Medication-Assisted Treatment For Opioid Addiction in Opioid Treatment Programs

Inservice Training

Based on
A Treatment Improvement Protocol

TIP
43
Medication-Assisted Treatment For Opioid Addiction in Opioid Treatment Programs Inservice Training

Based on A Treatment Improvement Protocol

TIP 43

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Substance Abuse and Mental Health Services Administration
Center for Substance Abuse Treatment
1 Choke Cherry Road
Rockville, MD 20857
Acknowledgments
Numerous people contributed to the development of this training manual based on Treatment Improvement Protocol (TIP) 43: Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs. This publication was prepared by the New England Addiction Technology Transfer Center (ATTC) under the ATTC grant, No. TI-13418, with the Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services (HHS). Catherine D. Nugent, LCPC, served as the Center for Substance Abuse Treatment (CSAT) ATTC Government Project Officer (GPO). The author of this training manual is Betty Singletary.

JBS International, Inc. (JBS), provided production assistance under the Knowledge Application Program (KAP) contract, No. 270-04-7049, with SAMHSA, HHS. Christina Currier served as the CSAT KAP GPO. Lynne MacArthur, M.A., A.M.L.S., served as the JBS KAP Executive Project Co-Director, and Barbara Fink, RN, M.P.H., served as the JBS KAP Managing Project Co-Director.

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This publication may be downloaded or ordered at http://www.samhsa.gov/shin. Or, please call SAMHSA’s Health Information Network at 1-877-SAMHSA-7 (1-877-726-4727) (English and Español). The document and accompanying PowerPoint slides can be downloaded from the KAP Web site at http://www.kap.samhsa.gov.

Recommended Citation

Originating Office
Quality Improvement and Workforce Development Branch, Division of Services Improvement, Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration, 1 Choke Cherry Road, Rockville, MD 20857.

HHS Publication No. (SMA) 09-4341
Printed 2008
Reprinted 2009
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Trainer’s Orientation

Purpose

This training manual provides counselors and other clinical staff with scripted modules and handouts to use in trainings for Treatment Improvement Protocol (TIP) 43: Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs, published by the Substance Abuse and Mental Health Services Administration’s (SAMHSA’s) Center for Substance Abuse Treatment. The 12 training modules will assist program staff in discussing, understanding, and implementing the evidence-based practices described in TIP 43.

TIP 43 discusses the many changes in medication-assisted treatment for opioid addiction (MAT) that have occurred since the inception of this treatment modality. The TIP describes basic principles of MAT and historical and regulatory developments. It presents consensus panel recommendations and evidence-based best practices for treatment of opioid addiction in opioid treatment programs and examines medical, psychiatric, and sociological factors, as well as substance use disorders and their treatment, as part of comprehensive maintenance treatment.

Target Audience

The manual is for use in community-based treatment programs that provide MAT. The primary target audience is frontline counselors and supervisors.

Training Design

All training materials are designed so that senior staff and clinical supervisors can easily lead the 45- to 60-minute sessions. Modules can be delivered as stand-alone training sessions or as elements within a large training program.

Trainers should read the corresponding TIP chapter before presenting a training module to familiarize themselves with the full content of the TIP. The training manual includes material from all of the TIP chapters except Chapter 14, Administrative Considerations.

Instructional Approach

An experienced substance abuse treatment provider should serve as the trainer for these modules, but no training experience is required to use the materials. Each module provides detailed descriptions of both the content and the activities that enhance learning. The success of the training depends on the willingness of the trainer to use the discussions and learning activities to ensure that participants grasp the modules’ objectives.

The training manual generally follows the flow of the TIP. The trainer should be aware of certain conventions used in each module. Each training module begins with an overview that lists the sections in the module and the materials that are needed to complete the session.

Activities follow a three-step approach: explain, initiate, and debrief. The explanation includes a brief overview of the learning objective and the means for accomplishing the task. The initiation step involves detailed instructions and implementation of the activity. The debriefing step provides an opportunity for the trainer to review the activity and clarify and reinforce the key learning points.
Trainers can modify the activities and information included so that they are suitable to their audience, and most activities can be used with 8–25 participants. The activities encourage interaction, maximize learning without relying solely on a lecture, and increase familiarity with the TIP. Research on adult learning shows that the more control participants have over their learning, the more likely they are to retain and apply the new information.

**Materials and Equipment**

Each module provides scripts for the discussions and instructions on how and when to use the materials. Thumbnail copies of the PowerPoint slides that reinforce the topics are provided in the left column on each page next to the discussion. Handouts used in the session are presented at the end of the scripted section of each module. Before each session, the trainer should make enough copies of the handouts for all the participants or groups depending on the activity.

The trainer should order enough copies of TIP 43 to distribute one to each participant. TIP 43 is used as a reference throughout the training. Copies may be ordered free of charge from SAMHSA’s Health Information Network (SHIN) by telephone at 1-877-SAMHSA (1-877-726-4727) or electronically at [http://www.samhsa.gov/shin](http://www.samhsa.gov/shin). The TIP can also be downloaded from the Knowledge Application Program (KAP) Web site at [http://www.kap.samhsa.gov](http://www.kap.samhsa.gov). Quick Guides and KAP Keys based on TIP 43 can also be ordered from SHIN or downloaded from the KAP Web site.

In addition to the specific materials listed in the overview of each module, trainers must have the following materials for all the modules:

- Newsprint paper and easel;
- Colorful markers; and
- Tape for affixing sheets of newsprint to the walls.

The PowerPoint slides, available at [http://www.kap.samhsa.gov/products/trainingcurriculums/index.htm](http://www.kap.samhsa.gov/products/trainingcurriculums/index.htm), require a personal computer; they can be saved as presentations or, if necessary, printed to make overhead slides. The room should be set up to accommodate small groups and comfortable viewing of the PowerPoint slides.

**Manual Format**

At the start of each module is a breakdown of the discussions and activities. A new discussion topic is designated by a section title, a summary, and the approximate time needed to complete the section. Throughout the manual are explanations of slides, talking points, and activities.

Passages in italics are scripted talking points, which are based on text taken directly from TIP 43. The left column of the module page displays the following icons to assist the trainer:

- The approximate time for the session
- Group activity
- PowerPoint slide
- Trainer’s note
Module 1: Introduction and History

Module Overview

The information in Module 1 covers Chapters 1 and 2 of Treatment Improvement Protocol (TIP) 43: Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs. This module takes 60 minutes to complete and is divided into seven sections:

- Welcome and Objectives
- Activity: What Do You Know About Opioids?
- Activity: What Do These Key Terms Mean?
- Discussion of the History of MAT
- Discussion of the Transformation of MAT
- Discussion of the Ongoing Challenges
- Module Closing

In addition to this training manual, you will need copies of Handout 1-1 for small groups and copies of Handout 1-2 for participants.

Welcome and Objectives

Summary

The training begins with an overview of the course and the learning objectives for Module 1.

PowerPoint Slides and Discussion

Slide 1, What Is a Treatment Improvement Protocol?

- Welcome to the first module of training on TIP 43, which addresses medication-assisted treatment for opioid addiction (MAT) in opioid treatment programs (OTPs).

- Treatment Improvement Protocols are developed by the Center for Substance Abuse Treatment (CSAT) of the Substance Abuse and Mental Health Services Administration (SAMHSA) within the U.S. Department of Health and Human Services (HHS). TIPs provide best-practice guidelines for substance use disorder treatment.

- CSAT draws on the experience and knowledge of clinical, research, and administrative experts.
CSAT invites staff from Federal agencies and national organizations to be on a resource panel that recommends topics for the TIP. An expert consensus panel considers these recommendations. The recommendations on which the panel reaches consensus form the foundation of the TIP. Consensus panel members represent substance abuse treatment programs, hospitals, community health centers, counseling programs, criminal justice and child welfare agencies, and private practitioners. A panel chair ensures that the TIP mirrors the results of the group’s collaboration.

**Slide 2, What Is the Purpose of TIP 43?**

- **TIP 43:** Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs explains the many changes in MAT that have occurred over the most active decade of change since the beginning of this treatment modality almost 50 years ago.

- Compared with medication-assisted treatment in other settings, such as physicians’ offices or detoxification centers, treatment in OTPs provides a more comprehensive, individually tailored program of medication therapy integrated with psychosocial, medical, and support services that address factors affecting patients.

- Treatment in OTPs can include detoxification from illicit opioids and medically supervised withdrawal from maintenance medications.

**Slide 3, Course Goals**

- This course will familiarize you with the content of TIP 43.

- It will increase your awareness and understanding of the issues, research, and recommendations related to MAT.

- In 12 training sessions, we will cover 13 chapters of the TIP.

**Slide 4, Course Curriculum**

- TIP 43 and this training cover the following topics:
  1. Introduction and History
  2. Pharmacology of Medications
  3. Initial Screening, Admission Procedures, and Assessment Techniques
  4. Clinical Pharmacotherapy
  5. Patient–Treatment Matching
  6. Phases of Treatment
  7. Approaches to Comprehensive Care and Patient Retention
  8. Drug Testing as a Tool
  9. Associated Medical Problems
Module 1: Introduction and History

TIP Chapters 1 and 2

Match terminology with definitions

Describe how changing user populations, treatment approaches, and governmental responses have shaped the history of opioid addiction

Learn about recent changes in MAT

Identify current challenges faced by treatment providers

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Activity: What Do You Know About Opioids?

Summary

In small groups, participants measure their current knowledge of opioids.

Materials Needed

- One piece of newsprint per small group
- One to two newsprint markers per small group

Activity

- Explain the activity.
  - You will work in small groups to identify what you know about opioids. You have 4 minutes to write on newsprint what you already know about opioids. After you’ve made your list, hang it on the wall.

- Initiate the activity.
  - Form small groups with three to four participants in each group.
  - Distribute one piece of newsprint and markers to each group.

- Debrief the activity.
  - Invite each group to describe two items from its list that have not been presented previously to the larger group.
  - Encourage participants to explore and identify what they already know, even if it is not entirely accurate. Avoid correcting participants at this time.
Activity: What Do These Key Terms Mean?

Summary
In small groups, participants match terms used in MAT with their definitions.

Materials Needed
- Cards with material on Handout 1-1 for each group (see Setup)
- Copies of Handout 1-2 for each participant

Setup
Photocopy enough copies of Handout 1-1 onto card stock so that each group will have a set of terms and a set of definitions. Cut each sheet as indicated by the cutting guidelines. Keeping each set of terms and definitions separate, shuffle the terms and distribute a set of terms and a set of definitions to each group.

Activity
- Explain the activity.
  - You will work in small groups to define key MAT terms. You have 3 minutes to match the key terms with their definitions.
- Initiate the activity.
  - Form small groups.
  - Distribute one set of terms and one set of definitions to each group.
- Debrief the activity.
  - After 3 minutes, distribute Handout 1-2 to participants.
  - Ask groups to identify the definition they selected for each term.
  - Review the correct definition on Handout 1-2. Use the following notes to further explain the terms:
    - **Abstinence:** The term “abstinence” in TIP 43 refers to nonuse of alcohol or illicit drugs, as well as nonabuse of prescription drugs. Abstinence in this TIP does not refer to withdrawal from legally prescribed maintenance medications for addiction treatment (for which “medically supervised withdrawal” is the preferred term).
    - **Addiction:** In TIP 43, “dependence” refers to physiological effects of substance abuse, and “addiction” refers to
physical dependence on and subjective need and craving for a psychoactive substance either to experience its positive effects or to avoid negative effects associated with withdrawal.

- **Co-Occurring Disorders:** Terminology continues to evolve for describing the combination of substance use and mental disorders. In TIP 43, “co-occurring” is the preferred term, but others use “coexisting,” “dual diagnosis,” and “comorbid” to describe the combination of current or former substance use disorders and any other Axis I or any Axis II mental disorders recognized by the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition (DSM-IV), of the American Psychiatric Association, published in 2000. (See also CSAT’s TIP 42: Substance Abuse Treatment for Persons With Co-Occurring Disorders published in 2005.)

- **Detoxification:** TIP 43 avoids the term “detoxification” to refer to the process of dose tapering from maintenance medication because that term incorrectly suggests that opioid treatment medications are toxic.

- **Medication-Assisted Treatment for Opioid Addiction:** MAT is any treatment for opioid addiction that includes a medication (e.g., methadone, buprenorphine, naltrexone) approved by the U.S. Food and Drug Administration (FDA) for opioid addiction detoxification or maintenance treatment. MAT may be provided in an OTP or an OTP medication unit (e.g., pharmacy, physician’s office) or for buprenorphine a physician’s office or other healthcare setting. Comprehensive maintenance, medical maintenance, interim maintenance, detoxification, and medically supervised withdrawal are types of MAT.

- **Opioid Treatment Program:** An OTP can exist in a number of settings, including, but not limited to, intensive outpatient, residential, and hospital settings. Types of treatment can include medical maintenance, medically supervised withdrawal, and detoxification, either with or without various levels of medical, psychosocial, and other types of care.

**Discussion of the History of MAT**

**Summary**

Participants learn about changing user populations, treatment approaches, and governmental responses that have shaped MAT.

**PowerPoint Slides and Discussion**

- Opioid addiction has affected different population groups and socioeconomic classes in the United States at different times.
Society’s response has changed along with changes in the groups or classes most affected, shifts in social and political attitudes toward opioid addiction, and the accumulation of better information about addiction’s causes and treatments.

- An understanding of the roots of opioid addiction and treatment is important because attitudes and beliefs about opioid use and addiction over the past 150 years continue to influence policies governing MAT.

**Slide 6, Two Views of Opioid Dependence**
- Recognition of this problem has spurred a long-running debate that centers on two different views:

  1. Opioid addiction is a disease that requires long-term maintenance with medication.
  2. Opioid addiction stems from weak will, lack of morals, or other psychodynamic factors or is a predilection that is rectified by criminalization of uncontrolled use and distribution and measures promoting abstinence.

**Slide 7, The Changing Face of Opioid Addiction**
- Opioid addiction emerged as a serious problem during and after the Civil War, when opioids were prescribed widely to alleviate acute and chronic pain, other types of discomfort, and stress. By the late 19th century, some two-thirds of the people addicted to opioids (including opium, morphine, and laudanum) were middle- and upper-class White women because of “the widespread medical custom of prescribing opioids for menstrual and menopausal discomfort, and the many proprietary opiates prescribed for ‘female troubles.’” Civil War veterans who were addicted by medical procedures composed another group, but their numbers were dwindling.

  - By 1900, an estimated 300,000 people were opioid addicted in the United States.

- During the late 19th and early 20th centuries, U.S. society generally viewed addiction among women and disabled war veterans sympathetically—as an unfortunate medical condition—and treated these groups with tolerance and empathy. Doctors usually prescribed more opioids for these patients, and sanatoriums were established for questionable “cures” of the resulting addictions. The chronic nature of opioid addiction soon became evident, however, because many people who entered sanatoriums for a cure relapsed to addictive opioid use after discharge. By the end of the 19th century, doctors became more cautious in prescribing morphine and other opioids, and the prevalence of opioid addiction decreased. Most Americans regarded opium smoking as socially irresponsible and immoral. Heroin, introduced in 1898 as a cough suppressant, also began to be misused for its euphoric qualities, gradually attracting new users. This development, along with increased use of needles to
The Changing Face of Opioid Addiction

- In the early 20th century, the size and composition of the opioid-addicted population changed.
- Early treatment response involved prescribing short-acting opioids.
- Addictive use of opium, cocaine, and heroin, along with drug-related crime, especially in urban communities, increasingly concerned social, religious, and political leaders. Negative attitudes toward, and discrimination against, new immigrants probably influenced views of addiction. Society’s response was to turn from rudimentary forms of treatment to law enforcement.
- Another major change in the U.S. opioid-addicted population occurred after World War II. As many European immigrants moved from crowded cities, Hispanics and African Americans moved into areas with opioid use problems, and the more susceptible people in these groups acquired the disorder.
- The post-World War II shift in the composition of opioid-addicted groups coincided with hardening attitudes toward these groups.
- By the 1980s, an estimated 500,000 Americans used illicit opioids (mainly heroin). Although this number represented a 66-percent increase over the estimated number of late 19th-century Americans with opioid addiction, the per capita rate was much less than in the late 19th century because the population had more than doubled. Nevertheless, addiction became not only a major medical problem but also an explosive social issue.
- By the late 1990s, 898,000 people in the United States used heroin, and the number seeking treatment was approximately 200,000 (almost double the number during the 1980s). The abuse of prescription opioids was a growing concern. Treatment admission rates for addiction to opioid analgesics more than doubled between 1992 and 2001, and emergency room visits related to opioid analgesic abuse increased 117 percent between 1994 and 2001.

Society’s Changing Response

- The first national response to opioid addiction was the Pure Food and Drug Act of 1906, which required medicines containing opioids to say so on their labels.

Inject the drug, which gained popularity between 1910 and 1920, had a profound effect on opioid use and addiction in the 20th century and beyond.

Slide 8, The Changing Face of Opioid Addiction

- The size and composition of the U.S. opioid-addicted population began to change in the early 20th century with the arrival of waves of European immigrants. Most users of opioids were young men in their 20s: “down-and-outs” of recent-immigrant European stock who were crowded into tenements and ghettos and became addicted during adolescence or early adulthood. They often resorted to illegal means to obtain their opioids.

- The initial treatment response in the early 20th century involved prescribing short-acting opioids. By the 1920s, morphine was prescribed or dispensed in treatment programs.

- Addictive use of opium, cocaine, and heroin, along with drug-related crime, especially in urban communities, increasingly concerned social, religious, and political leaders. Negative attitudes toward, and discrimination against, new immigrants probably influenced views of addiction. Society’s response was to turn from rudimentary forms of treatment to law enforcement.

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Slide 9, Society’s Changing Response

- The first national response to opioid addiction was the Pure Food and Drug Act of 1906, which required medicines containing opioids to say so on their labels.
The Harrison Narcotic Act of 1914 was the first Federal attempt to control opioids and other substances. The Harrison Act regulated the manufacture, distribution, and prescription of opioids, coca, and their derivatives.

In addition, the Harrison Act permitted physicians and dentists to dispense or distribute opioids “to a patient...in the course of [the physician’s] professional practice only,” so long as they kept the required records. The Treasury Department interpreted the act as a prohibition on physicians’ prescribing opioids to persons with addictions to maintain their addictions. (Treasury was the agency responsible for enforcing the Harrison Act as well as prohibition laws.) Thus, the Treasury’s position appeared to be that addiction is not a disease and the person with an addiction, therefore, is not a patient. It followed that any physician prescribing or dispensing opioids to such individuals was not doing so in the “course of his professional practice.”

In 1919, the U.S. Supreme Court upheld the Treasury’s interpretation. This interpretation and enforcement of the Harrison Act ended, until well into the 1960s, any legitimate role for the general medical profession in MAT.

Slide 10, Early Treatment Efforts

Before 1919, morphine was prescribed or dispensed in numerous municipal treatment clinics. The best known early opioid treatment programs were the New York City program, where people with addictions were detoxified with decreasing doses of heroin and morphine, and the program in Shreveport, Louisiana, which detoxified patients and maintained some on morphine.

By the early 1920s, the Treasury had succeeded in closing treatment clinics through legal pressure, inspections, and threats.

In 1929, Congress appropriated funds for two facilities, called “narcotics farms,” in Fort Worth, Texas, and Lexington, Kentucky. These institutions detoxified patients with opioid addiction who entered voluntarily and served as hospitals for prison inmates who had opioid addictions. These hospitals offered a range of services in addition to detoxification, but the atmosphere was prisonlike.

Between 1950 and 1961, death rates associated with heroin in New York increased from 7.2 to 35.8 per 10,000 deaths. By the late 1960s, illicit–opioid-related mortality had become the leading cause of death for young adults in New York City.

Hepatitis B cases related to contaminated needles increased. Record numbers of people with opioid addictions were arrested for drug-related crimes, and overcrowded jails had no effective method to ease detoxification.

In 1958, the American Bar Association (ABA) and the American Medical Association (AMA) recommended the establishment of an outpatient facility for opioid addiction on an experimental basis.
The New York Academy of Medicine recommended that clinics be established to dispense opioids in a controlled manner to patients addicted to opioids.

In 1962, Dr. Vincent Dole began investigating opioid maintenance. He read *The Drug Addict as a Patient* by Dr. Marie E. Nyswander, a psychiatrist with experience treating patients who were addicted to opioids. Dr. Nyswander thought that these individuals could be treated in general medical practice and that many would have to be maintained on opioids for long periods to function because many who attempted abstinence without medication relapsed.

In the early 1970s, the Federal Government increased funding to stem the supply of illicit opioids, primarily heroin, entering the United States. Funding for methadone maintenance was also increased; the number of patients receiving methadone increased from 9,000 in 1971 to 73,000 in 1973.

**Slide 11, Development of Medications To Treat Opioid Addiction: Methadone**

Researchers demonstrated that short-acting opioids were not a good choice as an opioid maintenance drug because patients’ social functioning was impaired. Therefore, they focused on methadone, which appeared to be longer acting and effective when administered orally.

In an initial study, methadone was administered to two patients previously maintained on morphine. Once tolerance for daily doses was established, the patients could function normally without the anxiety associated with drug craving, thus supporting methadone’s efficacy and benefits including:

- Normal patient functioning
- No euphoric, tranquilizing, or analgesic effects
- Blocking of the euphoric and tranquilizing effects of opioid drugs
- No change in tolerance levels over time
- Effectiveness when administered orally
- Relief for opioid craving
- Minimal side effects
- Medically safe and nontoxic.

**Slide 12, Methadone Maintenance: From Research to Public Health Program**

In 1965, the project on methadone safety and efficacy was transferred to Manhattan General Hospital in New York City.
- The research team found that patients’ social functioning improved with time in treatment.
- Most patients were stabilized on methadone doses of 80 to 120 mg/day.
- Those who remained in treatment typically eliminated illicit-opioid use. Although 20 percent or more also had entered treatment with alcohol and multiple substance use problems, methadone treatment was continued for these patients.
- Methadone maintenance became a major public health initiative to treat opioid addiction under the leadership of Dr. Jerome Jaffe, who headed the Special Action Office for Drug Abuse Prevention in the Executive Office of the White House in the early 1970s.

**Slide 13, Development of Buprenorphine**
- The latest successful maintenance medication is buprenorphine.
- In October 2002, the Drug Enforcement Administration (DEA) completed its evaluation of buprenorphine, classifying it as a Schedule III drug.
- FDA made buprenorphine the first drug approved for treatment of opioid addiction in physicians’ offices.

**Slide 14, Development of Naltrexone**
- Naltrexone is the only pure opioid antagonist.
- FDA approved naltrexone for opioid addiction treatment in 1984.
- Naltrexone is useful for highly motivated patients who have undergone detoxification from opioids and need support to avoid relapse or who desire an expedited detoxification schedule.
- Naltrexone benefits some patients in the beginning stages of opioid use and addiction.
- Other patient groups frequently have poor compliance with long-term naltrexone therapy.

**Slide 15, California Drug and Alcohol Treatment Assessment**
- Since 1993, public policy studies and reports from the California Drug and Alcohol Treatment Assessment, Institute of Medicine (IOM), and National Institutes of Health (NIH) have shown that maintenance treatment is effective in both outcomes and costs.
- In 1994, California published the results of a large-scale study of the effectiveness, benefits, and costs of substance abuse treatment. Study findings include:
  - Treatment in general was cost beneficial to taxpayers, with the cost averaging $7 returned for every $1 invested.
  - Methadone treatment was among the most cost-effective treatments, saving $3 to $4 for every $1 spent.
Module 1: Introduction and History

Slide 16, Institute of Medicine

- In 1995, IOM produced a study showing that FDA regulations were preventing physicians from using their professional judgment and isolated methadone treatment from mainstream medicine.
- This study recommended that the Federal regulatory process be modified to:
  - Encourage programs to provide comprehensive services, such as individual and group counseling and medical care
  - Emphasize the need for continuing clinical assessment throughout treatment
  - End arbitrary restrictions on OTP practices.

Slide 17, National Institutes of Health

- In 1997, an NIH consensus panel called for:
  - Expansion of methadone maintenance treatment
  - Federal leadership to inform the public that opioid addiction is a medical disorder that can be treated effectively
  - Access to methadone treatment for persons under legal supervision (e.g., probation, parole, incarceration)
  - Increase in funding for methadone maintenance treatment
  - Replacement of FDA regulation and oversight of MAT with more effective, less expensive measures—such as accreditation—to improve the quality of methadone treatment
  - Revision of DEA regulations to eliminate the extra level of regulation placed on methadone compared with other Schedule II opioids
  - Faster approval of new medications for MAT by FDA and States
  - Expansion of the availability of maintenance pharmacotherapy to States and programs where it is currently unavailable.

