the event, I thought I was about to die.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>I have felt irritable or angry since the event.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>I have found it difficult to concentrate on what I was doing or things going on around me since the event.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>I am confident that I can deal with the financial Stressors that may arise as a consequence of the event.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>I can accept what happened to me.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Scores:

PAS_P score __________

PAS_D score __________

---

*The PAS is a vulnerability scale designed to identify risk for PTSD. It was developed for use with injury patients and its generalizability to other populations is unknown at present.*
Psychotherapy

For GAD
The primary therapeutic approaches for the treatment of GAD involve cognitive behavioral, supportive, and insight-oriented therapies. Most research has examined cognitive behavioral techniques, which seem to have both long-term and short-term efficacy. Supportive therapies offer patients comfort and reassurance, but questions remain regarding the long-term efficacy of these approaches. Success for insight-oriented therapy for persons suffering with GAD has been found in many anecdotal case reports, but efficacy in large controlled studies is still lacking (Sadock & Sadock, 2007).

Cognitive behavioral therapy (CBT) is the most popular psychotherapeutic approach for persons with GAD. It deals with thought patterns of the individual with anxiety and includes a variety of techniques to change those thoughts. CBT theorizes that people can control their thought patterns and that helping people change their thoughts will lead to a change in emotional state and worldview. This therapy has much research support for helping with anxiety disorders (Meek, 2008). For example, a Cochrane review showed that people receiving therapy based on a CBT approach were more likely to have reduced anxiety symptoms following treatment than persons who received treatment as usual or were on a waiting list for therapy. CBT was also extremely effective in alleviating secondary symptoms of depression and worry (Hunot, Churchill, Teixeira, & de Silva, 2006).

CBT should not be attempted until patients make a conscious decision to undertake the therapy and cooperate. This therapy can last up to 12 weeks and may be conducted in individual sessions or in a group (NIMH, 2009).

For Panic Disorder
Cognitive behavioral therapy is the preferred non-drug therapy. CBT should be delivered in 12 – 16 sessions over a period of three to four months. The therapy should focus on recreating fear symptoms and helping patients change their response to those symptoms (Simon, 2010). The basic concepts of CBT for panic disorder include breathing retraining, applied relaxation, cognitive restructuring, and in vivo exposure. Session goals will include having the patient identify his/her patterns of anxiety and the antecedents. CBT will help the patient understand his/her automatic thoughts that contribute to the panic disorder. Through CBT, the patient learns that the heart palpitations that accompany the panic attacks are not harmful and begin to use breathing exercises when he/she begins to feel the panic anxiety (Boston Counseling Therapy, 2010).

For OCD
Cognitive behavioral therapy (CBT) may be offered as the initial treatment for OCD, but usually it is combined with pharmacotherapy. Techniques of CBT focus on exposure and response prevention (ERP) (Simon, 2010). In reality, CBT is a combination of ERP and cognitive therapy (CT). The exposure part of ERO involves imagined or direct controlled exposure to situations or objects that trigger the obsessions that arouse anxiety. Over time, exposure to the obsessional cues yields less and less anxiety, finally to the point where there is barely any anxiety. Patients
with OCD start ERP by creating a “hierarchy of situations” list. This is a list of the situations or objects that elicit the obsessional fears. Early sessions can range from 45 minutes to three hours in duration. Patients are also asked to practice the exposure activities between sessions a couple of hours each day. Whenever possible, the therapist will have the patient use “in vivo” or direct exposure to the fears rather than imaginal exposure. However, in vivo exposure may not be feasible in some cases. For example, if the patient’s obsession involved causing an accident while driving, in vivo exposure could not be allowed. ERP treatment may last from 14 – 16 weeks. The CT component of the therapy focuses on how patients interpret their obsessions—what they assume or believe to be true about themselves. CT further helps patients identify and re-evaluate their beliefs about the potential consequences of engaging or not engaging in the compulsive behavior, while working toward elimination of the behavior. They may maintain a “thought record,” writing responses to the following important questions:

- “Where was I when the obsession began?”
- “What intrusive idea/image/thought did I have?”
- “What meaning did I apply to having the intrusive idea/image/thought?”
- “What did I do?” (Centre for Addiction and Mental Health [CAMH], 2009)

**For Social Phobia**

**Behavior therapy** is the most studied and most effective treatment for phobias. Key aspects of the treatment’s success are: 1) the patient commits to treatment; 2) there are distinctly defined problems and objectives; and 3) available, optional strategies abound to deal with feelings. It appears that the most commonly used behavior therapy is systematic desensitization. Here the patient is exposed to a predetermined list of anxiety-provoking stimuli in a sequential manner, each graded in a hierarchy from the least to the most frightening. Patients ultimately teach themselves to induce relaxation when confronted with each anxiety-provoking stimulus until what previously produced the most anxiety no longer elicits this painful, dysfunctional effect (Sadock & Sadock, 2007). The group option has been shown to be more effective than individual settings for persons with this particular anxiety disorder (NIMH, 2009).

Another therapy used in the treatment of social phobia is **insight-oriented psychotherapy**. It is psychoanalytically based. Through this therapy, patients become able to understand the origin of their phobia, the phenomenon of secondary gain, and the role of resistance. Additionally, patients learn to seek healthy ways of dealing with their anxiety-provoking stimuli (Sadock & Sadock, 2007).

**For PTSD**

Research points to exposure-based CBTs such as **prolonged exposure therapy** and **cognitive processing therapy** as effective treatments for PTSD when delivered as individual therapy. All exposure-based CBTs have components of psychoeducation, relaxation training, and breathing. These therapies further incorporate into the therapy sessions some form of reexposure to the past traumatic experience. The reexposure can be in vivo, verbal, imaginal, directed therapeutic, written, or taped narrative recounts. As with other cognitive therapies, homework is generally a requirement (Benedek, Friedman, Zatzick, & Ursano, 2009).

Both **prolonged exposure therapy** (PE) and **cognitive processing therapy** (CPT) are highly recommended for use with veterans. PE helps the person decrease his/her distress regarding the trauma. It begins by having the individual approach trauma-related feelings, thoughts, and situations that he/she has been avoiding because of the pain they cause. The result is repeated exposure to feelings, thoughts, and situations that serve to reduce the power they have in creating pain and severe discomfort (DVA, 2009b). CPT gives individuals an alternative
to handling the distressing thoughts, as well as the opportunity to gain an understanding of the events. Through skills learned in CPT, patients learn why recovery from traumatic events has been so difficult for them. It focuses on helping people learn how going through the trauma changed their perceptions of the world, themselves, and others and that those new perceptions are now directly impacting how they act and feel (DVA, 2009a). PE and CPT widely demonstrate success in outcome research involving PTSD (Hamblen, Schnurr, Rosenberg, & Eftekhari, 2010).

In addition to PE and CPT, eye movement desensitization and reprocessing (EMDR) is a recommended treatment for PTSD in most practice guidelines. It involves imaginal exposure to trauma while simultaneously performing saccadic eye movements (Hamblen et al., 2010). EMDR incorporates an eight-step process that begins with the therapist taking a complete history of the patient and designing a treatment plan. This approach continues to grow in popularity, despite the controversy surrounding whether the eye movements are truly a mechanism of change. EMDR now has an empirically supported status designation for the treatment of PTSD (Cook, Biyanova, & Coyne, 2009).

Trauma-based therapy has proven effective for persons with PTSD as well, particularly the Seeking Safety therapy. It is an alternative to trauma-processing models that delve into the past. Seeking Safety is a present-focused, coping skills approach. It is a manualized program that was developed under an initial grant from the National Institute on Drug Abuse. Originally the treatment was designed for women, but has since been expanded to include men. It was actually the first treatment for the co-occurring diagnosis of PTSD and substance abuse with published outcomes. The therapy can be conducted in individual or group format (Najavits, 2004).

Psychological First Aid

A recent APA Guideline Watch (2009) addresses the issue of psychological first aid as a potential PTSD-preventive strategy for disaster survivors. The strategy replaces psychological debriefing for trauma victims due to the inconsistent results associated with debriefing. Its primary principles consist of calmness, self- and community efficacy, fostering safety, social connectedness, and optimism in the aftermath of disasters. This approach is a public health intervention, but additional research is needed to answer questions about how it should be delivered; in which format should it be delivered; and which type of responder, i.e., clinician responder versus emergency responder versus community leader, would be optimal. While an evidence-informed strategy, psychological first aid cannot yet be viewed as an evidence-based intervention (Benedek et al., 2009).

Pharmacological Treatments

Medication alone or in combination with psychotherapy can be treatment for anxiety disorders. Sometimes the treatment choices may depend on the patient’s preference, as well as the presenting problem. Often medication is prescribed to help keep the symptoms under control while the individual receives psychotherapy (NIMH, 2009a).

Usually a psychologist or a psychiatrist will diagnose PTSD. The diagnosis follows conversations with the patient regarding symptoms. For a PTSD diagnosis, individuals must have all of the following for one month or more:
One or more re-experiencing symptoms
Three or more avoidance symptoms
Two or more hyperarousal symptoms
The symptoms must significantly interfere with the individual’s ability to go to school or work, go about his/her daily activities, be with friends, and/or handle important tasks (NIMH, 2008; Simon, 2010).

However, physicians should conduct a careful diagnostic evaluation in advance of treatment to rule out any physical problems. If anxiety disorder is diagnosed, the specific type of disorder or combination of disorders must be identified, as well as any coexisting conditions, such as substance abuse or depression (NIMH, 2009a).

Psychosocial treatment, such as CBT, is typically the first-line treatment for anxiety disorders. However, some disorders require medications (University of Michigan Psychiatry, 2010).

**Antidepressants** have been shown as effective for anxiety disorders, despite their development to treat depression. Their full effect typically requires four to six weeks, i.e., before symptoms start to fade. SSRIs, previously discussed in the section on Mood Disorders, are often prescribed. Initially individuals may experience jitters or slight nausea, but these side effects generally fade with time. Any problems with sexual dysfunction may suggest dosage adjustment or switching to another SSRI (NIMH, 2009). Most commonly prescribed are sertraline, starting at 12.5 mg, or paroxetine or citalopram, starting at 5 mg. Effective ranges for most anxiety disorders, excluding OCD, range for 50 to 200 mg for sertraline and 20 to 40 mg of paroxetine or citalopram (University of Michigan Psychiatry, 2010).

**Tricyclics** also work well for anxiety disorders, except for OCD. Again, initial dosage should be low and gradually increased. Imipramine is often prescribed for GAD and panic disorder, with clomipramine prescribed when treating patients with OCD (NIMH, 2009a). Tricyclics too were previously discussed in the section on Mood Disorders.

Persons having anxiety disorder may also be treated with **MAOIs**. Some of the most frequently prescribed include phenelzine, tranylcypromine, and isocarboxazid. The latter MAOI has been shown useful in the treatment of social phobia and panic disorder. Taking MAOIs, however, require that people watch the types of foods they eat, beverages they drink, and medications, including herbal supplements, which they take. Less risk may be evident if patients use the MAOI skin patch (NIMH, 2009a).

Though **benzodiazepines** such as lorazepam, alprazolam, and clonazepam are anti-anxiety drugs, they should not be used as first-line treatment for persons with anxiety disorder. They tend to be extremely powerful in helping anxious patients get a quick and simple way to avoid the pain and distress of their anxiety, thus interfering with the patient’s ability to achieve long-term success from distress without medication through CBT, for example (University of Michigan Psychiatry, 2010). In addition, abrupt stoppage of use can lead to withdrawal symptoms. Benzodiazepines can be helpful in some cases, specifically for persons with panic disorder, but a newer anti-anxiety medication, buspirone, is being promoted to treat GAD. The full effect of buspirone is not instant like with benzodiazepines. It must be taken for two or more weeks to achieve any effect (NIMH, 2009).

**Beta-blockers** like propranolol can help patients avert the physical symptoms that accompany certain anxiety disorders, particularly social phobia. Developed for heart conditions, beta-blockers may be prescribed by medical clinicians to help keep anxiety symptoms under control.
when patients are faced with fearful situations like giving a speech or singing in front of an audience (NIMH, 2009a).

More on Treatment

There are a number of standard treatment approaches for anxiety disorders, though treatment must be specifically tailored for each person. The good news is that hospitalization is typically not a treatment consideration for persons with anxiety disorder. The treatment options chart below may be helpful because clinicians frequently use a combination of the following treatments.

<table>
<thead>
<tr>
<th>TREATMENT</th>
<th>GOAL</th>
<th>HOW IT WORKS</th>
<th>BENEFITS</th>
<th>DRAWBACKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavior Therapy</td>
<td>Modify and gain control over unwanted behavior</td>
<td>Learning to cope with difficult situations, often through controlled exposure to them</td>
<td>Person actively involved in recovery skills that are useful for a lifetime</td>
<td>Can take time to achieve results</td>
</tr>
<tr>
<td>Cognitive Therapy</td>
<td>Change unproductive thought patterns</td>
<td>Examine feelings and learn to separate realistic from unrealistic thoughts</td>
<td>Person actively involved in recovery skills that are useful for a lifetime</td>
<td>Can take time to achieve results</td>
</tr>
<tr>
<td>Medication</td>
<td>Resolve symptoms</td>
<td>Help restore chemical imbalances that lead to symptoms</td>
<td>Effective for many people, enables other treatment to move forward</td>
<td>Most medications have side effects</td>
</tr>
<tr>
<td>Relaxation Techniques</td>
<td>Help resolve stresses that can contribute to anxiety</td>
<td>Breathing re-training, exercise and other skills</td>
<td>Person actively involved in recovery skills that are useful for a lifetime</td>
<td>Can take time to achieve results</td>
</tr>
</tbody>
</table>

Treatment is successful in as many as 90 percent of anxiety disorder patients. Most people respond best to a combination of the four options summarized in this table. Source: Evans, 2007.

The chart above includes the two most effective forms of psychotherapy for persons of nonveteran status with anxiety disorders—cognitive and behavioral. CBT is, of course, an empirically supported treatment for anxiety disorders in adults. Moreover, it holds up exceptionally well in the real world of clinical practice (Stewart & Chambless, 2009). A variety of medications can be used for persons with anxiety disorders; however, benzodiazepines should not be the first drug of choice. Antidepressants tend to be the most standard medication. More often than not, treatment involving medication is combined with some type of psychotherapy (Simon, 2010).
In addition to one of the cognitive-behavioral therapies and medication, relaxation techniques/biofeedback might be added to the treatment regimen for persons with symptoms of GAD. Relaxation/biofeedback tends to alleviate muscle tension. Exposure-based therapies have been shown to end or reduce phobic reactions for persons with phobias for as long as seven (7) years. PTSD usually demonstrates more effectiveness when combining psychotherapy and medication (Evans, 2007). PE and CPT are particularly useful psychotherapies for veterans or persons who have encountered experiences similar to those of war (DVA, 2009).

**Antidepressant Warnings**

Since antidepressants can be a treatment option for persons with anxiety disorder, it should be noted that the same “black box” warnings cited in the section on Mood Disorders apply here. Further, patient monitoring is critical.

**References**


(This reference is also a continuing education offering that illustrates assessment and treatment of PTSD in a geriatric survivor of Hurricane Katrina. It is accompanied by a video available for viewing online and accessible through a link on the main web site.)


SCHIZOPHRENIA
Schizophrenia in Adults

Schizophrenia is profoundly disruptive, involving cognition, perception, emotion, and other aspects of behavior in a psychopathological way. The way it manifests varies across patients and over time. However, the consequences are typically long lasting and very severe. Quite frequently schizophrenia shows up before the age of 25 and continues throughout the lifespan, regardless of the socioeconomic status of the individual. Because the disease follows such an erratic course, patients as well as their families generally receive poor care. More important, they are prone to experience alienation and ostracism because so many people don’t really understand the disease (Sadock & Sadock, 2007).

A disabling brain disorder, schizophrenia is less common than many mental disorders. Only about one (1) percent of the total U.S. adult population suffers from schizophrenia (NIMH, 2010), with nearly 67 percent of the cases becoming chronic (Rosenberg, Woo, & Roane, 2009). However, statistics for African American males are staggering. They are overdiagnosed with schizophrenia at least five times greater than any other group of people (AnnArbor.com Staff, 2010). The overdiagnosis of African Americans as schizophrenic has been long-standing. Even recent studies of psychiatric inpatients show 83 percent of African Americans with a diagnosis of schizophrenia compared to 49 percent of whites (Barnes, 2008). Dr. Annelle Primm notes the problem as one of the many disparities related to recognition and diagnosis of mental health disorders in African Americans (Barclay, 2009).

Contrary to the myths surrounding people with schizophrenia, they tend not to be violent (Swanson et al., 2007). Statistics show that most violent crimes are not committed by persons experiencing schizophrenia. Substance use and/or delusions of persecution in people with schizophrenia may increase the propensity of violence. Any acts of violence, however, are generally directed toward members of their family. Further, the incidents often occur at home (NIMH, 2009). Research has also found that a history of childhood conduct problems factors into whether people diagnosed with schizophrenia will commit violent acts as adults (Swanson et al., 2007).

While schizophrenia tends to affect men and women with equal frequency, onset is earlier for men than women. The illness generally shows up in men during their late teen years or early twenties. For women, however, onset occurs in the twenties and early thirties. It is rare that individuals develop schizophrenia after age 45 (NIMH, 2010). Ten to 20 percent of patients are able to sustain competitive employment, either full- or part-time, and most require some type of public assistance for support (Velligan & Alphs, 2008).
DSM-IV-TR Criteria

Schizophrenia

A. At least two of the following must be present for a significant period of time during a one-month period (Time frame may be less a month if treatment has been initiated and is successful.):
   a. hallucinations
   b. delusions
   c. catatonic behavior or grossly disorganized
   d. disorganized, poorly coherent speech
   e. negative symptoms (that can be remembered as the three A's)
      i. Affective flattening (lack of emotional expressiveness)
      ii. Avolition (lack of initiation of goal-directed behavior); and
      iii. Alogia (poverty of speech)

- Note: Only one of the above need be present if the delusions are bizarre, the hallucinations include a voice providing a running commentary on the person’s behavior or thinking, or at least two voices are conversing with each other.

- For a substantial portion of time since the onset of the disorder, at least one major area of functioning should be markedly below the level achieved before onset. Major areas of functioning include self care, work, and interpersonal relations.

- The illness must be present for a period of at least six (6) months, of which one of these months will include active-phase symptoms, as described in “A” above. The balance of the six months may then include residual or prodromal phases with negative symptoms and at least two (2) symptoms from “A” above in attenuated form like unusual perceptual experiences or odd beliefs.

- Schizoaffective Disorder and Mood Disorder with Psychotic Features have been ruled out as differential considerations.

- The disorder is not due to a general medical condition or the direct physiological effects of a substance (APA, 2000).

The longitudinal course should also be identified when at least a year has elapsed since the initial course of active phase symptoms:
   - Episodic with interepisode residual symptoms (also specify if “with prominent negative symptoms”)
   - Episodic with no interepisode residual symptoms.
     - Continuous (also specify if “with prominent negative symptoms”)
     - Single episode, partial remission (also specify if “with prominent negative symptoms”)
     - Single episode, full remission
     - Other/unspecified pattern (APA, 2000).

Five subtypes of schizophrenia are identified in the DSM-IV-TR. They are disorganized, catatonic, paranoid, residual, and undifferentiated. The disorganized type is characterized by marked regression to disinhibited, unorganized, and primitive behavior, as well as by the absence of symptoms that meet the criteria for the catatonic type. Onset is generally in advance of the age of 25 years. The catatonic type, marked by disturbance in motor function, rigidity, stupor, negativism, excitement, or posturing, is almost extinct in North America and Europe. At one time, it was the most common type. Patients having the paranoid type exhibit preoccupation
with at least one delusion or frequent auditory hallucinations. Delusions of grandeur or persecution predominate and onset is typically later than for the disorganized type. Persons who clearly demonstrate behaviors of schizophrenia but cannot be “typecast” easily fall into the undifferentiated type. Residual type is defined by the absence of active symptoms or sufficient symptoms to meet the criteria for one of the other types of schizophrenia (Sadock & Sadock, 2007).

Relationship between Schizophrenia and Other Behavioral Health Concerns

- Substance abuse is extremely common among persons diagnosed with schizophrenia (Hodgins, Lincoln, & Mak, 2009; Schwartz, Hilscher, & Hayhow, 2007; NIMH, 2009).
- Prevalence of co-occurring schizophrenia and substance use disorders in America varies between 47 to 70 percent, and surpasses 80 percent when nicotine is added (Smelson, 2008).
- Schizophrenia is more common in people who have experienced depression than in the general population (Brichford, 2010).
- Suicide rates and mortality rates are significantly higher in adults with schizophrenia as compared to the general population (Wetherell & Jeste, 2003).

Relationship between Schizophrenia and Physical Health

- Individuals with schizophrenia have a 20 percent shorter life span than the general population (Bartels, 2004).
- Among the illnesses highly prevalent in persons with schizophrenia are myocardial infarction, coronary artery disease, and diabetes.
- Mortality rates for persons with schizophrenia are estimated at two to four times the rates of the general population (Rosenberg et al, 2009).

Relationship between Schizophrenia and Aging

Half of one (1) percent of people older than 65 years of age has schizophrenia (Wetherell & Jeste, 2003). Only around 15 percent of individuals with schizophrenia have late-life onset, i.e., development of the disorder at age 50 or older. Regardless of onset, the level of functioning of elderly persons with schizophrenia varies. About a third are able to maintain employment following the onset of psychosis and more than seven (7) in 10 are likely to live independently. In general, though, they are likely to demonstrate more negative symptoms, have lower education, and perform more poorly on neuropsychological testing than their healthy similarly aged peers (Rosenberg et al., 2009).