Slide 18, Controlled Substances Act

- The Controlled Substances Act was enacted in 1970. It requires manufacturers, distributors, and practitioners who prescribe, dispense, or administer controlled substances to register with DEA.
Slide 19, Narcotic Addict Treatment Act

- The Narcotic Addict Treatment Act was enacted in 1974.
- It amended the Controlled Substances Act and defined “maintenance treatment.”
- The law required separate DEA registration by medical practitioners who dispense opioid drugs in the treatment of opioid addiction.
- It increased coordination between HHS and DEA.
- The act established the National Institute on Drug Abuse (NIDA) as an institute independent of the National Institute on Mental Health.
- The act split regulation authority between NIDA and FDA:
  - NIDA became responsible for determining appropriate standards for medical, scientific, and public health aspects of drug abuse treatment.
  - FDA received the authority to determine the safety and effectiveness of drugs and approve new drugs for MAT.

Slide 20, Drug Addiction Treatment Act

- The act allows practitioners who meet certain criteria to dispense or prescribe Schedule III, IV, or V controlled substances specifically approved by FDA for MAT.

Slide 21, History of Federal Methadone Regulation

- In 1972, FDA issued regulations governing eligibility, evaluation procedures, dosages, take-home medications, frequency of patient visits, medical and psychiatric services, counseling, support services, and related details for methadone treatment programs.
- Several modifications were made to these regulations during the 1980s. Until 2001, FDA was responsible for approving programs and ensuring compliance with FDA regulations. Final regulations issued by HHS and SAMHSA, effective May 2001, govern the use of methadone in both maintenance and detoxification treatments for opioid addiction. The 1972 FDA regulations were repealed, and an accreditation-based regulatory system was created. The new system shifted administration and oversight from FDA to SAMHSA.
- The new regulations set forth general certification requirements and Federal opioid treatment standards. These are best-practice guidelines and accreditation “elements” (or standards) developed by the SAMHSA-approved accreditation bodies.
- Accreditation is a peer-review process that evaluates a treatment program against SAMHSA’s opioid treatment standards and
The new regulations provide that, once a program is accredited, SAMHSA uses accreditation results and other data to determine whether the program is qualified to carry out treatment under the standards. SAMHSA maintains oversight of accreditation elements in its review of accreditation bodies’ applications.

**Slide 22, History of State Methadone Regulation**

- The new Federal regulations preserve States’ authority to regulate OTPs.
- Oversight of treatment medications remains a tripartite system involving States, HHS/SAMHSA, and the U.S. Department of Justice (DOJ)/DEA.
- States can monitor the same areas as Federal agencies, but State rules do not always echo Federal regulations.

### Discussion of the Transformation of MAT

#### Summary

Participants learn about recent changes in MAT.

#### PowerPoint Slides and Discussion

- Several forces are transforming the MAT field:
  - Medication choices
  - Changes in healthcare systems
  - Acceptance of opioid addiction as a medical disorder
  - The new accreditation oversight system.

- Choices of medication, including methadone, buprenorphine, and naltrexone, are now available to treat opioid addiction. Each has its own benefits and limitations. Continued research on opioid addiction and treatment is clarifying what works to improve treatment outcomes.

- Changes in the healthcare system nationwide (e.g., the growth of managed care and effects of the Health Insurance Portability and Accountability Act) have an effect on OTPs and other healthcare programs. Understanding and acceptance of opioid addiction as a medical disorder by patients, healthcare providers, the media, and the public have increased.

- In May 2001, SAMHSA started a new accreditation oversight system. Its goal is to “reduce the variability in the quality of opioid treatment services, and reform the treatment system to provide for expanded treatment capacity” (Federal Register 64:39814).
Similarities to Other Medical Disorders

- Opioid addiction is viewed as a medical disorder.
- Substance addiction is comparable to asthma, hypertension, and diabetes.
- Risk of relapse is highest during the first 6 months.
- Patients respond best to a combination of pharmacological and behavioral interventions.
- Treatment improves outcomes of even severe cases.

Slide 23, Similarities to Other Medical Disorders

- Discussions about whether addiction is a medical disorder or a moral problem have a long history. For decades, studies have supported the view that opioid addiction is a medical disorder that can be treated effectively with medications administered under conditions consistent with their pharmacological efficacy and when treatment includes comprehensive services.

- Some researchers compared the basic aspects of substance addiction with those of three disorders—asthma, hypertension, and diabetes—which are considered medical and usually chronic and relapsing and for which behavioral change is an important part of treatment. They found that genetic, personal-choice, and environmental factors played comparable roles in these disorders and that rates of relapse and adherence to medication were similar, although substance addiction often was treated as an acute, not chronic, illness. The researchers' review of outcome literature showed that patients who comply with treatment regimens have more favorable outcomes.

- The concept of opioid addiction as a medical disorder was supported by follow-up studies. For example, one study found that the risk of relapse for a person who was opioid addicted was highest during the first 3 to 6 months after cessation of opioid use. This risk declined for the first 12 months after cessation and continued to decrease but at a much slower rate. Results from other studies indicated that roughly 80 percent of patients who leave MAT resume daily opioid use within 1 year.

- Similar to patients with other chronic disorders, many who are opioid addicted respond best to treatment that combines pharmacological and behavioral interventions. Treatment of opioid addiction with maintenance medication and other services for related problems increases the likelihood of ending opioid abuse. Conversely, ending maintenance medication often results in dropout from other services and a return to previous levels of opioid abuse, with medical and psychosocial consequences.

- Viewing opioid addiction as a medical disorder is consistent with the idea that treatment improves outcomes of even severe cases, just as in other chronic and relapsing medical disorders, even before abstinence is achieved. For example, one study found that substance abuse treatment was associated with a significantly lower risk of HIV infection than was nontreatment.

- The medical community has recognized that opioid addiction is a chronic medical disorder that can be treated effectively with a combination of medication and psychosocial services. The most important development was the 1997 publication of recommendations by the NIH consensus panel on effective medical treatment of opioid addiction. The panel concluded that...
“[opioid addiction] is a medical disorder that can be effectively treated with significant benefits for the patient and society.”

- The NIH study called for “a commitment to offer effective treatment for [opioid addiction] to all who need it.” The panel also called for Federal and State efforts to reduce the stigma attached to MAT and to expand MAT through increased funding, less restrictive regulation, and efforts to make treatment available in all States. The panel also recommended that access to treatment with methadone and other FDA-approved medications for opioid addiction be increased for people who are incarcerated, on parole, or on probation.

**Slide 24, Treatment Options**

- NIDA has broadened the array of effective treatment medications for chronic opioid addiction. These medications include methadone, buprenorphine, and naltrexone.

- Maintenance treatment combines pharmacotherapy with a full program of assessment, psychosocial intervention, and support services.

- Medical maintenance treatment is provided to stabilize patients and may include long-term provision of methadone, buprenorphine, or naltrexone, with less clinic attendance and fewer services; patients can receive medical maintenance at an OTP after they are stable. Deciding whether to provide medical maintenance must be made by a licensed practitioner. A designated medication unit (e.g., physician’s office, pharmacy, long-term care facility) affiliated with an OTP can provide some medical maintenance services. To reduce clinic attendance, patients must qualify to receive 7- to 14-day supplies of methadone for take-home dosing after 1 year of continuous treatment and 15- to 30-day supplies after 2 years of continuous treatment in an OTP.

- Detoxification from short-acting opioids involves medication and counseling or other assistance to stabilize patients who are opioid addicted by withdrawing them in a controlled manner from the illicit opioids.

- Medically supervised withdrawal treatment involves the controlled tapering of treatment medication for patients who want to remain abstinent from opioids without medication. FDA allows qualified practitioners not associated with an OTP to use buprenorphine to treat chronic opioid addiction in an office-based opioid treatment or other healthcare setting.

**Discussion of the Ongoing Challenges**

**Summary**

Participants review ongoing challenges faced by treatment providers.
PowerPoint Slides and Discussion

- MAT treatment providers face several challenges:
  - Dosage levels
  - Patients with complex problems
  - Expansion of treatment
  - Promoting comprehensive treatment
  - Combating stigma.
- Much remains to be done to improve and expand treatment and to address the stigma that affects patients and programs.

Slide 25, Dosage Levels

- Programs should monitor and adjust patients’ dosage levels of methadone and other opioid treatment medications to ensure that patients receive therapeutic dosages.
- Dosage decisions should be appropriate and tailored to each patient.

Slide 26, Patients With Complex Problems

- Complex problems (e.g., HIV/AIDS and other co-occurring disorders) can complicate patients’ diagnosis and treatment.
- Hepatitis C virus (HCV) infection occurs among people who inject drugs, with estimates of rates ranging from 60 to 90 percent. OTPs face the challenge of how to provide patient education and HCV testing.
- Patterns of opioid abuse have changed. In some areas, patients present with addiction to pain management medications as a primary admission indicator. OTPs report that patients addicted to pain management medications require higher therapeutic methadone levels than other patients.
- Since the mid-1990s, the prevalence of lifetime heroin use has increased for youth and young adults. From 1995 to 2002, the rate among youth ages 12 to 17 increased from 0.1 to 0.4 percent; among those ages 18 to 25, the rate rose from 0.8 to 1.6 percent.

Slide 27, Expansion of Treatment

- The number of patients enrolled in OTPs for addiction treatment has almost doubled since 1993.
- By the late 1990s, an estimated 898,000 people chronically or occasionally used heroin in the United States. Only about 20 percent of people who use heroin are being treated.
- For people who abuse opioid medications obtained by prescription, the percentage in treatment is even lower.
Promoting Comprehensive Treatment

- NIDA Principles of Effective Drug Addiction Treatment: A Research-Based Guide
- Effective treatment attends to multiple needs of the individual.
- Counseling and other behavioral therapies are critical components of effective treatment.
- Medications, especially combined with behavioral therapies, are an important element of treatment for many patients.

Combating Stigma

- Predominant view as self-induced or self-inflicted condition resulting from character disorder or moral failing
- Affect social policies, programs, and attitudes
- Limit funding and space for OTPs
- Discourage patients from entering or remaining in treatment
- Eliminating stigma in OTPs
- Treat patients with respect
- Use clinical language with patients

Slide 28, Promoting Comprehensive Treatment

In its 1999 publication Principles of Effective Drug Addiction Treatment: A Research-Based Guide, NIDA stressed the importance of comprehensive treatment services by devoting 3 of the 13 principles of effective drug addiction treatment to comprehensive care:

- Effective treatment attends to multiple needs of the individual, not just his or her drug use.
- Counseling and other behavioral therapies are critical for effective treatment for addiction.
- Medications are an important part of treatment for many patients, especially when combined with counseling and other behavioral therapies.

- It is critical to emphasize the central importance of comprehensive care as physicians begin to use buprenorphine to treat chronic opioid addiction in their offices. A full continuum of care should integrate the services of primary care physicians who dispense opioid treatment medications in private offices and other medication units with the services provided by counselors, case managers, and other staff in OTPs.

Slide 29, Combating Stigma

- For almost a century, the predominant view of opioid addiction has been that it is a self-induced or self-inflicted condition resulting from a character disorder or moral failing and that this condition is best handled as a criminal matter. Use of methadone and other therapeutic medications has been viewed traditionally as substitute therapy.

- The stigma associated with MAT has been unique in its permeation of community institutions, affecting the attitudes of medical and healthcare professionals; social services agencies and workers; paraprofessionals; employers, families, and friends of persons who are opioid addicted; and others who formerly abused substances. Stigma has also influenced criminal justice policies, created political opposition, and limited funding and space for OTPs.

- Stigma affects patients in various ways. It discourages them from entering treatment and prompts them to leave treatment early. It creates a barrier for those trying to access other parts of the healthcare system. A striking example is the failure of medical practitioners to adequately medicate pain in this group.

- Stigma affects programs, too. It prevents new programs from opening when community opposition develops. It can affect a program’s internal operations. Staff members who work in OTPs sometimes absorb society’s antipathy toward patients in MAT and may deliver program services with a punitive or counter-therapeutic demeanor.
Strong efforts are needed to eliminate stigma within OTPs. Staff members should treat patients with respect and pay attention to the terms they use. In keeping with the disease model of opioid addiction, people in treatment should be referred to as “patients,” not “clients” or “consumers.” The term “substitution treatment” should be avoided.

Terms such as “dirty” and “clean” in reference to drug-test specimens should be replaced by more clinically useful terms such as “positive” and “negative,” respectively. The use of criminal justice terms such as “probationary treatment” should be replaced with clinically appropriate language.

Module Closing

- Ask participants whether they have any questions.
- Thank participants for attending.
- Remind participants of the next training session.
  - Our next session is scheduled for <date> at <time>. We will talk about Chapter 3, Pharmacology of Medications.
**Handout 1-1: Key Terms**

- Abstinence
- Addiction
- Co-Occurring Disorders
- Dependence
- Detoxification
- Medication-Assisted Treatment for Opioid Addiction (MAT)
- Opioid Treatment Program (OTP)
- Tolerance
- Withdrawal
### Handout 1-1: Key Definitions

A combination of the following that leads to compulsive use of a substance either for its positive effects or to avoid negative effects:

- Physical dependence
- Behavioral manifestations of use
- Subjective sense of need and craving.

A SAMHSA-certified program that meets the following conditions:

- Comprises a facility, staff, administration, patients, and services
- Engages in supervised assessment and treatment (using methadone, buprenorphine, or naltrexone) of individuals who are addicted to opioids.

A type of addiction treatment that involves the following:

- Provided in a certified, licensed opioid treatment program or a physician’s office
- Provides maintenance pharmacotherapy using an opioid agonist, a partial agonist, or an antagonist medication
- May be combined with other comprehensive treatment services, including medical and psychosocial services.
Characterized by the nonuse of alcohol, illicit drugs, or medications normally obtained by prescription or over the counter.

In TIP 43, a DSM-IV diagnosis of a mental disorder present in an individual admitted to an opioid treatment program.

It involves the following:

- Needing increased amounts of an opioid to achieve intoxication or a desired effect
- Continued use of the same amount of a substance has a markedly diminished effect.

Reduction and elimination of substance use.

State of physical adaptation that is manifested by a drug class-specific withdrawal syndrome that can be produced by abrupt cessation, rapid dose reduction, and/or decreasing blood level of a substance and/or administration of an antagonist.

The treatment for addiction to an illicit substance involving the following:

- Gradual elimination of the substance from a patient’s body
- Treatment reinforcements to alleviate adverse physical or psychological reactions.
Handout 1-2: Key Terms and Definitions

**Abstinence:** Characterized by the nonuse of alcohol, illicit drugs, or medications normally obtained by prescription or over the counter.

**Addiction:** A combination of the following that leads to compulsive use of a substance either for its positive effects or to avoid negative effects:
- Physical dependence
- Behavioral manifestations of use
- Subjective sense of need and craving.

**Co-Occurring Disorders:** In TIP 43, a DSM-IV diagnosis of a mental disorder present in an individual admitted to an opioid treatment program.

**Dependence:** State of physical adaptation that is manifested by a drug class-specific withdrawal syndrome that can be produced by abrupt cessation, rapid dose reduction, and/or decreasing blood level of a substance and/or administration of an antagonist.

**Detoxification:** The treatment for addiction to an illicit substance involving the following:
- Gradual elimination of the substance from a patient’s body
- Treatment reinforcements to alleviate adverse physical or psychological reactions.

**Medication-Assisted Treatment for Opioid Addiction (MAT):** A type of addiction treatment that involves the following:
- Provided in a certified, licensed opioid treatment program or a physician’s office
- Provides maintenance pharmacotherapy using an opioid agonist, a partial agonist, or an antagonist medication
- May be combined with other comprehensive treatment services, including medical and psychosocial services.

**Opioid Treatment Program (OTP):** A SAMHSA-certified program that meets the following conditions:
- Comprises a facility, staff, administration, patients, and services
- Engages in supervised assessment and treatment (using methadone, buprenorphine, or naltrexone) of individuals who are addicted to opioids.

**Tolerance:** It involves the following:
- Needing increased amounts of an opioid to achieve intoxication or a desired effect
- Continued use of the same amount of a substance has a markedly diminished effect.

**Withdrawal:** Reduction and elimination of substance use.
Module 2: Pharmacology of Medications

Module Overview
The information in Module 2 covers Chapter 3 of Treatment Improvement Protocol (TIP) 43: Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs. This module takes 45 minutes to complete and is divided into five sections:

- Welcome and Objectives
- Discussion of the Pharmacology of Medications Used for Opioid Addiction Treatment
- Activity: Medication Characteristics
- Discussion of Drug Interactions
- Module Closing

In addition to this training manual, you will need copies of Handout 2-1 for participants and the Answer Key for Handout 2-1.

Welcome and Objectives
Summary
The training begins with an overview of the learning objectives for Module 2.

PowerPoint Slides and Discussion
Slide 1, Module 2: Pharmacology of Medications
- Module 2 covers Chapter 3 of TIP 43. During today’s training, you will:
  - Identify key factors in the pharmacology of some medications used for opioid addiction treatment
  - Describe the characteristics of medications frequently used to treat opioid addiction, using buprenorphine as an example
  - Review common drug interaction assessments for patients beginning medication-assisted treatment for opioid addiction (MAT)
  - Review common side effects.
Discussion of the Pharmacology of Medications Used for Opioid Addiction Treatment

Summary
Participants review the medications used to treat opioid addiction.

PowerPoint Slides and Discussion

*Slide 2, Pharmacotherapeutic Medications for Opioid Addiction Treatment*

- The four medications commonly used to treat opioid addiction are:
  - Methadone
  - Buprenorphine
  - Buprenorphine-naloxone
  - Naltrexone.

- Methadone:
  - Is the most frequently used medication for opioid addiction treatment in opioid treatment programs (OTPs)
  - Is a long-acting medication
  - Comes in several formulations, including oral solution, liquid concentrate, tablet/diskette, and powder
  - Is a full opioid agonist that decreases the pain-killing and other effects of opioids
  - Was never formally approved by the Food and Drug Administration (FDA)
  - Is a Drug Enforcement Administration (DEA) Schedule II drug
  - Is available in outpatient treatment programs.

- Buprenorphine:
  - Is a derivative of the opium alkaloid thebaine
  - Is available as a sublingual tablet
  - Does not activate mu receptors fully, so larger doses of buprenorphine do not produce greater agonist effects
  - Has an increased margin of safety from death by respiratory depression when increased doses of buprenorphine are used
Module 2: Pharmacology of Medications

- Was approved by the FDA in 2002
- Is a DEA Schedule III drug
- Can be administered in a physician’s office, OTP, or other medical settings.

**Buprenorphine-naloxone:**
- Is a combination of buprenorphine and naloxone
- Is formulated as a sublingual tablet
- Was approved by the FDA in 2002
- Is a DEA Schedule III drug
- Is administered in a physician’s office, an OTP, or another healthcare setting.

**Naltrexone:**
- Is a highly effective opioid antagonist
- Has no narcotic effect and produces no withdrawal symptoms when a patient stops using it
- Does not have abuse potential; tolerance does not develop even after months of regular use
- Is formulated as an oral tablet
- Blocks the effects of heroin, morphine, and methadone
- Can cause withdrawal in patients who have not been abstinent from:
  - Short-acting opioids for at least 7 days
  - Long-acting ones, such as methadone, for at least 10 days
- Displaces buprenorphine to a lesser degree, but in high enough doses overrides buprenorphine’s activity as well
- Was approved by the FDA for maintenance treatment in 1984
- Despite its potential advantages, has had little effect on the treatment of opioid addiction in the United States, primarily because of poor patient compliance
- Is not on the DEA schedule
- Is available in physicians’ offices, OTPs, and other substance abuse treatment programs.
Activity: Medication Characteristics

Summary
Participants investigate the medication characteristics of buprenorphine using TIP 43 to complete Handout 2-1.

Materials Needed
- TIP 43
- Copies of Handout 2-1 for each participant

Activity
- Explain the activity.
  - In small groups, you will examine the characteristics of a common treatment medication, buprenorphine. Each group will complete one portion of the handout.
  - All the answers are in Chapter 3 of TIP 43, beginning on page 25.
  - You have 10 minutes to complete your group’s portion of the handout. After that time, each group will report its findings.
- Initiate the activity.
  - Form four groups of equal size.
  - Distribute Handout 2-1 to each participant.
  - Assign each group a section of the handout.
- Debrief the activity.
  - After 10 minutes, ask for a volunteer from each group to provide the information for his or her section to the entire group. Encourage participants to write down the information from other groups on their handouts.
  - Allow each group 2 minutes to present its section.
  - Explain:
    - During this activity, you took an in-depth look at buprenorphine, examining pharmacology, dosage forms, side effects, and safety.
    - TIP 43 contains similar information on methadone, buprenorphine-naloxone, and naltrexone. By using the TIP for this activity, you’ve become acquainted with the TIP and can now refer to it when you need to identify characteristics of these other medications.
Discussion of Drug Interactions

Summary

Using methadone as an example, participants review common interactions with other therapeutic medications and ways to minimize harmful drug interactions in MAT.

PowerPoint Slides and Discussion

- Many medications when taken together can cause harmful or even fatal interactions. TIP 43 provides detailed information on the potential drug interactions of the medications used to treat opioid addiction. Today, we will examine the potential drug interactions that might occur with these medications, focusing on methadone. We will look at:
  - The relevant physical pathways of methadone
  - Examples of common drug interactions
  - Consensus panel recommendations to prevent drug interactions.

Slide 3, Methadone: Physical Pathways

- Methadone is metabolized by an enzyme system that can be affected by other medications.
- These other medications can change the levels of opioid medications or cause withdrawal.
- Some of these medications include psychiatric medications.
- Some psychiatric medications sharing the same metabolic pathways as methadone may increase serum levels of some antidepressants.
- Medications for HIV infection and seizures may speed transformation of methadone.

- The consensus panel recommends careful monitoring of patients who use these medications, but routine testing of their SMLs is unnecessary. Fluvoxamine likely has the most potential to cause excessive SMLs while patients take it and decreased SMLs after patients discontinue it. It has caused oversedation and respiratory depression when combined with methadone.

- Early studies showed that methadone increased serum levels of tricyclic antidepressants. Thus, the oral doses required for a therapeutic response to tricyclics might be lower than those needed for a positive response in patients not addicted to opioids.

- Rifampin, carbamazepine, phenobarbital (used to treat seizure disorders), and medications to treat HIV infection may influence liver enzymes that speed the body’s transformation of methadone. Patients taking these medications might need increases in their methadone dosage or split doses to maintain stability.
Slide 4, Methadone: Common Interactions

- A number of potential drug interactions can occur with methadone use.
- Exhibit 3-5 on page 37 of TIP 43 lists reported drug interactions with methadone. We will look at three common potential drug interactions.
  - Example 1: Fluvoxamine can increase SMLs and opioid effects and cause hypoventilation, severe hypoxemia, and hypercapnia; withdrawal symptoms when fluvoxamine is discontinued; and decreased methadone metabolism induced by barbiturates.
  - Example 2: Nevirapine can cause decreased SMLs and opioid effects and severe withdrawal symptoms.
  - Example 3: Sertraline can cause increased SMLs. However, there have been no reported side effects from excess dosage.

Slide 5, Recommendations: Preventing Drug Interactions

- Medications can have a variety of effects on patients receiving methadone for opioid addiction treatment. Treatment providers should take steps to reduce the likelihood of drug interactions.
- To control patients’ vulnerability to harmful cardiac and other effects of drug interactions with methadone, the consensus panel recommends obtaining a thorough drug and medication history, including results of drug and other laboratory tests. When patients are treated in multiple settings, consolidating this information can be a challenge.
- Treatment providers should rely on their experience, intuition, and common sense to anticipate and prevent drug interactions. The traditional advice when using medications in addition to methadone is to start with low doses, increase slowly, and monitor closely. In many cases, medication dosages lower than those recommended by the manufacturer may be sufficient for the desired therapeutic effect, especially for patients receiving agonist medications who have a positive diagnosis for cardiac risk factors.
- Knowledge about medication interactions with methadone and other medications used in the treatment of opioid addiction is changing constantly. Treatment providers should check for current information. A useful Web site is medicine.iupui.edu/flockhart.

Slide 6, Educating Patients About Drug Interactions

- Educating patients about the risks of drug interaction is essential. The following information should be emphasized:
  - During any agonist-based pharmacotherapy, abusing drugs or medications that are respiratory depressants (e.g., alcohol, other opioid agonists, benzodiazepines) may be fatal.
Module 2: Pharmacology of Medications

Slide 7, Minimizing Drug Interactions

Researchers have other suggestions for treatment providers to minimize harmful drug interactions in MAT such as the following:

- When possible, substitute alternative medications that do not interact with opioid treatment medications.
- When other medications must be used with opioid treatment medications, select those that have the least potential for interaction.
- The more complicated the medication regimen, the less likely patients will follow it. Increased vigilance on the part of treatment providers is needed as medication treatment becomes more complicated.
- Preexisting diseases (e.g., diseases that decrease renal or hepatic function) and cardiovascular conditions might influence the potential for adverse drug interactions.

More suggestions can be found on page 41 of TIP 43.

Module Closing

- Ask participants whether they have any questions.
- Thank participants for attending.
- Remind participants of the next training session.

- Our next session is scheduled for <date> at <time>. We will talk about Chapter 4, Initial Screening, Admission Procedures, and Assessment Techniques.
Handout 2-1: Characteristics of Buprenorphine

Use pages 25–42 of TIP 43 to fill in the blanks or select the correct answer.

SECTION 1: Pharmacology and Pharmacotherapy
1. Is buprenorphine overdose common or uncommon?
   a. Common
   b. Uncommon
2. How is buprenorphine metabolized?
   Buprenorphine is metabolized in the _________________. [L]ike _________________, its _________________ of _______________ is affected by _______________ of other _______________ metabolized along this _________________.

SECTION 2: Dosage Forms
1. In what form(s) is buprenorphine typically administered?
   a. Oral solution
   b. Diskette
   c. Sublingual tablet
   d. Injection
2. What type of abuse led to the development of a buprenorphine tablet?
   a. Injection abuse
   b. Overdose
   c. Black-market distribution
   d. Overprescribed

SECTION 3: Side Effects
1. Does buprenorphine therapy have few or many side effects?
   a. Few
   b. Many
2. Complete the following sentence:
   One report suggested an association between _________________ _________________ misuse and _________________ _________________, possibly because of buprenorphine’s _________________ _______________ when administered _________________.
   Is the above-referenced report conclusive? _____ Yes _____ No
SECTION 4: Safety

1. Is buprenorphine’s safety profile similar or dissimilar to methadone?
   a. Similar
   b. Dissimilar

2. Does buprenorphine reduce or increase the risk of respiratory depression from overdose?
   a. Reduce
   b. Increase

3. Complete the following sentence:
   Buprenorphine overdose deaths … have been attributed to the concurrent _______________ abuse of _______________ and _______________. …
Answer Key for Handout 2-1: Characteristics of Buprenorphine

SECTION 1: Pharmacology and Pharmacotherapy
1. Is buprenorphine overdose common or uncommon? b. Uncommon
2. Buprenorphine is metabolized in the liver... [L]ike methadone..., its rate of metabolism is affected by coadministration of other medications metabolized along this pathway.

SECTION 2: Dosage Forms
1. In what form(s) is buprenorphine typically administered? c. Sublingual tablet
2. What type of abuse led to the development of a buprenorphine tablet? a. Injection abuse

SECTION 3: Side Effects
1. Does buprenorphine therapy have few or many side effects? a. Few
2. Complete the following sentence:
   One report suggested an association between injection buprenorphine misuse and liver toxicity, possibly from buprenorphine’s increased bioavailability when administered parenterally.
   Is the above-referenced report conclusive? No

SECTION 4: Safety
1. Is buprenorphine’s safety profile similar or dissimilar to methadone? a. Similar
2. Does buprenorphine reduce or increase the risk of respiratory depression from overdose? a. Reduce
3. Complete the following sentence:
   Buprenorphine overdose deaths ... have been attributed to the concurrent parenteral abuse of buprenorphine and benzodiazepines....
Module 3: Initial Screening, Admission Procedures, and Assessment Techniques

Module Overview
The information in Module 3 covers Chapter 4 of Treatment Improvement Protocol (TIP) 43: Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs. This module takes 45 minutes to complete and is divided into six sections:

- Welcome and Objectives
- Discussion of Screening Techniques
- Discussion of Admission Procedures
- Activity: Information Management
- Activity: Assessment Techniques
- Module Closing

In addition to this training manual, you will need copies of Handout 3-1 for participants and cards with the text on Handout 3-2 for small groups.

Welcome and Objectives

Summary
The training begins with an overview of the learning objectives for Module 3.

PowerPoint Slides and Discussion

**Slide 1, Module 3: Screening and Assessment**
- Module 3 covers Chapter 4 of TIP 43. During today’s training, you will:
  - Describe screening techniques to use at the initiation of medication-assisted treatment for opioid addiction (MAT)
  - Identify appropriate procedures for admitting patients to MAT
  - Learn about which information should be collected and disseminated in a MAT setting and examine how to handle it
  - Explore medical, comprehensive, and psychosocial assessments for patients entering MAT.
Discussion of Screening Techniques

Summary
Participants examine screening techniques used at the beginning of treatment.

PowerPoint Slides and Discussion
- The initial assessment process includes:
  - First contact
  - Goals of initial screening
  - Emergency care
  - Suicidality
  - Homicidality and violence.

Slide 2, Screening Techniques: First Contact
- The screening process begins when an applicant or a family member first contacts an opioid treatment program (OTP), often by telephone or a visit to the provider.
- This contact is the first opportunity for treatment providers to establish an effective therapeutic alliance among staff members, patients, and patients’ families.
- Staff should provide immediate, practical information that helps applicants make decisions about MAT, including the approximate length of time from first contact to admission, what to expect during the admission process, and types of services offered.
- Staff members should also briefly explore applicants’ expectations and circumstances.

Slide 3, Goals of Initial Screening
- During the initial screening, staff members should:
  - Intervene if there is a crisis by identifying and providing immediate assistance with crisis and emergency situations.
  - Ensure that the applicant satisfies Federal and State regulations and program criteria for admission to an OTP.
  - Clearly describe patient and program responsibilities and explain the treatment alliance.
  - Educate the applicant by providing essential information about MAT and OTP operations (e.g., dosing schedules, OTP hours, treatment requirements, addiction as a brain disease) and...
Module 3: Screening, Assessment, and Admission

Discussing the benefits and drawbacks of MAT. This helps the applicant make informed decisions about treatment.

- Identify treatment barriers by determining the factors that might hinder an applicant’s ability to meet treatment requirements—for example, lack of childcare or transportation.

- Begin to identify medical and psychosocial risk factors that could affect treatment, including factors related to mental disorders; legal difficulties; other substance use; and vocational, financial, transportation, and family concerns. Cultural, ethnic, and spiritual factors affect communication and might affect treatment planning. Obtain enough information from applicants to accommodate needs arising from any factor.

**Slide 4, Screening Techniques: Emergency Care**

- The consensus panel recommends that providers develop medically, legally, and ethically sound policies to address patient emergencies.

- Emergencies can occur at any time but are most common during induction to MAT and the acute treatment phase.

- In particular, patients who exhibit symptoms that could jeopardize their own or others’ safety should be referred immediately for inpatient medical or psychiatric care.

- If possible, staff members who conduct initial screening and assessment should make appropriate referrals before applicants are admitted to an OTP.

- Identifying and assessing emergencies may require staff familiarity with the components of a mental health status examination.

**Slide 5, Screening Techniques: Suicidality**

- A study of population data from the U.S. National Comorbidity Survey found a significant association between opioid addiction and increased risk of suicide.

- Initial screening and periodic assessments should help determine whether those patients indicating risks of suicide need additional services (e.g., hospitalization for protection or treatment, outpatient mental treatment, or evaluation for antidepressant medication).

- Exhibit 4-1 on page 45 lists some indicators of suicidality.

- Behavioral and circumstantial indicators of suicide risk include talk about committing suicide; trouble eating or sleeping; drastic changes in behavior; withdrawal from friends or social activities; loss of interest in hobbies, work, or school; preparations for death, such as making a will; giving away prized possessions; a history of suicide attempts; unnecessary risk taking; recent severe losses; preoccupation with death and dying; loss of interest in personal appearance; and increased use of alcohol or drugs.
Patients may also express emotions that indicate suicide risk. Be alert to phrases such as “I can’t stop the pain,” “I can’t see any way out,” or “I can’t see a future without pain.” These and other phrases listed in Exhibit 4-1 are cause for concern and further assessment.

Exhibit 4-2 lists recommended responses. Treatment providers should be direct, talking openly and matter-of-factly about suicide.

They should be willing to listen, allowing patients to express their feelings. Providers should get involved, showing interest in and support for patients.

**Slide 6, Screening Techniques: Homicidality and Violence**

- Threats should be taken seriously. For example, if an individual with knowledge of OTP procedures and schedules makes a threat, interactions between staff and this individual should change.

- It may be necessary to change or stagger departure times, implement a buddy system, or use an escort service.

- Counseling assignments can be changed, or patients can be transferred to another OTP.

- The consensus panel recommends that OTP staff members receive training in recognizing and responding to signs of potential patient violence.

- OTPs should develop policies and procedures for homicide and other violent situations.

- The OTP’s policy on violence and threats of violence should be explained at the beginning of treatment.

- Emergency screening and assessment procedures should include the following:
  
  - Asking the patient questions specific to homicidal ideation, including thoughts, plans, gestures, or attempts in the past year; weapons charges; and previous arrests, restraining orders, or other legal procedures related to real or potential violence at home or the workplace.

  - Documenting violent incidents and diligent monitoring of these records to assess the nature and magnitude of workplace violence and to quantify risk are important. When a threat appears imminent, all legal, employee assistance, community mental health, law enforcement, and human resources should be readied to respond immediately.
Discussion of Admission Procedures

Summary
Participants explore issues surrounding admission procedures.

PowerPoint Slides and Discussion
Slide 7, Admission Procedures

- The admission process is usually patients’ first substantial exposure to the treatment system and should be thorough. It should include information about personnel, other patients, available services, rules, and requirements.

- The process should engage new patients positively, while screening for and assessing problems and needs that might affect MAT interventions.

- The longer the delay between first contact, initial screening, and admission, the fewer applicants who actually enter treatment. Prompt, efficient orientation and evaluation contribute to the therapeutic nature of the admission process.

- If a program is at capacity, admitting staff should advise applicants immediately of a waiting list and provide one or more referrals to programs that can meet their needs more quickly.

- A centralized intake process across programs can facilitate the admission process, particularly when applicants must be referred.

- Patients who prefer to wait for treatment should be added to the waiting list and contacted periodically to determine whether they want to continue waiting or be referred.

- Staff should assess individuals who are ineligible for other needed acute services and make prompt referrals.

- The consensus panel recommends that OTPs establish criteria to decide which prequalified patients should receive admission priority, especially when a program is near capacity.

- Some programs offer high-priority admission to pregnant women, spouses of patients, applicants with HIV infection or other medical conditions, or patients who have tapered off maintenance medication but subsequently require renewed treatment.

- For eligible individuals who cannot be admitted to a public or nonprofit program for comprehensive maintenance services within a reasonable geographic area and within 14 days of applying, Federal regulations provide for “interim maintenance treatment,” in which medication is administered to patients at an OTP for up to 120 days without formal screening or admission and with only minimal drug testing, assuming the existence of reasonable criteria at the OTP to prioritize admissions.
Denial of admission to an OTP should be based on sound clinical practices and the best interests of both the applicant and the OTP. Admission denial should be considered, for example, if an applicant is threatening or violent.

Continuity of care should be considered, and referral to more suitable programs should be the rule.

Due process and attention to applicant rights minimize the possibility that decisions to deny admission to an OTP are abusive or arbitrary.

OTPs should have qualified, compassionate, well-trained multidisciplinary teams that collect applicants’ information and histories, evaluate their needs, and orient them to MAT.

Team members should be cross-trained in treating co-occurring disorders.

Those conducting admission interviews should be culturally competent, and interactions should not be stigmatizing. The team should explain policies and services and make referrals.

Activity: Information Management

Summary
Using Handout 3-1, participants determine information to be collected, documented, or communicated to patients.

Materials Needed
- Copies of Handout 3-1 for each participant

Activity
- Explain the activity.
  - Collection of patient information and dissemination of program information occur by various methods, such as by telephone, through a receptionist, and through handbooks, information packets, and questionnaires.
  - Medical and psychosocial assessments gather specific types of information.
  - Although collection procedures differ among OTPs, the consensus panel recommends that certain types of information be collected, documented, or communicated to patients.
  - We will examine different types of information using Handout 3-1. For each item, I’ll ask a volunteer to read the text until we’ve covered all 13 key points.

- Initiate the activity.
Module 3: Screening, Assessment, and Admission

3-7
20 minutes

Distribute Handout 3-1 to each participant.

For each item on the handout:

- Ask a volunteer to read the item.
- Discuss the information as necessary based on participants’ questions.

Debrief the activity.

Ask participants whether they have any questions about the information.

Activity: Assessment Techniques

Summary
Small groups explore TIP 43 to match issues with the appropriate assessment category.

Materials Needed
- TIP 43
- Cards with material on Handout 3-2 (see Setup)

Setup
- Photocopy Handout 3-2 onto card stock. Cut each sheet as indicated by the cutting guidelines.
- Shuffle the cards and divide them into four equal sets. Write Medical Assessment, Comprehensive Assessment, and Psychosocial Assessment on three separate sheets of newsprint. Post the sheets on the wall.

Activity
- Explain the activity.
  - You will work in small groups to explore assessment techniques for several key areas of MAT.
  - I will distribute cards containing a variety of assessment issues. Each card lists an issue that belongs to one of the topics I’ve posted. Your group will determine which topic each card belongs to and will attach the card to the correct topic. You may bring the cards up in a single trip or as you assign them.
  - The information about these three topics is discussed beginning on page 49.
  - You have 10 minutes to complete the activity.
- Initiate the activity.
Form four groups of equal size.

- Distribute a set of cards to each group.

- Debrief the activity.

- After the groups have taped their cards to the newsprint sheets, confirm that the cards are in the right places. Move cards if they have been assigned to the wrong topic.

Module Closing

- Ask participants whether they have any questions.

- Thank participants for attending.

- Remind participants of the next training session.

  - *Our next session is scheduled for* <date> *at* <time>. *We will talk about Chapter 5, Clinical Pharmacotherapy.*
Handout 3-1: Information Collection and Dissemination

Treatment history. OTPs should obtain information about a patient’s substance abuse treatment history, use of other substances while in treatment, dates of prior treatment, patterns of success or failure, and reasons for discharge or dropout. Written consent is required to obtain information from other programs.

Orientation to MAT. All patients should receive a thorough orientation to MAT, including explanation of treatment methods and requirements and the roles and responsibilities of everyone involved in providing services. For medical and legal reasons, documentation should show that patients have been informed of all aspects of the MAT process. Also, patients must sign a consent to treatment form, kept on file by the OTP.

Age of applicant. Persons younger than age 18 must meet specific Federal and State requirements, and an OTP must secure parental or other guardian consent to start adolescents on MAT.

Recovery environment. A patient’s living environment, including the social network, those living in the residence, and stability of housing, can support or jeopardize treatment.

Suicide and other emergency risks. Providers must gather information about whether patients pose a risk to themselves or others.

Substances of abuse. A patient’s substance abuse history should record use patterns, especially in the last 30 days. Screening and medical assessment should identify non-opioid substance use and determine whether an alternative intervention is necessary or possible before an applicant is admitted.

Prescription and over-the-counter medications. Use of prescription and over-the-counter medications should be identified. Procedures should determine instances of misuse, overdose, or addiction, especially for psychiatric or pain medications. The potential for drug interactions should be noted.

Method and level of opioid use. The frequency, amounts, and routes of opioid use should be recorded. If opioids are injected, the risk of communicable diseases increases. Patient reporting helps providers assess patients’ substance addiction and tolerance levels, providing a starting point to prescribe appropriate treatment medication for stabilization.

Pattern of preoccupation with opioids. A patient’s pattern of opioid abuse should be determined. Frequent use to offset withdrawal indicates physiological dependence. People who are opioid addicted spend increasing amounts of time and energy obtaining, using, and responding to the effects of these drugs.

Compulsive behaviors. Patients in MAT sometimes have other impulse control disorders. A treatment provider should assess behaviors such as compulsive gambling or sexual behavior to develop a comprehensive perspective on each patient.

Patient motivation and reasons for seeking treatment. Successful MAT entails short-term relief and long-term commitment; applicants should explain why they are seeking treatment, why they chose MAT, and whether they understand treatment options and MAT. Negative attitudes may reduce motivation. Addressing concerns and stressing MAT’s benefits are essential to long-term retention and motivation.

Patient personal recovery resources. Patients’ comments can identify their recovery resources. Identification of patient strengths (e.g., stable employment, family support, spirituality, strong motivation for recovery) provides a basis for a focused, individualized, and effective treatment plan.

Scheduling the next appointment. If the OTP cannot provide assessment and admission on the same day, the next visit should be scheduled as soon as possible. To facilitate accurate diagnosis of addiction and prompt administration of the initial dose of medication, applicants should be instructed to report to the OTP while in mild to moderate opioid withdrawal.
Handout 3-2: Assessment Techniques

- Determination of opioid addiction and verification of admission eligibility
- History and extent of non-opioid substance use and treatment
- Medical history
Complete physical examination

Laboratory tests

Women’s health
Patient motivation and readiness for change

Substance use assessment

Cultural assessment
<table>
<thead>
<tr>
<th>History of co-occurring disorders and current mental status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sociodemographic history</td>
</tr>
<tr>
<td>Family, cultural background, relationships, &amp; supports</td>
</tr>
</tbody>
</table>
History of physical or sexual abuse

Peer relations and support

Housing status and safety concerns
Criminal history and legal status

Insurance status

Military or other service history
Employment history

Spirituality

Sexual orientation and history
Ability to manage money

Recreational and leisure activities
Module 4: Clinical Pharmacotherapy

Module Overview

The information in Module 4 covers Chapter 5 of Treatment Improvement Protocol (TIP) 43: Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs. This module takes 45 minutes to complete and is divided into six sections:

- Welcome and Objectives
- Discussion of Pharmacotherapy
- Activity: Pharmacotherapy Scavenger Hunt
- Discussion of Medically Supervised Withdrawal
- Discussion of Take-Home Medications
- Module Closing

In addition to this training manual, you will need copies of Handout 4-1 for participants and the Answer Key for Handout 4-1.

Welcome and Objectives

Summary

The training begins with an overview of the learning objectives for Module 4.

PowerPoint Slides and Discussion

Slide 1, Module 4: Clinical Pharmacotherapy

- Module 4 covers Chapter 5 of TIP 43. During today’s training, you will:
  - Identify contraindications to opioid pharmacotherapy
  - Examine the stages of pharmacotherapy
  - Explore medically supervised withdrawal (MSW) issues
  - Describe approval criteria for take-home medications, clinical considerations, and monitoring procedures
  - Consider criteria for transferring patients to an office-based opioid therapy (OBOT) setting.
Discussion of Pharmacotherapy

Summary
Participants are introduced to pharmacotherapy, including contraindications.

PowerPoint Slides and Discussion

Slide 2, Contraindications to Opioid Pharmacotherapy
- The consensus panel believes that few psychiatric or medical diagnoses should rule out admission to an opioid treatment program (OTP) or access to opioid pharmacotherapy.
- Inclusion rather than exclusion should be the guiding principle.
- Types of people who possibly should not be admitted to an OTP include:
  - Individuals who abuse opioids but whose conditions do not meet criteria for opioid dependence in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV). If a person has a history of opioid abuse or addiction but currently is not addicted, regulations allow admission to an OTP in two cases in which a person might relapse without treatment: pregnancy and release from incarceration.
  - Individuals with less than 1 year of opioid addiction and no addiction treatment history, except patients receiving OBOT with buprenorphine. Detoxification might be tried with applicants who have a short history of addiction.
  - Applicants who cannot attend treatment sessions regularly, especially for medication dosing (unless a clinical exception can be obtained); this requirement is less of a hindrance for patients receiving OBOT with buprenorphine.
  - Patients who have had allergic reactions to methadone or buprenorphine.

Slide 3, Contraindications to Opioid Pharmacotherapy
- In addition, people who are opioid addicted and meet DSM-IV criteria for alcohol or sedative dependence might not be good candidates because the combined effects of alcohol or sedatives that depress the central nervous system (CNS) can cause serious adverse events during medication-assisted treatment for opioid addiction (MAT).
- Some treatment providers require detoxification from alcohol and sedatives before opioid pharmacotherapy and careful monitoring.
- The consensus panel endorses this strategy, provided alcohol or sedative detoxification facilities are available.
If not, both opioid addiction and alcohol or sedative dependence should be treated by the OTP with both psychosocial and pharmacological interventions.

**Slide 4, Stages of Pharmacotherapy**

- **What do you think induction means?**
  - Encourage participants to define induction before revealing the answer.
  - The glossary in the TIP defines induction as the “initial treatment process of adjusting maintenance medication dosage levels until a patient attains stabilization.”

- **What is stabilization?**
  - Elicit responses before revealing the answer.
  - Stabilization is the process of providing immediate assistance (as with an opioid agonist) to eliminate withdrawal symptoms and drug craving.

- **What do you think maintenance treatment is?**
  - Elicit responses before revealing the answer.
  - TIP 43 defines maintenance treatment as “dispensing of an opioid addiction medication at stable dosage levels for a period in excess of 21 days in the supervised treatment of an individual for opioid addiction.”

**Activity: Pharmacotherapy Scavenger Hunt**

**Summary**

In small groups, participants examine the three stages of pharmacotherapy.

**Materials Needed**

- TIP 43
- Copies of Handout 4-1 for each participant

**Activity**

- Explain the activity.
  - In this activity, you will go on a “scavenger hunt” using TIP 43. Handout 4-1 is divided into three sections, corresponding to the three stages of pharmacotherapy.
  - Use TIP 43 beginning on page 65 to complete as much of the handout as possible. We’ll review the information together. If time remains after you’ve completed your section, work on the next section.
You have 10 minutes to finish as much of the handout as you can.

Initiate the activity.
- Form three groups of equal size.
- Distribute Handout 4-1 to each participant.
- Assign each group a section of the handout. After a group finishes its assigned section, it should work on the next section if time permits.

Debrief the activity.
- After 10 minutes, review the information on the handout.
- Ask for volunteers to read paragraphs of the handout. Remind them to read slowly so that participants can fill in blanks on the handouts.

Discussion of Medically Supervised Withdrawal

Summary
In this section, participants explore MSW.

PowerPoint Slides and Discussion
- Several issues are related to MSW. We will look at three of them:
  - Voluntary tapering and dosage reduction
  - MSW after detoxification
  - Involuntary tapering or dosage reduction.

Slide 5, Voluntary Tapering and Dose Reduction
- For various reasons, some patients try to reduce or stop maintenance medication. Some studies indicate high relapse rates for this group, often 80 percent or more, including patients judged to be rehabilitated before tapering.
- The possibility of relapse should be explained to patients who want to taper their dose, especially those who are currently unstable. Patients who choose tapering should be monitored closely and taught relapse prevention strategies. They and their families should be aware of risk factors for relapse during and after tapering. If relapse occurs or is likely, additional therapeutic measures can be taken, including rapid resumption of MAT.
- Ideally, withdrawal should be tried when a stable patient who has a record of abstinence and has adjusted well on MAT strongly wants it. Sometimes dose tapering is necessary for administrative
reasons, such as a response to extreme antisocial behavior or noncompliance with minimal program standards or a patient’s move to a location where MAT is unavailable.

- A review showed that many treatment providers can’t improve outcomes for patients who undertake planned withdrawal and that opioid craving remained prevalent in this group even after successful physiological withdrawal. It was therefore concluded that planned withdrawal from opioid pharmacotherapy should be undertaken conservatively.

**Slide 6, Voluntary Tapering and Dose Reduction**
- Relapse prevention techniques should be incorporated into counseling and other support services both before and during dosage reduction. Such structured techniques can help prevent and prepare for relapse.

- Although most data about outcomes after tapering from opioid medication come from studies of methadone maintenance, the consensus panel believes that success rates are similar for patients who taper from buprenorphine, and similar cautions and monitoring processes should be in place.

**Slide 7, Voluntary Tapering and Dose Reduction: Methadone**
- The techniques and rates of methadone reduction vary widely among patients. The rate of withdrawal can be increased or decreased based on patient response.

- Slow withdrawal gives patients and staff time to stop the tapering or resume maintenance if tapering is not working and relapse seems likely.

- Regardless of the rate of withdrawal from methadone, a point usually is reached at which brain processes cause discomfort, often with drug hunger and craving. Highly motivated patients with good support systems can continue withdrawal despite these symptoms. Some patients appear to have specific thresholds at which further dosage reductions become difficult.

- Physicians and other staff members should be alert to patients attempting dose tapering by substituting other psychoactive substances, such as alcohol, cocaine, sedatives/hypnotics, or other non-opioid substances, for their maintenance medication.

- Some patients might request blind dosage reduction, that is, withdrawal from medication without knowing about dose reductions at each step. Blind dosage reduction is appropriate only if requested by a patient. It should be discussed and agreed on before it is implemented. It is inappropriate to withdraw patients from medication without their knowledge and consent.

- The consensus panel recommends that OTP staff always disclose dosing information unless patients have given informed consent and have requested that providers not tell them their dosages.
Slide 8, MSW After Detoxification

- For patients who neither qualify for nor desire opioid maintenance treatment, methadone or buprenorphine can be used to control withdrawal from illicit opioids or from abuse of prescription opioids (detoxification) and then can be tapered gradually (MSW). Regulations specify two kinds of detoxification with methadone:
  - Short-term treatment of fewer than 30 days
  - Long-term treatment of 30 to 180 days.

- Dosing decisions in MSW are related to the intended steepness of tapering.

- Patients who fail two detoxification attempts in 12 months must be evaluated for a different treatment.