Compared to people without schizophrenia, older adults who have been diagnosed tend to have greater difficulty learning new material and performing executive functions such as interpreting abstract concepts or doing long-term planning. Yet, the cognitive performance of most patients tends to remain relatively stable over time (Wetherell & Jeste, 2003). Older persons with schizophrenia tend have more severe physical health problems, but they do not seem to have more illnesses than their geriatric peers (Bartels, 2004).

Better than 80 percent of older persons with schizophrenia live in the community rather than in psychiatric hospitals or nursing homes. Care costs for persons with schizophrenia are still higher for older individuals (at least 65 years of age) than for younger persons with the illness, even
when the care is provided for in the community. One thing we can be certain of is that as more individuals survive into their later years, the number of persons over the age of 65 years with schizophrenia will most likely escalate (Rosenberg et al., 2009; Wetherell & Jeste, 2003).

**Differential Diagnosis**

<table>
<thead>
<tr>
<th>Bipolar Disorder</th>
<th>Substance-Induced Psychotic Disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schizoaffective Disorder</td>
<td>Catatonic Disorder Caused by General</td>
</tr>
<tr>
<td>Mood Disorder with Psychotic Features (aka-</td>
<td>Medical Conditions</td>
</tr>
<tr>
<td>‘Psychotic Depression’)</td>
<td></td>
</tr>
<tr>
<td>Organic Disorders (e.g., neurodegenerative,</td>
<td>Substance Use Disorders (e.g., steroid abuse,</td>
</tr>
<tr>
<td>metabolic/toxic, or infectious</td>
<td>cocaine intoxication)</td>
</tr>
<tr>
<td>etiologies)</td>
<td></td>
</tr>
<tr>
<td>Psychotic Disorders Associated with General</td>
<td>Personality Disorders (e.g., paranoid,</td>
</tr>
<tr>
<td>Medical Conditions (e.g., CNS tumor,</td>
<td>borderline, schizotypal, or schizoid</td>
</tr>
<tr>
<td>seizure disorder, Cushing’s syndrome)</td>
<td>personality disorders)</td>
</tr>
<tr>
<td></td>
<td>Delusional Disorder</td>
</tr>
<tr>
<td></td>
<td>(APA, 2000; Sadock &amp; Sadock, 2007)</td>
</tr>
</tbody>
</table>

**Screening**

Schizophrenia is characterized by both positive and negative symptoms, as well as cognitive symptoms. Positive symptoms are the psychotic behaviors not seen in healthy persons. They include hallucinations, delusions, thought disorders, and movement disorders. Having positive symptoms often puts people with schizophrenia out of touch with what is real. The symptoms fade in and out. Sometimes they are extremely severe and other times they are barely noticeable (NIMH, 2009).

Positive symptoms tend to be the elements that get people’s attention because they lead to hospitalization, emergency room visits, utilization of crisis services, even contact with the criminal justice system for persons with schizophrenia (Velligan & Alphs, 2008). However, research has shown that negative symptoms contribute more to the poor quality of life and functional outcomes for persons with schizophrenia. These symptoms include diminished affective responsiveness, speech, and movement; social withdrawal; and problems with motivation (Kopelowicz, Zarate, Tripodis, Gonzalez, & Mintz, 2000; Velligan & Alphs, 2008). Unfortunately, patients tend not to report negative symptoms as problematic and they seem to be less concerned about them than their family members or friends. Clinicians, in particular medical staff, may fail to get information about negative symptoms because they lack sufficient time to observe and/or ask about specific behaviors. Patients with deficit syndrome, i.e., primary and enduring negative symptoms, have been observed to have larger cognitive deficits and much poorer outcomes than patients who do not manifest this syndrome (Velligan & Alphs, 2008). Estimates are that one in every four persons with schizophrenia manifests the deficit syndrome (Harvard Medical School, 2006).

Finally, there are cognitive symptoms in schizophrenia which tend to be less pronounced. Like the negative symptoms, cognitive issues may not be detected until other tests are performed, such as tests of executive functioning. Among the cognitive symptoms of schizophrenia are trouble focusing or paying attention; problems with ‘working memory’ or memory that allows people to use information immediately after learning it; and poor ‘executive functioning,’ which encompasses the ability to understand information and use it to make decisions (NIMH, 2009).
Researchers have identified a combination of risk factors that help predict who will experience a psychotic break with up to 80 percent accuracy. Risk factors constitute:

- Dropping out of activities;
- Deterioration of social functioning, including disturbed thoughts;
- History of drug abuse; and
- Family history of schizophrenia (Cannon et al., 2008; Munsey, 2008).

**Screening Procedures and Tools**

There is a lot of excitement around research on schizophrenia. For years, researchers have been trying to identify criteria that would allow clinicians to reliably predict which individuals are actually going to convert to psychoses and it appears that they now have an answer. Using the Structured Interview for Prodromal Syndromes (SIPS), researchers found that 35 percent of at-risk patients developed psychosis within a 30-month period. Adding drug abuse increased the prediction to 43 percent. Meeting the SIPS criteria plus five unique factors, the predictive power increased to nearly 80 percent. Those unique factors consist of: unusual thought content; decline in social functioning; any substance abuse; suspicion and paranoia; and genetic risk (first-degree relative has psychotic illness) along with functional decline. Researchers say that clinicians can make these predictions using clinical criteria that every psychiatrist will recognize (Moran, 2008; Munsey, 2008). However, a couple of tools are described below that may assist clinicians, particularly for non-psychiatrists, in arriving at an accurate diagnosis or prediction.

**Positive and Negative Syndrome Scale (PANSS)**

Other research has focused on the central role of negative symptoms in schizophrenia. In fact, researchers routinely include measures of negative symptoms in their studies. One such instrument is the Positive and Negative Syndrome Scale (Kopelowicz et al., 2000). This instrument has been widely used in the study of antipsychotic therapy with people who have schizophrenia. The scale is designed to measure two types of symptoms in schizophrenia: positive symptoms, which encompass an excess or distortion of what is normal, such as hallucinations and delusions, and negative symptoms, which represent a loss or lessening of what is normal. The PANSS is a relatively brief, interview-style instrument, requiring 45 to 50 minutes of administration time. The interviewer must be trained to a standardized level of reliability. The patient is rated from 1 to 7 on 30 different symptoms based on the interview as well as reports of health care workers or family members. There is a positive scale, a negative scale, and a general psychopathology scale (Wikipedia, 2010).

**Brief Psychiatric Rating Scale (BPRS)**

The Brief Psychiatric Rating Scale (BPRS) has been designed to assess the level of 18 symptom constructs, including but not limited to hallucination, grandiosity, suspiciousness, and hostility. Gauging the efficacy of treatment in patients who have at least moderate psychoses is its primary benefit to clinicians. Responses are completed based on the clinician’s interview with the patient and observations of his/her behavior. Patients are observed over a two- to three-day period if hospitalized. Information from family members or other informants is the typical data source when clients are outpatients (Jha, 2004). Each item is scaled from 1 (not present) to 7 (extremely severe). Scale completion and scoring take from 20-30 minutes. A copy of the BPRS, as well as scoring criteria, is included in this section of the guidelines. An expanded version is also available.
BRIEF PSYCHIATRIC RATING SCALE (BPRS)

Instructions for the Clinician:

The Brief Psychiatric Rating Scale (BPRS) is a widely used instrument for assessing the positive, negative, and affective symptoms of individuals who have psychotic disorders, especially schizophrenia. It has proven particularly valuable for documenting the efficacy of treatment in patients who have moderate to severe disease.

It should be administered by a clinician who is knowledgeable concerning psychotic disorders and able to interpret the constructs used in the assessment. Also considered is the individual's behavior over the previous 2-3 days and this can be reported by the patient's family.

The BPRS consists of 18 symptom constructs and takes 20-30 minutes for the interview and scoring. The rater should enter a number ranging from 1 (not present) to 7 (extremely severe). 0 is entered if the item is not assessed.

First published in 1962 as a 16-construct tool by Drs. John Overall and Donald Gorham, the developers added two additional items, resulting in the 18-item scale used widely today to assess the effectiveness of treatment.

BPRS Scoring Instructions:

Sum the scores from the 18 items. Record the total score and compare the total score from one evaluation to the next as the measure of response to treatment.
Treatment

Schizophrenia follows a predictable course. It typically emerges in either late adolescence or early adulthood and progresses into a severely disabling condition. The bad news is that patients usually do not receive treatment until late in the course of the illness. Recent, emerging evidence, however, points to the possibility that interventions may help to improve outcomes during the early stage of the disease. Imaging studies have shown that patients with schizophrenia experience brain volume loss—at least one (1) percent in the first year alone. (Kuehn, 2010).

There are two phases of treatment plus a maintenance/recovery phase. One phase focuses on the severe symptoms of the acute psychotic episode while the other addresses improvement in functioning and prevention of relapse during the maintenance or recovery phase of the disease.

- **Acute phase** – This phase involves intense psychotic symptoms. Treatment focuses on getting the psychotic symptoms under control so that the patient will not be a danger to himself/herself or others. It is likely that the patient will need hospitalization during this phase. Obviously, medication is the primary treatment.

- **Stabilization phase** – This phase takes place after the acute psychotic symptoms have been controlled. Patients may continue to experience symptoms, but they should be the milder symptoms of the disease. Unfortunately, this is the phase in which patients are extremely vulnerable to relapse. The goal of this phase is to prevent relapse, further reduce symptoms, and move the patient forward into the more stable maintenance (recovery) phase.

- **Maintenance phase** – The goal here is to sustain symptom control or remission, reduce the risk of relapse and/or hospitalization, and teach skills of daily living. Treatment in this phase is typically multifaceted, involving medication, supportive therapy, family education, counseling, and vocational/social rehabilitation (Smith et al., 2008).

Treatment, if effective, will result in the following outcomes for individuals with schizophrenia:

- Less frequent or shorter hospitalizations.
- Less abuse of alcohol or other drugs.
- Less need for intensive supports at home.
- Improved enjoyment and satisfaction in relationships.
- Greater likelihood of independent living and the ability to maintain a job (Smith et al., 2008).

Nonpharmacological Treatments

Psychotherapy

As with many other mental disorders, cognitive behavioral therapy (CBT) is highly recommended in the treatment of schizophrenia. Its purpose is to help individuals with symptoms that do not go away, despite the fact that they may be taking medication and may start to feel better. The therapist will teach persons with schizophrenia how to test the reality of their perceptions and thoughts, how not to listen to their voices, and how to manage their symptoms overall (NIMH, 2009).
A form of CBT that was specifically designed for schizophrenia is Cognitive Rehabilitation, Remediation, or Enhancement. This approach is based on the theory that patients become distant because the people around them distance themselves as a result of the patient’s manifestation of negative symptoms such as being unable to express feelings or emotion. Through this therapy, individuals learn social skills, focusing on reading social cues, communicating their own needs, and demonstrating understanding (NIMH, 2009).

**Family therapy** helps patients and their families avoid harmful emotional distancing and angry confrontations. There is evidence to support the effectiveness of multiple family groups in reducing negative symptoms (Harvard Medical School, 2006). Working with the family can further lead persons with schizophrenia to attain higher levels of functioning (Smith et al., 2008). **Supportive therapy** is also very helpful. It offers morale building, companionship, reassurance, commonsense advice, and, in many instances, help with practical problems. **Psychoeducation** is an additional strategy for persons with schizophrenia and their families. The goal is to educate both the patient and family members regarding the illness to assist in the coping process and hopefully avoid potentially harmful emotional reactions. The psychoeducational component also includes daily life skills training and assistance in how to socialize with other people (Harvard Medical School, 2006). Psychoeducation is sometimes subsumed under supportive therapy. Nevertheless, it provides a way for people with schizophrenia to monitor their progress, watch for signs of relapse, practice taking their medication daily, and to learn to deal with any side effects caused by the medication. It may also be referred to as **illness management and recovery** (Smith et al., 2008).

Early trials suggest that very simple, cost-effective behavioral interventions may be effective for prevention. Strategies have included CBT, supportive therapy, and Assertive Community Treatment (ACT) with family education/crisis intervention components. Research targets at-risk patients that have not developed the full-blown disease (Kuehn, 2010).

**Electroconvulsive Therapy**

It should not be surprising that **electroconvulsive therapy** (ECT) is a highly recognized treatment for patients with schizophrenia. ECT was actually developed for the treatment of this illness. It tends to be most effective when catatonic or affective symptoms are prominent or when the duration of the disease is relatively brief (Enns, Reiss, & Chan, 2010). Adults, i.e., individuals 18 years of age and older, in Tennessee are required to make an informed mental health treatment decision regarding the use of ECT or other types of convulsive therapies (TDMHDD, 2001).

In most instances, ECT is used as a second- or third-line treatment after psychotropic medications, in particular, have failed. However, the decision to use ECT as treatment should be based on numerous considerations, not solely on diagnosis. The number of treatments necessary for an effective course of ECT varies across patients. Typically though, patients with schizophrenia are expected to show improvement after 14 to 16 weeks. If little to no improvement has been demonstrated within that time frame, a second opinion should be considered before proceeding further (Enns et al., 2010).

A thorough medical and psychiatric evaluation must be conducted in advance of ECT administration. Conditions such as recent myocardial infarction, congestive heart failure, etc., would be of particular concern because an anesthesiologist would need to be consulted.
Older patients at least 50 years of age should receive an electrocardiogram, as well as patients that have known histories of hypertension, diabetes, renal disease, cardiovascular disease, or pulmonary disease. It is possible that ECT will be accompanied by potentially significant medical complications such as prolonged apnea or pulmonary complications. However, these complications can usually be successfully managed or avoided if appropriate pre-ECT assessment, optimization of overall medical care, appropriate anesthetic management and prompt attention to emerging medical concerns are implemented (Enns et al., 2010).

Other Psychosocial Treatments

Sometimes patients are taught illness management skills where they are allowed to take an active role in managing their own illness. As patients, they learn basic facts about the disease and its treatment, in addition to learning the early warning signs of relapse and how to prevent it. Rehabilitation is helpful for the patient because it will help the individual function better in his/her community. Through rehabilitation, persons with schizophrenia can gain vocational and social training that might include job counseling, counseling in money management, assistance in learning to use public transportation or his/her own transportation, and opportunities to practice communication skills.

Self-help groups are also becoming more common for people with schizophrenia and their families. These groups are typically comprised of peers that support and comfort each other.

In addition, families should be educated about the disease and how to help their family member with schizophrenia. Often the family member with schizophrenia may be hospitalized and the family will need to know as much as possible about the illness and how to help their family member stay on course with his/her treatment, including medications. A clinician will generally provide family education so that the family members can learn coping strategies and problem solving. They may even learn where to find outpatient and family services in the community (NIMH, 2009).

Pharmacological Treatments

Pharmacological treatment of schizophrenia is typically first line. It is rare that persons diagnosed with this disorder would not require medication to control the most troubling symptoms (National Mental Health Information Center, 2003). Medications for schizophrenia, especially in the acute phase, usually consist of new generation or atypical antipsychotics. These are medications that treat not only the positive symptoms, as do the conventional antipsychotics, but additionally treat the negative symptoms and most often with fewer side effects (Mental Health America, 2010). Common convention has defined adequate drug treatment for schizophrenia as a period of four to ten weeks, with trials of two to three antipsychotic medications (Shim, 2009). Suggested dosages for atypicals are shown in Table 3 below.
### Table 3: Suggested Dosages for Atypical Antipsychotic Medications

<table>
<thead>
<tr>
<th>Medication</th>
<th>Typical dosage range per day (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risperidone</td>
<td>4 – 6</td>
</tr>
<tr>
<td>Olanzapine</td>
<td>10 – 20</td>
</tr>
<tr>
<td>Aripiprazole</td>
<td>10 – 30</td>
</tr>
<tr>
<td>Sertindole</td>
<td>16 – 24</td>
</tr>
<tr>
<td>Ziprasidone</td>
<td>120 – 160</td>
</tr>
<tr>
<td>Quetiapine</td>
<td>250 – 600</td>
</tr>
<tr>
<td>Amisulpride</td>
<td>400 – 800</td>
</tr>
</tbody>
</table>

Source: Adapted from Shim, 2009.

The September 2009 Guide Watch updated recommendations regarding first-line antipsychotic agents. Several recently published effectiveness studies contended that the first-generation antipsychotic medications perphenazine and molindone may be as effective as second-generation medications. Additionally, a population-based cohort study observed lower rates of mortality with perphenazine when compared to other first- and second-generation antipsychotics. Only clozapine was linked to lower rates of overall mortality (Dixon et al., 2009). Clozapine also exhibits superiority in treatment-resistant cases (Foussias & Remington, 2010).

Finding the right drug and dosage for schizophrenia treatment is a trial and error process because the antipsychotics affect people differently. It is not possible to know in advance how helpful a particular antipsychotic will be, the dosage level that will be most effective, and what side effects will occur. Further, it takes time for the antipsychotics to take full effect. While some symptoms may respond to medication within a couple of days, other symptoms may take weeks, even months, before any improvement becomes evident. On the average, most people will see a significant improvement in their illness within six (6) weeks after starting medication. If no improvement is evident within this time frame, it is likely that the dosage and/or medication is not working and that a change in one or both may be warranted (Smith et al., 2008).

There is no cure for schizophrenia, so it is certain that people with the disease will require medications for extended periods of time, maybe for life. Yet the goal is to find a medication regimen that keeps the symptoms of the disorder under control and yields the fewest side effects. Changes in medication or dosages should never be sudden or unsupervised as such irresponsibility can trigger a severe relapse or other grave complications (Smith et al., 2008).

Not all cases of schizophrenia respond to treatment. Estimates suggest that between one fifth to three fifths of patients with schizophrenia have the treatment-resistant form. Both the International Psychopharmacology Algorithm Project (IPAP) and Kane et al. (2001) proposed useful definitions of treatment-resistant schizophrenia. Per IPAP, after two trials of 4-6 weeks each involving two different antipsychotic medications at adequate dosages, patients will exhibit any one of the following:

- Recurrent mood;
- Repeated suicide attempts or suicidal ideation;
• Uncontrolled aggressive behavior;
• Persistent psychotic symptoms;
• Moderate to severe negative symptoms; or
• Moderate to severe cognitive impairment (Shim, 2009).

Many variations of the Kane et al. (2001) criteria are found in research and in clinical practice. Elements identified across all versions include severe recurrent symptoms, treatment resistance to current antipsychotics, and a history of treatment resistance. Clinically speaking, patients with treatment-resistant schizophrenia most often fit the following profile:

• History of substance abuse;
• More psychiatric hospitalizations;
• More psychotic episodes;
• Fewer periods of remission;
• Longer time that the psychosis goes untreated;
• Male; and
• 19 years of age and younger.

Since 1988, clozapine has been billed as the most effective agent for treatment-resistant schizophrenia. Current research continues to yield similar findings. While not always superior in efficacy, clozapine consistency diminishes psychopathology, improves quality of life, and is linked to lower rates of discontinuation. Switching to clozapine for treatment of resistant schizophrenia can be gleaned from the following IPAP algorithm (Shim, 2009).
**IPAP Schizophrenia Algorithm**

1. Diagnosis of schizophrenia or schizoaffective disorder

2. Consider critical initial or emergent issues affecting management and choice of drugs (*here* and at each subsequent treatment node)

**MONOTHERAPY**

3. 4-6 week trial of an atypical (AMI, ARIP, OLANZ, QUET, RISP, or ZIP) or, if not available, a trial of HAL, CHLOR or other typical antipsychotic

4. Trial of adequate dose, duration, no intolerability?
   - yes
   - no

5. Psychosis persists after adjusting dose?
   - yes

**MONOTHERAPY**

6. Second 4-6 week trial of second atypical if available, or second typical, if not

7. Adequate trial? (*see 4*)
   - yes
   - no

8. Psychosis or mod to severe TD or tardive dystonia after adjusting dose?
   - yes

9. Six month trial of CLOZ up to 900 mg/day

10. Persistent symptoms?
    - yes
    - no

11. Optimize CLOZ and/or augment with ECT or adjuvant medication, alternate strategies

12. Enter maintenance phase

**KEY:** Atypicals – AMI = amisulpride; ARIP = aripiprazole; CLOZ = clozapine; OLANZ = olanzapine; QUET = quetiapine; RISP = risperidone; ZIP = ziprasidone. Typicals – CHLOR = chlorpromazine; FLU = fluphenazine; HAL = haloperidol; THIO = thiothixene. Other – AD = antidepressant; BDZ = benzodiazepine; ECT = electroconvulsive therapy; IM = intramuscular; MS = mood stabilizer; TD = tardive dyskinesia; NMS = Neuroleptic Malignant Syndrome

© Copyright 2004-2006 International Psychopharmacology Algorithm Project (IPAP) www.ipap.org

*Permission for use granted by Dr. Herbert Meltzer and his IPAP colleagues.*
Weber, Gutierrez, & Mohammadi (2009) have identified issues that clinicians should consider when deciding whether to switch antipsychotics, as required when treating schizophrenia that is resistant to treatment. Initially, there is the decision to switch or not to switch medications. First, the clinician should determine whether the patient is willing to make lifestyle changes in activity and diet. Then the clinician should gauge the patient’s willingness to adhere to the extra monitoring required by switching. In short, the clinician has to consider the psychiatric stability of the patient for which switching medications is a consideration.

There are three possible switching strategies from which clinicians might choose. The first is the discontinuation/initiation method. This method involves immediate discontinuation of the first antipsychotic and initiation of the new antipsychotic at full dose. Studies have demonstrated successfully switching patients to aripiprazole from their present antipsychotic, but there is little research to support this strategy in clinical practice. The second method is taper/initiation where the first antipsychotic is tapered over a two- to three-week period and the new antipsychotic is immediately initiated at full dose. Patients involved in this switching method tend to be clinically stable outpatients. The third method is taper/titration or crossover technique. In this method, the first antipsychotic is tapered over a two-week period and the new antipsychotic is titrated up over two weeks. Empirical evidence is scarce, but no significant increase in adverse outcomes have been reported with this crossover method. The jury is still out on which switching strategy is best, but there is agreement that the target dose should be estimated before initiating the switching process. The switch in medication should be agreed upon by the patient and the provider in advance of dose estimation (Weber et al., 2009).