Slide 9, Involuntary Tapering

- When patients violate program rules or no longer meet treatment criteria, involuntary tapering might be indicated. Involuntary tapering and discontinuation of maintenance medication may be necessary if a patient is unwilling to comply with treatment or tapering or if discontinuation of medication appears to be in the patient’s best interest.

- If a patient is intoxicated repeatedly with alcohol or sedative drugs, the addition of an opioid medication is unsafe. Any dose should be withheld, reduced, or tapered.

- Disruptive or violent behavior or threats to staff and other patients might be reasons for dismissal without tapering or for immediate transfer to another facility where a patient may be treated under safer conditions.

- Administrative tapering for nonpayment of fees may be part of the structure to which patients agree on admission. It should be noted that, in addiction treatment, a patient’s sudden lack of funds is a marker of possible relapse.

Slide 10, Involuntary Tapering

- When patients know that they must serve time in jail or prison, planned withdrawal is the best course of action. When the TIP was written, few correctional institutions offered methadone maintenance to nonpregnant inmates. Many jails do not provide methadone for detoxification.

- When a patient in MAT is arrested, OTP staff should recommend to criminal justice authorities that the patient be withdrawn gradually.
from medication. Maintenance or MSW is preferable to sudden discontinuation of any opioid medication.

- The consensus panel recommends that opioid pharmacotherapy be available during incarceration for patients who are in MAT when incarcerated.

**Discussion of Take-Home Medications**

**Summary**

Participants learn about take-home medications.

**PowerPoint Slides and Discussion**

- Some patients qualify for take-home medication. Take-home medication refers to unsupervised doses.

**Slide 11, Take-Home Medications**

- Any OTP patient may receive a single take-home dose for a day when the OTP is closed.
- Beyond this, decisions on dispensing take-home medication are determined by the OTP medical director.
- Federal regulations provide eight criteria for take-home medication eligibility.

**Slide 12, Take-Home Medications: Criteria**

- Patients must meet these eight criteria to be considered for take-home medication:
  1. Absence of recent drug and alcohol abuse
  2. Regular OTP attendance
  3. Absence of behavioral problems at the OTP
  4. Absence of recent criminal activity
  5. Stable home environment and social relationships
  6. Acceptable length of time in comprehensive maintenance treatment
  7. Assurance of safe storage of take-home medication
  8. Determination that rehabilitative benefits of decreased OTP attendance outweigh the potential risk of diversion.

**Slide 13, Take-Home Medications: Dosing Criteria**

- Maximum take-home dose amounts are based on the length of time a patient has been in treatment.
  - First 90 days: 1 take-home dose per week
  - Second 90 days: 2 take-home doses per week
  - Third 90 days: 3 take-home doses per week.
- No take-home doses are permitted for patients in short-term detoxification or interim maintenance treatment.
- Second 90 days: two take-home doses per week
- Third 90 days: three take-home doses per week.

- More examples of take-home dosage amounts are on page 81 of TIP 43.
- No take-home doses are permitted for patients in short-term detoxification or interim maintenance treatment. Some States have additional restrictions.

**Slide 14, Take-Home Medications: Clinical Considerations**

- Other clinical considerations may determine whether take-home medication is appropriate for a patient.

- TIP 43 provides detailed information about the following considerations:
  - Concurrent medical disorder may have an affect on OTP attendance and may cause potential medication-related interactions. Frequent observations are important to monitor concurrent disease.
  - Take-home medication may enable patients to engage in employment, education, child care, or other important endeavors, enhancing their rehabilitative potential.
  - During emergency situations or unforeseen circumstances such as personal or family crises, unscheduled take-home medication needs may arise. Courtesy dosing at a distant OTP usually can be arranged if unstabilized patients are traveling.
  - If patients continue to abuse illicit drugs or prescription medications as evidenced by drug testing, they should not receive take-home medications.
  - Under the influence of other substances, patients may be unable to safeguard or adequately store their take-home doses; some programs require patients to bring a locked container to the OTP to transport their take-home medication.
  - This policy should be considered carefully because such containers might advertise that a patient is carrying medication. Page 83 of TIP 43 lists three diversion control policies for take-home medication.
  - Patients appearing intoxicated or who demonstrate aggressive, criminal, or disordered behavior are poor candidates for take-home medication.
  - Where social relationships are unstable, a methadone take-home dose may not be properly protected against diversion or accidental use (e.g., by children).
**Slide 15, Take-Home Medications: Monitoring**

- Monitoring should ensure that patients with take-home privileges are free of illicit drug use and consume their medication as directed.
- This goal can be met through random drug testing and periodic assessment of eligibility. OTPs should consider whether to use pill counts or callbacks of dispensed take-home doses to verify adherence to program rules.
- A physician should periodically review the status of every patient provided with take-home medication.
- The rationale for providing take-home medication should be reviewed regularly and documented to determine whether initial justifications continue to apply.
- OTPs should have policies to address treatment interruptions, such as work-related travel, illnesses, funerals, planned vacations, or emergencies.
- When disability or illness prevents patients from coming to the OTP, authorized staff may use home delivery and observed-dosing procedures.
- OTPs are responsible for ensuring continuity of treatment when patients are hospitalized for medical or psychiatric problems. The best practice is for OTP staff to educate and stay in touch with a patient’s hospital clinicians about MAT.
- When doses are missed, it is critical to determine whether a patient has been using illicit drugs or taking other medications, has lost tolerance for previous doses, or is intoxicated.

**Slide 16, Office-Based Therapy**

- OTPs should consider assisting with transfer arrangements for long-term methadone-maintained patients who prefer to use a physician in the community for ongoing care.
- Patient selection for this treatment option should be based on a history of negative drug tests, a required length of stability in treatment, social stability, and minimal need for psychosocial services.
- Methadone can be ordered by private physicians, through an affiliation or other arrangement with an OTP, and patients can get their medication at specially registered pharmacies. Under this arrangement, patients on extended take-home-dosing schedules (up to 1 month) no longer must take their doses under observation.
- Outcomes have been uniformly positive, with few relapses and little or no diversion reported. Patient satisfaction has been found to be significantly better compared with OTP dosing.
Module Closing

- Ask participants whether they have any questions.
- Thank participants for attending.
- Remind participants of the next training session.
  
  Our next session is scheduled for <date> at <time>. We will talk about Chapter 6, Patient–Treatment Matching.
Handout 4-1: Pharmacotherapy Scavenger Hunt

Use pages 65–77 of TIP 43 to fill in the blanks.

SECTION 1: Induction
1. Induction procedures for _______________, _______________, and _______________ depend on the unique _______________ _______________ of each medication, prevailing _______________ _______________, and _______________ _______________. Regardless of the medication used, _______________ is key during the _______________ _______________.

2. Most treatment providers begin treating new _______________ when there are _______________ signs of opioid _______________ or _______________ and some beginning signs of _______________ _______________. Administration of the _______________ dose should await a _______________ _______________ to rule out any acute, _______________ condition....

3. The presence of ________________ such as benzodiazepines or alcohol should be _______________ _______________ before induction to _______________ the likelihood of _______________ with the _______________ _______________. [P]atients known to abuse _______________, _______________, _______________, _______________, _______________, or other _______________ _______________ are told in clear language of the _______________ of _______________ _______________ if they take these substances while being stabilized....

4. The _______________ dose of any opioid treatment medication should be _______________ if a patient’s _______________ _______________ is believed to be ________________, the history of opioid use is ________________, or no signs of opioid ________________ are _______________. In general, the safety principle “_______________ _______________ _______________ _______________ _______________ _______________ _______________” applies for early _______________ _______________....

5. Steady state refers to the _______________ in which the _______________ of _______________ in a patient’s _______________ remains _______________ _______________ because that drug’s rate of _______________ equals the rate of its _______________ and _______________.
6. Because variation in response to ______________ is ______________, ... the notion of a
______________ ______________ dosage range or an ______________ ______________ ________________
______________ for all patients is ________________ scientifically.

7. The way a person ________________ at the OTP is often the ________________ ________________ for
determining ________________ ________________.

SECTION 2: Stabilization
1. Steady state is achieved when a ________________ ________________ is eliminated from the blood at the
______________ ________________ that ________________ ________________ ________________. [A]
patient is stabilized when he or she ________________ ________________ exhibits drug-seeking
______________ or ________________.

2. The stabilization stage of opioid pharmacotherapy focuses on ________________ the right
______________ ________________ for each ________________.

3. It is critical to successful patient management in MAT to determine a ________________
______________ that will minimize ________________ ________________ and ________________ and
decrease or ________________ opioid abuse. Dosage ________________ for methadone and
buprenorphine must be determined on an ________________ ________________.

4. [E]vidence shows a ________________ correlation between ________________ ________________ during
MAT and treatment ________________.

5. Certain ________________ factors may cause a patient’s ________________ ________________ to
change.... Patient complaints of ________________ ________________, ________________
______________,medication ________________ ________________, or ________________ always should
be ________________ and never should be ________________.

SECTION 3: Maintenance Pharmacotherapy
1. The ________________ ________________ of opioid pharmacotherapy begins when a patient is
responding ________________ to ________________ ________________ and ________________ dosage
are needed. Patients at this stage have opioids and and have resumed away from the people, places, and things their. These patients typically scheduled privileges.

2. During the maintenance stage, many patients on the of treatment medication for many months, whereas others require or adjustments. Serious may require or dosage. [D]rug test reports and are useful for and during and after from to the.
Answer Key for Handout 4-1: Pharmacotherapy Scavenger Hunt

SECTION 1: Induction
1. Induction procedures for methadone, LAAM, and buprenorphine depend on the unique pharmacologic properties of each medication, prevailing regulatory requirements, and patient characteristics. Regardless of the medication used, safety is key during the induction stage.
2. Most treatment providers begin treating new patients when there are no signs of opioid intoxication or sedation and some beginning signs of opioid withdrawal. Administration of the first dose should await a physical assessment to rule out any acute, life-threatening condition.
3. The presence of sedatives such as benzodiazepines or alcohol should be ruled out before induction to minimize the likelihood of oversedation with the first dose. Patients known to abuse sedatives, tranquilizers, tricyclic antidepressants, benzodiazepines, alcohol, or other CNS depressants are told in clear language of the dangers of adverse effects if they take these substances while being stabilized.
4. The first dose of any opioid treatment medication should be lower if a patient’s opioid tolerance is believed to be low, the history of opioid use is uncertain, or no signs of opioid withdrawal are evident. In general, the safety principle “start low and go slow” applies for early medication dosages.
5. Steady state refers to the condition in which the level of medication in a patient’s blood remains fairly steady because that drug’s rate of intake equals the rate of its breakdown and excretion.
6. Because variation in response to methadone is considerable, the notion of a uniformly suitable dosage range or an upper dosage limit for all patients is unsupported scientifically.
7. The way a person presents at the OTP is often the best indicator for determining optimal dosage.

SECTION 2: Stabilization
1. Steady state is achieved when a treatment medication is eliminated from the blood at the exact rate that more is added. A patient is stabilized when he or she no longer exhibits drug-seeking behavior or craving.
2. The stabilization stage of opioid pharmacotherapy focuses on finding the right dosage for each patient.
3. It is critical to successful patient management in MAT to determine a medication dosage that will minimize withdrawal symptoms and craving and decrease or eliminate opioid abuse. Dosage requirements for methadone and buprenorphine must be determined on an individual basis.
4. Evidence shows a positive correlation between medication dosage during MAT and treatment response.
5. Certain medical factors may cause a patient’s dosage requirements to change.... Patient complaints of opioid craving, withdrawal symptoms, medication side effects, or intoxication always should be investigated and never should be dismissed.

SECTION 3: Maintenance Pharmacotherapy
1. The maintenance stage of opioid pharmacotherapy begins when a patient is responding optimally to medication treatment and routine dosage adjustments are no longer needed. Patients at this stage have stopped abusing opioids and other substances and have resumed productive lifestyles away from the people, places, and things associated with their addiction. These patients typically receive scheduled take-home medication privileges.
2. During the maintenance stage, many patients remain on the same dosage of treatment medication for many months, whereas others require frequent or occasional adjustments. Serious emotional crises may require long-term or temporary dosage adjustments. Drug test reports and medication blood levels are useful for dosage determination and adjustment during and after transition from stabilization to the maintenance stage.
Module 5: Patient–Treatment Matching

Module Overview

The information in Module 5 covers Chapter 6 of Treatment Improvement Protocol (TIP) 43: Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs. This module takes 60 minutes to complete and is divided into eight sections:

- Welcome and Objectives
- Activity: Patient–Treatment Matching Issues
- Discussion of Patient–Treatment Matching Issues
- Activity: Special Needs Roulette
- Discussion of Treatment Planning
- Activity: Case Study
- Review of Issues
- Module Closing

In addition to this training manual, you will need Handout 5-1 for participants.

Welcome and Objectives

Summary

The training begins with an overview of the learning objectives for Module 5.

PowerPoint Slides and Discussion

Slide 1, Module 5: Patient–Treatment Matching

Module 5 covers Chapter 6 of TIP 43. During today’s training, you will:

- List necessary steps for matching patients to appropriate treatment programs
- Investigate issues related to patients with special needs
- Examine the factors for developing effective treatment planning in opioid treatment programs (OTPs)
- Explore the development of a patient treatment plan.
Activity: Patient–Treatment Matching Issues

Summary
Participants discuss issues related to patient–treatment matching.

Activity
- Explain the activity.
  - In this activity, you will explore and identify what you already know about patient–treatment matching.
  - As a group, you will put together a list of issues that may arise during patient–treatment matching.
- Initiate the activity.
  - Ask, What might you need to know about a patient to match him or her to an appropriate treatment program?
  - Ask for volunteers to offer ideas. Write participants’ responses on newsprint. Avoid correcting participants.
- Debrief the activity.
  - Say, Thank you. We’ll revisit these ideas later in this session.
  - Leave newsprint posted until session is concluded.

Discussion of Patient–Treatment Matching Issues

Summary
Participants learn about issues related to patient–treatment matching.

PowerPoint Slides and Discussion
- Several steps are involved in matching patients to appropriate treatment programs.
  - Patient–treatment matching begins with a thorough assessment to determine each patient’s service needs.
  - Psychosocial services and mutual-help programs are among the available treatment options.
  - The patient’s needs are matched to appropriate treatment settings.
  - Treatment providers consider medication options as part of treatment.
Slide 2, Steps in Patient–Treatment Matching: Patient Assessment

- A comprehensive assessment includes the following elements:
  - The extent, nature, and duration of patient’s opioid and other substance use
  - Treatment history
  - Medical, psychiatric, and psychosocial needs
  - Functional status
  - Gender, culture, ethnicity, and language
  - Motivation to comply with treatment
  - Recovery support

Slide 3, Steps in Patient–Treatment Matching: Psychosocial Treatment Services

- In a comprehensive medication-assisted treatment for opioid addiction (MAT) setting, patients often have access to a variety of psychosocial services and case management.
  - Residential and outpatient programs offer intensive individual and group counseling or counseling on a periodic or as-needed basis.
  - Most patients in the acute phase of treatment need to see a counselor daily for counseling or case management just to become stabilized, whereas others require fewer counseling services.

Slide 4, Steps in Patient–Treatment Matching: Mutual-Help Programs

- Mutual-help programs (such as 12-Step programs) offer motivation and reinforcement during and after active treatment.
  - Such programs provide social support from others in recovery.
  - However, patients with opioid addiction who are maintained on treatment medication can feel out of place in some group settings where continued opioid pharmacotherapy may be misunderstood.

Slide 5, Steps in Patient–Treatment Matching: Matching Needs to Settings

- After defining the services needed, the next step is to identify the most appropriate available setting or settings for these services.
  - MAT has been offered primarily in dedicated outpatient OTPs. However, as the importance of treating patients’ varied needs during recovery has become evident, varied programs and settings have emerged.
Steps in Patient–Treatment Matching: Matching Needs to Settings

The following treatment programs and settings offer some or all of the comprehensive services recommended in MAT.

- **Outpatient OTPs** ideally treat patients who are opioid addicted during all phases of treatment and at most levels of care.

- **Residential treatment programs** offer cooperative living arrangements for patients in recovery, but they vary in their willingness or ability to accept MAT patients.

- **Mobile treatment units** either offer comprehensive maintenance services or work in conjunction with fixed-site outpatient programs.

- After achieving stabilization in an OTP, some patients may be eligible for referral to less intensive physician’s **office-based opioid treatment (OBOT)**. In these settings, patients receive the same level of monitoring and intervention as patients receiving other types of health care.

- Few jails or prisons offer MAT services. MAT services are often interrupted or discontinued when patients are incarcerated. OTPs should work with **criminal justice institutions** to ensure that appropriate procedures are followed. Patients released from a criminal justice setting should be referred to an OTP.

- Numerous **other settings and specialized programs** offer some services and levels of care needed by patients who are opioid addicted. These programs can be sources of referral by OTPs or can function as satellite OTPs to ensure that patients receive the services and care they need.

- The consensus panel recommends that OTPs offer a variety of treatment medications.

- Chapters 3 and 5 of TIP 43 provide information about the pharmacology and appropriate use of the medication options.

**Activity: Special Needs Roulette**

**Summary**

Participants investigate the special needs that patients may have.
Materials Needed

- TIP 43
- Cards with material on Handout 5-1 for each participant or group (see Setup)

Setup

- Photocopy Handout 5-1 onto card stock. Cut each sheet in half as indicated by the cutting guidelines.

Activity

- Explain the activity.
  - Effective treatment for opioid addiction should address the needs of each patient.
  - Culturally competent and creative treatment planning, implementation, and referrals address the distinct needs of patients from different backgrounds. TIP 43 provides findings for 10 groups.
  - I will randomly give each of you [or each group, if there are more than 10 participants] a card that describes a patient group with special needs.
  - I’ll call out the name of the patient group. If you have that group’s description, read the information aloud.

- Initiate the activity.
  - If there are fewer than 10 participants, give some participants more than 1 card.
  - If there are more than 10 participants, form 10 groups. Mixed group sizes are okay, for example, some participants by themselves and others in pairs.
  - Distribute the description cards to each participant or group.
  - Randomly call out each category.
  - Allow the participant who has the description for the category to read the description aloud.

- Debrief the activity.
  - Ask participants whether they have questions.

Discussion of Treatment Planning

Summary

Participants explore issues related to treatment planning.
PowerPoint Slides and Discussion

Slide 7, Treatment Planning: Developing a Plan

- After patients’ individual needs are assessed and appropriate levels of care determined, a treatment plan should be developed with the patient.

- Treatment planning for MAT should involve a multidisciplinary team, including physicians, counselors, nurses, case managers, social workers, and patients.

- Based on a thorough patient history and assessment, a treatment plan should be realistic and tailored to each patient’s needs, strengths, goals, and objectives.

- Good treatment plans contain both short- and long-term goals and specify the actions needed to reach each goal. Treatment plans should indicate which goals and objectives require referral to and followup with outside resources and which are provided by the OTP.

- Treatment plans should contain specific, measurable treatment objectives that can be evaluated for degree of accomplishment.

Slide 8, Treatment Planning

- Counselors should ensure that treatment plans incorporate strategies to develop therapeutic relationships with patients, based on respect for patients’ autonomy and dignity, while motivating patients to become partners in the change process. Fulfilling this responsibility, the counselor usually incorporates approaches that strive to enhance patient motivation for change by focusing on patient strengths and respecting patient decisions.

- A patient in MAT should be an integral member of the treatment team with his or her needs and expectations considered respectfully and incorporated into the treatment plan. Patients who agree with the treatment rationale or therapeutic approach tend to improve.

- Treatment plans should incorporate an assessment of linguistic and cultural factors that can affect treatment and recovery either positively or negatively. Treatment providers should work collaboratively with patients to identify health-related cultural beliefs, values, and practices and to decide how to address these factors in the treatment plan.

- Patient motivational strategies should be incorporated throughout the treatment plan. As part of this process, the treatment team can benefit from an understanding of stages of change and their effects on patient progress.
Activity: Case Study

Summary
Using a case study, participants analyze the factors of a patient treatment plan.

Materials Needed
- TIP 43
- Slide 9, Case Study

Activity
- Explain the activity.
  - You will work in pairs to analyze the case study that begins on page 97 of TIP 43.
- Initiate the activity.
  - Form pairs.
  - Say, Read the case study beginning on page 97. Focus your analysis on which treatment program elements, settings, and patient needs are present in this case study. Identify those elements and special needs by circling them. Possible answers are indicated on the slide. You have 10 minutes.
- Debrief the activity.
  - After 10 minutes have passed (or sooner, if participants have finished) say, Look at the elements you’ve identified. Who can tell me which treatment program elements or settings are present in this case study?
  - Call on volunteers, and write their responses on newsprint.
  - Ask, What special needs were present in this case study?
  - Call on volunteers, and write their responses on newsprint.

Review of Issues

Summary
Participants compare their responses from the beginning of the module with responses from the case-study activity.

Discussion
- Ask, What did you learn about patient–treatment matching in this module?
- Compare participants’ earlier responses with the examples discovered in the case study.
Module Closing

- Ask participants whether they have any questions.
- Thank participants for attending.
- Remind participants of the next training session.
  
  - Our next session is scheduled for <date> at <time>. We will talk about Chapter 7, Phases of Treatment.
Patients With Serious Medical Disorders

If a serious medical condition is discovered during medical evaluation or patient assessment, the patient should receive appropriate medical treatment either on site or by referral to a medical center. Chapter 10 of TIP 43 describes medical conditions commonly encountered among patients in MAT and provides treatment recommendations. Most OTPs offer only basic medical services. OTPs should develop and maintain referral networks for patients who present for MAT and have other medical conditions. Moreover, OTP staff should coordinate referrals and follow up as needed to ensure compliance with medical treatments and to act as consultants about MAT and medication interactions.
Patients With Serious Co-Occurring Disorders

Co-occurring disorders should not prevent patients' admission to an OTP; however, diagnosis of these disorders is critical to match patients with appropriate services and settings. Therefore, OTPs should include professionals trained to screen for the presence of co-occurring disorders, develop appropriate referrals to services for these disorders, and provide coordination of care. Most staff members can be trained to recognize and flag major symptoms of co-occurring disorders. The OTP should maintain communication and followup with referral resources.
Patients With Housing, Family, or Social Problems

(TIP 43, page 92)

The following psychosocial problems should be addressed during or directly after admission to increase the likelihood that patients engage successfully in treatment:

- Lack of stable housing
- Broken ties with family members; nonexistent or dysfunctional family relationships
- Poor social skills and lack of a supportive social network
- Unemployment; lack of employable skills.

Once these needs are identified during assessment, referrals can be made. Although some OTPs have onsite social workers to manage the assessment and referral processes, most OTPs rely on counselors to assume this role. Case management duties should include arrangements for provision of psychosocial care when indicated. Family members need education about MAT, including information on how to support a partner or loved one in recovery, self-care of family members, signs and symptoms of active addiction, and support and assistance from family members willing to participate in family counseling.
Patients With Disabilities

(TIP 43, page 92)

OTPs should try to provide access for patients with physical disabilities. Treatment interventions for these patients usually include vocational rehabilitation, physical therapy, and social services that help procure prosthetic limbs, wheelchairs, and other assistive devices. Alternative approaches in MAT, specifically those that reduce OTP visits, include take-home dosing and requests for medical exceptions through visiting-nurse services to provide equal access to treatment for persons with disabilities.

Mobile medication units and office-based or home-nursing services may offer viable treatment options for patients with disabilities. OTP staff should address these challenges with patients so that barriers to treatment are overcome.
Adolescents and Young Adults

(TIP 43, page 92)

Adolescents and young adults present a unique challenge for MAT. Often, ethnic background, peer affiliations, and aspects of the “youth culture” require staff training and special expectations from both staff and patients. Differences in routes of administration for heroin or prescription opioids and in treatment needs between adolescents or young adults and older adults who are opioid addicted might be attributable in part to generational characteristics and life experiences. Youth who are opioid addicted tend to present after only a few years of addiction and with different attitudes toward addiction and the recovery process and distinct treatment needs. These youth may be more difficult to evaluate, because, as a result of other modes of administration, they do not exhibit some physical markers of opioid use.

Other risk factors for this group include possible sexual and physical abuse, young age at first sexual experience, incidents of trading sex for drugs, and co-occurring disorders. These risk factors also can contribute to increased risk for HIV infection and other sexually transmitted diseases.
Women

(TIP 43, pages 93 and 94)

- **Pregnancy.** The special needs of women who are opioid addicted and pregnant should be assessed thoroughly through a comprehensive medical evaluation. Treatment matching for pregnant patients in MAT should provide optimal services related to pregnancy and birth including prenatal care, maternal nutrition, and psychosocial rehabilitation.

- **Sexual or physical abuse.** Patients’ risks of ongoing abuse in their current relationships should be addressed, and appropriate plans or referrals made. Co-occurring disorders such as posttraumatic stress disorder can occur among both women and men who have experienced sexual or physical abuse. The best treatment settings to address women’s needs in these cases include OTPs with onsite care provided by professionals with special training in this area.