Switching to another medication requires frequent monitoring and observation for decline in baseline functioning or adverse events. Weekly monitoring is preferable because it reduces risks of relapse; adverse side effects can be identified early and the patient’s change of mind can be observed before all drugs are stopped. The chosen switching method, however, should take into consideration patient and family readiness or reluctance to change, safety issues, and feasibility of maintaining proper medication administration. In addition to close monitoring, patient education should be provided during the switching process. Inform the patient regarding risks of relapse, risks of adverse events with both current and new medications, the importance of taking medications as prescribed during the switch process, and his/her need to report any adverse effects promptly (Weber et al., 2009).

Unfortunately, switching to clozapine does not ensure treatment success in 40-70 percent of the treatment-resistant patients. Patients for whom clozapine does not work typically maintain persistent active psychotic features. Treatment options that show promise include augmentation of clozapine with sulpiride, risperidone, or olanzapine or the addition of ECT to the clozapine therapy (Shim, 2009).

If negative symptoms are secondary to antipsychotic treatment, the symptoms can be alleviated by reducing the dosage of the current antipsychotic to a level that does not produce adverse extrapyramidal symptoms (EPS) or by prescribing an antipsychotic with a low likelihood of producing parkinsonian adverse effects. Treatments for depression might be considered if the negative symptoms are related to depressed affect (Velligan & Alphs, 2008).

Currently the treatment recommendation for at-risk patients does not entail antipsychotics. Instead treatment should involve the physician engaging the patient, monitoring his/her condition, and providing necessary support. Antipsychotic medications should be reserved for patients that are presently in a psychotic episode. (Kuehn, 2010).
More on Treatment

Outcomes from schizophrenia are quite variant. Nearly 20 percent of patients experience symptom remission. Another 20 percent go through symptom worsening. Then for the remaining 60 percent, disease course stays largely unchanged over time. Functioning can deteriorate or improve, usually within the first five to 10 years following onset. However, the following factors have been linked to better prognosis:

- Developing the illness later.
- Obtaining appropriate treatment early during the course of the disorder.
- Being female.

Rehospitalization can be a troubling issue for persons with schizophrenia. This situation will not only negatively impact the individual, but his/her family. Moreover, rehospitalization is financially costly. Evidence points to the fact that rehospitalization often occurs early following discharge, so research has examined factors that may minimize or eliminate early rehospitalizations. Lin & Lee (2008) observed that lack of contact with outpatient services within two months following discharge led to significantly higher rehospitalization rates than when patients met at least one appointment within a two-month period after discharge. Thus, it appears that timely outpatient visits are associated with decreased risk of rehospitalization.

Smoking is a significant problem for persons with schizophrenia which makes smoking cessation a critical health challenge. Recent studies have identified greater rates of abstinence among smokers with schizophrenia when participants in an eight-session behavioral/motivation enhancement intervention in conjunction with nicotine replacement therapy, specifically involving bupropion. Since bupropion is an FDA-approved treatment for smoking cessation, it can be recommended as a smoking cessation intervention for persons with this psychotic disorder. The research further suggests that smoking cessation programs likely need to incorporate extended outreach to improve treatment engagement and retention, training in coping skills that can be used to manage negative affect that replaces the smoking, and other strategies to overcome some of the common barriers to smoking cessation encountered by this group of smokers. While bupropion provides significant benefits to patients that want help with smoking cessation, it is associated with the potential for serious neuropsychiatric symptoms. Among the symptoms are hostility, agitation, depressed mood, changes in behavior, suicidal thoughts and behavior, and attempted suicide (Dixon et al., 2009). Careful monitoring should be instituted when bupropion is prescribed.

Not all persons with schizophrenia have comorbid substance use disorders and appropriate screening can help ensure the right diagnosis and treatment. However, substance abuse is the most common co-occurring disorder in individuals with schizophrenia, so integrated treatment is highly recommended as it results in more positive outcomes (NIMH, 2009). This means that psychosocial treatments must serve as the foundation for care of patients with schizophrenia, in conjunction with medications. Medications should be selected based on their risk of harm to the patient who also uses substances, assessing anticholinergic, weight-gain inducing, seizure-threshold lowering, sedating, and other potentially harmful effects. Efforts should be made to avoid prescribing medications with known abuse potential or high overdose lethality. How medications are dispensed to individuals with co-occurring schizophrenia and substance use should further be a consideration. Use strategies that can reduce risk and improve safety of use
and tolerability such as limiting the dispensing of medication to only that which is needed for brief periods of time or limiting refills and making refills contingent on the patient actually returning for a follow-up appointment. All medications should be titrated to realize full recovery with flexibility of dose administration (Smelson, 2008). For patients with schizophrenia, clozapine treatment appears the most promising. Typical antipsychotics do not have positive impact on substance use disorders (Brunette et al., 2008).

Unfortunately, the co-occurrence of schizophrenia and substance abuse often results in poor treatment adherence. Research says that this group of patients discontinues treatment much more rapidly than persons with schizophrenia that do not have substance use as a co-existing problem. Individuals with this co-occurrence tend to present with more severe positive symptoms and experience more rehospitalizations, more violent episodes, longer admissions, increased suicidality (Lin & Lee, 2008).

Poor adherence to treatment is a typical problem for patients with schizophrenia, not just for those that have co-existing substance use issues. As many as six in 10 of patients with schizophrenia do not take their medications as prescribed and the consequences are costly. A number of environmental supports have been promoted as strategies to cue and reinforce the taking of medications by people with schizophrenia. Many of these supports have proven effective strategies for persons with physical illnesses (Velligan & Weiden, 2006).

Among the most prominent environmental supports are cognitive adaptation training (CAT) and Generic Environmental Supports (GES). CAT is a labor intensive, manualized environmental support used to bypass deficits in cognitive functioning and improve community adaptation for persons with schizophrenia. Customized for each individual, supports are established and maintained on weekly home visits. CAT therapists may provide checklists for tasks that involve complex behavioral sequencing or place equipment and signs for daily activities directly in front of the patient. Supports in CAT might include large calendars with pens, signs, labeled single-dose containers, notebooks, and technology. GES is also a manual driven environmental support. However it is offered to patients at their regular clinic visit so it is less labor intensive than CAT. GES supports might include a watch, bus passes, an alarm clock, a checklist of daily activities, pill containers, and reminder signs. Results demonstrate that the use of environmental supports, as provided in CAT and GES, improve functional outcomes and motivation for patients with schizophrenia (Velligan & Weiden, 2006; Velligan et al., 2008).

Antipsychotic Warning for Elderly

The Food and Drug Administration (FDA) issued a public health advisory in 2005 regarding the off-label use of atypical antipsychotic medications in the treatment of dementia-related behavioral disorders in the elderly. They found these medications to be associated with nearly a two-fold increase in mortality rate when patients treated with antipsychotics were compared to those treated with placebos. Additionally, the older, conventional antipsychotics may also be associated with increased risk of mortality when given in the context of dementia. Hence, clinicians need to be extremely caution when prescribing any antipsychotic for older adults. Because the risks were associated with dementia-related behavioral disorders, of which schizophrenia is not, researchers contend that the benefits outweigh the risks in treating older individuals with schizophrenia (Rosenberg et al, 2009).
References


Wetherell, J.L. & Jeste, D.V. Older adults with schizophrenia: Patients are living longer and gaining researchers’ attention. Elder Care, 3(2), 8-11.

SUBSTANCE USE DISORDERS
TDMHDD BEST PRACTICE GUIDELINES

Substance-Related Disorders in Adults

All disorders related to the taking of a drug of abuse, toxin exposure, or the side effects of a medication are subsumed under substance-related disorders (SRDs). These substances are grouped into 11 classes: alcohol; amphetamines, including similarly acting sympathomimetics; caffeine, cannabis; cocaine; hallucinogens; inhalants; nicotine; opioids; phencyclidine (PCP), including similarly acting aryalkylamines; and hypnotics, sedatives, or anxiolytics. Moreover, many of the classes share the same features. For example, cocaine shares features with amphetamines and alcohol shares features with the hypnotics, sedatives, and anxiolytics (APA, 2000).

In addition, many over-the-counter (OTC) and prescribed medications can cause SRDs. Symptoms generally occur when doses of the medication are high and tend to disappear when lower dosages are taken or the medication is stopped. Among the medications that may result in SUDs include, but are not limited to, analgesics, antihistamines, parkinsonian medications, antihypertensive medications, corticosteroids, muscle relaxants, nonsteroidal anti-inflammatory medications, antidepressants, and disulfiram (APA, 2000).

SRDs can surface as a result of exposure to chemical substances. For example, toxic substances such as heavy metals; rat poisons containing strychnine; pesticides containing nicotine; carbon monoxide; and carbon dioxide can cause SRDs. Volatile substances such as paint or fuel are categorized as “inhalants” if the purpose for their use is to become intoxicated. If the exposure is accidental or part of intentional poisoning, then the substance is classified as a “toxin.” Symptoms that may manifest from exposure to these chemical substances may include anxiety, delusions, hallucinations, or seizures. More common symptoms take the form of impairment of mood or cognition. Though the symptoms tend to fade during nonexposure to the substance, complete resolution may take weeks, even months, and it is possible that treatment may be necessary (APA, 2000).

SRDs actually comprise Substance Use Disorders (SUDs) and Substance-Induced Disorders (SIDs) (APA, 2000). Individuals with substance use disorders have problems with either substance dependence or substance abuse, criteria for which are provided below. Substances of abuse may include, but might not be limited to, alcohol, opiates, cocaine, amphetamines, hallucinogens, and prescription/OTC medications. Substance-Induced Disorders include Substance Intoxication and Substance Withdrawal; however, many of the disorders will not be found in the section labeled SRD (APA, 2000). Instead the disorder and its subsequent criteria will be located with its more appropriate category. For instance, Substance-Induced Mood Disorder will be found in the section on Mood Disorders rather than the section on Substance-Related Disorders.

Though these guidelines focus on adults ages 18 and older, some data on drug use and abuse are captured and reported for persons starting as young as age of 12. Most statistics are based on data from the National Survey on Drug Use and Health, which is an annual survey conducted by the Substance Abuse and Mental Health Services Administration (SAMHSA). These data help describe users of substances for illicit or nonmedical purposes. For example, the data shows us that early drug is a risk factor for addiction (Sadock & Sadock, 2007). For 2008, eight (8) percent of the population age 12 years and over had used illicit drugs during the
month preceding the survey. Illicit drugs are defined as cocaine (including crack), heroin, hallucinogens, marijuana/hashish, inhalants, or prescription-type psychotherapeutics used nonmedically (Office of Applied Statistics, 2008).

Additional statistics on substance use show that:

- One (1) in every 12 adults abuses alcohol.
- Problem drinking shows the highest prevalence among young adults ages 18-25 (Adelson, 2006).
- In 2007:
  - Approximately 1.1 million persons age 12 and over reported using hallucinogens (LSD, peyote, psilocybin, and PCP) for the first time within the past 12 months (NIDA, 2009a).
  - Close to 6,000 people a day used marijuana for the first time and six of every 10 was under the age of 18 (NIDA, 2009b).
  - 5.8 percent of adults 26 years of age and older reported current illicit drug use.
  - College graduates exhibited a lower rate of illicit drug use, but were more likely to have tried illicit drugs in their lifetime.
  - Illicit drug use rates are higher for the unemployed; however, most adults at least 18 years of age with a substance abuse or dependence problem are employed.
  - Over half of non-medical users of prescription-type pain relievers, tranquilizers, stimulants, and sedatives age 12 and over reported getting the drugs “from a friend or relative for free.”
  - Among persons age 12 and over, about 12.7 percent drove under the influence of alcohol at least once the previous year.
  - For persons between the ages of 12 and 49, the average age of first nonmedical use of psychotherapeutics was 21.8 years: 21.9 years for stimulants, 24.2 years for sedatives, 21.2 years for pain relievers, and 24.5 years for tranquilizers.
  - Alcohol consumption levels were correlated with tobacco use. Heavy drinkers age 12 and over tend to smoke cigarettes and cigars, and use smokeless tobacco (Office of Applied Statistics, 2008).

**DSM-IV-TR Criteria**

**Substance Dependence**

1) A maladaptive pattern of substance use, as manifested by at least three of the following and occurring at any time in the same 12-month period, that leads to clinically significant distress or impairment:

   a) Tolerance, as defined by one of the following:
      i) Markedly diminished effect with continued use of the identical amount of the substance
      ii) A need for markedly increased amounts of the substance to achieve desired effect or intoxication

   b) Withdrawal, as demonstrated by one of the following:
      i) The equivalent (or a closely related) substance is taken to avoid or relieve withdrawal symptoms
      ii) The characteristic withdrawal syndrome for the substance (Refer to criteria A and B of the criteria sets for Withdrawal from the specific substances.)

2) The substance is often taken over a longer period or in larger amounts than was intended
3) There is a persistent desire or unsuccessful efforts to control or cut down substance use
4) A great deal of time is spent in activities necessary to obtain the substance (e.g., driving long distances or visiting multiple doctors), use the substance (e.g., chain smoking), or recover from the effects of the substance
5) Important occupational, recreational, or social activities are reduced or given up because of substance use
6) The substance use is continued despite knowledge of having a recurrent or persistent psychological or physical problem that is likely to have been exacerbated or caused by the substance (e.g., continued drinking despite recognition that an ulcer was made worse by alcohol consumption, or current cocaine use despite recognition of cocaine-induced depression)

Specify if:
- With Physiological Dependence: Evidence of tolerance or withdrawal (i.e., either item "a" or "b" is present)
- Without Physiological Dependence: No evidence of tolerance or withdrawal (i.e., neither item "a" nor "b" is present)

Course specifiers:
- **Early Full Remission** (No criteria for Dependence or Abuse have been met for a month or more, but not for more than 12 months)
- **Early Partial Remission** (At least one criterion for Dependence or Abuse have been met, though the full criteria have not, for a month or more, but not for more than 12 months)
- **Sustained Full Remission** (No time during a 12-month-period have criteria for Dependence or Abuse been met)
- **Sustained Partial Remission** (At least one criterion for Dependence or Abuse have been met, though the full criteria have not been met for at least 12 months)
- **On Agonist Therapy** (Patient on prescribed agonist medication such as methadone; however, no criteria for Dependence or Abuse have been met for that class of medication for at least the past month, outside of withdrawal from, or tolerance to, the agonist. Patients being treated for Dependence using an agonist/antagonist or a partial agonist also fit in this category.)
- **In a Controlled Environment** (Patient is in an environment where access to controlled substances and alcohol is restricted and no criteria for Dependence or Abuse have been met for at least the past month. Closely supervised, substance-free locked hospital units, therapeutic communities, or jails are examples of these kind of environments.)

**Substance Abuse**

- A maladaptive pattern of substance use, as manifested by at least one of the following and occurring within a 12-month period, that leads to clinically significant distress or impairment:
  - Recurrent substance use resulting in a failure to fulfill major role obligations at home, school, or work (such as neglect of children or household, substance-related absences, suspensions, or expulsions from school; or repeated absences or poor work performance related to substance use)
  - Recurrent substance use in situations in which it is physically hazardous (such as operating a machine or driving a vehicle when impaired by substance use)
  - Recurrent substance-related legal troubles (such as arrests for substance related disorderly conduct)
  - Continued substance use despite having recurrent or persistent interpersonal or social problems exacerbated or caused by the effects of the substance (e.g., physical fights and arguments with spouse about consequences of intoxication)
Additionally, the symptoms have never met the criteria for substance dependence for this class of substance.

**Substance Intoxication**

- A reversible substance-specific syndrome, due to recent exposure to or ingestion of a substance, has developed. **Note:** It is possible for different substances to produce identical or similar syndromes.
- Clinically significant maladaptive psychological or behavioral changes that are the result of the effect of the substance on the central nervous system (e.g., mood lability, cognitive impairment, impaired judgment, belligerence, impaired occupational or social functioning). These changes may be evident during or shortly following the use of the substance.
- The symptoms are not better accounted for by another mental disorder and are not due to a general medical condition.

**Substance Withdrawal**

- A substance-specific syndrome due to a reduction in or the stoppage of substance use that has been prolonged and heavy.
- The substance-specific syndrome brings about clinically significant impairment or distress in occupational, social, or other important areas of functioning.
- The symptoms are not better accounted for by another mental disorder and are not due to a general medical condition.

**About Criteria Sets for Specific Substances**

Criteria sets for Substance Dependence, Abuse, Intoxication, and Withdrawal are applicable across classes of substances. However, there are additionally some unique aspects of Dependence and Abuse, e.g., for each class of substance. These specific criteria for each substance can be found online at Psychology Net at [http://www.psychologynet.org/dsm.html](http://www.psychologynet.org/dsm.html). Scroll down to Substance Use Disorders and access links to DSM-IV-TR criteria for Alcohol Dependence, Amphetamine Dependence, Cannabis Dependence, Cocaine Dependence, Hallucinogen Dependence, Inhalant Dependence, Opioid Dependence, Phencyclidine Dependence, and Sedative Dependence.

**Relationship between Substance Use Disorder and Other Behavioral Health Concerns**

- About four fifths of adults that are alcohol-dependent meet lifetime criteria for at least one (1) other psychiatric disorder.
- More than half of the patients with schizophrenia have a substance use disorder.
- The relative risk of co-occurrence of SUDs with any affective disorder is high, with an odds ratio of 2.3. However, the odds ratio for major depression is 2.7 and 9.2 for bipolar disorder.
- Close to 40 percent of persons with an anxiety disorder also have a substance use disorder.
- As many as 50 percent of patients with schizophrenia that seek treatment are dependent on alcohol or illicit drugs. Moreover, over 70 percent have nicotine dependence (Brady, 2002).
- There is a strong link between substance use and eating disorders (Ressler, 2008).
Relationship between Substance Use Disorder and Physical Health

- Drug and alcohol abuse causes or contributes to injury, illness, or the transmission of infectious disease, e.g., substance-related cardio- and skeletal myopathy, alcohol-induced bone loss, cocaine-induced myocardial infarction, poor fetal outcomes, unintentional and intentional injury, tobacco-related cancers, and HIV transmission among drug injectors.
- Drug and alcohol abuse exacerbate non-substance-related illness, e.g., diabetes, epilepsy, essential hypertension, and abdominal pain (Jones et al., 2004).

Relationship between Substance Use Disorder and Aging

Once considered a problem only of the young, substance abuse has become a growing problem for older people too. Recent statistics additionally confirm that misuse of alcohol and other drugs as a common cause of physical and mental health problems for the elderly, especially elderly men. Older people appear to be extremely vulnerable to the negative effects of substances because of the changes that the body goes through from aging (AGS Foundation for Health in Aging [AGS], 2005).

Unfortunately substance abuse typically goes unrecognized and hence untreated in older people. It should also be noted that other medical issues, such as the effects of medication and psychosocial problems, make the signs of abuse difficult to recognize. Severe hearing loss or confusion experienced by some older persons can hamper a clinician’s ability to question them about substance use. Moreover, the stigma that accompanies having a substance use problem serves to prevent some clinicians from bringing up the topic with older people. Further, the warning signs of substance abuse in older persons tend to be less obvious than in the young. For example, many older people are retired and drink or abuse drugs alone at home alone, so they are less likely to miss work, get into arguments, or be arrested due to their drinking and/or drugging. Some researchers even estimate that between five and ten percent of dementia is alcohol or drug abuse related (AGS, 2005).
**Differential Diagnosis**

All Axis 1 psychiatric disorders, e.g.,
- Substance-Induced Mood Disorder or Substance-Induced Psychosis (Brady, 2002)
- Attention Deficit Hyperactivity Disorder (Goodman, McIntyre, and Bukstein, 2009)

Panic Disorder
- Myocardial Infarction
- Congestive Heart Failure and Pulmonary Edema
- Seizure Disorder
  (APA, 2000; Cohagan, Worthington, & Krause, 2009; Sadock & Sadock, 2007)

**Screening**

Screening is a quick way to identify patients who need further assessment or treatment for substance use disorders, though it does not provide definitive information regarding diagnosis or possible treatment needs. Fortunately, a number of instruments have been developed for substance abuse screening (SAMHSA, n.d.). Nevertheless, it is best practice that all individuals seeking help for substance abuse treatment services be screened for co-occurring mental illness (Health Canada, 2007).

When considering screening instruments, look for tools that are brief, particularly for this population. In fact, having some sort of tool, which may involve just asking a few simple questions or observations that raise a high index of suspicion, will be extremely helpful. Start with Level I screening procedures. At this level, there are four alternatives from which to choose: establish an index of suspicion, ask a few questions, administer a brief screening instrument, or use intake staff judgment. It is usually better to “cast a wide net” in the screening process for substance use disorders (Health Canada, 2007).

A simple checklist of social, behavioral, and/or clinical indicators that, when considered as a group, can raise the suspicion that an individual has an SUD. Indicators may include, but not be limited to:

- Housing instability;
- Difficulty budgeting funds;
- Prostitution or other sexual acting out or sexual deviance;
- Social isolation;
- Cognitive impairments;
- Symptom relapses apparently not related to life stressors;
- Pervasive, repeated social difficulties;
- Threats of violence or violent behavior;
- Employment difficulties;
- Legal problems;
- Hygiene and health problems; or
- Treatment noncompliance.

Such indicators are typical consequences of substance abuse in individuals with mental disorders. Avoidance of disclosure for fear of inpatient admission, a cyclic history of replacement or substitute addictions, and repeated self-harm in the absence of obvious situationally relevant stressors would be prudent additions to the indicator checklist (Health Canada, 2007).
While potentially beneficial, asking a few questions about previous substance use problems, especially upon first presentation in settings where no trusting relationship has yet been established, can be difficult. Yet research has noted that the best predictor of substance use problems by the patient/consumer is their perception that others were concerned about their problems. Thus, when other approaches are considered inappropriate, clinicians could ask the following three questions. A positive response to any one of the three questions will indicate the need for further investigation.