- **Complex medical problems.** The complex medical problems commonly diagnosed in women in MAT include gynecological infections, amenorrhea, hypertension, and pneumonia. It is optimal to provide onsite primary care services; hospital-based programs and OTPs with formalized medical referral systems are best equipped to deliver such services.
Lesbian, Gay, and Bisexual Patients

Lesbian, Gay, and Bisexual Patients
(TIP 43, page 94)

Just as important as sensitivity to cultural differences based on race or ethnicity is providing a treatment climate that is available and sensitive to lesbian, gay, or bisexual (LGB) patients by openly acknowledging their heterogeneity and variations in sexual orientation and treating these individuals with dignity and respect. OTP staff should be prepared to assist LGB patients in coping with problems related to their sexual orientation and the need for HIV/AIDS and sexually transmitted disease risk avoidance. Providers should help patients obtain appropriate medical care and secure their safety if, for example, they are threatened. OTPs should acknowledge the unique social support structures of LGB patients, which can provide a way to counteract isolation and separation from community, peers, and immediate and extended family members. Finally, the consensus panel recommends that OTPs identify and refer LGB patients to community counseling, support, and spiritual and religious organizations that are sensitive to these groups and address any sexual- or gender-orientation concerns these patients have that could affect treatment.
Aging Patients

(TIP 43, page 95)

MAT treatment planners should consider the stressors common to the aging patient, such as loss of family, retirement, loneliness, and boredom, which can contribute to high risk of self-overmedication and addiction to alcohol and medications. OTPs should focus on the following areas when working with elderly patients:

- Monitoring the increased risk for dangerous drug interactions
- Differentiating between co-occurring disorders and symptoms and disorders associated with aging
- Differentiating between depression and dementia
- Screening for and treating physical and sexual abuse
- Developing referral sources that meet the needs of elderly patients
- Training staff to be sensitive to the elderly patient population
- Providing psychosocial treatment for age-associated stressors and medical screening and referral for common medical conditions affected by the aging process
- Assessing and adjusting dosage levels of medication for the slowed metabolism of many elderly patients.
Patients With Pain

(TIP 43, page 95)

Patients in MAT often are undertreated or denied medication for acute or chronic pain management. Healthcare workers may misperceive pain medication requests by patients in MAT as drug-seeking behavior, in part because of patients’ higher tolerance for opioids and, usually, their need for higher doses. Many physicians who treat pain do not have the necessary education to treat pain in this population. Medical providers in MAT should work collaboratively with primary care providers and pain and palliative-care clinicians to ensure establishment of appropriate pain interventions for patients in MAT.
Parents

(TIP 43, page 94)

Because many patients in MAT are parents, the lack of adequate childcare services is often a barrier to OTP attendance and successful treatment. One solution is supervised onsite childcare services, which may provide opportunities to observe how patients relate to their children. Problems in parenting skills can be addressed in treatment planning and through parenting groups for patients with children. However, onsite childcare services are available in few programs because of limited resources and licensing and insurance requirements. These obstacles might cause missed appointments or lack of privacy and concentration for parents who must bring their children to treatment and counseling sessions. Insufficient treatment may result.
Module 6: Phases of Treatment

Module Overview

The information in Module 6 covers Chapter 7 of Treatment Improvement Protocol (TIP) 43: Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs. This module takes 50 minutes to complete and is divided into five sections:

- Welcome and Objectives
- Discussion of Phased Treatment
- Activity: Instant Specialist
- Discussion of Phased Treatment—Continued
- Module Closing

In addition to this training guide, you will need copies of Handout 6-1 and Handout 6-2 for participants and the Answer Keys for Handout 6-1 and Handout 6-2.

Welcome and Objectives

Summary

This training begins with an overview of the learning objectives for Module 6.

PowerPoint Slides and Discussion

Slide 1, Module 6: Phases of Opioid Treatment

- Module 6 covers Chapter 7 of TIP 43. During today’s training, you will:
  - Explain the rationale for a phased-treatment approach in opioid treatment programs (OTPs)
  - Describe characteristics and issues of the acute phase of medication-assisted treatment for opioid addiction (MAT)
  - Describe characteristics and issues of the rehabilitative phase
  - Describe characteristics and issues of the supportive-care, medical maintenance, tapering and readjustment, and continuing-care phases of MAT
Describe issues pertaining to transition between treatment phases in MAT and readmission to OTPs.

Discussion of Phased Treatment

Summary
Participants learn about the rationale of a phased-treatment approach to opioid treatment.

PowerPoint Slides and Discussion

Slide 2, Phased-Treatment Approach
- The phased-treatment approach comprises five or six patient-centered phases for planning and providing MAT services and evaluating treatment outcomes in an OTP:
  - Acute Phase
  - Rehabilitative Phase
  - Supportive-Care Phase
  - Medical Maintenance Phase
  - Tapering Phase (optional)
  - Continuing-Care Phase.

What would you consider to be the value of a phased-treatment approach to OPT?
Write responses on newsprint.

Slide 3, Rationale for Phased Treatment
- Research on the effectiveness of organizing MAT into phases is limited, partly because MAT is a relatively long-term process that makes systematic studies difficult; however, this approach is recommended as an effective treatment methodology.

- The phases of treatment that we will discuss are guidelines.

- The treatment model does not go in only one direction; at any point, patients can encounter setbacks that require a return to an earlier treatment phase.

- The model includes two distinct medication tracks, one of continuing medication maintenance and the other of medication tapering or medically supervised withdrawal (MSW).

- Maintaining abstinence from illicit opioids and other substances of abuse, even if that requires ongoing MAT, should be the primary objective.
Module 6: Phases of Treatment

Slide 4, Variations of Phased Treatment

- The types and intensity of services patients need vary throughout treatment and should be determined by individual circumstances.

- Most patients need more intensive treatment services at entry, more diversified services during stabilization, and fewer and less intensive services after benchmarks of recovery are met.

- The treatment phases should be regarded as a dynamic continuum that allows patients to progress according to individual capacity.

- Assessment of patient readiness for a particular phase and assessment of individual needs should be ongoing.

- Decisions about treatment length should be made by OTP physicians, the treatment team, and patients and should be based on accumulated data and medical experience.

Slide 5, Treatment Phases

- In the **acute phase**, patients are admitted for detoxification. A major goal during the acute phase is to eliminate use of illicit opioids for at least 24 hours and eliminate inappropriate use of other psychoactive substances.

- The primary goal of the **rehabilitative phase** is to empower patients to cope with major life problems—drug or alcohol abuse, medical problems, co-occurring disorders, vocational and educational needs, family problems, and legal issues—so that they can pursue goals such as education, employment, and family reconciliation.

- In the **supportive-care phase**, patients continue opioid pharmacotherapy, participate in counseling, receive medical care, and resume primary responsibility for their lives.

- In the **medical maintenance phase**, stabilized patients who require continued medication can have a 30-day supply of take-home medication and reductions in frequency of treatment visits, generally without all the services included in comprehensive MAT.

- **Tapering** and **MSW** are commonly used to describe the gradual reduction and elimination of maintenance medication during opioid addiction treatment.

- **Continuing-care treatment** comprises ongoing medical followup by a primary care physician, occasional check-ins with an OTP counselor, and participation in recovery groups.

Activity: Instant Specialist

**Summary**

In groups, participants research the acute and rehabilitative phases of treatment.
Materials Needed
- TIP 43
- Copies of Handouts 6-1 and 6-2 for each participant

Activity
- Explain the activity.
  - You will explore the two most involved phases of the phased-treatment approach: acute and rehabilitative.
  - Working in groups, you will have 10 minutes to review TIP 43 to fill in the blanks in the handout. To finish the research in the time allotted, you will need to assign portions of the handout to a few people in your group.
  - Select one or more representatives to share the group’s results with the class.
  - You have 10 minutes to complete your group's handout.
- Initiate the activity.
  - Form two groups: an acute group and a rehabilitative group. The acute group receives Handout 6-1, and the rehabilitative group receives Handout 6-2.
  - When 8 minutes have lapsed, give the groups a 2-minute warning for completing the handout.
- Debrief the activity.
  - Distribute blank rehabilitative phase handouts (Handout 6-2) to each participant in the acute group and blank acute phase handouts (Handout 6-1) to each participant in the rehabilitative group.
  - Allow each group 5 minutes to present the information in its handout. Encourage each group to complete the handouts as the other group reviews the answers.

Discussion of Phased Treatment—Continued

Summary
Participants continue learning about the phased-treatment approach.

Slide 6, Supportive-Care Phase: Treatment Issues
- In the supportive-care phase, patients continue opioid pharmacotherapy, participate in counseling, receive medical care, and resume primary responsibility for their lives. They receive take-home medication for longer periods and are permitted to make fewer OTP visits, depending on regulations.
Treatment issues occur with:
- Alcohol and drug abuse
- Medical and mental health concerns
- Vocational and educational needs
- Family issues
- Legal issues

**Slide 7, Supportive-Care Phase: Substance Use Strategies**
- Patients should have discontinued alcohol and prescription drug abuse and all illicit drug use, as well as any criminal activities, before entering the supportive-care phase.
- Strategies include monitoring use and continued drug screening.
- Heavy problem substance abuse could send patients back to the acute phase.

**Slide 8, Supportive-Care Phase: Medication and Mental Health Strategies**
- Medical and mental health strategies include:
  - Monitoring compliance with medical and psychiatric regimens to ensure that patients are healthy and recovered from aspects of opioid addiction and can cope with life issues
  - Maintaining communication with patients’ healthcare and mental health care providers to ensure that patients are progressing as they should to move to the next stage.

**Slide 9, Supportive-Care Phase: Vocational and Education Strategies**
- Patients in supportive care should be employed, actively seeking employment, or involved in productive activities and should have legal, stable incomes.
- Patients’ vocational status and progress toward educational goals should be monitored to ensure their success in becoming financially stable and independent.
- Patients may need assistance in addressing workplace problems.

**Slide 10, Supportive-Care Phase: Family and Legal Issues**
- Patients’ progress with their family issues should be assessed quarterly to determine whether patients are ready for transition from supportive care to medical maintenance or tapering.
- Strategies include monitoring family stability and relationships.
- Patients should be referred for family therapy as needed.
### Supportive-Care Phase: Transition

- Discontinued alcohol and drug abuse
- Stable medical and mental health
- Stable source of income
- Stable family situation and relationships
- Resolved legal issues

### Medical Maintenance Phase

- 2 years of continuous treatment
- No illicit drug use or abuse of prescription drugs for the period indicated by Federal and State regulations (at least 2 years for a full 30-day maintenance dosage)
- No alcohol use problem
- Stable living conditions in a substance-free environment
- Stable and legal source of income
- Involvement in productive activities such as job, school, or volunteer work
- No criminal or legal involvement for at least 3 years and no parole or probation status

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### Slide 11, Supportive-Care Phase: Transition

- Ongoing legal issues should be monitored.
- Service providers should assist patients coping with these issues.

### Slide 12, Medical Maintenance Phase

- Opinions vary on the length of time patients should be free from illicit drug use and abuse of prescription drugs before moving to the next phase. However, to receive the maximum 30-day supply of take-home medication, a patient must be demonstrably free from illicit substances for at least 2 years of continuous treatment.

- Even though all medical and mental health treatment plans and patients’ progress should be assessed individually, if any requirements are unmet, counselors should return patients to the rehabilitative phase to address areas of renewed concern rather than advance them to the medical maintenance or tapering phase.

- Patients should continue to be employed, actively seeking employment, or involved in other productive activities, and they should have legal, stable incomes.

- Patients should be in stable family situations and relationships for transition from supportive care to the medical maintenance or tapering phase.

- Legal issues should be resolved before patients move to the next phase.
Module 6: Phases of Treatment

Slide 13, Medical Maintenance Phase: Strategies

- During the medical maintenance phase, OTPs should continue to monitor and maintain communication with patients about medical and mental health issues. OTPs that provide limited healthcare services should integrate their services with those of other healthcare providers.

- The consensus panel recommends random drug testing and callbacks of medication. Positive drug test results should be addressed without delay, and patients should be returned to the rehabilitative phase when appropriate.

- Although patients in medical maintenance may not require psychological services, they may need occasional dosage adjustments based on their use of other prescription medication or on such factors as a change in the rate of metabolizing methadone.

- Evaluation of life situations including vocational and educational needs, family circumstances, and legal issues should continue during the medical maintenance phase, regardless of the setting.

- Patients in medical maintenance should be monitored for risk of relapse. The consensus panel recommends that, as part of the diversion control plan required for all OTPs by the Substance Abuse and Mental Health Services Administration, indications of medication diversion by a patient in medical maintenance result in reclassification of that patient to the most appropriate previous phase of treatment and in adjustment of treatment, other services, and privileges. Reinstatement into medical maintenance should occur only after the patient has demonstrated required progress for at least 3 months.

Slide 14, Medical Maintenance Phase: Transition

- To be considered for transition to the next phase of treatment, patients must not have abused drugs and alcohol for 2 years.

- Patients should demonstrate stability in medical and mental health, vocation and education, family issues, and legal issues.

Slide 15, Tapering Phase

- Tapering and MSW describe the gradual reduction and elimination of maintenance medication during treatment.

- The decision to taper from opioid treatment medication should be made without coercion and with careful consideration of a patient’s wishes and preferences, level of motivation, length of addiction, results of previous attempts at tapering, family involvement and stability, and disengagement from activities with others who use substances.

- Adequate social support system and no significant untreated co-occurring disorders.
Tapering Phase: Strategies
- Monitor drug and alcohol use, continue drug testing, and provide counseling support.
- Monitor emotional status.
- Monitor vocational and educational issues and be available for workplace issues.
- Monitor family stability and refer to counseling as required.
- Monitor ongoing legal issues and provide support as needed.

Reasons for Tapering
- Hardships of OTP attendance and stigma.
- OTPs should identify situational motives to ensure that withdrawal from MAT is driven by legitimate concerns.

Relapse After Tapering
- Risk of relapse increases because of physical and emotional stress of attempting to discontinue medication.
- Patients should discuss difficulties with tapering and readjustment to avoid relapse.
- Patients need education about how to reenter MAT if relapse is imminent.

Readjustment After Tapering
- Continue support.
- Reinforce relapse prevention skills.
- Initiate naltrexone therapy after tapering.
- Consider problem-solving counseling, positive behavior reinforcement, open-door policy, strengthening patients’ support systems, developing relapse prevention plan.

Slide 16, Tapering Phase: Strategies
- Drug and alcohol abuse monitoring, drug testing, and counseling support should continue.
- As medication is being tapered, intensified services should be provided, including counseling and monitoring of patients’ behavioral and emotional conditions.
- Service providers should continue to monitor vocational and educational issues and be available to help with workplace issues.
- Family stability should be monitored, and referrals to counselors should be made when required.
- Service providers should continue to monitor ongoing legal issues and provide support as needed.

Slide 17, Reasons for Tapering
- Sometimes decisions to taper are motivated by the hardships of OTP attendance and other requirements or by the stigma associated with MAT.
- The consensus panel urges OTPs to identify situational motives and ensure that patients who choose medically supervised withdrawal from MAT are motivated by legitimate concerns about health and relapse.

Slide 18, Relapse After Tapering
- The risk of relapse during and after tapering is significant because of the physical and emotional stress of attempting to discontinue medication.
- The consensus panel recommends that patients be encouraged to discuss difficulties they experience with tapering and readjustment so that action can be taken to avoid relapse.
- Patients should be educated about how to reenter MAT if they believe that relapse is imminent.

Slide 19, Readjustment After Tapering
- Many patients who complete tapering need support and assistance during the first 3 to 12 months.
- During this period, treatment providers should reinforce patients’ coping and relapse prevention skills.
- Naltrexone should be initiated well after tapering is completed to avoid precipitating withdrawal symptoms.
- Other recommendations include problem-solving counseling, reinforcing positive behaviors/attitudes, an open-door policy to counseling services, strengthening patients’ support systems, and a relapse prevention plan that includes how to return to MAT.
**Slide 20, Reversion to MAT**

- The consensus panel recommends that all patients attempting tapering be counseled that a return to medication and a previous phase is not failure.
- Rather it is simply an indication that medical maintenance is more appropriate for some patients in general and for others at particular times in their lives.

**Slide 21, Indicators for Transition**

- Successful transition from the tapering phase to the continuing-care phase requires several indicators:
  - Successful discontinuation of medication is a key indicator for transition from tapering to the continuing-care phase.
  - A positive self-image as someone who feels good and functions well without medication is another key indicator.
  - Having a socially productive lifestyle without involvement with substances of abuse is critical to completing this phase and to continued recovery.
  - There are no symptoms of abuse or dependence, as defined by the Diagnostic and Statistical Manual of Mental Disorders.

**Slide 22, Continuing-Care Phase**

- Continuing care follows successful tapering and readjustment. Treatment at this stage comprises ongoing medical followup by a primary care physician, occasional check-ins with an OTP counselor, and participation in recovery groups.
- Patients in continuing care should have a socially productive lifestyle, no involvement with drugs or problem involvement with alcohol, and improved coping skills demonstrated over at least 1 year. Significant co-occurring disorders should be under control.
- Appointments with the OTP should be scheduled every 1 to 3 months.

**Slide 23, Transition and Readmission**

- Regarding transition:
  - The criteria for transition between phases should not be rigidly enforced. Transition should be according to a patient’s circumstances. Treatment should be modified based on the best interests of the patient, rather than on a patient’s infraction of program rules.
  - Occasional relapses might not require that a patient return to the acute phase but instead that he or she receive intensified counseling, lose take-home privileges, or receive a dosage adjustment.
If a patient is in the medical maintenance phase or the tapering and readjustment phase, a relapse often requires a rapid response and change of phase. In these cases, the patient might be reclassified into the rehabilitative phase. After providing evidence that problems are under control, the patient might be able to return to the supportive-care or medical maintenance phase.

- Regarding readmission:
  - Patients almost always should be encouraged to remain in treatment at some level, and pharmacotherapy should be reinstituted for most previously discharged patients if or when relapse occurs or seems likely.
  - Feelings of shame, disappointment, and guilt, especially for rehabilitated patients who have close relationships with staff members, should not keep patients from seeking reentry to treatment. The consensus panel recommends that all patients be informed at entry to the OTP that subsequent reentry is common and can be accomplished more quickly than initial intake because regulations waive documentation of past addiction for returning patients.

Module Closing

Summary
- Ask participants whether they have any questions.
- Thank participants for attending.
- Remind participants of the next training session.
  - Our next session is scheduled for <date> at <time>. We will talk about Chapter 8, Approaches to Comprehensive Care and Patient Retention.
Handout 6-1: Instant Specialist—Acute Phase

Use pages 102–108 of TIP 43 to fill in the blanks.

SECTION 1: Introduction
1. Patients admitted for detoxification may be treated for up to _______________ _______________ in an OTP.

2. Detoxification focuses primarily on _______________ with medication ..., _______________ from this medication, and _______________ for continuing care, usually outside the OTP.

3. Patients admitted for detoxification should have _______________ to maintenance treatment if their _______________ from treatment medication is _______________ or they change their minds and wish to be admitted for comprehensive MAT.

4. If these patients meet _______________ _______________ _______________ _______________ _______________, their medically supervised withdrawal from treatment medication should end....

5. The acute phase is the _______________ period, ranging from days to months, during which treatment focuses on _______________ _______________ of illicit opioids and _______________ of other psychoactive substances while lessening the intensity of the co-occurring disorders and medical, social, legal, family, and other problems associated with addiction.

6. The consensus panel believes that _______________ highly intensive services during the acute phase, especially for patients with serious co-occurring disorders or social or medical problems, engages patients in treatment and conveys that the OTP is concerned about all the issues connected to patients’ addiction.

SECTION 2: Goals for the Acute Phase
1. A major goal during the acute phase is to _______________ use of illicit opioids for at least _______________ hours.

2. This process involves:
   - Initially prescribing a medication dosage that minimizes _______________ and other undesirable side effects
   - Assessing the _______________ and _______________ of each dose after administration
Rapidly but safely ______________ dosage to suppress withdrawal symptoms and cravings and discourage patients from self-medicating with illicit drugs or alcohol or by abusing prescription medications

_______________ or _______________ patients for services to lessen the intensity of co-occurring disorders and medical, social, legal, family, and other problems associated with opioid addiction

Helping patients identify ______________ situations for drug and alcohol use and develop ______________ strategies for coping with cravings or compulsions to abuse substances.

3. Indications that patients have reached the goals for the acute phase can include:

   Elimination of symptoms of ________________, ________________, or ________________ for opioids and stabilization

   ______________ feelings of comfort and wellness throughout the day

   ______________ from illicit opioids and from abuse of opioids normally obtained by prescription, as evidenced by drug tests

   Engagement with treatment staff in assessment of ________________, ________________ ________________, and ________________ issues

   Satisfaction of basic needs for ________________, ________________, and ________________.

SECTION 3: Exhibit 7-1: Acute Phase of MAT

List the six treatment issues in Exhibit 7-1: Acute Phase of MAT. Select one of the treatment issues, and read the Strategies To Address Issue and Indications for Transition to Rehabilitative Phase.

1.
2.
3.
4.
5.
6.

SECTION 4: Alcohol, Opioid, and Other Drug Abuse

1. During the acute phase, OTP staff members should pay attention both to patients’ ______________ opioid abuse and to their use of other ______________ and ______________ substances.
2. Patients should receive ______________ about how other drugs, nicotine, and alcohol ______________ with treatment medications and why medication must be ______________ or ______________ when intoxication is evident.

3. When substance abuse continues during the acute phase, the treatment team should ______________ patients’ presenting problems and ______________ plans to address them, including ______________ in dosage, ______________ drug testing, or other ______________ interventions.

4. [F]requent contact with knowledgeable and caring staff members … ______________ the elimination of opioid abuse.

5. Engaging the patient by scheduling extra individual or group ______________ sessions provides additional support and communicates staff concern for the patient.

SECTION 5: Co-Occurring Disorders
1. Persistent, independent co-occurring disorders … and substance-induced co-occurring disorders … should be identified during ______________ ______________ and the acute phase of treatment so that appropriate ______________ or ______________ can be arranged.

2. Patients should be monitored closely for symptoms that interfere with treatment because immediate intervention might prevent ______________ ______________.

SECTION 6: Medical and Dental Problems
1. Patients often present with longstanding, neglected medical problems. These problems might require ______________ or extensive ______________ and could incur substantial costs for people often lacking financial resources.

2. In addition, many patients in MAT have neglected their ______________ health.

3. Once opioid abuse is stopped, these patients often experience ______________ because the analgesic effects of the opioids have been removed. Such conditions must be ______________, assessed, and treated, either within an OTP or via referral.

SECTION 7: Legal Problems
1. Most correctional systems do not allow ______________.

2. [S]udden, ______________ opioid withdrawal caused by precipitous incarceration can endanger health, especially that of patients already experiencing comorbid medical illness, and can increase the risk of ______________ in individuals with co-occurring disorders.
3. Therefore, it is critical to address patients’ problems and any ongoing activity as soon as possible, preferably in the acute phase.

4. [P]rogram staff members should work with agencies, educating them about MAT and, with patients’ informed consent, reporting patient progress and incorporating continuing addiction treatment into the probation or parole plan.

5. OTPs should work with local and to provide as much and as possible.

SECTION 8: Basic Needs
1. [P]atients’ basic needs such as food, clothing, housing, and safety [should] be determined during the acute phase, if possible, ... and ... [should] be made to appropriate agencies to address these needs.

SECTION 9: Therapeutic Relationships
1. reinforcement of a patient’s treatment engagement and compliance, especially in the acute phase, is important to elicit a to therapy.

2. Patients consistently report that a strong relationship is one of the most critical factors influencing treatment and that therapists’, regard, and are major elements in relationship development.

3. Treatment providers should minimize during scheduled appointments to demonstrate that they patients’.

SECTION 10: Motivation and Patient Readiness
1. [P]atient motivation to engage in treatment is a of and should be reassessed continually.

2. Counselors should and patients’ negative treatment experiences.
Handout 6-2: Instant Specialist—Rehabilitative Phase

Use pages 108–113 of TIP 43 to fill in the blanks.

SECTION 1: Introduction
1. The primary goal of the rehabilitative phase of treatment is to ____________ patients to ____________ with their major ____________ problems ... so that they can pursue longer term goals such as ____________, ____________, and ____________ reconciliation.

2. [D]uring the rehabilitation phase treatment, providers should ____________ to assist or provide referrals for patients who need help with legal, educational, employment, medical, and financial problems that threaten treatment ____________.

3. Throughout this phase, efforts should increase to promote participation in ____________ activities such as full- or part-time employment, ____________, vocational training, child rearing, ____________, and ____________ work.

4. As patients attend to other life domains, ____________ for frequent OTP attendance ... should not become ____________ to employment, education, or other constructive activities or medical regimens.

5. [P]rogram policies ... should be more ____________ in the rehabilitative phase....

6. [I]nformation about outside ____________ ____________ ... [should] be reviewed with patients ... and patients [should] be ____________ to participate in such groups, assuming that these groups support MAT.