- “Have you ever had any problems related to your use of alcohol or other drugs?”
- “Has a relative, friend, doctor or other health worker been concerned about your drinking or other drug use or suggested cutting down?”
- “Have you ever said to another person, ‘No, I don’t have [an alcohol or drug] problem,’ when around the same time, you questioned yourself and felt, ‘Maybe I do have a problem?’ (Health Canada, 2007)”

The third alternative involves a brief screener, for which the CAGE questionnaire, and a modification known as the CAGE-AID that addresses both alcohol and other drugs, was recommended. (The CAGE is one of the screening tools included in print copy in this section of the guidelines.) One of the primary considerations for this alternative is that the screening tool be brief and the CAGE definitely meets that criteria. It is comprised of only four items. Moreover, a few studies have found that the CAGE has decent psychometric properties, particularly high specificity and sensitivity. Results on its quality may be mixed because it asks information related to lifetime substance use rather than current substance use (Health Canada, 2007). Nevertheless, other brief measures could be used, several of which are included in print copy in these guidelines such as the TWEAK and UNCOPE.

The final Level I option is the judgment of the intake worker or clinician. If the patient has frequented the setting for several weeks or some period of time, staff can ask themselves questions to screen for an SUD. One study found that the best predictor of a person meeting criteria for an SUD was the questions: “Do you think that client has ever had a drinking or other drug problem? Would you say definitely, probably or not at all? (Health Canada, 2007)”

Of course, Level II screening procedures much more time and effort and therefore may not be practical for use in routine practice. Suggested screening tools are, in some cases, nearly five times longer than the shortest Level I measure (i.e., the CAGE). Tools might include the Alcohol Use Disorders Identification Test (AUDIT), Michigan Alcoholism Screening Test (MAST), Dartmouth Assessment of Lifestyle Instrument (DALI); and the Drug Abuse Screening Test (DAST). Screening at this level additionally includes a screen for mental health disorders. The Psychiatric Screener was the suggested tool for this purpose (Health Canada, 2007).

**Screening Procedures and Tools**

Fortunately a number of substance abuse screening instruments have been developed. Most of them are simple enough that they can be administered by a range of clinicians (SAMHSA, n.d.). The delineation below comprises a sample of brief screeners that can be used with people that have substance use disorders (SUDs).

**CAGE and CAGE-AID**

The CAGE is a substance abuse screener that is quite familiar to clinicians. It is one of the oldest and most popular screening instruments for alcohol abuse around. The CAGE is very brief,
consisting of only four (4) questions for which a single positive response suggests a problem with alcohol. The questions tend to inquire about problems associated with drinking instead of the amount of alcohol consumed. The instrument was likely developed that way because many persons that consume alcohol deny any problems with alcohol. Two ‘Yes’ responses indicate problems with alcohol.

Some researchers argue that the CAGE has limited utility, being most accurate for white males and less valid identifying alcohol abuse in the elderly, white women, and African and Mexican Americans (Buddy, 2010). Further, the CAGE focuses on lifetime use rather than current alcohol consumption.

The fact that the CAGE only dealt with alcohol problems spawned the development of the CAGE-AID (CAGE – Adapted to Include Drugs). This tool presents with four (4) questions but this time the questions cover both alcohol and drugs. As with the CAGE, each positive response for the CAGE-AID counts one (1) point. At least one (1) point identifies a positive screen. Both screens are included in these guidelines and available online from https://www.mhn.com/static/pdfs/CAGE-AID.pdf.

**TWEAK**

This tool has been highly recommended for use with females (Cohagan, et al., 2009). Originally it was developed to screen pregnant women for harmful drinking habits. It has since been used to screen for harmful drinking in outpatients, hospital patients, the general population, and in emergency room settings. The TWEAK is comprised of five (5) questions, three of which appear in the CAGE. Of the remaining two questions, one asks about blackouts and the other about the individual’s tolerance to alcohol. The test’s name is an acronym for Tolerance, Worried, Eye-opener, Amnesia, and K/Cut down (on consumption of alcohol) (Buddy, 2007).

**UNCOPE**

Unlike the CAGE and the TWEAK, the UNCOPE can be used to screen for other drugs in addition to alcohol. It too is a brief screen, comprised of six (6) questions that are found on other existing instruments and in research reports. The UNCOPE provides a quick and simple way of identifying risk for abuse and dependence on alcohol and other drugs.

This instrument was developed by Hoffmann and his colleagues and has been used in the Comprehensive Assessment and Treatment Outcomes Research (CATOR), the largest independent evaluation of chemical dependency in the United States. Only original items were used in the CATOR treatment evaluation system. However, using the revised wording, as allowed on two of the six (6) items, makes the instrument only slightly stronger psychometrically than the original version. The authors advise that all original questions can still be used. More recently, the UNCOPE has been administered to state prison inmates (Campbell, Hoffmann, Hoffmann, & Gillaspy, 2005; Hoffmann & Miller, 1992).

The NM Assist – Screening for Drug Use in General Medical Settings is available online at http://ww1.drugabuse.gov/nmassist/.
Has anyone ever felt you should cut down on your drinking?

Have people annoyed you by criticizing your drinking?

Have you ever felt guilty about your drinking?

Have you ever had a drink first thing in the morning (Eye-opener) to steady your nerves or to get rid of a hangover?

The maximum number of points that can be achieved is seven (7) because the first two items count as two points each. The remaining questions count for one point each. A question either receives the maximum score or the minimum score. For Question 1, a response of “3” or higher value yields the maximum score of two for that question. The other four questions receive the maximum score for each “Yes” response and the minimum score for each “No” response.

**NOTE:** The CAGE is in the public domain.
CAGE Adapted to Include Drugs (CAGE-AID)

Patient Name: ____________________________ Date: __________

Please circle “yes” or “no” for each question.

Have you felt you ought to cut down on your drinking or drug use? ................................. Yes  No

Have people annoyed you by criticizing your drinking or drug use? ................................. Yes  No

Have you felt bad or guilty about your drinking or drug use? ................................. Yes  No

Have you ever had a drink or used drugs first thing in the morning to steady your nerves or to get rid of a hangover (eye-opener)? ......................................................... Yes  No

NOTE: The CAGE-AID is in the public domain.
• **Tolerance** (2 points): How many drinks can you hold? (Six or more indicates tolerance.)

• **Worried** (2 points): Have close friends or relatives worried or complained about your drinking in the past year?

• **Eye opener** (1 point): Do you sometimes take a drink in the morning when you first get up?

• **Amnesia** (1 point): Has a friend or family member ever told you about things you said or did while you were drinking that you could not remember?

• **[K] Cut down** (1 point): Do you sometimes feel the need to cut down on your drinking?

The maximum number of points that can be achieved is seven (7) because the first two items count as two points each. The remaining questions count for one point each. A question either receives the maximum score or the minimum score. For Question 1, a response of “3” or higher value yields the maximum score of two for that question. The other four questions receive the maximum score for each “Yes” response and the minimum score for each “No” response.

A total score of two or more on the test suggests that harmful drinking is occurring and that further evaluation is warranted.

*Sometimes Question 1 asks:: “How many drinks does it take to make you feel high?” (Buddy 2007; Cohagan, 2009)*

**NOTE:** The TWEAK is in the public domain.
Variations in wording are noted for several of the items. The first wording is the original for the “U” and “P” items. The more concrete wording of the revised versions were found to be slightly better as a generic screen. They provide a simple and quick means of identifying risk for abuse and dependence for alcohol and other drugs.

U  “In the past year, have you ever drank or **used** drugs more than you meant to?”
**Or as revised:** “Have you spent more time drinking or using than you intended to?”

N  “Have you ever **neglected** some of your usual responsibilities because of using alcohol or drugs?”

C  “Have you felt you wanted or needed to **cut down** on your drinking or drug use in the last year?”

O  “Has anyone **objected** to your drinking or drug use?”
**Or:** “Has your family, a friend, or anyone else ever told you they **objected** to your alcohol or drug use?”

P  “Have you ever found yourself **preoccupied** with wanting to use alcohol or drugs?”
**Or as revised:** “Have you found yourself thinking a lot about drinking or using?”

E  “Have you ever used alcohol or drugs to relieve **emotional discomfort**, such as sadness, anger, or boredom?”

**Scoring**
Questions should be answered “Yes” or “No.” Two or more positive responses indicate possible abuse or dependence and the need for further assessment. “Yes” responses qualify as positive responses.

*Permission to use this tool in these guidelines was obtained from the author: Hoffmann, N.G. (1999). UNCOPE. Smithfield, RI: Author.*
Addiction to drugs is characterized by intense and, sometimes, uncontrollable drug cravings, in conjunction with compulsive drug seeking and use that persist despite devastating consequences. Addiction affects the brain, including circuits involved in motivation and reward, memory and learning, and inhibitory control over behavior. Drug abuse and addiction has many dimensions and disrupts many aspects of a person’s life, which makes treatment needs complex. Effective treatment programs incorporate several different components, each directed to a specific aspect of the illness and its consequences. The goal of addition treatment is to help the person stop using drugs, maintain a drug-free lifestyle, and achieve productive functioning in the family, at work, and in society. Because addiction is a chronic disease, most patients require long-term or repeated episodes of care to achieve the ultimate goal of sustained abstinence and recovery of their lives (National Institute on Drug Abuse [NIDA], 2009d).

In general, substance use treatment statistics for 2007 show that:
- 9.4 percent of the U.S. population aged 12 or older needed treatment for an illicit drug or alcohol use problem
- 10.4 percent of those who needed treat actually received it at a specialty facility, i.e., hospital, alcohol or drug rehabilitation or mental health center (NIDA, 2009d).

Moreover, the number of people with alcohol or substance use disorders who received treatment through a private doctor’s office increased by 67 percent from 2005 to 2006—from 254,000 to 422,000, respectively (Office of Applied Studies, 2007).

Mental health support and self-help groups are increasing in popularity as well. NSDUH data for adults age 18 and over that received treatment, counseling, or support for nerves, emotions, or mental health from an in-person support or a self-help group provide the following profile:
- Six of every 10 was female.
- Over half were in the 26 to 49 year-old age group.
- 75 percent were white or of the Caucasian race.
- Not quite half had full time employment (Office of Applied Statistics, 2008).

Marijuana abuse statistics for 2006 still show it as the most common illicit drug of abuse. Moreover, about 16 percent of all admissions to treatment facilities in the country was due to marijuana abuse. Of these admissions:
- More than 70 percent were male.
- Over half were white.
- Slightly more than a third were young, i.e., in the 15-19 year old age group.
- Of the treated group:
  - 56 percent began abusing the drug by age 12; and
  - Approximately 93 percent had abused the drug by age 18 (NIDA, 2009b).

A variety of treatments exist for the substance use disorders. Effective treatment programs include many components, each directed to a particular aspect of the illness and its consequences. People with severe addiction problems, the polydrug users, will require treatment for each and every substance that they abuse. It should also be noted that it is not necessary for treatment to be voluntary for it to be effective (NIDA, 2009d).
Nonpharmacological Treatments

Psychotherapy

Behavioral therapies are standard, often first-line, treatment for many substance use disorders. In some cases, medications are not available as treatments so psychosocial treatments, which comprise therapy and other supports, are the only recourse. There are also recommendations that require medication-assisted treatments involving therapy and/or other supports along with medications (CSAT, 2009b).

Behavioral interventions, including motivational incentives such as providing goods or services to patients that remain abstinent or cognitive-behavioral therapy (CBT), have demonstrated efficacy in treating marijuana dependence (NIDA, 2009b). Behavioral treatments have also shown efficacy for patients addicted to PCP (NIDA, 2009a). Likewise, comprehensive behavioral therapy programs are viewed as the most effective method to reduce cocaine drug use, especially in the long term (NIDA, 2010). CBT has been used successfully in helping persons in treatment for abuse of benzodiazepines and other CNS depressants, as well as stimulant addiction. For stimulant addiction, CBT gives patients skills to recognize risky situations, avoid drug use, and cope more effectively with their problems. Another behavioral therapy that has proven successful for stimulant addiction is contingency management. Patients earn vouchers for producing drug-free urine tests. The vouchers then can be exchanged for items that promote healthy living and lifestyles. Recovery support groups may also be effective, if used in conjunction with a behavioral intervention (NIDA, 2009c).

Screening, Brief Intervention, and Referral to Treatment (SBIRT)

The use of brief intervention and brief therapy techniques has become an increasingly important part of the continuum of care in the treatment of substance use problems. In fact, these short, problem-specific strategies can be valuable in the substance use treatment, particularly in light of the changing healthcare system. They give clinicians the opportunity to increase positive outcomes for persons presenting with substance issues. These brief approaches can be used in various types of settings including opportunistic (e.g., primary care, home health care) and specialized substance abuse treatment (inpatient and outpatient) (Barry, 1999).

Brief intervention can be a single session or multiple sessions of motivational discussion focused on increasing awareness and insight regarding substance use and motivation toward behavioral change. Brief intervention can be used as a stand-alone treatment for individuals at-risk as well as a vehicle for engaging those in need of more extensive levels of care (SAMHSA, n.d.). Recent studies using brief intervention in emergency departments have shown promise when employed with alcohol users. Staff use what is referred to as the “teachable moment” to give brief advice regarding alcohol abuse. Injured alcohol-using patients that received brief advice reported lower alcohol consumption at 12-month follow-up, compared to those getting no advice. Unfortunately, findings for heavy alcohol users are inconclusive (Cohagan et al., 2009).

Brief treatment is a distinct level of care and is inherently different from both brief intervention and specialist treatment. This approach is usually provided to persons seeking or already
engaged in treatment who have acknowledged problems with substance use. Brief treatment is of shorter duration than traditional or specialist treatment. It consists of a limited number of highly structured and focused clinical sessions with the purpose of eliminating harmful and/or hazardous substance use (SAMHSA, n.d.).

Brief interventions and brief therapies may be thought of as elements of a continuum of care, but differences in outcome goals distinguish them from each other. Interventions are typically aimed at motivating a client to perform a particular action (e.g., to change a behavior, enter treatment, think differently about a situation), whereas therapies are designed to address larger concerns (such as maintaining abstinence, altering personality, or addressing long-standing problems that exacerbate substance abuse). TIP 34 discusses brief interventions as a way of improving clients’ motivation for treatment. Brief therapies are presented as ways of changing clients’ behaviors and attitudes. Other distinguishing features are delineated below.

- Length of the sessions (from five minutes for an intervention to at least six 1-hour therapy sessions)
- Extensiveness of assessment (greater for therapies than for interventions)
- Setting (nontraditional treatment settings such as a primary care or social service setting, which will use interventions exclusively, versus traditional substance abuse treatment settings where counseling or therapy will be used in addition to interventions)
- Personnel delivering the treatment (brief interventions can be administered by a wide variety of professionals, but therapy will require clinicians that have training in specific therapeutic modalities)
- Media and materials used (certain materials such as computer programs or written media booklets may be used in the delivery of interventions but not therapies) (Barry, 1999).

Fortunately, brief interventions and brief therapies also have research backing that supports their use. Moreover, their brevity and lower delivery costs make these brief approaches attractive mechanisms for use in a variety of settings, from primary care to substance abuse treatment where cost often plays as much of a role as efficacy in determining what treatments clients will receive. Equally important, brief interventions and brief therapies are well suited for clients who may not be able or willing to expend the significant financial and personal resources necessary to complete more intensive, longer term treatments. Although there is research that supports the theory that longer time in treatment is associated with better outcomes, some research suggests that for certain kinds of clients, there is no loss in effectiveness when length and intensity of treatment are reduced.

Most brief interventions have focused on alcohol problems, with the goal of changing drinking behaviors. Approaches range from practically “no structure” counseling and feedback to very formal, structured therapy as found in behavioral self-control training (BSCT). It should also be noted that these brief interventions have very flexible goals, allowing patients to choose moderation or abstinence. The therapist works to motivate the client to change his/her behavior, not to assign self blame.
## Figure 1 Goal of Brief Treatment Interventions Based on Setting

<table>
<thead>
<tr>
<th>Setting</th>
<th>Purpose</th>
</tr>
</thead>
</table>
| Opportunistic setting (i.e., primary care, home health care) | • Facilitate referrals for additional specialized treatment (e.g., a nurse identifying substance-abusing clients through screening and advising them to seek further assessment or treatment)  
• Impact substance abuse directly by recommending a reduction in at-risk or hazardous consumption patterns (e.g., a primary care physician advising at-risk or hazardous drinkers to cut down, National Alcohol Screening Day) or establishing a plan for abstinence |
| Neutral environments (e.g., individuals responding to media advertisements) | • Assess substance abuse behavior and render supportive advice about harm reduction (e.g., a public health initiative to screen people in shopping malls and supply feedback and advice) |
| Health care setting                                | • Assist with referrals for additional specialized treatment  
• Act as a nonpermanent substitute for more extended treatment for persons seeking assistance but waiting for services to become available (e.g., an outpatient treatment center that offers potential clients assessment and feedback while they are on a waiting list)  
• Perform as a motivational prelude to engagement and participation in more intensive treatment (e.g., an intervention to help clients commit to inpatient treatment when the assessment deems it appropriate but clients accept that outpatient treatment is adequate)  
• Facilitate change in behavior akin to substance abuse or associated problems |
| Substance abuse treatment programs                 | • Adapted from TIP 34. (Barry, 1999).                                                                                       |

The primary goals of brief interventions are to increase awareness of problems and then to recommend a specific activity for change. They are usually conducted one-on-one, and there may not be written materials such as self-help manuals, self-monitoring diaries, or workbooks. Some interventions are aimed at a specific health problem impacted by the substance use rather than the abuse of the substance itself (Barry, 1999).

Brief therapies are shorter than traditional versions of therapy, but they are not simply a short version of some form of psychotherapy. They are much more intensive and longer in duration than brief interventions, requiring six (6) sessions at minimum. These therapies are focused applications of therapeutic techniques that are uniquely targeted to a behavior or symptom and they are time limited. They comprise brief CBT, short-term family therapy, brief psychodynamic therapy, brief strategic and interactional therapies, brief humanistic and existential therapies, and time-limited group therapy (Barry, 1999).

The United States Department of Health and Human Services, through its Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment, has promoted a new early intervention approach to substance abuse treatment. The initiative—Screening, Brief Intervention, and Referral to Treatment (SBIRT)—represents a paradigm shift in the way that treatment for substance use and abuse is provided. It targets individuals with more severe substance use or persons who have met the criteria for a Substance Use Disorder (SUD).
involves implementing a system within community and/or medical settings to screen for and identify individuals with or at-risk for substance-related problems.

Screening is an integral component of SBIRT because it determines the severity of substance use and identifies the appropriate level of intervention needed. The system then provides either brief intervention or treatment within the community setting or encourages and refers individuals identified as needing more extensive services to a specialist setting.

In fiscal year 2010, the Department, through its Division of Alcohol and Drug Abuse Services (DADAS), began implementation of a pilot SBIRT project in the state. This project operates in partnership with the Tennessee Primary Care Association (TPCA) and engages and trains primary care providers about the usefulness of the initiative as a tool for early identification of substance use problems. This project also utilizes anti-drug coalitions across the state to assist with identification of other community partners (TDMHDD Web site, 2010).

As of August 2007, SBIRT grantees funded by SAMHSA have screened over 536,000 individuals. Through grantees efforts, researchers are learning how to integrate SBIRT into primary care. Preliminary data suggest the approach is successful in modifying the consumption/use patterns of those who consume five or more alcoholic beverages in one sitting and those who use illegal substances. These grantees have implemented SBIRT in trauma centers/emergency rooms, community clinics, federally qualified health centers, and school clinics (TDMHDD Web site, 2010).

**Pharmacological Treatments**

Medications are not yet available for all substances of abuse. However, information is provided where medications exist. More important, though, is the fact that pharmacological treatments are being promoted as medication assisted treatments. **Medication-assisted treatment** involves the use of medication in conjunction with counseling and other supports (CSAT, 2009b). Thus, the best treatment scenario for persons with substance use issues is a combination therapy that involves medication whenever possible.

**Alcohol**

Treatment involving medications for alcohol dependence should be used adjunctively to psychosocial treatments rather than as replacement. This combination has shown to be more effective than either medication or nondrug therapy alone. To the extent that pharmacological therapy reduces craving and helps maintain abstinence, it likely makes patients more agreeable to psychosocial interventions (CSAT, 2009a).

A medical management (MM) strategy has been designed specifically to accompany pharmacological therapy for alcohol use disorders (AUDs). MM not only gives structure, but provides materials to help clinicians offer their patients strategies for taking medications and staying in treatment; support their patients' efforts in changing their drinking habits; provide recommendations to their patients for changing drinking habits; and to stay informed about alcohol dependence and pharmacological therapy research and recommendations (CSAT, 2009a).
Four medications have been approved by the United States Food and Drug Administration (FDA) in the treatment of alcohol use disorders (AUDs). These medicines are acamprosate, disulfiram, oral naltrexone, and extended-release injectable naltrexone (CSAT, 2009a).

**Acamprosate**

The third medication for AUDs approved by the FDA, acamprosate has a good safety profile. Usually initiated after stopping drinking, it can be safely used with alcohol and with benzodiazepines. It can also be started during medically supervised withdrawal. It reaches full effectiveness in five to eight days and should be maintained if a patient relapses to alcohol use. In general, there is no specific patient profile that must be considered if planning to use acamprosate in the treatment of AUDs. Not surprising though, it is most effective for patients that are motivated for complete abstinence rather than decreased drinking when treatment begins. Acamprosate may also be particularly for patients that are undergoing opioid maintenance therapy. The fact that there are no known clinically significant drug interactions associated with acamprosate appears to give it a safety valve for patients that are trying to deal with multiple medical issues and are currently taking many other medications.

Obviously there are many positives connected to treatment with acamprosate, among which include few side effects, no negative liver effects, and no drug interaction profiles. But because dosing must occur three times a day, patient adherence may become problematic. Clinicians, however, can help their patients identify reminders that will work for them, such as have patients wear “reminder” bracelets, set alarms on watches/clocks/cell phones, or purchase three-a-day pill containers (CSAT, 2009a).

**Disulfiram**

Disulfiram, the first FDA-approved pharmacological treatment for AUDs, has been used for more than 60 years. It is an alcohol-sensitizing or alcohol-aversive agent that initiates an acutely toxic physical reaction when mixed with alcohol. Research continues to support its establishment as an effective and safe treatment of AUDs in particular patient groups. Patients’ having the following profiles would be considered good candidates for disulfiram as a pharmacological treatment for AUD:

- Treatment motivated and committed to total abstinence.
- Have the capacity to fully understand the consequences associated with alcohol use while taking this medication.
- Medically appropriate.
- Can receive supervised dosing.
- Are abstinent from alcohol use (i.e., patients must have abstained from alcohol use at minimum 12 hours and/or breath or blood alcohol levels are zero).
- Maintain abstinence from alcohol during treatment.
- Have codependence on or current abuse of cocaine (CSAT, 2009a).

Table 4 below shows dosage recommendations for patients that fit the disulfiram profile.
Table 4: Disulfiram Dosage Recommendations

<table>
<thead>
<tr>
<th>Dosage Type</th>
<th>Dose Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>250 mg/da in single morning or evening dose for a period of one-two weeks</td>
</tr>
<tr>
<td>Average maintenance</td>
<td>250 mg/da</td>
</tr>
<tr>
<td>Range</td>
<td>125–500 mg/da</td>
</tr>
<tr>
<td>Maximum</td>
<td>500 mg/day</td>
</tr>
</tbody>
</table>

Source: Adapted from CSAT, 2009a.

Naltrexone

Naltrexone was first developed as treatment for opioids addiction. It was not until the mid-1990’s that the FDA approved the drug for treatment of AUDs.

**Oral Form:**

Oral naltrexone significantly improved relapse rates both during active treatment and medication-free follow-up. Short-term treatment has been linked to lower percentage of drinking days, more days of abstinence, lower total alcohol consumption, and fewer drinks per drinking day during treatment. It is believed to give people with AUDs a measure of control that can keep a slip from becoming a full-blown relapse.

As with most AUD medications, oral naltrexone is more effective if the patient is highly motivated about treatment or the patient can be encouraged to be compliant with a medication monitoring plan. This medication is additionally good treatment for individuals that have a history of opioid abuse or dependence. Naltrexone reduces the reinforcing effects of and curbs cravings for both alcohol and opioids. Finally, patients whose alcohol cravings are more intense will likely get more benefit from this oral form of naltrexone.

Table 5 below shows dosing recommendations for patients receiving treatments of oral naltrexone.
Table 5: Oral Naltrexone Dosage Recommendations

<table>
<thead>
<tr>
<th>Dosage Type</th>
<th>Dose Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial (most patients)</td>
<td>50 mg/da in a one tablet</td>
</tr>
<tr>
<td>Initial (at-risk patients)</td>
<td>12.5 mg/day (one fourth tablet) or 25 mg/da (half tablet) for one full week, taken with food (two weeks, if necessary); gradually increase to 50 mg/da</td>
</tr>
<tr>
<td>Average maintenance</td>
<td>50 mg/da</td>
</tr>
</tbody>
</table>

Source: Adapted from CSAT, 2009a.

Side effects are associated with this medication, but they are usually mild and tend to diminish over time. There have been reports of less common and potentially serious reactions, but not in general. Nausea seems to be the most commonly reported side effect, though women appear the most effected. Women of childbearing age or who are pregnant will need to be informed that the drug’s effects on the fetus are unknown. Naltrexone is considered FDA pregnancy category C. Withdrawal is not an issue when oral naltrexone is discontinued and neither is tapering off necessary (CSAT, 2009a).

Extended-Release Injectable Form:

This form of naltrexone is administered by intramuscular (IM) gluteal injection every month. It helps address patient noncompliance, a problem that sometimes arises with oral naltrexone treatment. It should also be noted that the peak concentration of naltrexone to which the liver is exposed is substantially lower for the injectable than for the oral form of the drug, thus reducing the potential for liver toxicity.

Injectable naltrexone appears to reduce the number of heavy drinking days for patients. Research supports even better efficacy for patients who are abstinent for as few as four days before they begin treatment. This form further appears to be well tolerated, having a side effect profile similar to that of its oral counterpart.

Since naltrexone is an opioid antagonist, it is not recommended for persons with opioid dependence. Patient must be opioid free for seven to ten days prior to treating him/her with injectable naltrexone. The wait is 14 days for patients who been on methadone for at least three to four weeks.

Proper IM injection technique is essential. Serious consequences, including surgery, can result if not followed. Injections should be administered every four weeks. Delayed or missed dosages should be administered as soon as possible, but administrations earlier than four weeks are not recommended. Dosing higher than 380 mg is also not recommended. Table 6 below succinctly delineates precautions that should be considered before implementing injectable naltrexone treatment.

Table 6: Extended-Release Naltrexone Precautions
<table>
<thead>
<tr>
<th>Patient Circumstance or Condition</th>
<th>Precaution</th>
</tr>
</thead>
<tbody>
<tr>
<td>History of sensitivity to PLG, carboxymethylcellulose, or any components of the diluent</td>
<td>Do <strong>not</strong> administer injectable naltrexone</td>
</tr>
<tr>
<td>Anticipated need for opioid analgesics within the next 30 days</td>
<td>Do <strong>not</strong> administer injectable naltrexone</td>
</tr>
<tr>
<td>Patient obesity</td>
<td>Do <strong>not</strong> administer injectable naltrexone if patient’s body mass prevents IM injection with the provided 1.5 inch needle</td>
</tr>
<tr>
<td>Coagulation or thrombocytopenia disorders</td>
<td>Monitor carefully for 24-hour period following injection</td>
</tr>
<tr>
<td>Recent opioid dependence</td>
<td>Explain to the patient the risk of precipitated withdrawal if opioids have been recently used</td>
</tr>
<tr>
<td></td>
<td>Explain to the patient that opioid-blocking effects last for 30 or more days and that risks associated with a return to opioid use are significant</td>
</tr>
</tbody>
</table>

Source: Adapted from CSAT, 2009a).

**Black Box Warnings**

Under no circumstances should **disulfiram** be administered to a patient that is in a state of alcohol intoxication or without the patient’s full knowledge and consent. Clinicians should further apprise family members of the patient accordingly.

While an FDA-approved treatment for AUDs, **naltrexone**’s approval includes a black-box warning for hepatotoxicity. It is contraindicated in liver failure or acute hepatitis and use in patients that have active liver disease must be carefully considered. The effects are reversible and have shown to be primarily associated with much higher doses than typically used in routine clinical practice (e.g., at least 300 mg/day). Research further suggests that the negative effects tend to show up only after patients have been on these higher doses for extended periods of time (CSAT, 2009a).
Nicotine

Nicotine replacement therapies (NRTs) come in all shapes and styles. There are the patches, gums, sprays, and lozenges, all of which can be purchased over the counter. However, two prescription medications are now approved by the FDA for nicotine dependence, one very recently. These are **bupropion** and **varenicline** (NIDA, 2009d).

Originally introduced as an antidepressant, bupropion reduced the desire to smoke cigarettes and demonstrated effectiveness in clinical trials. Bupropion is most effective when combined with behavioral supports. It seems to attenuate the weight gain that most often surfaces after quitting and, if used for at least eight weeks, it provides protection against relapse. The most serious side effect associated with bupropion is seizures, which is a rare occurrence. However, it is contraindicated for particular groups of people, such as those with a history of epilepsy, bulimia, anorexia nervosa, bipolar disorder, and severe hepatic necrosis ((Roddy, 2004).

Varenicline received FDA approval in May 2006. Dosing should be initiated one week prior to the desired quit date. In addition, there are starter packs with blister-packed doses with titration instructions for the first month of treatment. The dosage recommendation is 0.5 mg each day for three days, followed by 0.5 mg twice a day for four days, followed by increases as tolerated to a target dose of one (1) mg twice a day. If patients have moderate to severe renal impairment, dose reductions and close monitoring are indicated. Twelve weeks has been the standard length of treatment in research, but extending treatment may be warranted for heavy smokers or persons with multiple prior failed attempts to stop smoking (Connery & Kleber, 2007).

Cannabis

Currently there are no medications for the treatment of marijuana abuse. Work is ongoing that offers promise for the medication development to ease withdrawal, block the intoxicating effects, and prevent relapse (NIDA, 2009b).

Hallucinogens

“Bad trips” typically prompt treatment seeking for users of psilocybin. Usual treatment is simply supportive, such as providing a quite room with little to no stimulation for the patient. However, benzodiazepines are used on occasion to control seizures or extreme agitation. There are no specific medical treatments for PCP abuse and/or addiction, but inpatient and/or behavioral treatments tend to be helpful for patients (NIDA, 2009a).

Cocaine

There are no approved FDA medications for cocaine addiction, so research in this area has become a top priority for NIDA (NIDA, 2010). Recently a study was conducted that involved the development of a TA-CD vaccine. The vaccine was used on persons having cocaine and/or opioid dependence. This vaccine, like disease vaccines, was designed to stimulate an individual’s immune system to produce antibodies. Unfortunately, the immunization did not produce complete abstinence from cocaine use. More cocaine-free urine samples and less cocaine use were observed for only 38 percent of the study’s participants. Behaviors worsened
for some of the participants as they attempted to overcome the effects of the vaccine to get their usual cocaine high. It was concluded that improved vaccines and boosters were needed (Martell et al., 2009).

**Prescription and Over-the-Counter (OTC) Medications**

There are three classes of most frequently abused prescription medications. They include central nervous system (CNS) depressants that are used to treat sleep disorders and anxiety; stimulants that are often prescribed to treat narcolepsy and ADHD; and opioids that are typically prescribed to relieve pain (NIDA, 2009c).

Medical supervision during withdrawal is the usual treatment method for addiction to CNS depressants, coupled with counseling either in an inpatient or outpatient setting. At this time there are no proven medications for the treatment of stimulant addiction. Detoxification may be necessary, depending on the patient’s situation. If so, the first step may involve decreasing the drug’s dose slowly while attempting to treat withdrawal symptoms. Psychosocial methods are currently the proven effectives for treating stimulant addiction. Medical treatment of opioids is recommended in conjunction with other supports (NIDA, 2009c). Approved medications are provided below.

**Opioids**

Treatment that includes pharmacotherapy is often the best choice for opioid addiction. The most frequently used medications are methadone and buprenorphine, though naltrexone is sometimes used. Methadone and buprenorphine work by getting the brain to think that it is still getting the problem opioid. Withdrawal is typically not a problem with either of these two medications. Methadone and buprenorphine also serve to reduce the brain’s cravings for the opioid that is causing problems for the patient.

Naltrexone works somewhat differently in helping individuals overcome their addiction to opioids. It blocks the effect of the opioid drug, thereby taking away the feeling of “getting high” if the problem drug is taken again. This feature of naltrexone makes is a good choice to prevent relapse.

Methadone must be dispensed daily from a specially licensed treatment facility. Buprenorphine and naltrexone are taken daily at the start of treatment, but after a time, buprenorphine may be taken every other day and naltrexone dosages can even fall three days apart.

Unlike the other two medications, methadone can be taken safely at the start of recovery. Buprenorphine dosing cannot begin until withdrawal has started. All opioids must be completely out of the body before naltrexone can be taken, and this is generally seven to ten days following the start of withdrawal. Taking either of the latter medications too soon can exacerbate withdrawal.

Both methadone and buprenorphine can cause drowsiness in the beginning of treatment. Thus, persons starting either of those two medications should not drive or perform other high-risk tasks to avoid injury. The right medication and the right dosage has been found when the individual feels normal again, does not feel withdrawal, has few to no side effects, and the cravings are under control (CSAT, 2009b; 2009c).
Effective April 1, 2008, the Division of Alcohol and Drug Abuse Services assumed responsibility for oversight of Tennessee’s Opioid Treatment Programs (also known as “medication-assisted treatment programs”). The State Opioid Treatment Authority within the Department of Mental Health and Developmental Disabilities is responsible for program oversight and clinical assistance. Specifically, the State Opioid Treatment Authority is responsible for providing administrative, medical, and pharmaceutical oversight to certified OTPs, including, but not limited to planning, developing, educating, and implementing policies and procedures to ensure that opioid addiction treatment is provided at an optimal level. Tennessee has ten (10) for-profit methadone clinics (TDMHDD Web site, 2010).

**Co-Occurring Disorders (COD)**

For the purposes of these guidelines, “co-occurring disorders” will refer to a service recipient or person that has one or more mental illness in conjunction with an SUD that manifests at the same time. Moreover, “co-occurring disorders” is the terminology to which the Department subscribes, though it may be used interchangeably with the terms “dual diagnosis,” “comorbidity,” “concurrent disorders,” and “double trouble” in the literature (TDMHDD Web site, 2010). The focus on co-occurring disorders is largely based on the “No Wrong Door” principle promulgated in the Center for Substance Abuse Treatment (2000) report entitled Changing the Conversation. It is this principle that has not only guided policy but decision making about treatment for co-occurring disorders. The principle takes into account that most persons with substance abuse do not have a single targeted problem and that rehabilitation and treatment programs must adapt to meet the specific needs of the individual.

People, or service recipients, with a combined mental disorder (depression, bipolar disorder, anxiety disorder, psychotic disorder, etc.) and substance use disorder (alcohol and/or drugs) are a fast growing segment of residents in our communities. Co-occurring disorders are more common than one might think (TDMHDD Web site, 2010). However, the first step in being able to treat mental health disorders among people with substance use problems starts with recognition. Proper screening needs to occur, which involves at least the asking of appropriate questions of clients. In addition to asking about substance use, one set of best practice recommendations suggest that the following questions be asked of clients:
Have you had a significant period of time (that was not a direct result of alcohol/drug use) in which you have (0=no; 1=yes):

1. Experienced significant problems with controlling your eating (e.g., purging, binging, unable to eat) in the past 30 days? Lifetime?
2. Experienced significant problems with your sleep (e.g., sleeping too much, falling/staying asleep) in the past 30 days? Lifetime?
3. Experience trauma that comes back in unwanted flashbacks in the past 30 days? Lifetime? (Health Canada, 2007)

TIP 42 provides a wealth of information about clients with co-occurring disorders, including strategies for successfully working with these type of clients. (See Sacks & Ries, 2008). These guidelines will address a few strategies, but the complete document can be ordered directly from CSAT or downloaded from http://download.ncadi.samhsa.gov/prevline/pdfs/bkd515.pdf. A listing of other free TIPs can be found in Appendix C of these guidelines.

In working successfully with individuals that present with co-occurring disorders (COD), it is initially important to establish a successful therapeutic relationship. Research wholeheartedly supports the fact that clients, specifically those with COD, are much more responsive when the therapist acts consistently in a nonjudgmental and nurturing way. Of course, the comfort level of the clinician can impact his/her ability to build an appropriate therapeutic alliance with the client. Therefore it is imperative that he/she recognize certain patterns that might invite unsettling feelings regarding the client and not let those feelings interfere with appropriate treatment. Clients presenting with COD frequently experience despair and demoralization because of the complexity of having more than one problem and difficulty achieving treatment success. Encouraging hope helps to give clients with COD at least short-term relief in exchange for long-term work, despite some uncertainty regarding benefit and timeframe.

Working with clients that have COD can be challenging. Many individuals that abuse substances may additionally present with some antisocial-type traits. Thus they are less amenable to treatment, pharmacological or psychosocial, and may work to avoid contact with treatment staff (Sacks & Ries, 2008). The problem becomes extremely difficult if the client with COD suffers from both a substance use disorder and schizophrenia, and research confirms that substance abuse is one of the most common comorbid conditions for clients with this particular mental disorder (Schwartz, Hilscher, & Hayhow, 2007). A consensus panel recommends the following strategies in forming a therapeutic alliance with clients that have problems with COD:

- Show acceptance and understanding of the client.
- Assist the client in clarifying the nature of his/her problem.
- Indicate to the client that the two of you will be working collaboratively.
- Communicate to the client that, as the clinician, your role will be helping him/her to help himself/herself.
- Demonstrate empathy and a willingness to really listen to the way the client defines his/her problem.
- When necessary, help the client to solve some external problems immediately and directly.
- Genuinely foster hope for positive change (Sacks & Ries, 2008).
As a clinician, it will be important to promote a recovery perspective. Treatment plans should be developed in such a way as to provide for continuity of care over time. Maintaining a recovery perspective also means devising treatment interventions that are specific to the challenges and tasks that may be encountered at each stage of the COD recovery process. Make every effort to gain a thorough understanding of the interrelationship between stages of change and stages of treatment. The expectation for the client’s progress through treatment stages must be consistent with his/her stage of change. Table 7 below delineates the stages of change.

Table 7: Stages of Change

<table>
<thead>
<tr>
<th>Stage</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precontemplation</td>
<td>Change is not a possible goal in the foreseeable future; may be under aware or unaware of problems</td>
</tr>
<tr>
<td>Contemplation</td>
<td>Awareness that a problem exists and thinking seriously about overcoming it, but no commitment to take action yet made; weighing pros and cons of the problem and its solution</td>
</tr>
<tr>
<td>Preparation</td>
<td>Combines intention and behavior—action is planned within the next month, and action has been taken, though unsuccessfully in the past year; some reductions have been made in problem behaviors, but criterion for effective action has not been determined.</td>
</tr>
<tr>
<td>Action</td>
<td>Behavior, environment, or experiences are modified to rise above the problem; successful change of addictive behavior for anywhere between a single day to six months (Note: Action does not equal change).</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Working to prevent relapse and consolidate gains attained during the Action stage; remaining free from addictive behavior and engaging consistently in new incompatible behavior(s) for longer than six months.</td>
</tr>
</tbody>
</table>

Source: Adapted from Sacks & Ries, 2008.

The Department’s COD Advisory Committee, under the auspices of DADAS, continues to function and promote enhancement of COD services in Tennessee. The Dual Diagnosis Capability in Addiction Treatment (DDCAT) Index has been implemented and 20 DADAS block grant providers have received on-site initial DDCAT technical assistance. The goal is to help providers create an action plan for enhancing their COD program capability (COD Advisory Committee Meeting Minutes, February 2010)
Suicidality

Suicidality, which ranges from ideation (i.e., thoughts of suicide and making suicide plans) to suicide attempts to completed suicide, is a major public health problem. Current data show higher suicidal behaviors among persons with a substance use disorder. However, suicidality is particularly troublesome for many clients with COD. People that have mental disorders are at 10 times greater risk for suicide than the general population. Furthermore, the risk of suicidal behavior and suicide increases with nearly every major mental disorder. Ninety percent of the adults that commit suicide have a mental disorder and most often the disorder is PTSD or a major affective illness. Substance abuse, including alcohol, is often linked to suicides and represents a major risk factor (Sacks & Ries, 2008).

If clients mention sadness or depression or appear to be experiencing those emotions, it is essential that the extent to which suicidal thinking is present be explored. Similarly, clinician should clarify and monitor clients that report thinking of doing harm to someone else. In short, clinicians should also ask explicitly about suicide or the intention to do harm to another person when screening and/or assessment indicates that either of those possibilities is an issue. In addition, clinicians should routinely follow up appointments missed by clients that have presented with sadness and/or depression. A substance abuse professional may need to secure the services of an appropriate mental health professional for the client and have the client closely monitored by that professional. Twenty-four hour coverage should be made available, such as hotlines for the client to call for help during non-business hours. An extensive discussion of this topic can be found in Chapter 8 of TIP 42, as well as in Appendix D. Chapter 4 of the same TIP provides information on screening for suicide risk (Sacks & Ries, 2008).

Trauma sensitivity

Persons with COD have likely experienced a great deal of trauma in their lives. Thus, clinicians should consider the possibility of a trauma history even before any screening/assessment begins. Trauma may encompass experiences of rape or interpersonal violence as an adult; early childhood sexual, physical, or emotional abuse; and traumatic experiences associated with political oppression, as could be the case with refugees or other immigrant populations. The client should be approached with sensitivity, in consideration of the possibility that the client has indeed suffered previous traumatic experiences that could interfere with his/her ability to be trusting in a therapeutic relationship. Any guardedness on the part of the client may indicate the possibility of trauma, so make every effort to promote safety in your interactions with the patient. Provide support and gentleness rather than trying to “break through” evasiveness that may erroneously be perceived initially as resistance or denial. Any questioning of the client should avoid “retraumatizing” the client. CSAT is working on the development of a TIP that addresses this issue: “Substance Abuse Treatment and Trauma.” In the interim, clinicians are asked to engage clients with appropriate sensitivity.

NIDA Resource

The National Institute on Drug Abuse (NIDA) has created a Physicians’ Outreach Initiative. Called NIDAMED, it provides tools and resources for medical personnel to screen their patients for substance use. NIDAMED affords medical professionals the opportunity to be the first line of defense against substance abuse and addiction. It is also designed to elevate awareness of the likely impact of substance use on patients’ overall health. The NIDAMED toolbox contains
an online screening tool and quick reference guide. It will fit into the busy clinical practice format of today’s medical professional.

The online screening tool is NIDA-Modified Alcohol, Smoking, and Substance Involvement Screening Test or NMASSIST. There is even a print copy of the tool that can be downloaded as a PDF file. NIDAMED and its additional resources can be obtained from http://www.nida.nih.gov/nidamed/.