7. ____________ triggers or cues such as ____________, certain ____________, specific ____________, family problems, ____________, or symptoms of co-occurring disorders might recur during the rehabilitative phase and trigger the use of illicit drugs or abuse of prescription drugs or alcohol.

8. Many factors that receive emphasis in the acute phase should continue to be addressed in the rehabilitative phase:
   - Continued ____________ and ____________ drug abuse and use of illicit drugs
   - Ongoing ____________ concerns
   - Acute and chronic ____________ management
   - ____________, formal ____________, and other income-related areas
   - Family ____________ and other social ____________
SECTION 2: Exhibit 7-2: Rehabilitative Phase of MAT
List the six treatment issues in Exhibit 7-2: Rehabilitative Phase of MAT. Select one of the treatment issues, and read the Strategies To Address Issue and Indications for Transition to Supportive-Care Phase.

1.
2.
3.
4.
5.
6.

SECTION 3: Continued Alcohol and Prescription Drug Abuse and Use of Illicit Drugs
1. The consensus panel recommends that _____________ of _____________ abuse, illicit-drug use, and inappropriate use of other _____________ be required to complete the rehabilitative phase.
2. Take-home _____________ should not be considered until these patients have demonstrated a period of abstinence.
3. Patients also should receive information on the risks of _____________, both for their own _____________ and for the _____________ of those around them.
4. The frequency of _____________ _____________ ... should depend on a patient’s _____________ in treatment.... [O]nce a patient is progressing well and has consistently _____________ drug tests, the frequency of random testing [can] be _____________.... The criteria for this should be part of the _____________ _____________.

SECTION 4: Ongoing Health Concerns
1. As patients advance in the rehabilitative phase,... OTP staff should help them navigate _____________ and _____________ systems, while educating practitioners about MAT.
2. _____________ primary health care is optimal and has been instituted successfully in many OTPs and can result in better outcomes for patients.
3. The consensus panel recommends a more _____________ approach to patient health in the rehabilitative phase. [H]ealth needs should be _____________ and _____________ immediately.
4. Education about topics with longer term benefits, such as _____________, exercise, personal _____________, sleep, and _____________ cessation, can be started. Eventually, patients should demonstrate adherence to medical _____________ for their _____________ conditions and address any _____________ conditions before they are considered for transition from the rehabilitative phase to subsequent treatment phases.

**SECTION 5: Acute and Chronic Pain Management**

1. Patients in OTPs are at high risk of _____________ for pain.
2. Because acute pain treatment usually involves opioid medications, programs should work with patients to recognize the risk of _____________ and provide supports to prevent it.

**SECTION 6: Employment, Formal Education, and Other Income-Related Issues**

1. [D]ifficult obstacles to a stable life for MAT patients include _____________ and inadequate funds to live comfortably and safely. Most such _____________ should be addressed during the rehabilitative phase.
2. Individuals who need access to high-quality _____________ services should be identified during the rehabilitative phase for educational, _____________, and _____________ programs....
3. Ideally, OTPs should provide onsite _____________ counseling and assistance or make referrals to local adult education programs....
4. Patients in MAT face unique _____________ challenges, especially as employers increasingly impose preemployment drug testing and patients must wrestle with whether to disclose their status. [V]ocational training provided in an OTP [should] include basic education about _____________ _____________, including the fact that methadone may be detected.
5. Patients with disabilities should be educated about the basics of the _____________ _____________ _____________ and any local _____________ legislation and enforcement.
6. By the end of the rehabilitative phase, patients should be _____________, actively seeking employment, or involved in a _____________ activity such as school, child rearing, or regular volunteer work. They should have a stable source of _____________ income, whether from employment, disability benefits, or other legitimate sources, ensuring that they can _____________ drug dealing or other criminal activities to obtain money.

**SECTION 7: Family Relationships and Other Social Supports**

1. Broken trust, _____________, anger, and _____________ with family members and acquaintances are _____________ that patients should face during the rehabilitative phase.
2. Counselors need to help patients improve their social ____________ and ____________ and begin to rebuild and heal severely damaged family relationships.

3. Transition from the rehabilitative phase should require that patients have a ____________ ____________ ____________ in place that is free of major conflicts and that they assume increased responsibility for their dependents.

SECTION 8: Legal Problems
1. The stress associated with patients’ legal problems can precipitate ____________ to illicit drug use or abuse of alcohol or prescription drugs.

2. [C]ounselors should probe patients’ ____________ circumstances, such as child custody obligations, and patients should be encouraged to take ____________ for their actions.

3. [C]ounselors should help patients overcome ____________, ____________, or ____________ stemming from their legal problems.

4. In addition, OTP staff should ensure that patients have access to adequate ____________ counsel, for instance, through a public defender.

5. All major legal problems should be in the process of ____________ before patients move beyond the rehabilitative phase.

SECTION 9: Co-Occurring Disorders
1. [B]efore patients move beyond the rehabilitative phase, co-occurring disorders should be ____________ or ____________.
Answer Key for Handout 6-1: Instant Specialist—Acute Phase

SECTION 1: Introduction
1. Patients admitted for detoxification may be treated for up to 180 days in an OTP.
2. Detoxification focuses primarily on stabilization with medication ..., tapering from this medication, and referral for continuing care, usually outside the OTP.
3. Patients admitted for detoxification should have access to maintenance treatment if their tapering from treatment medication is unsuccessful or they change their minds and wish to be admitted for comprehensive MAT.
4. If these patients meet Federal and State admission criteria, their medically supervised withdrawal from treatment medication should end....
5. The acute phase is the initial period, ranging from days to months, during which treatment focuses on eliminating use of illicit opioids and abuse of other psychoactive substances while lessening the intensity of the co-occurring disorders and medical, social, legal, family, and other problems associated with addiction.
6. The consensus panel believes that front-loading highly intensive services during the acute phase, especially for patients with serious co-occurring disorders or social or medical problems, engages patients in treatment and conveys that the OTP is concerned about all the issues connected to patients’ addiction.

SECTION 2: Goals for the Acute Phase
1. A major goal during the acute phase is to eliminate use of illicit opioids for at least 24 hours.
2. This process involves:
   - Initially prescribing a medication dosage that minimizes sedation and other undesirable side effects
   - Assessing the safety and adequacy of each dose after administration
   - Rapidly but safely increasing dosage to suppress withdrawal symptoms and cravings and discourage patients from self-medicating with illicit drugs or alcohol or by abusing prescription medications
   - Providing or referring patients for services to lessen the intensity of co-occurring disorders and medical, social, legal, family, and other problems associated with opioid addiction
   - Helping patients identify high-risk situations for drug and alcohol use and develop alternative strategies for coping with cravings or compulsions to abuse substances.
3. Indications that patient have reached the goals for the acute phase can include:
   - Elimination of symptoms of withdrawal, discomfort, or craving for opioids and stabilization
   - Expressed feelings of comfort and wellness throughout the day
   - Abstinence from illicit opioids and from abuse of opioids normally obtained by prescription, as evidenced by drug tests
Engagement with treatment staff in assessment of medical, mental health, and psychosocial issues

Satisfaction of basic needs for food, shelter, and safety.

SECTION 3: Exhibit 7-1: Acute Phase of MAT
List the six treatment issues in Exhibit 7-1: Acute Phase of MAT. Select one of the treatment issues, and read the Strategies To Address Issue and Indications for Transition to Rehabilitative Phase.

1. Alcohol and drug use
2. Medical concerns
3. Co-occurring disorders
4. Basic living concerns
5. Therapeutic relationship
6. Motivation and readiness for change

SECTION 4: Alcohol, Opioid, and Other Drug Abuse
1. During the acute phase, OTP staff members should pay attention both to patients’ continuing opioid abuse and to their use of other addictive and psychoactive substances.

2. Patients should receive information about how other drugs, nicotine, and alcohol interact with treatment medications and why medication must be reduced or withheld when intoxication is evident.

3. When substance abuse continues during the acute phase, the treatment team should review patients’ presenting problems and revise plans to address them, including changes in dosage, increased drug testing, or other intensified interventions.

4. Frequent contact with knowledgeable and caring staff members facilitates the elimination of opioid abuse.

5. Engaging the patient by scheduling extra individual or group counseling sessions provides additional support and communicates staff concern for the patient.

SECTION 5: Co-Occurring Disorders
1. Persistent, independent co-occurring disorders ... and substance-induced co-occurring disorders ... should be identified during initial assessment and the acute phase of treatment so that appropriate treatment or referral can be arranged.

2. Patients should be monitored closely for symptoms that interfere with treatment because immediate intervention might prevent patient dropout.

SECTION 6: Medical and Dental Problems
1. Patients often present with longstanding, neglected medical problems. These problems might require hospitalization or extensive treatment and could incur substantial costs for people often lacking financial resources.

2. In addition, many patients in MAT have neglected their dental health.

3. Once opioid abuse is stopped, these patients often experience pain because the analgesic effects of the opioids have been removed. Such conditions must be recognized, assessed, and treated, either within an OTP or via referral.

SECTION 7: Legal Problems
1. Most correctional systems do not allow MAT.
2. [S]udden, severe opioid withdrawal caused by precipitous incarceration can endanger health, especially that of patients already experiencing comorbid medical illness, and can increase the risk of suicide in individuals with co-occurring disorders.

3. Therefore, it is critical to address patients' legal problems and any ongoing criminal activity as soon as possible, preferably in the acute phase.

4. [P]rogram staff members should work cooperatively with criminal justice agencies, educating them about MAT and, with patients' informed consent, reporting patient progress and incorporating continuing addiction treatment into the probation or parole plan.

5. OTPs should work with local prisons and jails to provide as much support and consultation as possible.

SECTION 8: Basic Needs

1. [P]atients' basic needs such as food, clothing, housing, and safety [should] be determined during the acute phase, if possible, ... and ... referrals [should] be made to appropriate agencies to address these needs.

SECTION 9: Therapeutic Relationships

1. Positive reinforcement of a patient’s treatment engagement and compliance, especially in the acute phase, is important to elicit a commitment to therapy.

2. Patients consistently report that a strong therapeutic relationship is one of the most critical factors influencing treatment outcomes and that therapists’ warmth, positive regard, and acceptance are major elements in relationship development.

3. Treatment providers should minimize waiting times during scheduled appointments to demonstrate that they value patients’ time.

SECTION 10: Motivation and Patient Readiness

1. [P]atient motivation to engage in treatment is a predictor of retention and should be reassessed continually.

2. Counselors should explore and address patients’ negative treatment experiences.
Answer Key for Handout 6-2: Instant Specialist—Rehabilitative Phase

SECTION 1: Introduction

1. The primary goal of the rehabilitative phase of treatment is to empower patients to cope with their major life problems ... so that they can pursue longer term goals such as education, employment, and family reconciliation.

2. During the rehabilitation phase treatment, providers should continue to assist or provide referrals for patients who need help with legal, educational, employment, medical, and financial problems that threaten treatment retention.

3. Throughout this phase, efforts should increase to promote participation in constructive activities such as full- or part-time employment, education, vocational training, child rearing, homemaking, and volunteer work.

4. As patients attend to other life domains, requirements for frequent OTP attendance ... should not become barriers to employment, education, or other constructive activities or medical regimens.

5. Program policies ... should be more flexible in the rehabilitative phase....

6. Information about outside support groups ... [should] be reviewed with patients ... and ... patients [should] be urged to participate in such groups, assuming that these groups support MAT.

7. Relapse triggers or cues such as boredom, certain locations, specific individuals, family problems, pain, or symptoms of co-occurring disorders might recur during the rehabilitative phase and trigger the use of illicit drugs or abuse of prescription drugs or alcohol.

8. Many factors that receive emphasis in the acute phase should continue to be addressed in the rehabilitative phase:
   - Continued alcohol and prescription drug abuse and use of illicit drugs
   - Ongoing health concerns
   - Acute and chronic pain management
   - Employment, formal education, and other income-related areas
   - Family relationships and other social supports
   - Legal problems
   - Co-occurring disorders
   - Financial problems.

SECTION 2: Exhibit 7-2: Rehabilitative Phase of MAT

List the six treatment issues in Exhibit 7-2: Rehabilitative Phase of MAT. Select one of the treatment issues, and read the Strategies To Address Issue and Indications for Transition to Supportive-Care Phase.

1. Alcohol and drug use
2. Medical concerns
3. Co-occurring disorders
4. Vocational and educational needs
5. Family issues
6. Legal problems
SECTION 3: Continued Alcohol and Prescription Drug Abuse and Use of Illicit Drugs

1. The consensus panel recommends that elimination of alcohol, illicit-drug use, and inappropriate use of other substances should be required to complete the rehabilitative phase.

2. Take-home medication should not be considered until these patients have demonstrated a period of abstinence.

3. Patients also should receive information on the risks of smoking, both for their own recovery and for the health of those around them.

4. The frequency of drug testing should depend on a patient’s progress in treatment. Once a patient is progressing well and has consistently negative drug tests, the frequency of random testing can be decreased. The criteria for this should be part of the treatment plan.

SECTION 4: Ongoing Health Concerns

1. As patients advance in the rehabilitative phase, OTP staff should help them navigate medical- and dental-care systems, while educating practitioners about MAT.

2. Onsite primary health care is optimal and has been instituted successfully in many OTPs and can result in better outcomes for patients.

3. The consensus panel recommends a more integrated approach to patient health in the rehabilitative phase. Health needs should be diagnosed and treated immediately.

4. Education about topics with longer term benefits, such as nutrition, exercise, personal hygiene, sleep, and smoking cessation, can be started. Eventually, patients should demonstrate adherence to medical regimens for their chronic conditions and address any acute conditions before they are considered for transition from the rehabilitative phase to subsequent treatment phases.

SECTION 5: Acute and Chronic Pain Management

1. Patients in OTPs are at high risk of undertreatment for pain.

2. Because acute pain treatment usually involves opioid medications, programs should work with patients to recognize the risk of relapse and provide supports to prevent it.

SECTION 6: Employment, Formal Education, and Other Income-Related Issues

1. Difficult obstacles to a stable life for MAT patients include unemployment and inadequate funds to live comfortably and safely. Most such limitations should be addressed during the rehabilitative phase.

2. Individuals who need access to high-quality social services should be identified during the rehabilitative phase for educational, literacy, and vocational programs.

3. Ideally, OTPs should provide onsite GED counseling and assistance or make referrals to local adult education programs.

4. Patients in MAT face unique employment challenges, especially as employers increasingly impose preemployment drug testing and patients must wrestle with whether to disclose their status. Vocational training provided in an OTP should include basic education about drug testing, including the fact that methadone may be detected.

5. Patients with disabilities should be educated about the basics of the Americans with Disabilities Act and any local antidiscrimination legislation and enforcement.
6. By the end of the rehabilitative phase, patients should be employed, actively seeking employment, or involved in a productive activity such as school, child rearing, or regular volunteer work. They should have a stable source of legal income, whether from employment, disability benefits, or other legitimate sources, ensuring that they can avoid drug dealing or other criminal activities to obtain money.

SECTION 7: Family Relationships and Other Social Supports
1. Broken trust, disappointment, anger, and conflict with family members and acquaintances are realities that patients should face during the rehabilitative phase.
2. Counselors need to help patients improve their social supports and relationships and begin to rebuild and heal severely damaged family relationships.
3. Transition from the rehabilitative phase should require that patients have a social support system in place that is free of major conflicts and that they assume increased responsibility for their dependents.

SECTION 8: Legal Problems
1. The stress associated with patients’ legal problems can precipitate relapse to illicit drug use or abuse of alcohol or prescription drugs.
2. Counselors should probe patients’ legal circumstances, such as child custody obligations, and patients should be encouraged to take responsibility for their actions.
3. Counselors should help patients overcome guilt, fear, or uncertainty stemming from their legal problems.
4. In addition, OTP staff should ensure that patients have access to adequate legal counsel, for instance, through a public defender.
5. All major legal problems should be in the process of resolution before patients move beyond the rehabilitative phase.

SECTION 9: Co-Occurring Disorders
1. Before patients move beyond the rehabilitative phase, co-occurring disorders should be alleviated or stabilized.
Module 7: Approaches to Comprehensive Care and Patient Retention

Module Overview

The information in Module 7 covers Chapter 8 of Treatment Improvement Protocol (TIP) 43: Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs. This module takes 45 minutes to complete and is divided into three sections:

- Welcome and Objectives
- Activity: Non-Trivial Pursuit
- Module Closing

In addition to this training manual, you will need the slides for the Non-Trivial Pursuit Game and the Answer Key for Non-Trivial Pursuit Game.

Welcome and Objectives

Summary

This training begins with an overview of the learning objectives for Module 7.

PowerPoint Slides and Discussion

Slide 1, Module 7: Approaches to Comprehensive Care and Patient Retention

- Module 7 covers Chapter 8 of TIP 43. During today’s training, you will:
  - Describe the recommended core services for opioid treatment programs (OTPs)
  - Explain strategies for retaining patients in medication-assisted treatment for opioid addiction (MAT)
  - Identify approaches for counseling and case management
  - List the benefits of family involvement in MAT
  - Survey integrated approaches to MAT
  - Explain strategies for relapse prevention
  - Investigate issues regarding referrals to social services, involuntary discharge, and patient advocacy.
Slide 2, Overview

- With comprehensive care:
  - A core group of basic- and extended-care services is essential to the effectiveness of MAT.
  - Psychosocial interventions contribute to treatment retention and compliance by addressing social and behavioral problems and co-occurring disorders.
  - A well-planned and well-supported comprehensive treatment program increases patient retention in MAT and the likelihood of positive treatment outcomes.

Activity: Non-Trivial Pursuit

Summary

In groups, participants play a game based loosely on the board game Trivial Pursuit® to reinforce the module’s learning objectives.

Materials Needed

- TIP 43
- PowerPoint Slides 3–35

Activity

- Explain the activity.
  - We’re going to play a game called Non-Trivial Pursuit. I will display a question. Team 1 will have 1 minute to locate the answer in TIP 43 or guess the answer. If Team 1 cannot answer the question, Team 2 will have 1 minute to answer and so on. All teams should try to find the answer in Chapter 8.

- Initiate the activity.
  - Form three teams. Advance through Slides 3–35.

- Debrief the activity.
  - Ask whether there are any questions.

Module Closing

Summary

- Ask participants whether they have any questions.
- Thank participants for attending.
- Remind participants of the next training session.
  - Our next session is scheduled for <date> at <time>. We will talk about Chapter 9, Drug Testing as a Tool.
Answer Key for Non-Trivial Pursuit Game

Slide 3, Question 1
Psychosocial interventions contribute to treatment retention and compliance by addressing the social and behavioral problems and co-occurring disorders.

Slide 4, Question 2
A well-planned and well-supported comprehensive treatment plan increases ... the likelihood of positive treatment outcomes.

Slide 5, Question 3
Which of the following are core services?
- Psychological assessment
- Initial and yearly medical assessment
- Marriage counseling
- Medication dispensing
- Drug tests
- Family psychological assessment

Slide 6, Question 4
Which of the following are core services?
- Identification of co-occurring disorders and neuropsychological problems
- Counseling related to substance abuse
- Personality testing
- Evaluation and intervention related to family issues
- Referral for additional required services
- HIV and hepatitis C virus testing and related services

Slide 7, Question 5
Which of the following are strategies for extended care?
- Psychosocial support
- Biomedical interventions
- Meditation
- Peer-support approaches
- Exercise and proper diet

Slide 8, Question 6
What other substance abuse addictions do some patients have when they enter opioid addiction treatment?
- Cocaine
- Alcohol
- Marijuana
- Nicotine
- Sedatives
- Stimulants
Slide 9, Question 7
People addicted to opioids have greater risk of what medical conditions?
Sexually transmitted diseases and pneumonia

Slide 10, Question 8
What three outcomes do people who stay in treatment a year or longer have?
- Abuse substances less
- Engage in more productive activities
- Avoid criminal involvement

Slide 11, Question 9
Name two key factors that affect patient retention.
- Treatment experience
- Patient’s motivation
- Patients who have received methadone previously

Slide 12, Question 10
Which of the following are strategies for improving patient retention?
- Individualize medication dosages
- Make people go to a 12-Step program
- Clarify goals and treatment plans
- Simplify the entry process
- Inform employers of problems
- Attend to patients’ financial needs

Slide 13, Question 11
Which of the following are strategies for improving patient retention?
- Psychological assessment
- Reduce attendance burden
- Provide useful treatment services as early as possible
- Explain criminal problems to the neighbors
- Enhance staff–patient interactions
- Improve staff knowledge and attitudes about MAT

Slide 14, Question 12
Which of the following should MAT counseling focus on?
- Guidance to eliminate substance abuse
- Monitoring problematic behaviors
- Making sure patients have the freedom they need
- Eliminating physical pain
- Helping patients comply with OTP rules
- Family medical history

Slide 15, Question 13
Which of the following should MAT counseling focus on?
- Behavioral style assessment
- Identifying problems and referring patients to extended services
- Identifying and removing barriers to full treatment participation
- Providing motivation for positive changes in lifestyle
- Learning to discipline children better

**Slide 16, Question 14**
List five components of substance abuse counseling.

- Assistance in locating and joining mutual-help groups or peer-support groups, such as Narcotics Anonymous or Methadone Anonymous
- Education about addiction and the effects of substances of abuse
- Education about relapse prevention strategies
- Identification of unexpected problems needing attention, such as sudden homelessness
- Assistance in complying with program rules and regulations
- Information about stress- and time-management techniques
- Assistance in developing a healthy lifestyle involving exercise, good nutrition, smoking cessation, and avoidance of risky sexual practices
- Assistance in joining socially constructive groups, such as community organizations and faith-based groups
- Continuing education on health issues (particularly HIV/AIDS and hepatitis)

**Slide 17, Question 15**
List five components of individual counseling.

- How patient feels
- Results of drug tests
- Emergencies
- Treatment plan
- Goals and timeframes and progress toward them
- Dosage and take-home medications
- Family concerns
- Liaison services
- Routine issues

**Slide 18, Question 16**
Name three types of group counseling.

- Psychoeducational groups
- Skill development groups
- Cognitive behavioral groups
- Interpersonal-process groups
- Support groups

**Slide 19, Question 17**
What is node-link mapping?
A cognitive-enhanced technique that uses flowcharts and other visual aids to diagram relationships between patients’ thoughts, actions, and feelings and their substance abuse and to increase patient participation

**Slide 20, Question 18**
What is the contingency management approach?
Contingency management reinforces desired behavior with immediate incentives.
Slide 21, Question 19
Define psychotherapy.
Form of verbal-expressive therapy that uses psychological principles to modify problematic thoughts, feelings, and behaviors

Slide 22, Question 20
Which of the following are psychotherapy strategies?
- Address recent success/failure regarding substance abuse
- Adopt more active role
- Strengthen patients’ resolve
- Take patient out for social events
- Teach warning signs
- Develop coping skills

Slide 23, Question 21
Which of the following are psychotherapy strategies?
- Support rearranging priorities
- Assist patients in managing emotional pain
- Explore family history
- Help patients enhance interpersonal functioning
- Use only after strong therapeutic alliance is developed

Slide 24, Question 22
If an OTP is not in the position to provide onsite HIV testing, how should it handle such testing?
Develop referral relationships so that it can send the patient for competent outside treatment

Slide 25, Question 23
List three strategies for psychoeducation in MAT.
- Introduce psychoeducation at the beginning of treatment
- Involve family with patient’s consent
- Adapt to culture and family
- Dispel myths regarding medications and their use
- Discuss implications of continuing substance abuse
- Discuss sexual behaviors that may affect relapse
- Discuss power of triggers with patients and families
- Incorporate special groups to discuss issues

Slide 26, Question 24
List six common education topics for patients.
- Physical and psychological effects of substance abuse
- Health education
- Effects of drug use on family and friends
- Mutual-help groups
- Effects and side effects of treatment medications
- Symptoms of co-occurring disorders
- Compulsive behaviors other than substance abuse
- Skills to attain and sustain abstinence
- Developing non-drug-related leisure activities
- Stress management and relaxation
- Communication skills and assertiveness training
- Time management
- Parenting skills
- Responsible sexual behavior
- Vocational planning and employment

**Slide 27, Question 25**
What percentage of women in MAT has experienced partner violence?
75 percent

**Slide 28, Question 26**
What are the most popular and widely used mutual-help models?
12-Step recovery programs

**Slide 29, Question 27**
What issue causes conflict between MAT and mutual-help programs?
Negative attitudes of some recovery programs toward opioid pharmacotherapy

**Slide 30, Question 28**
List five patient goals for building relapse prevention skills.
- Understand relapse as a process
- Develop new coping skills
- Make lifestyle changes
- Increase participation in healthy activities
- Understand and address social pressures
- Develop a supportive relapse prevention network
- Develop coping methods for emotional states
- Learn to cope with cognitive distortions
- Develop a plan to interrupt a slip or relapse
- Recognize relapse warning signs
- Combat memories of drug-associated euphoria
- Reinforce negative aspects of drug abuse
- Avoid people, places, or things that trigger drug abuse
- Develop rewarding alternatives to drug abuse

**Slide 31, Question 29**
List three warning signs of relapse.
- Illusion of being cured
- Patient’s belief that he or she can control abuse
- Idealized memories of drug-induced euphoria
- Overreactions to cravings
- Denial of vulnerability
- Entry into high-risk situations

**Slide 32, Question 30**
What percentage of MAT patients is unemployed?
50–80 percent
Slide 33, Question 31
What are the dangers in involuntary discharge?
Discharged patients have worse outcomes, and the death rate is higher among these patients.

Slide 34, Question 32
List three reasons for administrative (involuntary) discharge.
- Continued drug use
- Nonpayment
- Incarceration

Slide 35, Question 33
List three advocacy groups for MAT patients.
- National Alliance of Methadone Advocates
- International Center for Advancement of Addiction Treatment
- Advocates for Recovery through Medicine

Non-Trivial Pursuit: Question 1
Psychosocial interventions contribute to treatment retention and compliance by addressing the _______ and _______ problems and _______

Non-Trivial Pursuit: Question 2
A well-planned and well-supported comprehensive treatment plan increases the likelihood of _______.

Non-Trivial Pursuit: Question 3
Which of the following are core services?
- Psychological assessment
- Initial and yearly medical assessment
- Marriage counseling
- Medication dispensing
- Drug tests
- Family psychological assessment

Non-Trivial Pursuit: Question 4
Which of the following are core services?
- Identification of co-occurring disorders and neuropsychological problems
- Counseling related to substance abuse
- Personality testing
- Evaluation and intervention related to family issues
- Referral for additional required services
- HIV and hepatitis C virus testing and related services

Non-Trivial Pursuit: Question 5
Which of the following are strategies for extended care?
- Psychosocial support
- Biomedical interventions
- Meditation
- Peer-support approaches
- Exercise and proper diet

Non-Trivial Pursuit: Question 6
What other substance abuse addictions do some patients have when they enter opioid addiction treatment?

Non-Trivial Pursuit: Question 7
People addicted to opioids have greater risk of what medical conditions?

Non-Trivial Pursuit: Question 8
What three outcomes do people who stay in treatment a year or longer have?

Non-Trivial Pursuit: Question 9
Name two key factors that affect patient retention.
Non-Trivial Pursuit: Question 25
What percentage of women in MAT has experienced partner violence?

Non-Trivial Pursuit: Question 26
What are the most popular and widely used mutual-help models?

Non-Trivial Pursuit: Question 27
What issue causes conflict between MAT and mutual-help programs?

Non-Trivial Pursuit: Question 28
List five patient goals for building relapse prevention skills.

Non-Trivial Pursuit: Question 29
List three warning signs of relapse.

Non-Trivial Pursuit: Question 30
What percentage of MAT patients is unemployed?

Non-Trivial Pursuit: Question 31
What are the dangers in involuntary discharge?

Non-Trivial Pursuit: Question 32
List three reasons for administrative (involuntary) discharge.

Non-Trivial Pursuit: Question 33
List three advocacy groups for MAT patients.
Module 8: Drug Testing as a Tool

Module Overview
The information in Module 8 covers Chapter 9 of Treatment Improvement Protocol (TIP) 43: Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs. This module takes 65 minutes to complete and is divided into seven sections:

- Welcome and Objectives
- Discussion of Drug Testing in OTPs
- Activity: Drug Testing
- Discussion of Drug-Testing Procedures
- Activity: Other Considerations
- Discussion of Drug-Testing Results
- Module Closing

This module requires no additional material.

Welcome and Objectives

Summary
The training begins with an overview of the learning objectives for Module 8.

PowerPoint Slides and Discussion

Slide 1, Module 8: Drug Testing in OTPs
- Module 8 covers Chapter 9 of TIP 43. During today’s training, you will:
  - Explain the purpose of drug testing in opioid treatment programs (OTPs)
  - List benefits and limitations of standard types of drug tests
  - Describe common drug-testing components and methodology
  - Explore additional considerations in drug-testing procedures
  - Examine issues regarding interpretation and use of drug test results
  - Investigate the reliability, validity, and accuracy of drug test results.
Discussion of Drug Testing in OTPs

Summary
Participants learn about the purpose, benefits, and limitations of drug testing.

PowerPoint Slides and Discussion

Slide 2, Purpose of Drug Testing in OTPs
- Since the inception of medication-assisted treatment for opioid addiction (MAT) in OTPs, drug testing has provided both an objective measure of treatment efficacy and a tool to monitor patient progress.
  - Analysis of test results provides guidance for OTP accreditation and information for program planning and performance improvement.
  - Increasing emphasis on treatment outcomes as evidence of program effectiveness has added significance to drug tests in OTPs.
  - Drug test results help policymakers and OTP administrators detect and monitor emerging trends in substance abuse that may signal a need to redirect resources.

Slide 3, Testing for Treatment Compliance
- At a minimum, most specimens from patients maintained on methadone should be tested for methadone and metabolites.
  - No precise test measures buprenorphine in a patient specimen, although it can be detected in urine, blood, or hair by gas chromatography/mass spectrometry (GC/MS). Patients receiving buprenorphine should be tested to detect substances of abuse.

Slide 4, Testing for Substances of Abuse
- At a minimum, OTPs should test for opioids, cocaine, and benzodiazepines and consider testing for other drugs (e.g., methamphetamine), depending on local substance use patterns.
  - Refer to Exhibit 9-1 on page 145. Explain the exhibit.
    - Exhibit 9-1 summarizes necessary minimum (or cutoff) concentrations for detection of some illicit and prescription drugs in urine, as well as their reliable detection times for both initial patient testing and confirmation of positive results.
    - Look at the last column in the exhibit, Urine Detection Time column. What do you notice about the number of days that the drug can be detected in urine?
      - There are no right or wrong answers to this question. The goal is to have participants notice anything that stands out to them.
Limitations of Drug Tests
- Drug tests are not the only means for assessing compliance.
- Over-the-counter medications or certain foods give false drug-testing results.

Types of Drug Tests
- Urine
- Oral-Fluid
- Blood
- Sweat
- Hair

Slide 5, Limitations of Drug Tests
- Drug test results should not be the only means to detect substance abuse or monitor treatment compliance.
- Staff members should understand that certain prescribed and over-the-counter medications and foods might generate false positive and false negative results for different substances.

Slide 6, Types of Drug Tests
- TIP 43 addresses five types of drug tests:
  - Urine drug testing remains the most common method in OTPs.
  - Oral-Fluid. The Substance Abuse and Mental Health Services Administration (SAMHSA) has notified OTPs that they may use oral-fluid testing to satisfy the drug-testing requirements in 42 Code of Federal Regulations, if a program’s medical director deems this method adequate.
  - Blood.
  - Sweat.
  - Hair.

Activity: Drug Testing
Summary
Participants explore different types of drug tests.

Materials Needed
- TIP 43

Activity
- Explain the activity.
  - You will work in small groups.
  - Each person will read a section of TIP 43 about drug testing.
  - Take notes and share what you learned with your group.
- Initiate the activity.
  - Form small groups.
  - Assign one person in each group one of the following topics:
    - Urine Drug Testing (pages 146–147)
    - Oral-Fluid Drug Testing (page 147) and Hair Drug Testing (page 148)
    - Blood Drug Testing (page 147) and Sweat Drug Testing (pages 147–148)
After 5 minutes, instruct participants to spend 1 minute per topic sharing what they learned.

• Debrief the activity.
  
  • Ask participants whether they found any information that was particularly interesting.
  
  • Ask for questions and discuss as needed.
  
  • Use the information below when discussing the different types of testing and debriefing the activity.

  • Urine Drug Testing: Despite its limitations, urine drug testing is dominant in OTPs because obtaining specimens is relatively easy and testing is affordable. The technique is well studied, has been in use for a long time, and has well-established cutoff levels and laboratory guidelines. Urine drug testing is not feasible for patients with renal failure or other bladder control problems. Variations in metabolism and excretion could affect urine concentrations of methadone or its metabolites. Urine drug tests for patients on relatively low methadone dosages may be methadone negative even though subjects have ingested medication as prescribed. Patients with paruresis (shy bladder syndrome) have a social anxiety disorder that may leave them unable to urinate under observation. Some medications affect the metabolism of others and can affect drug test results.

  • Oral-Fluid Drug Testing: Oral-fluid drug testing is approved by SAMHSA when a qualified offsite laboratory performs the analysis. This test is sensitive and specific for methadone. Samples can be stored or sent to a laboratory for analysis. Oral-fluid testing ensures privacy and is less susceptible to tampering than urine testing. Concentrations of some substances are lower in saliva than in urine, and some remain detectable for a shorter time for saliva than urine.

  • Blood Drug Testing: Blood drug testing is used to monitor plasma methadone levels. Testing for methadone in serum is the most accurate method available to determine whether other medications influence methadone metabolism or a patient is a rapid metabolizer. Blood testing has limitations besides cost. Blood offers a smaller drug detection window than oral-fluid or urine, and most drugs are undetectable in blood after 12 hours. Trained personnel must obtain blood specimens.

  • Sweat Drug Testing: Sweat patches are used as an adjunct to other forms of testing. They provide a longer specimen collection period than either urine or blood. They may be less susceptible to tampering than urine. Playing-card-sized, waterproof adhesive patches are available. Each patch is imprinted with a unique number to track its chain
of custody. After a patch is worn for about 1 week, a laboratory can extract about 2 mL of sample to be tested. Compared with urine specimens, sweat yields higher proportions of parent drugs, such as cocaine, heroin, or marijuana. Drug use is assessed cumulatively, but uniform cutoff levels have not been established. External contamination is possible.

- Hair Drug Testing: Hair analysis provides a longer term look at drug use than other methods because hair retains drugs for weeks or months. Drawbacks include expense, possible ethnic bias, and environmental contamination.

Discussion of Drug-Testing Procedures

Summary
Participants examine drug-testing procedures.

PowerPoint Slides and Discussion

Slide 7, Specimen Collection

- Specimen collection and testing should be performed in a therapeutic environment, and results should be used to guide patient care, modify treatment plans, and confirm clinical impressions.

- Procedures should be in writing. Patients should be informed during admission about how drug-testing specimens are collected and patients’ responsibility to provide specimens when asked.

- To ensure patient confidentiality, programs should store specimens and related documents and material so that only authorized personnel can access and read them.

- Universal safety precautions for handling urine specimens should be followed; staff members must wear gloves.

- Staff members should carefully determine the need for direct observation of urine collection. Temperature strips, adulterant checks, and other methods should be used to ensure test validity.

- Observed collection has many options, including random observation, observation to ensure treatment compliance before a schedule change, or observation because of suspected drug use.

Slide 8, Analytical Methods

- Practitioners and State and Federal regulators must understand the limits of the drug testing and testing methods used in OTPs.

- Thin-layer chromatography (TLC) and enzyme immunoassay (EIA) analyze test specimens. The enzyme multiplied immunoassay technique (EMIT) is the EIA method used most often in the United States because its costs are low, it allows for short analysis time, it can be automated for many samples, and it can be used on site.
- **Development of Written Procedures**
  - Procedures should be described in a clearly written document.
  - Procedures should be based on OTP's mission, service philosophy, and practices.

- **Frequency of Testing**
  - Frequency and randomness assist providers in making informed decisions.
  - Patients who continue to abuse substances should receive more frequent and random tests.
  - Eight tests per year are required for patients in long-term MAT.

  - Testing frequency is based on patient’s progress.
  - Requirements vary from State to State.

- **Imunoassays** use antibodies with specific surface sites to which drugs or metabolites bind. For urine drug testing, either of two immunoassay types—radioimmunoassay (RIA) or EIA—can be used.

  - RIA uses radioactive markers and requires an incubation period and centrifugation of the sample.

  - EIA uses an enzyme as its marker. It permits detection of extremely small quantities of substances but lacks specificity to determine which drug in a class is present. EIA cannot distinguish among morphine (the metabolite of heroin excreted in urine), codeine, and other opioids, including those from poppy seeds used in baked goods.

- **Chromatographic analyses** use flows of liquid or gas to separate molecules and isolate any drugs or drug metabolites in specimens. TLC, one of the oldest of these methods, can distinguish among drugs in a class, but it also can produce false negative reports because it requires relatively large amounts of drugs in specimens before these drugs can be detected.

**Slide 9, Development of Written Procedures**

- Procedures for drug testing in an OTP should be described clearly in a written document.

- Each OTP should develop policies and procedures for drug testing based on its mission, service philosophy, and practices.

**Slide 10, Frequency of Testing**

- Drug tests should be performed with sufficient frequency and randomness to assist in making informed decisions about take-home privileges and responses to treatment.

- For patients who continue to abuse drugs or test negative for treatment medication, OTPs should use more frequent, random tests. Increased testing provides greater protection to patients vulnerable to relapse.

- SAMHSA requires eight drug tests per year for patients in long-term MAT.

- The actual frequency of testing should be based on a patient’s progress in treatment, and more testing should be performed earlier in treatment than later.

- Some States require more frequent testing than that required by SAMHSA.

- Some States require specific drug-testing methodologies or decision matrices. OTPs must adhere to the more stringent of either Federal or State regulations.

- **TIP 43 addresses the following other considerations in drug-testing procedures:**
  - Frequency of testing
Activity: Other Considerations

Summary
Participants describe “other” considerations in drug-testing procedures.

Materials
- TIP 43

Activity
- Explain the activity.
  - You will work in small groups.
  - Each person in your group will read one section of TIP 43.
  - Take notes and share what you learned with your group.
- Initiate the activity.
  - Form small groups.
  - Assign one person in each group one of the following topics:
    - Laboratory Selection (pages 154–155)
    - Onsite Test Analysis (page 155)
    - Interpreting and Using Drug Test Results (155–156).
  - After 5 minutes, instruct participants to spend 1 minute per topic sharing what they learned.
- Debrief the activity.
  - Ask participants whether they found new information that was particularly interesting.
  - Ask for questions and discuss as needed.
  - Use the information below when discussing considerations in drug-testing procedures and debriefing the activity.
    - Laboratory Selection: The laboratory analyzing patient specimens must comply with Health Insurance Portability and Accountability Act regulations and the Clinical Laboratory Improvement Amendments. It should collaborate with an OTP about custody of specimens, confidentiality and reporting of results, turnaround times, and retesting. Programs should understand minimum cutoff levels for determining positive results.
• Onsite Test Analysis: Onsite (also known as near-patient or point-of-care) drug test analyses can provide rapid results. However, they may have limitations such as increased cost or reduced accuracy. Some State regulations disallow onsite test analysis.

• Interpreting and Using Drug Test Results: Test results should be documented in patient records with justifications for treatment decisions, particularly when take-home medications are continued despite test results that are consistently positive for substances of abuse. OTPs should confirm positive results. Results are not used to force patients out of treatment, and no treatment decisions are based on a single test result. Patients should be informed of positive results for substances of abuse or negative results for treatment medication and should have an opportunity to discuss these results with OTP staff. Drug test results should be used clinically—not punitively—for guidance, treatment planning, and dosage determination. OTPs should retest using more sensitive analytical methods when results indicate problems. Continued use of opioids (and other substances) should generate a review of a patient’s medication dosages.

Discussion of Drug-Testing Results

Summary
Participants review using drug-testing results.

PowerPoint Slides and Discussion

Slide 11, Responding to Unfavorable Test Results

- Results should be used to explore treatment interventions and treatment plans to eliminate substance use and improve compliance. Positive reports signal the need for a review of medication dosage and more counseling and education.

- Because of regulatory concern about medication diversion, reports that are negative for treatment medication should be evaluated carefully. Because dose, pH, and urine concentration can limit detection of treatment medications, staff members should consider these areas in their medical reviews.

- When patients deny substance use despite a positive laboratory result, a history of their prescribed or over-the-counter drug use should be obtained and discussed with a pathologist or chemist to determine whether these drugs may produce false positives or confound tests. A questionable test should be redone (if the specimen is available) and confirmed by another method.

- Specimens can be collected under direct observation, and a chain of custody can be maintained to assure patients that efforts are made to prevent errors and respond to their denials.
### Slide 12, Patient Falsification of Test Results

- Confirmations of positive drug test results generally are conducted in a laboratory rather than at the OTP.

- **Slide 12, Patient Falsification of Test Results**
  - False negatives can occur because of patient falsification of drug test results or laboratory error.
  - Patients tamper with or obscure the results of urine drug tests by substituting urine from another person, diluting urine specimens, or adding other substances (such as bleach or salt) to samples.
  - Strategies to minimize sample falsification should be balanced by sound treatment ethics and the overall goals of the program—recovery and rehabilitation.
  - When it is clear that interventions for substance abuse are ineffective, moving patients to a higher level of care, rather than discharging them, is warranted.
  - Some patients are in denial about their drug use or fear loss of take-home privileges.

### Slide 13, Strategies To Minimize Falsification of Test Results

- Common strategies to minimize falsification include:
  - **Turning off hot water in bathrooms to prevent patients from heating specimens brought from elsewhere** (This is not feasible in States where other regulations prohibit this step.)
  - **Using bathrooms within eyesight of staff to prevent use by more than one person at a time and feeling specimen containers for warmth** (Freshly voided specimens should be near body temperature [37°C].)
  - **Using temperature and adulterant strips or collection devices that include temperature strips**
  - **Using a temperature “gun” (infrared thermometer) to measure the temperature of urine specimens**
  - **Directly observing specimen collection.**

### Slide 14, Reliability, Validity, and Accuracy of Drug Test Results

- **Reliability, Validity, and Accuracy of Drug Test Results**
  - Urine drug testing is reliable and valid. Studies generally report that the accuracy level for urine analysis by EIA techniques is at least 70 percent of that for RIA or GC/MS.
  - On the basis of cost, the consensus panel believes that EIA and TLC are adequate analytical methods in OTP drug testing.
  - Numerous medications and substances can produce false positive results in urine drug tests.
Responses to Test Results
- Results should be discussed using a therapeutic, constructive approach.
- If patient is receiving medication from a physician outside the OTP, treatment should be coordinated.
- If tests indicate continued drug use, the counselor and patient should explore strategies to eliminate future use.

Slide 15, Responses to Test Results
- Drug test results should be discussed with patients using a therapeutic, constructive approach.
- If a patient receives medication from a physician outside the OTP, staff should request informed consent to contact the physician, ask the patient to bring in prescription bottles, and record these prescriptions in the patient records.
- If a positive drug test indicates continuing drug use or a relapse after a period of abstinence, the counselor and patient should explore strategies to eliminate future use.

Medication Diversion
- Concerns remain about diversion of medication through theft, robbery, or patients or staff selling.
- OTPs should closely monitor take-home medications.
- OTPs should develop and implement a diversion control plan.

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- OTPs should closely monitor take-home medications.
- OTPs should develop and implement a diversion control plan.

Slide 16, Medication Diversion
- Since the late 1960s, concerns have existed about the diversion of methadone from legitimate treatment use through theft, robbery, or patients or staff selling or giving away medication.
- Accrediting bodies pay attention to test results and whether an OTP follows up with patients who receive take-home medications.
- OTPs should develop and implement a diversion control plan in their quality assurance program and integrate the plan into patient and staff orientations. The plan must contain measures to reduce diversion and assign responsibility to program staff.

Slide 17, Take-Home Medication
- Although drug test reports are a key factor in take-home medication decisions, OTPs should consider and document other considerations, such as employment and medical problems.
- Current Federal regulations establish eight criteria that must be met when granting take-home privileges (see page 81 in TIP 43).
- If patients receiving take-home medications have positive drug test results, OTPs should consider reviewing and increasing medication dosage, revising the treatment plan, or increasing the level of care, in addition to cessation or reduction in take-home doses.

Module Closing
Summary
- Ask participants whether they have any questions.
- Thank participants for attending.
- Remind participants of the next training session.
  - Our next session is scheduled for <date> at <time>. We will talk about Chapter 10, Associated Medical Problems.
Module 9: Associated Medical Problems

Module Overview

The information in Module 9 covers Chapter 10 of Treatment Improvement Protocol (TIP) 43: Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs. This module takes 55 minutes to complete and is divided into eight sections:

- Welcome and Objectives
- Discussion of Medical Problems and Assessments
- Discussion of Acute Infections
- Activity: Name That Disease
- Discussion of Treating Patients With Disabilities
- Activity: Pain Management
- Review
- Module Closing

In addition to this training manual, you will need copies of Clues for the Name That Disease Activity and Handout 9-1 for participants.

Welcome and Objectives

Summary

The training begins with an overview of the learning objectives for Module 9.

PowerPoint Slides and Discussion

Slide 1, Module 9: Associated Medical Problems

- Module 9 covers Chapter 10 of TIP 43. During today’s training, you will:
  - Investigate considerations for assessing medical problems in patients who are receiving medication-assisted treatment for opioid addiction (MAT)
  - Study acute infections that commonly occur in MAT patients
  - Examine treatment concerns for disabilities, pain management, and other conditions in MAT patients
  - Identify infectious diseases frequently found in MAT patients.
Discussion of Medical Problems and Assessments

Summary
Participants examine medical problems common to MAT patients and basic considerations for assessing their medical problems.

PowerPoint Slides and Discussion
- What medical problems have you observed or do you think might occur in MAT patients?
- Write participants' ideas on newsprint.
- Leave newsprint posted until session is concluded.

Slide 2, Medical Assessment
- Patients in treatment may have associated medical problems.
- Some medical problems are more prevalent and often more severe in people addicted to opioids than in the general population.
- Some conditions can be life threatening.
- Many patients in MAT have chronic diseases.
- Management of chronic pain for patients is challenging because of the role opioids play in pain treatment.
- The general approach in opioid treatment programs (OTPs) for medical problems is to remain alert and knowledgeable, facilitate preventive measures, and provide ongoing medical care and emergency treatment to the extent possible.

Slide 3, Medical Assessment: Integrated Services
- Given that many OTPs lack resources to treat acute and chronic medical problems, applicants with these medical issues may sometimes be denied admission because an OTP cannot manage their other medical needs.
- Even when people with difficult medical problems are admitted to an OTP, unavailable or fragmented medical and psychiatric services may cause patients to leave MAT prematurely or relapse.
- The consensus panel believes that medical problems associated with opioid addiction should be treated either in the OTP or through liaisons with or referrals to outside specialists and programs.

Slide 4, Medical Assessment: Integrated Services
- Services for the common medical problems should be provided at the OTP, with expansion to other services as resources permit.
- Each OTP should clearly define the medical services it offers on site versus by referral. Safety, practicality, and efficacy are considerations in these decisions.
The panel recommends that OTPs establish sound links with medical providers and programs skilled in treating problems that go beyond the direct services of the OTPs.

**Slide 5, Medical Assessment: Referral Services**

- Patients must understand an OTP’s policies regarding onsite services versus referrals. For example, an OTP might test for infectious diseases but refer for treatment of these diseases.
- Referral services should be part of a patient’s treatment plan.
- Primary care responsibility should be established on site or through a community provider because specialists are more likely to accept patients if their primary care responsibility has been assigned.
- OTPs should inform hospitals about their willingness to provide medical information when MAT patients are admitted to a hospital.
- Patients may need help understanding their testing and treatment experiences at other sites and may feel uncomfortable asking offsite providers questions. OTP staff should help patients understand offsite procedures and care and what they mean.

**Slide 6, Medical Assessment: Routine Testing and Followup**

- Because medical problems sometimes emerge or are resolved during MAT, OTPs should establish protocols for both assessment of acute problems and periodic reassessments of:
  - Hepatitis A, B, and C; syphilis and other sexually transmitted diseases; tuberculosis; HIV infection; hypertension; and diabetes
  - Liver and kidney functions.
- Physical examinations of patients in MAT should be performed at least annually.
- Tuberculin skin tests should be performed every 6 to 12 months, based on recommendations from local public health authorities.

**Discussion of Acute Infections**

**Summary**
Participants receive an overview of the acute infections that commonly occur in MAT patients.

**PowerPoint Slides and Discussion**

**Slide 7, Acute Infections**

- OTP medical staff, in particular those performing intake assessments, should recognize most potentially life-threatening infections related to opioid abuse.
- Some conditions can mimic opioid or intoxication withdrawal.
Patients may be unaware of the severity of their condition or may attribute their symptoms to withdrawal.

Because patients are focused on avoiding withdrawal, their descriptions of their histories may not be helpful.

**Slide 8, Acute Infections: Endocarditis**

- Endocarditis is an infection, usually bacterial, of the inner lining of the heart and its valves.
- A diagnosis of endocarditis should be considered in a patient with recent injection marks and fever or a new heart murmur.
- A history of treated endocarditis might produce persistent heart murmur.
- Patients who have survived endocarditis by having a valve replacement are at increased risk of recurrent endocarditis.
- Fever in patients with a heart murmur always merits careful investigation.

**Slide 9, Acute Infections: Soft-Tissue Infections**

- Soft-tissue infections, such as abscesses and cellulitis, involve inflammation of skin and subcutaneous tissue, including muscle.
- Contaminated injection sites often swell and become tender.
- A fluctuant abscess might need incision and drainage.
- Patients with abscesses or cellulitis might not have fever.