References


COD Advisory Committee Meeting Minutes. (February 16, 2010). Personal communication.


and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment.


APPENDICES
APPENDIX A
Guidelines for Miscellaneous Mental Disorders
Eating Disorders

Eating Disorders occur worldwide. They cause significant concern in the United States where the culture particularly impacts body image among adolescents and young adults. The American Psychiatric Association provides the diagnostic criteria for the three categories of Eating Disorders in its Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR). These three categories are: (1) Anorexia Nervosa, (2) Bulimia Nervosa, and (3) Eating Disorders Not Otherwise Specified. A refusal to maintain a minimally normal body weight characterizes Anorexia Nervosa. Bulimia Nervosa consists of specific episodes of binge eating with subsequent inappropriate compensatory behavior, including vomiting, misuse of laxatives, misuse of diuretics or other medications, fasting, or excessive exercise. Eating Disorders Not Otherwise Specified describes disorders of eating that do no meet the explicit criteria of duration, episodes, or severity as necessitated by the criteria for Anorexia Nervosa or Bulimia Nervosa.

Anorexia Nervosa and Bulimia Nervosa constitute culture bound disorders in that they only occur in industrialized cultures that value thinness and where sufficient food sources make being overweight a realistic possibility. The prevalence of Anorexia Nervosa is up to 5.7%. The prevalence of Bulimia Nervosa is as high as 7.3%. Eating disorders more commonly occur in females (6:1 in community samples; 10:1 in clinical referrals). These disorders present most often in the teens and twenties, following a preoccupation with weight in the earlier years. Eating disorders tend to occur in Westernized societies valuing thinness and commonly occur among ballet dancers, wrestlers, models, jockeys and gymnasts. The racial distribution depends on the valuation of slimness within the group, with Caucasians more at risk than African Americans. Research suggests, however that “body image concerns, dysfunctional eating patterns and eating disorders are on the upswing among young African American women as well as among women of other minority groups” (Comer, 2005). There is also a reported increase of eating disorders among males. Eating disorders are also becoming more common in younger persons. The “protections” previously offered by race, gender, age and culture no longer appear to operate in the arena of weight control and eating disorders (Comer, 2005).

DSM-IV TR CRITERIA

ANOREXIA NERVOSA

- The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR) defines Anorexia Nervosa as follows:

1. “Refusal to maintain body weight at or above a minimally normal weight for age and height (e.g., weight loss leading to maintenance of body weight less than 85% of that expected; or failure to make expected weight gain during period of growth, leading to body weight less than 85% of that expected).

2. Intense fear of gaining weight or becoming fat, even though underweight.
3. Disturbance in the way in which one’s body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or denial of the seriousness of the current low body weight.

4. In postmenarcheal females, amenorrhea, i.e., the absence of at least three consecutive menstrual cycles. (A woman is considered to have amenorrhea if her periods occur only following hormone, e.g. estrogen, administration.)

Specify type:
Restricting Type: During the current episode of Anorexia Nervosa, the person has not regularly engaged in binge-eating or purging behavior (i.e., self-induced vomiting or the misuse of laxatives, diuretics, or enemas.)

Binge-Eating/Purging Type: During the current episode of Anorexia Nervosa, the person has regularly engaged in binge-eating or purging behavior (i.e., self-induced vomiting or the misuse of laxatives, diuretics, or enemas)."

**BULIMIA NERVOSA**

- The *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision* (DSM-IV-TR) defines Bulimia Nervosa as follows:

1. "Recurrent episodes of binge eating. An episode of binge eating is characterized by both of the following:
   a. eating, in a discrete period of time (e.g., within any 2-hour period), an amount of food that is definitely larger than most people would eat during a similar period of time and under similar circumstances
   b. a sense of lack of control over eating during the episode (e.g., a feeling that one cannot stop eating or control what or how much one is eating).

2. Recurrent inappropriate compensatory behavior in order to prevent weight gain, such as self-induced vomiting; misuse of laxatives, diuretics, enemas, or other medications; fasting or excessive exercise.

3. The binge eating and inappropriate compensatory behaviors both occur, on average, at least twice a week for 3 months.

4. Self-evaluation is unduly influenced by body shape and weight.

5. The disturbance does not occur exclusively during episodes of Anorexia Nervosa.

Specify type:
   a. Purging Type: during the current episode of Bulimia Nervosa, the person has regularly engaged in self-induced vomiting or the misuse of laxatives, diuretics, or enemas.

   b. Non-purging Type: during the current episode of Bulimia Nervosa, the person has used other inappropriate compensatory behaviors, such as fasting or excessive exercise, but has not regularly engaged in self-induced vomiting or the misuse of laxatives, diuretics, or enemas."
EATING DISORDER NOT OTHERWISE SPECIFIED

- The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR) defines Eating Disorder Not Otherwise Specified as follows:

  “The Eating Disorder Not Otherwise Specified category is for disorders of eating that do not meet the criteria for any specific Eating Disorder. Examples include:

  1. For females, all of the criteria for Anorexia Nervosa are met except that the individual has regular menses.

  2. All of the criteria for Anorexia Nervosa are met except that, despite significant weight loss, the individual's current weight is in the normal range.

  3. All of the criteria for Bulimia Nervosa are met except that the binge eating and inappropriate compensatory mechanisms occur at a frequency of less than twice a week or for a duration of less than three months.

  4. The regular use of inappropriate compensatory behavior by an individual of normal body weight after eating small amounts of food (e.g., self-induced vomiting after the consumption of two cookies).

  5. Repeatedly chewing and spitting out, but not swallowing, large amounts of food.


DIFFERENTIAL DIAGNOSIS

The diagnosis of eating disorders is challenged by several factors. Separate illnesses can account for weight loss or gain. Additionally, some features of eating disorders are also seen in other psychiatric disorders. Adding to the diagnostic challenge is the fact that behavioral coping mechanisms often camouflage the diagnosis.

A. ANOREXIA NERVOSA

1. Medical Illnesses

   Several medical illnesses, such as brain tumors and malignancies, commonly lead to weight loss. Other medical illnesses that produce weight loss include hyperthyroidism, Addison's disease, diabetes mellitus, chronic infections, hypothalamic lesions, cystic fibrosis, malabsorption syndrome, inflammatory bowel disease, parasitic intestinal infection, chronic pancreatitis, Simmond disease, Sheehan syndrome, and superior mesenteric artery syndrome. The diagnosis of eating disorder is not made by ruling out all conceivable medical causes, however, but is based on a brief history and mental status exam.

2. Other Psychiatric Disorders

   A number of psychiatric illnesses can imitate anorexia nervosa, in that there is refusal of food and weight loss.
a. Mood Symptoms

Major Depression is frequently accompanied by a weight loss of 15 to 20 pounds. In Major Depression, however, there is no body image distortion. With Major Depression, the appetite returns and weight is restored with antidepressant or electroconvulsive therapy. The depressive cycles of Bipolar II and dysthymia can also present with weight loss. All these forms of depressed mood are different from anorexia nervosa in that they do not have the body image disturbance nor preoccupation with food-related items as is seen with anorexia nervosa.

b. Anxiety Symptoms

Anxiety associated with various psychiatric disorders can present with significant weight loss. This can be seen with obsessive-compulsive disorder, schizophrenia, somatization disorder, and substance abuse disorders. In schizophrenia, patients can have delusions about food, but they do not show concern about calories nor do they have the fear of becoming fat. Although weight can fluctuate in somatization disorder, obsessive compulsive disorder, Cluster C personality disorders, and substance abuse disorders, the weight loss is not generally as severe as that in anorexia nervosa. Additionally, a patient with somatization disorder, obsessive compulsive disorder, Cluster C personality disorders, or substance abuse disorder does not express fears of weight gain nor manifest amenorrhea for three months or longer.

B. BULIMIA NERVOSA

1. Medical Illnesses

Several medical illnesses produce symptoms also seen in Bulimia Nervosa. They include connective tissue disorders, inflammatory bowel disease, peptic ulcer disease, parasitic intestinal infection, chronic pancreatitis, hypothalamic lesion, Zenker diverticulum. A brief history and mental status exam can differentiate these from bulimia nervosa.

2. Other Psychiatric Disorders

While no psychiatric disorder mimics bulimia, Cluster B personality disorders are frequently seen with this disorder. The impulsivity, unstable moods, and dramatic features seen with Cluster B personality disorders create a ripe environment for the development of bulimia nervosa.
EVALUATION

A. MEDICAL HISTORY

The medical history should include the following:
1. Weight history
2. Diet history
3. Use of diuretics, laxatives, diet pills, Ipecac, and thyroid medications

B. SCREENING QUESTIONS

In particular, find out the patient’s perceptions of their body and their feelings about eating food. Ask the patient if they are worried about their weight, if they are dieting, if they have lost weight, if they binge eat, if they purge, and if they feel their exercise is out of control.

C. PHYSICAL EXAMINATION

The physical exam should include the following:
1. Weight and height
2. Pulse and blood pressure
3. State of hydration
4. Dental examination
5. Cardiac examination (EKG)
6. Abdominal examination, checking for constipation and GI bleeding
7. Neurologic examination
8. Gynecologic examination, including a DEXA scan.

D. SYMPTOMS FOUND IN PATIENTS WITH ANOREXIA NERVOSA

1. Weight Loss
2. Amenorrhea
3. Irritability
4. Sleep Disturbance
5. Fatigue
6. Weakness
7. Headache
8. Dizziness
9. Faintness
10. Constipation
11. Nonfocal abdominal pain
12. Feeling of “fullness”
13. Polyuria
14. Intolerance of cold

E. SYMPTOMS FOUND IN PATIENTS WITH BULIMIA NERVOSA

1. Irregular menses
2. Esophageal burning
3. Nonfocal abdominal pain
4. Lethargy
5. Headache
6. Constipation/diarrhea
7. Swelling of hands/feet
8. Frequent sore throats
9. Depression
10. Swollen cheeks

F. SIGNS PRESENT IN PATIENTS WITH ANOREXIA NERVOSA

1. Emaciation
2. Hyperactivity
3. Bradycardia
4. Hypotension
5. Dry skin
6. Brittle hair
7. Brittle nails
8. Hair loss on scalp
9. “Yellow” skin, especially palms
10. Lanugo hair
11. Cyanotic and cold hands and feet
12. Edema (ankle, periorbital)

G. SIGNS PRESENT IN PATIENTS WITH BULIMIA NERVOSA

1. Calluses on the back of hand
2. Salivary gland hypertrophy
3. Erosion of dental enamel
4. Periodontal disease
5. Dental carries
6. Petechiae
7. Perioral irritation
8. Mouth ulcers
9. Hematemesis
10. Edema (ankle, periorbital)
11. Abdominal bloating

H. RECOMMENDED LABORATORY TESTS

The following laboratory tests should be considered:

1. CBC with differential
2. Serum electrolytes
3. Calcium, magnesium, phosphorus levels
4. Liver function tests
5. Serum salivary amylase level
6. Serum BUN, creatinine levels
7. Blood glucose levels
8. Thyroid panel—T3, T4, and TSH
9. Urinalysis
10. Stool examination if GI bleeding, abdominal complaints, or anemia are present.
I. LABORATORY RESULTS THAT COULD POINT TO A DIAGNOSIS OF ANOREXIA NERVOSA (FOOD-RESTRICTING SUBTYPE)

1. Hypercholesterolemia
2. QT prolongation on the EKG
3. Low white blood cell count
4. If past puberty, a low LH, FSH, estradiol, or testosterone

J. LABORATORY RESULTS THAT COULD POINT TO A DIAGNOSIS OF BULIMIA NERVOSA

1. Hyperamylasemia
2. Hypokalemia
3. Metabolic alkalosis

K. MAKING THE DIAGNOSIS

In eating disorders, the diagnosis is made by the history and the mental state examination, rather than by ruling out all possible medical causes. Although most eating disorders occur in the teens and twenties, eating disorders have been documented to occur in patients as young as seven years of age and as old as 77 years of age. Once the eating disorder is diagnosed, evaluate the patient for a co-morbid psychiatric disorder, as well as for the medical consequences of the diagnosis.

V. TREATMENT

I. ANOREXIA NERVOSA

A. Nutritional Rehabilitation

The first goal of treatment consists of restoring the patient to a healthy weight and helping them maintain this weight. The treatment plan must establish a rate of slow weight gain that takes into consideration the current weight of the patient. The extent of malnutrition, the severity of physical complications, and the cooperation level of the patient determine the appropriate setting for nutritional rehabilitation—inpatient psychiatric hospital, outpatient psychiatric center, or general medical hospital. Utilize hospitalization when there is substantial or rapid weight loss resulting in a weight that is 75-80% of normal or 20-30% below the weight at the onset of the illness. Hospitalization should also be used when there are substantial medical issues, such as a low serum potassium, severe malnutrition, or unstable vital signs.

1. Potential Indications for Total Parenteral Nutrition (TPN) or Enteral Feeding:
   a. Failure of multiple previous attempts at dietary treatment
   b. Life-threatening weight loss, resulting in more than 30 to 40 percent below the ideal body weight
   c. Worsening psychological state or complete noncompliance with standard therapy.

Nutritional Rehabilitation should continue until the patient returns to a self-regulating set-point. When this occurs, the patient will not be cold, will have a normal T3 level, normal eating behaviors, with normal menses (for females), and normal testosterone (for males).
B. Psychosocial Interventions

Appropriate treatment of anorexia nervosa includes psychotherapy. Psychotherapy tools include individual psychodynamic therapy, cognitive-behavioral therapy, group therapy, family therapy, and psycho-education. The goal is to establish healthy thinking within culturally normative concerns about their weight. With younger patients, it is important to treat and support the whole family, as this will lessen the chances of relapse. After initial treatment goals are met, it is important to monitor for two to four years.

C. Medication

Psychotropic medications provide adjunct, rather than primary, treatment in anorexia nervosa. Medications often prove more beneficial when substantial co-morbid psychopathology exists. Antidepressants, particularly selective serotonin reuptake inhibitors, can provide some benefit. Antipsychotics can prove beneficial for patients with obsessive thinking or in efforts to promote weight gain. As always, only use medications applicable to the patient’s clinical picture.

II. BULIMIA NERVOSA

A. Nutritional Rehabilitation

In contrast to a patient with anorexia nervosa, a patient with bulimia nervosa usually presents with a normal or above normal weight. Even so, a patient frequently presents with nutritional deficiencies or physical complications of their illness. Treatment goals include helping the patient reduce the episodes of binging and purging through establishing a structured meal plan.

B. Psychosocial Interventions

Treatment includes psychotherapy, with the evidence suggesting that cognitive behavioral therapy provides particular benefit in treating acute episodes of bulimia. Other psychotherapies to consider include psychodynamic, interpersonal, combination therapies, group therapy and family therapy. As with anorexia nervosa, it is important to treat and support the family when dealing with a younger (less than age 18) patient. After patient attains initial treatment goals, continue to monitor for two to four years to help guard against relapse.

C. Medication

In the initial phase of treatment, antidepressants often provide benefit. As of this writing, fluoxetine is the only FDA-approved medication for the treatment of bulimia nervosa, with dosages up to 60mg/day often used. Studies also suggest that sertraline can prove beneficial in the treatment of bulimia nervosa. Medications less likely to benefit the patient include antidepressants outside of the SSRIs and other psychotropic medication, unless comorbid pathology exists. As always, tailor medications to the individual patient, keeping in mind the side effect profile.

References


According to the Brain Injury Association of America, traumatic brain injury (TBI) is an insult to the brain caused by an external physical force that may produce an altered or diminished state of consciousness, which results in impairment of physical functioning or cognitive abilities. This insult to the brain is not of a degenerative or congenital nature. The insult to the brain can also result in disturbance of emotional or behavioral functioning (TDOE, 2009). Current findings identify TBI as the signature injury of veterans returning from Afghanistan and Iraq (Psychiatry Neuroimaging Laboratory, 2010).

TBI symptoms can be mild, moderate, or severe. Persons with mild TBI may or may not lose consciousness for a brief period. He/She may experience confusion, lightheadedness, dizziness, headache, tired eyes or blurred vision, changes in sleep patterns, ringing in the ears, lethargy or fatigue, mood or behavioral changes, bad taste in the mouth, and/or difficulty with concentration, memory, thinking, or attention. Individuals with moderate or severe TBI may display the same symptoms, but to a greater degree. For example, there may be slurred speech, a headache that gets worse or does not go away, numbness or weakness in the extremities, loss of coordination, among other symptoms (NINDS, 2010).

Epidemiology

TBI has become a serious public health problem. On average, 1.7 million people sustain a TBI annually. Of these, three (3) percent die, 16 percent are hospitalized, and the remainder are treated and released. These estimates are based solely on persons that have been seen in an emergency department or hospital. TBI is a contributing factor to nearly one third of all injury-related deaths. About three fourths of the TBIs that happen each year fall in the mild category and includes concussions (CDC, 2010).

Some of the most common events that result in TBI consist of the following:

- **Falls**, which may involve slipping in the bath, falling down steps, etc.—events that often happen to older adults.
- **Vehicle-related collisions**, such as those involving motorcycles or bicycles, and cars, as well as the pedestrians involved in such accidents. These events inflict many adults in their early 20s.
- **Violence** resulting from gunshot wounds or domestic violence, e.g. About 10 percent of TBIs result from violence.
- **Sports injuries** from sports like football, boxing, race-car driving, or other high-impact or extreme sports.
- **Explosive blasts/combat injuries** as obtained in war or other conflicts involving active-duty military personnel (Mayo Clinic Staff, 2010).
Adults most at risk of TBI include:

- young people 18 and 19 years of age;
- those over the age of 65;
- low-income individuals;
- residents of inner cities;
- members of ethnic minority groups;
- men;
- singles;
- persons with a history of substance abuse; and
- persons with a previous TBI (Dawodu, 2009; Mayo Clinic Staff, 2010).

**Assessment**

Typically physicians or other medical staff will use the 15-point Glasgow Coma Scale (GCS) to assess the initial severity of a brain injury. This scale checks a person’s ability to follow directions and move their eyes and limbs, as well as the coherence of his/her speech. Abilities are scored numerically, with higher scores indicative of milder injury (Mayo Clinic Staff, 2010).

Classifications of TBI refer to the nature of the injury itself. Accepted definitions of the three levels of TBI follow:

- **Mild**: an alteration or loss of consciousness for less than 30 minutes, post-traumatic amnesia (PTA) for a period less than 24 hours, focal neurologic deficits that may or may not be temporary, and/or GCS of 13-15.
- **Moderate**: loss of consciousness for more than 30 minutes, PTA for longer than 24 hours, and an initial GCS of 9-12.
- **Severe**: all of the criteria for “moderate” as listed above, but with a GCS less than 9.

Patients who have TBI often meet criteria for PTSD on screening instruments and vice versa. The gold standard for diagnosis of TBI is still the interview by a skilled clinician (National Center for PTSD, 2007).

**Treatment**

Persons showing signs of moderate or severe TBI should receive medical attention as soon as possible. There is not much that can be done to reverse initial brain damage caused by trauma, so medical staffs first try to stabilize individuals with TBI and focus on the prevention of further injury. Rehabilitation for clients with moderate to severe symptoms may include individually tailored treatment programs in the areas of occupational therapy, psychology/psychiatry, speech/language therapy, physical therapy, physiatry (physical medicine), and social support (NINDS, 2010).
Course of Recovery and Prognosis

Recovery from TBI occurs in three phases: coma (period of unconsciousness), post-traumatic amnesia (PTA), and a longer, more unpredictable stage. The amount of time for each phase varies for each client, but the order of the phases is fixed. Tests such as the Galveston Orientation and Amnesia Test (GOAT) are typically used to determine when individuals have come out of PTA. This information is extremely helpful because the length of PTA is the best predictor of how much recovery an individual can be expected to have (Kothari, 2010).

Table 8 below provides information regarding prognosis following a severe TBI.

<table>
<thead>
<tr>
<th>Table 8: Prognostic Guidelines Following Severe TBI</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Most clients will be able to live on their own (for at least a 24-hour period) when:</td>
<td></td>
</tr>
<tr>
<td>Time to follow commands is less than two weeks</td>
<td>OR</td>
</tr>
<tr>
<td>Duration of PTA is less than two months</td>
<td></td>
</tr>
<tr>
<td>Most clients will not be able to live on their own when:</td>
<td></td>
</tr>
<tr>
<td>Time to follow commands is longer than one month</td>
<td>OR</td>
</tr>
<tr>
<td>Duration of PTA is greater than three months</td>
<td>AND/OR</td>
</tr>
<tr>
<td>Age is greater than 65 years</td>
<td></td>
</tr>
</tbody>
</table>

Adapted from Kothari, 2010.

Age is uniquely related to prognosis. Older persons tend not be able to live on their own following a TBI. Prognosis gets better for younger age groups (Kothari, 2010).

Available Services

Below are listed the services available for TBI within the state (TDOE, 2009):

- Tennessee Department of Health TBI Program: 1-800-882-0611
  The Tennessee Department of Health TBI Program can provide information and referral services, contact names and numbers of Service Coordinators for individuals throughout the state (funding provided by the program), and statistical information from the TBI Registry.

- Tennessee Rehabilitation Center Traumatic Brain Injury Program, Smyrna, TN: 615-459-6811
  This program is funded by the Tennessee Department of Human Services (TDHS) through its Division of Rehabilitation Services. The program provides comprehensive vocational evaluations for persons in school that are of working age and have TBI and/or an Acquired Brain Injury (ABI). The Tennessee Department of Health TBI Program also provides comprehensive rehabilitation services to persons with TBI. They serve Tennessee residents with TBI and/or ABI.

- The Brain Injury Association of Tennessee: 1-877-885-7511
  The Brain Injury Association of TN is a state affiliate of the Brain Injury Association of America, the national advocacy organization.
• Project BRAIN: 615-383-9442

Project BRAIN is a resource and training network for educators, families, and health care professionals that support students in the state that have TBI.

References


Assessment and Diagnosis

Mental disorders are frequently comorbid with intellectual disabilities (ID), with the point prevalence being 40 percent (Cooper and Bailey, 2001). Thus, people with intellectual disabilities are considerably more likely to have an additional mental disorder than the average person from the general population (Cooper, 2003).

The psychiatric diagnostic evaluation of persons who have ID is in principle the same as for persons who do not have an intellectual disability. Diagnostic approaches are modified, depending on the patient’s cognitive level and communication skills. For persons who have mild ID and good verbal skills the approach does not differ much from diagnosing persons with average cognitive skills. The poorer the communication skills, the more one has to depend on information provided by caregivers familiar with the patient and on direct behavioral observations (Szymanski & King, 1999).

Criteria for Diagnosis of Intellectual Disability

(Considerations adapted from DSM-IV-TR and American Association of Intellectual and Developmental Disabilities [AAIDD] criteria)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significantly sub-average intellectual</td>
<td>IQ approximately 70 or below</td>
</tr>
<tr>
<td>functioning</td>
<td></td>
</tr>
<tr>
<td>Below average IQ causes limitations in adaptive</td>
<td>Communication, Self-direction, Self-care,</td>
</tr>
<tr>
<td>skills* and functioning in at least two of the</td>
<td>Functional academic skills, Home living, Work,</td>
</tr>
<tr>
<td>following areas:</td>
<td>Social/interpersonal skills, Leisure, Use of</td>
</tr>
<tr>
<td></td>
<td>community resources, Health and safety</td>
</tr>
<tr>
<td>Age at onset</td>
<td>Must be evident before age 18</td>
</tr>
<tr>
<td>Levels of severity (DSM-IV-TR)</td>
<td>Mild IQ 55-70</td>
</tr>
<tr>
<td></td>
<td>Moderate IQ 40-55</td>
</tr>
<tr>
<td></td>
<td>Severe IQ 25-40</td>
</tr>
<tr>
<td></td>
<td>Profound IQ below 25</td>
</tr>
<tr>
<td></td>
<td>Unspecified Strong presumption, but the individual’s intellectual ability</td>
</tr>
<tr>
<td></td>
<td>is not testable by standard</td>
</tr>
<tr>
<td></td>
<td>instruments</td>
</tr>
<tr>
<td>Levels of supports needed (AAIDD)</td>
<td>Intermittent, Limited, Extensive, or Pervasive</td>
</tr>
<tr>
<td>Be cautious in interpreting low IQ in the</td>
<td>Impairment in intellectual ability must precede and not be directly related to psychiatric disorder</td>
</tr>
<tr>
<td>presence of a psychiatric disorder</td>
<td></td>
</tr>
</tbody>
</table>

*As identified from, the Vineland Adaptive Scales
Assessment of Mental Disorders in Persons with ID

Assessment methods used with the general population will work well with people with intellectual disabilities, but they often must be supplemented by additional special considerations. This includes spending time with the individual to hear his/her experiences and concerns and to conduct an examination; taking a collateral history from a person close to the individual; reviewing previous medical case notes; and speaking with professionals from other disciplines such as psychologists or social workers that may be involved in providing support to the person. The information gathered should cover the typical psychiatric headings. Findings can then be integrated and interpreted into a three-stage framework to summarize the relevant psychopathology (positive and negative findings), describe, and classify the likely etiology. The assessment must be thorough and detailed so that the treatment/intervention/support plan can be developed in such a way as to optimize the chance of best possible outcome for each person given his/her particular set of circumstances (Cooper, 2003).

Special considerations that might need to be taken into account during assessment include:

- Capacity to consent
- Engagement and communication
- Information from caregivers
  - Measurement of all psychopathology, not just that volunteered by caregivers
  - Distinguishing symptoms from long-standing traits and behaviors
    - Gathering background from information
    - Engaging caregivers
- Pathoplastic effect of development level on psychopathology
- Developmental history
  - Level of ability
  - Cause of disabilities
- Behavioral phenotypes
- Issues surrounding epilepsy (Cooper, 2003).

The following considerations can help ensure a successful, reliable, and valid assessment process. They address ways to successfully communicate with individuals that have an intellectual disability.

Context:
- Allow plenty of time

Environment:
- Familiar, relaxed, environment (e.g., the person’s own home)
- Remove physical barriers
- Provide comfortable seating
- Position the person so as to allow communication with both the person and his/her caregiver, if necessary (i.e., not turning away from the person)
- Make every effort to ensure a noise-free environment (e.g., turn the TV off)

Verbal language:
- Articulate clearly
- Avoid complex sentence constructions such as conditional tenses
- Avoid intellectually complex concepts (be concrete)
Avoid using jargon
- Clarify to facilitate correct interpretation(s)
- Repeat and rephrase as necessary
- Use active listening
- Use open questions to the extent possible
- Use short sentences and straightforward language

Nonverbal communication
- Look at the person you are communicating with (not your case notes)
- Use intonation, body language, gesture, and posture to:
  - Help convey a particular message
  - Encourage the person in their expression
- Some persons may require high-tech communication devices, and special speech and language therapy support
- Make every reasonable effort to ensure that you have the person’s attention before starting to speak, e.g. touch his/her arm or hand (Cooper, 2003).

Psychiatric and behavioral assessment and diagnosis of persons with ID include:
- Comprehensive assessment of intellectual disabilities.
- A comprehensive history and physical examination, service recipient and caregiver interviews, medical record review, completion of relevant laboratory tests and psychological testing, behavioral inventories and diagnostic formulation.

Gather a comprehensive history. This will involve collecting information from the patient as well as from several caregivers in different settings. The comprehensive history should contain:

- Presenting symptoms with concrete descriptions of specific behaviors in various settings and situations, their change over time, events that preceded the behaviors, and the way the various caregivers handled them.
- Psychiatric review of systems that incorporates premorbid, as well as current, personality and behavioral patterns, self care, communication, adaptive functioning, and social functioning.
- Details of previous psychiatric treatment, paying particular attention to medication side-effects that could cause the presenting symptoms.
- Past and present habilitative, educational work programs and living situations; their appropriateness and quality consistency; availability of supportive services; and long term plans for the patient’s care.
- Caregivers’ attitudes toward the patient, their understanding of the patient’s disability, and their support for growth versus overprotection.
- Review of past cognitive assessments and evaluations, and/or request new ones if needed.

Additionally the patient should be interviewed. The patient’s mental status might also be assessed during the process of conversation instead of conducting a formal examination. Follow the aforementioned considerations that will facilitate communication with the patient during the interview process.

The final component of assessment should involve a medical review. The review should involve medical and developmental history, past etiological assessments, and coexisting general medical disorders and their treatments (Szymanski & King, 1999).
Diagnosis and Identification of “Target” Symptoms

Data from assessments should be interpreted in light of communication skills, developmental level, education, life experiences, associated handicaps, and family and sociocultural factors. Particular behaviors may suggest an underlying mental disorder if they are part of a pattern of a defined mental disorder syndrome. In addition, the possibility of sexual or other abuse that the patient cannot report, should be a consideration. Thus, a DSM-IV-TR diagnosis should be made, if appropriate criteria are met, in addition to the Axis II diagnosis of intellectual disability. Included in the diagnostic statement should be a description of the individual’s strengths, limitations, and needs including intellectual, adaptive behaviors, health, psychosocial domains, and communication. The comprehensive assessment should yield a multiaxial diagnostic formulation with appropriate differential, and the supporting evidence for diagnosis should be highlighted (Szymanski & King, 1999)

Diagnosis of Mental Disorders Common to Persons with ID

- Mental Disorders Due to a General Medical Condition
  ID does not constitute a medical condition to which aberrant behavior should be ascribed. The disturbance to a general medical condition should be used only when there is evidence from physical examination, history, or laboratory findings that disturbance is a direct consequence of a specific medical condition.

- Schizophrenia/Other Psychotic Disorders
  In verbal persons with mild ID, schizophrenia can be diagnosed in the usual manner. Such is typically not the case when individuals have more severe ID. For such individuals, the less specific diagnosis of Psychotic Disorder NOS might be made. Further, conversations with imaginary friends should not be confused with hallucinations.

- Mood Disorders
  These disorders, especially depressive disorders are very common in persons with ID. The complaints in verbal individuals with mild ID are likely simpler and concrete. Caregiver information will be helpful in identifying signs of mood changes. Sometimes depression manifests as aggressive behavior in individuals with ID. Medication side effects should also be considered as a depression trigger.

- Mental Disorders Due to a General Medical Condition
  Again, verbals individuals with mild ID can report on subjective feelings of anxiety. Those with poor or nonexistent verbal skills may display symptoms such as agitation or avoidance behaviors.
• **PTSD**

This mental disorder may show up often in persons with ID and should be routinely considered in the differential diagnosis. These individuals are extremely vulnerable to abuse, due to difficulties in reporting it and their tendency to want to please others (Szymanski & King, 1999).

**Treatment**

**General**

Habilitation of persons with ID is based on the principles of normalization and community-based care, with additional supports as needed. Some parents and older service recipients are not aware of their rights to obtain services. The clinician has an important role in such instances to educate and, if needed, to refer to a "patient advocate" or "educational advocate."

Adults with ID of all levels live in the community, in settings varying from their own apartments with supports as needed, to small shared living situations. They are employed in specialized settings or, increasingly, in the competitive job market. Habilitation and treatment include:

- Specific treatment of the underlying condition, if known, to prevent or to minimize brain insults that result in ID (e.g., shunting in the case of hydrocephalus).
- Early intervention, education, and ancillary therapies (such as physical, occupational, language therapies, and behavior therapies), family support, and other services, as needed.
- Treatment of comorbid physical conditions, such as hypothyroidism, congenital cataracts or heart defects in children with Down syndrome, treatment of seizures in persons with tuberous sclerosis, etc.
- Treatment of comorbid mental disorders, including psychosocial interventions and pharmacotherapy (Szymanski & King, 1999).

**Psychiatric**

The psychiatric treatment of persons with ID and a comorbid mental disorders is generally the same as for persons without intellectual disability. However, persons with ID and a comorbid psychiatric disorder may have features that warrant special consideration; for example some persons with ID may be more sensitive to the disinhibiting effects of sedative/hypnotic agents and this needs to be taken into account in choosing a medication.

Psychotropic medication should be integrated as part of a comprehensive treatment plan that includes, appropriate behavior planning, behavior monitoring, and communication between the prescribing physician, therapists, and others providing supports, habilitative services, and medical treatment.

Treatment including psychotropic medications should be based on the most specific DSM-IV TR diagnosis possible. When only a tentative non-specific DSM-IV TR diagnosis can be made, the clinician may need to focus on one or more behavioral symptoms as the target of treatment. There should be an effort, over time, to adjust medication doses to document ongoing need or the minimum dose at which a medication remains effective. The prescribing clinician may want to collaborate with a Board Certified Behavior Analyst regarding behavior analysis and treatment.

Psychotropic medication decisions need to be made with due consideration for potential problems of polypharmacy, and otherwise for negative impact on the individual’s functioning.
and overall quality of life. Every effort should be made to avoid unnecessary compromise of cognitive function or motor function. Risk vs. benefit needs to be considered and continually reassessed, and justification for duration of treatment needs to be established periodically during the course of treatment (Szymanski & King, 1999).

**Behavioral Emergencies**
- Restraint of any kind, where permitted, is used only when efforts at redirection have failed and the service recipient poses an imminent risk of harm to self or others.
- Emergency medications, where permitted, are given only after appropriate diagnostic assessment and other alternatives have been attempted or are contraindicated.
- Possible medical causes for an acute behavioral exacerbation must be considered (e.g., other illness, injury, medication side effects).
- Reassessment of the diagnosis and the plan of treatment and support are indicated when there is an emergent behavioral episode.

**Psychotherapeutic Interventions**
Psychotherapy can be effective for persons with ID toward realization of a variety of goals such as:
- Mitigation of stressors.
- Improved coping skills.
- Improved communication of feelings, problems, etc.
- Improved problem solving skills.
- Improved social and interpersonal skills.
- Reduction/elimination of maladaptive behaviors.
- Increase of adaptive behaviors.
- Understanding of disability and illness.
- Increased self-esteem.

**Modality and Technique**
Types of psychotherapy for persons with intellectual disability and a comorbid mental disorder may include:
- Individual.
  - Conjoint.
  - Behavioral.
- Applied behavior analysis (ABA).
- Group.
- Family therapy.

As with all psychiatric care, the approach to treatment of persons with intellectual disability and a comorbid mental disorder is generally the same as for the general population. Techniques typically utilized with persons with mental disorders can be considered potential interventions for persons who are dually diagnosed, with adaptations made as necessary, based on the needs and strengths of the individual. The approach to therapy may need to be more concrete, repetitive, and/or directive, and may need to incorporate visual and auditory aids. Role play can be effective, and behavioral techniques, such as positive reinforcement are very important.

Generally, lower cognitive and adaptive functioning is associated with more extensive modifications necessary for the technique. Some techniques are rarely appropriate for persons who function at the lower levels of intellectual disability.
**Individual therapy** may be utilized in working with individuals with intellectual disability and a comorbid mental or behavioral disorder. It usually involves concrete communications and a supportive approach.

**Conjoint Therapy** with or without the client present may be used to address specific behavioral issues, and allows parents or caregivers to report their observations frankly. Parents or caregivers can be supported in their efforts at behavior management. Concrete advice in management and accessing resources is important.

**Behavior Therapy** is based upon learning theory and uses a functional assessment to understand the variables that influence the behavior. Generally, to be effective, behavior therapy should be applied in all settings, and include an emphasis on increasing functional replacement skills, along with the reduction of the maladaptive behavior. This approach may include adjusting the environment to reduce physical and social conditions that seem to trigger maladaptive behaviors, and may employ various specific techniques, such as systematic desensitization, progressive relaxation, anger management, assertiveness training, and developing more effective social and interpersonal skills.

**Applied behavior analysis** (ABA) is a widely used strategy for addressing behavior problems among patients with disorders such as intellectual disabilities, developmental disabilities, and traumatic brain injury. It considers antecedents (environmental factors that appear to trigger unwanted behavior), the behaviors themselves, and consequences that either increase or decrease future occurrences of that behavior. A treatment program using a behavioral technique known as operant conditioning is then carried out to address the specific challenging behavior, such as self-injurious behavior.

The principles of ABA include:
- Indirect Assessment, such as interviewing family/caregivers; use of behavior rating scales.
- Direct observation of behavior.
- Functional analysis, i.e., a formal evaluation of the effects of specific environmental variables upon the behavior.
- Ongoing assessment of treatment effects by repeated direct observations of behavior, coupled with repeated behavioral assessments.

**Group therapy** can be a valuable treatment approach for a wide range of emotional, behavioral and life problems. Group therapy uses the power of group dynamics and peer interaction to promote learning and development of new skills among individual group members. Group therapy can be used in promoting skills in decision making, problem solving, expression of feelings, socialization, communication, and in maintaining behavioral change. Young adults may need help in coming to terms with their own sexuality and in emotionally separating and preparing themselves to move to out-of-family living in the community.

**Family therapy** utilizes the principles of family therapy to focus on support, education and conflict resolution.

**Treatment Follow-up**
It is essential to assess treatment effectiveness. Treatment goals as well as “target” symptoms must be established by the clinicians, family caregivers and service recipient. Interdisciplinary collaboration of professionals and caregivers is essential. Follow-up includes repeated recipient interview/observation and obtaining comprehensive interim information. The risks vs. benefits of a treatment must be reevaluated on an ongoing basis throughout the course of treatment.
When psychotropic medications are prescribed for the individual with intellectual disability and a comorbid mental disorder, the treating professionals should establish a plan to monitor for potential side effects as well as for continued efficacy and need for continued use of the medication. If the service recipient is not experiencing improvement, the accuracy and completeness of the diagnosis should be reviewed, as well as the consistency of implementation of treatment by the caregivers.

**References**


Page Intentionally Left Blank
APPENDIX B
Departmental Resources
Alcohol and Drug Addiction Treatment (ADAT) Program

The Alcohol and Drug Addiction Treatment (ADAT) Program is a state-funded program which provides alcohol and drug abuse treatment services for DUI offenders.

To be eligible for the ADAT program, offenders must:

1. Have a Current Conviction of one of the following:
   a. DUI First Offense OR
   b. DUI Second (or greater) Offense
   OR
   c. Driving on a Canceled, Suspended, or Revoked license (along with proof that the license was cancelled, suspended or revoked due to a prior DUI conviction in the past five years);

2. Be directed into treatment by order of the court;

3. Be deemed indigent by the court.

Treatment services are provided by 42 ADAT-contracted providers across the state. Each provider is a state-licensed alcohol and drug abuse treatment facility (TDMHDD Web site, 2010).
Problem Gambling Program

The Problem Gambling Program is a state funded program that provides education, referral, and treatment services to individuals and their families who have experienced problems with compulsive gambling. The program provides education about problem gambling and gambling addiction through community outreach activities, which increase public awareness and identification of individuals and families that are at risk. A 24-hour referral hotline provides information to callers about services which provide assessment and outpatient treatment to those individuals and families seeking problem gambling and gambling addiction services.

Currently, there are three regional problem gambling programs that provide outpatient treatment in the state:

- The Gambling Clinic at the University of Memphis (West region)
- Buffalo Valley Treatment Center (Central region)
- Helen Ross McNabb Center (East region)

For confidential assistance, call the 24 hour, 7 day a week toll-free Tennessee REDLINE for help with gambling problems.
1-800-889-9789
Crisis Services

Toll-Free Adult Statewide Crisis Telephone Line

1-855-CRISIS-1 (1-855-274-7471)

Toll-Free Youth Telephone Lines across Tennessee

MEMPHIS REGION: 1(866)791-9226
RURAL WEST TN: 1(866)791-9227
RURAL MIDDLE TN: 1(866)791-9222
NASHVILLE REGION: 1(866)791-9221
UPPER CUMBERLAND: 1(866)791-9223
SOUTHEAST TN: 1(866)791-9225
KNOXVILLE REGION: 1(866)791-9224
NORTHEAST TN: 1(866)791-9228

Behavioral Health Crisis Services are rendered when there is a perception of a crisis by an individual, family member, law enforcement, hospital staff or others. The goals of TDMHDD’s crisis service system are to:

- Promote the safety and emotional stability of individuals with mental illness or emotional crises;
- Minimize further deterioration of individuals with mental illness or emotional crises;
- Help individuals with mental illness or emotional crises to obtain ongoing care and treatment; and
- Promote placement in settings that are less intensive, or less restrictive and more clinically appropriate to meet an individual’s needs.

TDMHDD emphasizes a consumer focus, early intervention, community education and outreach, and referral to the least restrictive alternative that is medically appropriate for individuals.

The current crisis system has 24/7 accessibility by telephone and/or walk-in services, face-to-face crisis service capabilities including triage, intervention, evaluation/referral for additional services/treatment and follow-up services. Services are provided to anyone in Tennessee regardless of insurance coverage. Providers of this service use the “Managed Care Standards for the Delivery of Behavioral Health Services Manual” and the “Crisis Response Training Manual for Crisis Services Providers” as resources for the delivery of crisis services.
Assisted Living Permanent Supportive Housing Program

The Assisted Living Program is a housing program that bridges the gap in the housing continuum between supportive living facilities (the more restrictive group homes) and congregate/individual rental or home ownership. This program not only provides housing to consumers but also employs consumer staff members, who offer structure, support, and supervision as needed to residents. Additionally, staff members support residents as they develop independent living skills and gain confidence in their ability to move toward more independence.

This program is designed for adult consumers diagnosed with mental illness and co-occurring disorders that can live independently in the community but may require a period of adjustment to practice independence in a semi-structured environment on their journey of recovery. This program creates a safe environment for residents to learn basic housekeeping, simple home maintenance, budgeting and bill paying, meal planning and preparation, transportation system navigation, and medication management—all essential skills for consumers who wish to become less dependent on professional intervention and high-cost services. The program serves adults who wish to move to more independent, less restrictive housing. Additionally, the program employs adults who are diagnosed with mental illness and co-occurring disorders as residential support staff.

The Assisted Living Program also reduces the likelihood of hospitalization and the use of acute care, increases community tenure and the likelihood of employment, ensures that consumers receive the needed services in order to successfully integrate into the community, improves the quality of life, and reduces the reliance upon more costly services. Because the program employs consumers in the operation of the program, it is a peer-provider service. This program also helps in the transition from the more costly institutional setting to the community. Evaluations of similar supported housing programs nationally have found that retention rates are increased while also reducing hospitalization. Supportive housing costs significantly less than a day in a shelter, jail, or psychiatric hospital.

Supportive Living Housing Program

TDMHDD is required by statute to reimburse certain supportive living facilities in 11 Tennessee counties. This service provides a supplement to eligible facilities in these counties. After a facility is certified to be eligible for the program, facilities submit their monthly reimbursement forms. They are reimbursed until the funds for the program run out.

Supportive living facilities are found in the following 11 counties:

- Davidson
- Knox
- Shelby
- Dyer
- Lincoln
- Warren
- Hamilton
- Madison
- Wilson
- Hardeman
- Obion

The program serves adults who are diagnosed with co-occurring disorders who are residing in supportive living facilities. This program reduces the likelihood of hospitalization and the use of acute care, increases community tenure and the likelihood of employment, ensures that people receive needed services in order to successfully integrate into the community, improves the quality of life, and reduces reliance upon more costly services.
Creating Homes Initiative (CHI)

In 2001, TDMHDD formed a strategic plan to partner with Tennessee communities to create housing options for people with mental illness and co-occurring disorders efficiently and effectively.

The original goal of this initiative was to create 2,005 new or improved permanent housing options for Tennesseans with mental illnesses and co-occurring disorders by the year 2005. That goal was achieved in the fall of 2002, and a new goal of 4,010 by 2005 was developed. That goal was reached, and now the ongoing goal is to create 1,100 new or improved permanent housing options each year.

Working with local community housing developers and other stakeholders in partnership with seven Regional Housing Facilitators, the program has leveraged to date more than $101 million in federal, state, local, public, private, traditional and non-traditional funding sources and has successfully created more than 4,600 permanent, safe, affordable, quality, permanent housing options for Tennesseans diagnosed with mental illness and co-occurring disorders.

Vision

To create and expand affordable, safe, permanent, and quality housing options in local communities for people with mental illness in Tennessee.

Mission

To assertively and strategically partner with local communities to educate, inform and expand quality, safe, affordable and permanent housing options for people with mental illness.

Housing Within Reach

Access to comprehensive housing information for Tennesseans with mental illness or co-occurring disorders, their family members, mental health service providers, housing developers, policy makers and other stakeholders is provided through this program.

This consumer-directed project, funded by the Centers for Medicare and Medicaid Services, Real Choice Systems Change grant, employs Consumer Housing Specialists to reach out with housing information and education and features a Web site that is updated daily, a longitudinal evaluation study of the impact of stable housing on the recovery of the target population, and a campaign to address mental health stigma and housing discrimination.
Regional Housing Facilitators

Region I - Upper East Tennessee
Jeanne Price
Frontier Health Center
2001 Stonebrook Place
Kingsport, TN 37660
(423) 578-4010
jprice@frontierhealth.org

Region II - East Tennessee
Sandie Shaver
Ridgeview MHC
240 West Tyrone Road
Oak Ridge, TN 37830
(865) 481-6170, ext. 1156
(865) 483-6697 fax
Sshaver@ridgevw.com

Region III - Middle East Tennessee
Susan Greene
A.I.M. Center, Inc.
472 W. MLK Blvd.
Chattanooga, TN 37402
(423) 648-1003
(423) 624-6593 fax
SH_Greene@comcast.net

Region IV - Nashville/Davidson County
Ken McKnight
Park Center
801 12th Avenue, South
Nashville, TN 37203
(615) 242-3576, ext. 240
(615) 242-3580 (fax)
Ken.McKnight@parkcenternashville.org

Region V - Middle Tennessee
Vonda Gray
Centerstone
633 Thompson Lane
P.O. Box 40406
Nashville, TN 37204-0406
(615) 460-4479
(615) 460-4432 (fax)
Vonda.Gray@centerstone.org

Region VI - West Tennessee
Rozann Downing
Carey Counseling Center
408 Virginia Street
P.O. Box 30
Paris, TN 38242
(731) 644-1753, ext. 156
(731) 642-1010 fax
Rozann@bhilc.org

Region VII - Shelby County
Cheré Bradshaw
BHI
2430 Poplar Suite 101
Memphis, TN 38112
(901) 452-6691
(901) 452-4297 fax
Chereb@bhilc.org
Peer Specialist Services

Peer Support is a best-practice model for supporting people who have mental illness. This model relies on individuals who live with mental illness to provide peer-to-peer support to others, drawing on their own experiences to promote wellness and recovery. It is fostered in Tennessee through the Peer Specialist Certification Program administered by the TDMHDD’s Office of Consumer Affairs. Additionally, Peer Specialist Certification expands professional employment opportunities for people who have mental illness and co-occurring disorders.

A Tennessee Certified Peer Specialist has self-identified as a person who has a mental illness or co-occurring disorder and has successfully navigated the service system to access treatment and resources necessary to build personal recovery and success with his or her life goals. This individual undergoes training recognized by the Department on how to assist other persons with mental illness in fostering their own wellness, based on the principles of self-directed recovery. Certified Peer Specialists deliver unique services in the mental health system; provide Medicaid-billable services through provider agencies; assist service recipients by promoting self-directed recovery goals; function as life coaches, advocates, teachers and group facilitators. Many Peer Specialists in Tennessee work in one of the state’s 45 Peer Support Centers. Peer-operated Peer Support Centers are places where adults diagnosed with mental illness and co-occurring disorders develop their own programs to supplement existing mental health services and support services. Peer Support Center staff members promote recovery and help their peers in acquiring the necessary skills for the utilization of resources within the community. This is accomplished by providing education, support, and socialization.

The Office of Consumer Affairs has also worked with Tennessee Voices for Children, the Governor’s Office of Children’s Care Coordination, and NAMI Tennessee to develop a Family Support Specialist certification program modeled on the peer certification program. A Family Support Specialist is a person who has self-identified as the caregiver of a child or youth with emotional, behavioral or co-occurring disorder and who has successfully navigated the child serving systems to access treatment and resources necessary to build resiliency and foster success in the home, school, and community. This individual undergoes training recognized by the Department on how to assist other caregivers in fostering resiliency in their child based on the principles of resiliency and recovery.

The Peer Specialist Certification program has resulted in a growing workforce of trained paraprofessionals throughout Tennessee. State certification also raises Peer Specialists to a higher level of validity and value throughout the mental health system. Peer Specialists who become certified take their recovery very seriously and experience fewer problematic symptoms associated with their mental illness.

Peer support services have been found to serve as an effective part of mental health care by a number of researchers (Davidson et. al., 2003; Felton, et. al, 1995; Mead & MacNeil, 2006). Peer support has also been identified as one of the Ten Fundamental Components of Recovery developed by the Center for Mental Health Services (SAMHSA, 2004).

Mental health self-help groups, which are often led by Certified Peer Specialists, have been shown to decrease symptoms, increase coping skills, and increase life satisfaction (Davidson et al, 1999; Chamberlin et al, 1996, Humphreys, 1997; Raiff, 1984). Peer specialists have been proven successful in engaging people who have serious mental illness into treatment (Sells et al, 2006; Solomon, 2004).
One-to-one peer support with people who have co-occurring disorders of mental illness and substance use was found to result in fewer hospitalizations, improved social functioning, reduced substance use and improved quality of life among participants (Klein, Cnaan, & Whitecraft, 1998). Research has also shown that peer support plays a part in reducing the overall need for mental health services over time (Chinman et al., 2001; Klein, Cnaan, & Whitecraft, 1998; Simpson & House, 2002).

References

WHAT IS A SYSTEM OF CARE?
A system of care is a coordinated network of community-based services and supports that are organized to meet the challenges of children and youth with serious mental health needs and their families. Families and youth work in partnership with public and private organizations to design mental health services and supports that are effective, that build on the strengths of individuals, and that address each person's cultural and linguistic needs. A system of care helps children, youth and families function better at home, in school, in the community and throughout life.

“System of care” is not a program — it is a philosophy of how care should be delivered. Systems of Care is an approach to services that recognizes the importance of family, school and community, and seeks to promote the full potential of every child and youth by addressing their physical, emotional, intellectual, cultural and social needs.

BUILDING SYSTEMS OF CARE IN TENNESSEE
TDMHDD currently has three federally-funded Systems of Care: the Mule Town Family Network (Maury County), the JustCare Family Network (Shelby County), and the K-Town Youth Empowerment Network (Knox County). TDMHDD’s first federally-funded System of Care grant was the Nashville Connection (Davidson County), which was funded from 1999-2006. In addition to working in partnership with community stakeholders on federal competitive System of Care grants, TDMHDD also Co-Chairs with the Tennessee Commission on Children and Youth the legislated Council on Children’s Mental Health.

MULETOWN FAMILY NETWORK (MTFN)
The MTFN is a partnership between TDMHDD, Centerstone, Tennessee Voices for Children, and the Centerstone Research Institute. The goal of the MTFN is to develop a system of care through a coordinated effort of state, county, local child-serving agencies, individuals, youth, and family members. Using a Wraparound approach, the MTFN will provide community-based, culturally and linguistically competent, family-driven and youth-guided care for 440 children and youth with Serious Emotional Disturbance (SED) and their families in Maury County over the course of the grant funded period. The MTFN serves children and youth ages 0-21 and is federally funded from 2005-2011. The Maury County community is currently implementing plans to sustain the MTFN after 2011.

JUSTCARE FAMILY NETWORK (JCFN)
The JCFN is a partnership between TDMHDD, Tennessee Voices for Children, Comprehensive Counseling Network, and Rhodes College. The goal of the JCFN is to offer an effective approach to delivering mental health services and system transformation through an enhanced culturally competent, family-driven and coordinated system of care. JCFN will serve 450 children and youth with serious emotional disturbance and their families in Memphis and Shelby County over the course of the six-year grant funded period. One of the program’s goals is to reach the disproportionate number of African-American youth in the juvenile justice system with undiagnosed, untreated mental health needs. The JCFN serves children and youth ages 5-19 and is federally funded from 2008-2014.

K-TOWN YOUTH EMPOWERMENT NETWORK (K-TOWN)
The K-Town Youth Empowerment Network is a mental health initiative in Knox County, Tennessee, serving youth transitioning to adulthood with serious emotional disturbance (SED) and their families. K-Town will offer an effective approach to delivering mental health services and system transformation through an enhanced culturally competent, family-driven, youth-guided, community-based and coordinated system of care. Employing local youth and caregivers as care coordinators with support from mental health consultants, and partnering with parents and youth at all levels, K-Town will serve a minimum of 400 youth ages 14-21 with serious emotional disturbance or serious persistent mental illness and their families over the course of the grant funded period (2009-2015). K-Town is a partnership between TDMHDD, Tennessee Voices for Children, Helen Ross McNabb Center, and Centerstone Research Institute.

For more information about TDMHDD’s federally-funded Systems of Care, please contact:

Dr. Freida Outlaw, Principal Investigator
(615) 532-6758
Freida.Outlaw@tn.gov

Susan Steckel, Federal Grants Manager
(615) 253-8377
Susan.Steckel@tn.gov
APPENDIX C

Listing of Free Treatment Improvement Protocols
Free Treatment Improvement Protocols – Listing

This appendix contains a listing of all the Treatment Improvement Protocols (TIPs) that are available from the Center for Substance Abuse Treatment (CSAT). These TIPs may be ordered and purchased free of charge from CSAT or downloaded directly onto your computer from the CSAT Web site at http://www.ncbi.nlm.nih.gov/bookshelf/br.fcgi?book=hssamhsatip. Also listed are publications based on TIPs.

**TIP 1 State Methadone Treatment Guidelines**— Replaced by TIP 43

**TIP 2** Pregnant, Substance-Using Women—BKD107
  - Quick Guide for Clinicians QGCT02
  - KAP Keys for Clinicians KAPT02

**TIP 3 Screening and Assessment of Alcohol- and Other Drug-Abusing Adolescents**— Replaced by TIP 31

**TIP 4 Guidelines for the Treatment of Alcohol- and Other Drug-Abusing Adolescents**— Replaced by TIP 32

**TIP 5 Improving Treatment for Drug-Exposed Infants**—BKD110

**TIP 6** Screening for Infectious Diseases Among Substance Abusers—BKD131
  - Quick Guide for Clinicians QGCT06
  - KAP Keys for Clinicians KAPT06

**TIP 7 Screening and Assessment for Alcohol and Other Drug Abuse Among Adults in the Criminal Justice System**— Replaced by TIP 44

**TIP 8 Intensive Outpatient Treatment for Alcohol and Other Drug Abuse**— Replaced by TIPs 46 and 47

**TIP 9 Assessment and Treatment of Patients With Coexisting Mental Illness and Alcohol and Other Drug Abuse**— Replaced by TIP 42

**TIP 10 Assessment and Treatment of Cocaine-Abusing Methadone-Maintained Patients**— Replaced by TIP 43

**TIP 11** Simple Screening Instruments for Outreach for Alcohol and Other Drug Abuse and Infectious Diseases—BKD143
  - Quick Guide for Clinicians QGCT11
  - KAP Keys for Clinicians KAPT11

**TIP 12 Combining Substance Abuse Treatment With Intermediate Sanctions for Adults in the Criminal Justice System**— Replaced by TIP 44
TIP 13 Role and Current Status of Patient Placement Criteria in the Treatment of Substance Use Disorders—BKD161
  • Quick Guide for Clinicians QGCT13
  • Quick Guide for Administrators QGAT13
  • KAP Keys for Clinicians KAPT13

TIP 14 Developing State Outcomes Monitoring Systems for Alcohol and Other Drug Abuse Treatment—BKD162

TIP 15 Treatment for HIV-Infected Alcohol and Other Drug Abusers—Replaced by TIP 37 TIP 16 Alcohol and Other Drug Screening of Hospitalized Trauma Patients—BKD164
  • Quick Guide for Clinicians QGCT16
  • KAP Keys for Clinicians KAPT16

TIP 17 Planning for Alcohol and Other Drug Abuse Treatment for Adults in the Criminal Justice System—Replaced by TIP 44

TIP 18 The Tuberculosis Epidemic: Legal and Ethical Issues for Alcohol and Other Drug Abuse Treatment Providers—BKD173
  • Quick Guide for Clinicians QGCT18
  • KAP Keys for Clinicians KAPT18

TIP 19 Detoxification From Alcohol and Other Drugs—Replaced by TIP 45

TIP 20 Matching Treatment to Patient Needs in Opioid Substitution Therapy—Replaced by TIP 43

TIP 21 Combining Alcohol and Other Drug Abuse Treatment With Diversion for Juveniles in the Justice System—(SMA) 08-4073
  • Quick Guide for Clinicians and Administrators QGCA21

TIP 22 LAAM in the Treatment of Opiate Addiction—Replaced by TIP 43

TIP 23 Treatment Drug Courts: Integrating Substance Abuse Treatment With Legal Case Processing—(SMA) 08-3917
  • Quick Guide for Administrators QGAT23

TIP 24 A Guide to Substance Abuse Services for Primary Care Clinicians—(SMA) 08-4075
  • Concise Desk Reference Guide (SMA) 08-3740
  • Quick Guide for Clinicians QGCT24
  • KAP Keys for Clinicians KAPT24

TIP 25 Substance Abuse Treatment and Domestic Violence—(SMA) 08-4076
  • A Guide for Treatment Providers MS668
  • A Guide for Administrators MS667
  • Quick Guide for Clinicians QGCT25
  • KAP Keys for Clinicians KAPT25

TIP 26 Substance Abuse Among Older Adults—(SMA) 08-3918
  • A Guide for Treatment Providers MS669
  • A Guide for Social Service Providers MS670
  • Good Mental Health is Ageless PHD881 (English), (SMA) 08-3897 (Spanish)
  • Aging, Medicines and Alcohol (SMA) 08-3169 (English), (SMA) 08-3898 (Spanish)
  • Quick Guide for Clinicians QGCT26
  • KAP Keys for Clinicians KAPT26

TIP 27 Comprehensive Case Management for Substance Abuse Treatment—(SMA) 08-4215
  • Guide for Treatment Providers MS673
  • Quick Guide for Clinicians QGCT27
  • Quick Guide for Administrators QGAT27

TIP 28 Naltrexone and Alcoholism Treatment—
  Replaced by TIP 49
TIP 29 Substance Use Disorder Treatment for People With Physical and Cognitive Disabilities—
(SMA) 08-4078
- Quick Guide for Clinicians QGCT29
- Quick Guide for Administrators (SMA)08-3592
- KAP Keys for Clinicians KAPT29

TIP 30 Continuity of Offender Treatment for Substance Use Disorders From Institution to
Community—(SMA) 08-3920
- Quick Guide for Clinicians QGCT30
- KAP Keys for Clinicians KAPT30

TIP 31 Screening and Assessing Adolescents for Substance Use Disorders—(SMA) 08-4079 (See
companion products for TIP 32.)

TIP 32 Treatment of Adolescents With Substance Use Disorders—(SMA) 08-4080
- Quick Guide for Clinicians QGC312
- KAP Keys for Clinicians KAPT312

TIP 33 Treatment for Stimulant Use Disorders— BKD289
- Quick Guide for Clinicians QGCT33
- KAP Keys for Clinicians KAPT33

TIP 34 Brief Interventions and Brief Therapies for Substance Abuse—(SMA) 07-3952
- Quick Guide for Clinicians QGCT34
- KAP Keys for Clinicians KAPT34

TIP 35 Enhancing Motivation for Change in Substance Abuse Treatment—(SMA) 08-4212
- Faces of Change (SMA) 08-4174
- Inservice Training (SMA) 08-4190
- Quick Guide for Clinicians QGCT35
- KAP Keys for Clinicians KAPT35

TIP 36 Substance Abuse Treatment for Persons With Child Abuse and Neglect Issues—(SMA)
08-3923
- Helping Women Heal—(SMA) 08-4132 (English), PHD981S (Spanish)
  Helping Men Heal—(SMA) 07-4134 (English), PHD1059S (Spanish)
- Quick Guide for Clinicians QGCT36
- KAP Keys for Clinicians KAPT36

TIP 37 Substance Abuse Treatment for Persons With HIV/AIDS—(SMA) 08-4137
- HIV/AIDS: Is Your Client at Risk? MS965
- Drugs, Alcohol and HIV/AIDS (SMA) 08-4127 (English), (SMA) 08-4181 (Spanish)
- Drugs, Alcohol and HIV/AIDS for African Americans (SMA) 07-4248
- Quick Guide for Clinicians QGCT37
- KAP Keys for Clinicians KAPT37

TIP 38 Integrating Substance Abuse Treatment and Vocational Services—BKD381
- Quick Guide for Clinicians QGCT38
- Quick Guide for Administrators QGAT38
- KAP Keys for Clinicians KAPT38

TIP 39 Substance Abuse Treatment and Family Therapy—(SMA) 08-4219
- Quick Guide for Clinicians QGCT39
- Quick Guide for Administrators QGAT39

TIP 40 Clinical Guidelines for the Use of Buprenorphine in the Treatment of Opioid Addiction—
(SMA) 07-3939
- Quick Guide for Physicians QGPT40
- KAP Keys for Physicians KAPT40

TIP 41 Substance Abuse Treatment: Group Therapy—BKD507
- Quick Guide for Clinicians QGCT41
TIP 42 Substance Abuse Treatment for Persons With Co-Ocurring Disorders—(SMA)08-3992
   • Inservice Training (SMA) 08-4262
   • Quick Guide for Clinicians (SMA) 07-4034
   • Quick Guide for Administrators QGAT42
   • KAP Keys for Clinicians (SMA) 08-4036
TIP 43 Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs—
   (SMA) 08-4214
   • Inservice Training (SMA) 08-4341
   • Quick Guide for Clinicians QGCT43
   • KAP Keys for Clinicians (SMA) 07-4108
TIP 44 Substance Abuse Treatment for Adults in the Criminal Justice System—BKD526
   • Alcohol & Drug Treatment (SMA) 07-4292 (English), (SMA) 08-4320 (Spanish)
   • Quick Guide for Clinicians QGCT44
   • KAP Keys for Clinicians (SMA) 07-4250
TIP 45 Detoxification and Substance Abuse Treatment—(SMA) 08-4131
   • Inservice Training (SMA) 08-4331
   • Quick Guide for Clinicians (SMA) 06-4225
   • Quick Guide for Administrators (SMA)06-4226
   • KAP Keys for Clinicians (SMA) 06-4224
TIP 46 Substance Abuse: Administrative Issues in Outpatient Treatment—BKD545
   • Quick Guide for Administrators (SMA)07-4232
TIP 47 Substance Abuse: Clinical Issues in Intensive Outpatient Treatment—BKD551
   • Quick Guide for Clinicians (SMA) 07-4233
   • KAP Keys for Clinicians (SMA) 07-4251
TIP 48 Managing Depressive Symptoms in Substance Abuse Clients During Early Recovery—
   (SMA) 08-4353
TIP 49 Incorporating Alcohol Pharmacotherapies Into Medical Practice—(SMA) 09-4380
TIP 50 Addressing Suicidal Thoughts and Behaviors With Clients in Substance Abuse Treatment—
   (SMA) 09-4381

*Under revision
APPENDIX D
Service Maps
Counties Where Regional Mental Health Institutes (RMHIs) for Adult Populations Are Located

Tennessee and Surrounding States Methadone Clinics
(Out of State Methadone Clinics are within 100 miles from Tennessee Borderline)

ONE LOCATION  TWO LOCATIONS  THREE LOCATIONS

(Private Clinic and NW Treatment Center)

(Muscle Shoals)

Knox (Knoxville)
8) DRD Knoxville Medical Clinic-Central-412 Cilco Street
Knoxville, TN 37921
(865) 522-0691
9) DRD Knoxville Medical Clinic-Bernard-628 Bernard Avenue
Knoxville, TN 37921
(865) 522-0161

Shelby (Memphis)
1) American Drug Care-Recovery & Counseling
3041 Getwell, Suite 101
Memphis, TN 38118
(901) 375-1050
2) Memphis Center for Research & Addiction
1270 Madison Ave
Memphis, TN 38104
(901) 722-9420
3) Raleigh Professional Association-2960 B Austin Peay Hwy
Memphis, TN 38128
(901) 372-7978

Madison (Jackson)
4) Jackson Professional Association-1869 Hwy 45 Bypass, Suite 5
Jackson, TN 38305
(731) 660-0890

Dyer (Dyersburg)
10) MidSouth Treatment Center-640 Hwy 51
Bypass E, Suite M
Dyersburg, TN 38024
(731) 285-6535

Monroe (Chattanooga)
7) Volunteer Treatment Center-2347 Rossville Blvd
Chattanooga, TN 37408
(423) 265-5122
Approved Mental Health Professional Shortage Areas (As of October 2010)

Legend
- Northwest Memphis/Frayser
- Southwest Memphis/Henryaven-Lain
- Non-designated Counties
- MBDA 26
- MBDA 24
- MBDA 22
- MBDA 21
- MBDA 20
- MBDA 19
- MBDA 14
- MBDA 12
- MBDA 10
- MBDA 9
- MBDA 5
- MBDA 4

Map created by Kindle Chambers on November 16, 2010.

*Counts in parts of counties matching in color with a designated area. Any county or part of a county within a contiguous urban area that is approved mental health workforce shortage area.