**Slide 10, Acute Infections: Necrotizing Fasciitis**

- Necrotizing fasciitis, sometimes called flesh-eating infection, is usually caused by introducing the bacterium Streptococcus pyogenes into subcutaneous tissue via a contaminated needle. It is uncommon, and cases from other bacteria have been reported.
- The infection spreads along tissue planes and can cause death from overwhelming sepsis in days, without evidence of inflammation.
- Some patients may lose skin patches, subcutaneous tissue, and even muscle, requiring grafting.
- Case fatality rates from 20 to more than 50 percent have been reported.

**Slide 11, Acute Infections: Necrotizing Fasciitis**

- This infection should be considered when pain at an injection site is more severe than expected from the redness or warmth at the site.
- Edema (fluid accumulation and swelling), fever, hypotension, and high white blood cell counts are additional clues.

- Infection of the inner lining of the heart and its valves.
- Necrotizing fasciitis, also called flesh tissue infections
- Some patients may lose large areas of skin, subcutaneous tissue, and muscle.
- Case fatality rates from 20 to more than 50 percent have been reported.
- Fever in patients with a heart murmur always merits investigation.

- Soft-tissue infections, such as abscesses and cellulitis, involve inflammation of skin and subcutaneous tissue, including muscle.
- Contaminated injection sites often swell and become tender.
- A fluctuant abscess might need incision and drainage.
- Patients with abscesses or cellulitis might not have fever.

- Necrotizing fasciitis, sometimes called flesh-eating infection, is usually caused by introducing the bacterium Streptococcus pyogenes into subcutaneous tissue via a contaminated needle. It is uncommon, and cases from other bacteria have been reported.
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- This infection should be considered when pain at an injection site is more severe than expected from the redness or warmth at the site.
- Edema (fluid accumulation and swelling), fever, hypotension, and high white blood cell counts are additional clues.
Acute Infections: Wound Botulism

- Caused by Clostridium botulinum, usually found in contaminated food.
- Causes loss of muscle tone, including respiratory muscle weakness, making it life threatening.
- Presenting symptoms and signs (difficulty swallowing or speaking, blurred vision, and impaired body movements) may mimic signs of intoxication.
- An epidemic among people who injected drugs occurred in the 1990s, particularly in California.

Slide 12, Acute Infections: Wound Botulism

- Botulism is caused by the neurotoxin Clostridium botulinum, a bacterium usually found in contaminated food.
- Botulism causes loss of muscle tone, including respiratory muscle weakness, making it life threatening.
- The presenting symptoms and signs—difficulty swallowing, difficulty speaking, blurred vision, and impaired body movements—may mimic signs of intoxication.
- An epidemic of botulism among people who injected drugs occurred in the 1990s in several areas, particularly California.

Activity: Name That Disease

Summary
Participants match facts to the correct disease.

Materials Needed
- TIP 43
- Cards with the Clues for the Name That Disease Activity
- Answer Key for the Name That Disease Activity

Setup
- Prepare one sheet of newsprint by dividing it into four equal quadrants. Label each quadrant with one of the following diseases:
  - Tuberculosis (TB)
  - Sexually Transmitted Diseases (STDs)
  - Hepatitis
  - HIV/AIDS
- Photocopy the Clues for the Name That Disease Activity onto cardstock. Cut the photocopies as indicated. Shuffle the clues.

Activity
- Explain the activity.
  - You will work in pairs. Each pair will have “clues” with information about various diseases. Use pages 164–173 of TIP 43 to identify the disease the clue describes. Place each clue in the appropriate quadrant of the newsprint.
- Initiate the activity.
  - Form pairs. Distribute an equal number of clues to each pair. Give participants 5 minutes to read pages 164–173 in TIP 43 and place their clues in the appropriate quadrant.
  - Use the Answer Key to check participants’ choices. If any are incorrect, ask the pair to research the answer again.
- Debrief the activity.
  - After each pair has completed placing its clues on the newsprint, review the clues with the entire group.

**Discussion of Treating Patients With Disabilities**

**Summary**

Participants learn about treating patients with disabilities.

**PowerPoint Slides and Discussion**

**Slide 13, Patients With Disabilities**

- OTPs must address the needs of patients with disabilities. TIP 29: Substance Use Disorder Treatment for People With Physical and Cognitive Disabilities discusses the requirements of the Americans with Disabilities Act of 1990.
- Many patients with AIDS have disabilities such as visual or hearing impairments, or they may lack the strength to visit an OTP.
- In one study, prevalence of illicit drug use was higher for persons with disabilities than for others.

**Slide 14, Patients With Disabilities: Home Dosing**

- Home dosing is an option for patients whose disabilities preclude daily OTP visits. However, some patients are ineligible. Those with AIDS or medical problems that affect neurological functioning may be unable to manage their medication unsupervised.
- Patients who are medically compromised and continue to abuse substances usually are ineligible for take-home dosing. These patients pose major challenges for OTPs, and treating them requires creative planning.

**Slide 15, Patients With Disabilities: Home Dosing**

- For patients with disabilities who do not meet take-home eligibility criteria, home dosing sometimes can be negotiated under the emergency dosing provisions of Federal or State regulations.
- Some OTPs identify a family member or support person to assist with dosing. With patient permission, this person can pick medications up from the OTP, ensure safe storage (e.g., locked boxes, limited key access), and administer them daily.
For patients who cannot identify such people, OTPs may negotiate medication support through the Visiting Nurses Association or comparable programs that can assist in this process.

**Slide 16, Patients With Disabilities: Home Dosing**

- Some OTPs deliver medication directly to patients’ homes, but such arrangements may be impractical when patients live far from their OTPs, and delivery often is expensive.
- Buprenorphine, with its longer duration of action, may be used for home dosing. Information is available in TIP 40: Clinical Guidelines for the Use of Buprenorphine in the Treatment of Opioid Addiction.

**Slide 17, Hospitalization of MAT Patients**

- During a medical crisis requiring hospitalization, it is important that the OTP physician communicate with the attending physician and other members of the patient’s hospital healthcare team.
- During hospitalization, it is important for the treating physician to understand that a patient in MAT might require larger doses of anesthesia and that pain relief might require the patient to receive a normal methadone dose plus additional medication. Failure to do this can lead to inadequate pain relief.
- The hospital team should be advised to institute controls to prevent a patient from obtaining and using illicit substances or abusing prescription drugs while in the hospital. These controls are especially important for patients in the acute phase of MAT.
- Some patients in MAT are hospitalized frequently. OTP staff members who dispense medications can be in a position to monitor patients to facilitate early treatment.

**Slide 18, General Medical Conditions and MAT**

- As patients become engaged in MAT, they are likely to take better care of themselves, modify their lifestyles, and participate in medical followup to manage chronic illnesses.
- Their medical care for other conditions should be identical to that given non-MAT patients. Care for common medical conditions can be provided in an OTP by nurse practitioners and other staff members working with primary care physicians or internists.
- Advice on diet, exercise, smoking prevention, and stress management should be part of MAT.
- Age- and risk-appropriate medical screening (e.g., mammograms, sigmoidoscopy, prostate checks, or exercise stress tests) should be discussed with patients during examinations.
Activity: Pain Management

Summary
Participants learn about pain management.

Materials Needed
- TIP 43
- Copies of the Handout 9-1 for each participant

Activity
- Explain the activity.
  - Patients in MAT have been shown to have high rates of both acute and chronic pain. We’re going to look at some of the issues surrounding pain in MAT patients.
  - Please read pages 174–177 in TIP 43, starting with the “Pain Management” section. You have 7 minutes to read the material and complete the handout.
- Initiate the activity.
  - Distribute Handout 9-1.
- Debrief the activity.
  - Ask for volunteers to read their answers.

Review

Summary
Participants review the medical conditions they listed at the beginning of the session.

Discussion
- What medical problems do you think might occur in MAT patients?
- Facilitate a discussion comparing participants’ earlier responses with their answers now, making additional notes if appropriate.

Module Closing

Summary
- Ask participants whether they have any questions.
- Thank participants for attending.
- Remind participants of the next training session.
  - Our next session is scheduled for <date> at <time>. We will talk about Chapter 11, Treatment of Multiple Substance Use.
### Clues for the Name That Disease Activity

<table>
<thead>
<tr>
<th>Patients should receive a purified protein derivative (PPD) skin test for this disease both on admission and annually.</th>
<th>Symptoms of this disease include persistent cough, fever, night sweats, weight loss, and fatigue.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The skin test detects the immune response when a patient has been infected with this disease. However, patients who have received a particular vaccination against the disease will have a positive skin test, and a chest x ray is indicated.</td>
<td>Those who have a history of exposure (e.g., when a family member has the disease) but remain uninfected (i.e., their skin tests are negative) are sometimes treated prophylactically.</td>
</tr>
<tr>
<td>A negative PPD means one of three things: there is no infection, the infection is in the incubation period, or the patient is unable to respond to the skin test for this disease.</td>
<td>Adequate room ventilation is important for preventing this disease. Special attention should be paid to waiting rooms, corridors, and offices.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Patients with an active case of this disease who are coughing in an unventilated room are most likely to spread the disease, and special precautions should be taken to prevent transmission pending medical evaluation.</td>
<td>Some patients may benefit from receiving their medication for this disease under direct observation along with their addiction treatment medication.</td>
</tr>
</tbody>
</table>
## Clues for the Name That Disease Activity

<table>
<thead>
<tr>
<th>Patients should receive a purified protein derivative (PPD) skin test for this disease both on admission and annually.</th>
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</tr>
<tr>
<td>This disease is a viral liver infection that affects people who abuse drugs at higher rates than rates found in the general population.</td>
<td>From 50 to 70 percent of people who begin injecting drugs contract this disease within 5 years, accounting for 17 percent of all new cases in 2000. This prevalence is particularly disturbing because vaccination can prevent infection.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>All staff members risk exposure to this infection, especially those who do physical examinations or handle urine or blood specimens, and they should receive vaccine.</td>
<td>When antibody test results are negative for this disease, it is important to educate patients about the disease’s high transmissibility. The main method of transmission in this group is injection drug use.</td>
</tr>
</tbody>
</table>
This disease can be acquired through sexual transmission. Sexual transmission of this disease occurs more frequently in individuals infected with HIV than in other individuals.

OTPs should provide patients who are positive for this disease with advice on minimizing their risk of liver damage and encourage them to be evaluated further. These patients should know that alcohol ingestion significantly worsens this disease.

The decision to treat patients in MAT for chronic infection of this disease is complex because it must include many factors, such as presence of co-occurring disorders, motivation to adhere to a 6- to 12-month weekly injection schedule, and medication side effects.

Transplantation is a last recourse for patients with this infection who have end-stage liver disease.
Since the early 1990s, the prevalence of this infection has increased substantially in most of the United States among people who inject drugs.

Many health agencies recommend that counseling and testing for this disease be routinely offered in drug or alcohol prevention and treatment programs, especially where most patients have injected drugs and therefore are at increased risk.

Individuals should be informed that they may decline testing for this infection without losing healthcare or other services. Counseling and testing also should be made available to patients’ acquaintances who might have been exposed to this disease.

Universal precautions to prevent the spread of this disease through contaminated bodily fluids should be followed in any OTP. Prevention should include a factual understanding of the highly charged, often panic-laden, beliefs surrounding this disease.
Education about this disease should be part of the intake process for all patients and should include a description of the modes of transmission (stressing sexual and needle-sharing transmission), an assessment of risk status, the guidelines for prevention, and the importance of testing in prevention and intervention.

Decisions about raising or lowering methadone dosages for patients in MAT who have tested positive for this disease should be based on observation during the first month of any treatment.

Patients with dementia or loss of balance related to this disease may become erratic and difficult to monitor in an OTP. For them, a referral for neuropsychological evaluation may be helpful to identify any cognitive deficits and effective ways to provide supportive care.

Addiction treatment participation may foster adherence to treatment and lead to reductions in the spread of this disease.
### Answer Key for the Name That Disease Activity

<table>
<thead>
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<th>Activity</th>
<th>Disease</th>
</tr>
</thead>
<tbody>
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<td>Patients should receive a purified protein derivative (PPD) skin test</td>
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</tr>
<tr>
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</tr>
<tr>
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<td>member has the disease) but</td>
</tr>
<tr>
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<td></td>
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<td></td>
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<td>addiction treatment medication.</td>
</tr>
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</tr>
<tr>
<td>The consensus panel recommends that all patients admitted to OTPs be</td>
<td>Patients with a confirmed</td>
</tr>
<tr>
<td>tested at intake for this disease.</td>
<td>positive serologic test for</td>
</tr>
<tr>
<td></td>
<td>this disease need to receive</td>
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<tr>
<td></td>
<td>treatment either on site or by</td>
</tr>
<tr>
<td></td>
<td>referral to a local clinic,</td>
</tr>
<tr>
<td></td>
<td>hospital, physician’s office,</td>
</tr>
<tr>
<td></td>
<td>or health department.</td>
</tr>
<tr>
<td>–STD</td>
<td>–STD</td>
</tr>
<tr>
<td><strong>TIP 43 Curriculum: Module 9 Activities Materials</strong></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td><strong>TIP 43 Curriculum: Module 9 Activities Materials</strong></td>
<td></td>
</tr>
<tr>
<td>Treatment of this disease is particularly important because the disease has been shown to facilitate sexual transmission of HIV.</td>
<td>One cross-sectional study found that 7.9 percent of adults between ages 18 and 35 had untreated infections of one or the other of these diseases.</td>
</tr>
<tr>
<td></td>
<td><strong>STD</strong></td>
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<td>Transplantation is a last recourse for patients with this infection who have end-stage liver disease.</td>
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<td><strong>Hepatitis</strong></td>
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<tr>
<td>Since the early 1990s, the prevalence of this infection has increased substantially in most of the United States among people who inject drugs.</td>
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<td><strong>HIV/AIDS</strong></td>
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<td>Individuals should be informed that they may decline testing for this infection without losing healthcare or other services. Counseling and testing also should be made available to patients’ acquaintances who might have been exposed to this disease.</td>
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</tr>
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<td><strong>HIV/AIDS</strong></td>
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</tr>
</tbody>
</table>
Handout 9-1: Pain Management

Use pages 174–177 of TIP 43 to fill in the blanks or select the correct answer.

1. A maintenance dose of opioid addiction treatment medication also relieves acute pain.
   - True  - False

2. Long-term opioid pharmacotherapy produces substantial tolerance for the analgesic effects of opioid treatment medications.
   - True  - False

   - True  - False

4. Choose the correct definition for “hyperalgesic.”
   a. Patients experience pain less severely than those not receiving methadone.
   b. Patients experience pain more severely than those not receiving methadone.
   c. Patients experience pain more frequently than those not receiving methadone.
   d. Patients experience pain less frequently than those not receiving methadone.

5. Relapse to ____________ opioid use has occurred when ____________ analgesics are given to people in recovery. Such patients generally should not be given the drugs they ____________ ____________, and patients with ____________ or ____________ opioid addiction should be monitored ____________ ____________. ...

6. List three conditions that might produce acute pain.
   a. ____________________________
   b. ____________________________
   c. ____________________________

7. Draw a line to match the type of pain with a possible cause.
   Type of Pain       Possible Cause
   i. Dying patient with lung cancer   a. Chronic nonmalignant pain
   ii. Aches in bones and joints     b. Chronic malignant pain
   iii. Arthritis or disc disease   c. Withdrawal-related pain

8. Patients occasionally require medical, surgical, and dental procedures that must be performed away from the OTP.... These patients often required ____________ doses of opioids at relatively ____________ intervals for ____________ ____________ because they have developed ____________ for opioids. One recommended approach to pain management for this group was to prescribe ____________ doses of an alternative ____________ ____________ agonist,... while ____________ the maintenance dose of methadone or LAAM. ____________ agonists ...

9-11
should be _______________ because they can cause _______________ _______________ in
patients receiving MAT.

9. TIP 43 lists principles (on pages 175−176) that provide the basis for managing acute pain in
hospitalized patients also receiving opioid addiction pharmacotherapy. Summarize two of them.
   a. ____________________________________________________________________________
   b. ____________________________________________________________________________

10. Several options should be tried before a patient receives opioids for chronic pain. List two options.
    a. ____________________________________________________________________________
    b. ____________________________________________________________________________

11. Many pain centers provide nonpharmacologic approaches to managing chronic, nonmalignant pain.
    Complete this chart of potential interventions.

<table>
<thead>
<tr>
<th>Physical Interventions</th>
<th>Psychological Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold and heat</td>
<td>Biofeedback</td>
</tr>
<tr>
<td>Counterstimulation (TENS)</td>
<td></td>
</tr>
<tr>
<td>Stretching and strengthening</td>
<td>Mood disorder treatment</td>
</tr>
<tr>
<td></td>
<td>Family/relationship therapy</td>
</tr>
</tbody>
</table>

12. Withdrawal of patients with chronic pain from maintenance opioids
    a. is standard treatment protocol.
    b. is often appropriate, with the proper screening.
    c. often results in failure to treat the addiction and the pain.
    d. is never appropriate.

13. When a patient in MAT uses opioid pain medications only as prescribed, ... long-term use typically
    ☐ should disqualify the patient from take-home dosing.
    ☑ should not disqualify the patient from take-home dosing.

14. Some patients with chronic pain have _______________ levels of pain or _______________ of acute
    pain as well. For them, prescribing _______________ _______________ (or “______________”
    doses) of opioid _______________ to manage _______________ pain may be indicated as part of a
    _______________ approach. If so, the amount of _______________ medication should be calculated
    prospectively based on a _______________ _______________.
Answer Key for Handout 9-1: Pain Management

1. A maintenance dose of opioid addiction treatment medication also relieves acute pain. ☑ False
2. Long-term opioid pharmacotherapy produces substantial tolerance for the analgesic effects of opioid treatment medications. ☑ True
3. A maintenance dose of opioid treatment medications affords excellent pain relief for a patient undergoing long-term opioid pharmacotherapy. ☑ False
4. Choose the correct definition for “hyperalgesic.”
   a. Patients experience pain less severely than those not receiving methadone.
   b. Patients experience pain more severely than those not receiving methadone.
   c. Patients experience pain more frequently than those not receiving methadone.
   d. Patients experience pain less frequently than those not receiving methadone.
5. [R]elapse to illicit opioid use has occurred when opioid analgesics are given to people in recovery. Such patients generally should not be given the drugs they abused previously, and patients with current or past opioid addiction should be monitored more closely. ...
6. List three conditions that might produce acute pain.
   a. Traumatic injury
   b. Dental procedures
   c. Labor and delivery
7. Draw a line to match the type of pain with a possible cause.

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<th>Type of Pain</th>
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<td>c. Withdrawal-related pain</td>
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8. Patients occasionally require medical, surgical, and dental procedures that must be performed away from the OTP. These patients often required large doses of opioids at relatively short intervals for pain control because they have developed tolerance for opioids. One recommended approach to pain management for this group was to prescribe adequate doses of an alternative mu opioid agonist, while maintaining the maintenance dose of methadone or LAAM. Partial agonists should be avoided because they can cause opioid withdrawal in patients receiving MAT.
9. TIP 43 lists principles (on pages 175–176) that provide the basis for managing acute pain in hospitalized patients also receiving opioid addiction pharmacotherapy. Summarize two of them.
   a. Methadone should be continued at the same daily dose, whether by oral or intramuscular routes, although it can be divided.
   b. Buprenorphine treatment may have to be suspended temporarily because it can attenuate or block the effects of opioids.
   c. Hospital physicians should be aware that methadone can be prescribed by any physician with a DEA registration.
   d. Pain management should be discussed with affected patients, and they should receive assurances that they will be afforded adequate relief.
   e. Patients’ levels of pain should be monitored and, if increases are evident, pain should be treated promptly.
f. Partial agonist or agonist antagonist drugs should be avoided in methadone-maintained patients because these agents can precipitate withdrawal symptoms.
g. Changeover to non-opioid agents should occur as soon as practical.
h. Take-home opioids should be monitored for appropriate use and amounts limited.
i. Hospital physicians should communicate clearly with OTPs about discharge dates and times and the amounts of final methadone doses given in the hospital.

10. Several options should be tried before a patient receives opioids for chronic pain. List two options.
   a. Nonsteroidal anti-inflammatory drugs
   b. COX-2 inhibitors
   c. Other pharmacotherapies
   d. Physical therapy or surgery

11. Many pain centers provide nonpharmacologic approaches to managing chronic, nonmalignant pain. Complete this chart of potential interventions.

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<td>Cognitive behavioral therapy</td>
</tr>
<tr>
<td>Stretching and strengthening</td>
<td>Mood disorder treatment</td>
</tr>
<tr>
<td>Orthotics, splints, and braces</td>
<td>Posttraumatic stress disorder treatment</td>
</tr>
<tr>
<td>Positioning aids (pillows, supports)</td>
<td>Family/relationship therapy</td>
</tr>
</tbody>
</table>

12. Withdrawal of patients with chronic pain from maintenance opioids
   a. is standard treatment protocol.
   b. is often appropriate, with the proper screening.
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   d. is never appropriate.

13. When a patient in MAT uses opioid pain medications only as prescribed, ... long-term use typically ☑ should not disqualify the patient from take-home dosing.

14. Some patients with chronic pain have variable levels of pain or bursts of acute pain as well. For them, prescribing additional doses (or “rescue” doses) of opioid analgesics to manage breakthrough pain may be indicated as part of a comprehensive approach. If so, the amount of rescue medication should be calculated prospectively based on a patient’s history.
Module 10: Treatment of Multiple Substance Use

Module Overview

The information in Module 10 covers Chapter 11 of Treatment Improvement Protocol (TIP) 43: Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs. This module takes 45 minutes to complete and is divided into four sections:

- Welcome and Objectives
- Discussion of Medical Problems and Assessments
- Activity: Substance Effects and Management
- Module Closing

In addition to this training manual, you will need copies of Handout 10-1 for participants and the Answer Key for Handout 10-1.

Welcome and Objectives

Summary

The training begins with an overview of the learning objectives for Module 10.

PowerPoint Slides and Discussion

Slide 1, Module 10: Treatment of Multiple Substance Use

- Module 10 covers Chapter 11 of TIP 43. During today’s training, you will:
  - Examine the prevalence of common drug combinations used to treat multiple substance use in medication-assisted treatment for opioid addiction (MAT)
  - Describe the effects of other substances abused by patients in MAT
  - Study the management of multiple substance abuse in MAT

Discussion of Medical Problems and Assessments

Summary

Participants learn about the prevalence of multiple substance abuse and common drug combinations used by patients addicted to opioids.
PowerPoint Slides and Discussion

Slide 2, Multiple Substance Abuse
- Concurrent opioid and other substance use is a serious problem in opioid treatment programs (OTPs).
- Patients in MAT commonly use alcohol, amphetamines, benzodiazepines and other prescription sedatives, cocaine, and marijuana.
- Patterns of use range from occasional low doses to regular high doses that meet dependence criteria.
- CNS depressants such as alcohol, benzodiazepines, and barbiturates are especially dangerous when used with opioids.

Slide 3, Multiple Substance Abuse
- Except for naltrexone, which is used for alcohol dependence, MAT treatment medications do not address non-opioid substance use directly. Patients stabilized on treatment medication are less likely to abuse substances than patients who are undermedicated.
- Because multiple substance use during MAT may complicate treatment greatly, staff members should be trained to recognize the pharmacologic and psychosocial effects of both opioid and non-opioid substances of abuse.
- OTPs should have treatment options available to address multiple substance use either directly or by referral.

Slide 4, Multiple Substance Abuse
- An essential purpose of preliminary assessment is to determine whether new patients are abusing substances other than opioids. If a problem is identified, OTPs should adjust treatment plans and the types of services provided accordingly.
- OTPs should not automatically exclude patients from MAT who test positive for illicit drugs other than opioids.
- Treatment providers should treat patients for their concurrent substance abuse aggressively or refer them appropriately.
- Providers should try to understand and address the underlying causes of concurrent substance use.

Slide 5, Prevalence of Multiple Substance Abuse
- The Treatment Episode Data Set (TEDS) summarizes data on substance abuse treatment programs in the United States. According to TEDS, 42.7 percent of patients entering substance abuse treatment in OTPs in 2000 reported using only heroin.
- Exhibit 11-1, page 180 in TIP 43, presents data on heroin and other substances used by people admitted to OTPs in 2000.
Module 10: Treatment of Multiple Substance Use

- Proportions of patients using additional drugs and types of drugs used varied by locality, depending primarily on drug availability.
- Rates of cigarette smoking in this population reportedly range from 85 to 92 percent.

Slide 6, Emergency Room Admissions and Fatalities
- The Drug Abuse Warning Network tracks data from hospital emergency departments and other institutions that report admissions for substance use and drug-related deaths.
  - In 2001, 93,064 nonfatal admissions mentioned heroin use.
  - Of these, 45 percent mentioned concurrent use of alcohol and/or other substances as well as heroin.
  - Nearly 90 percent of heroin-related deaths may involve concurrent use of other substances.

Slide 7, Common Reasons for Drug Combinations
- Exhibit 11-3, page 182 in TIP 43, summarizes reasons patients in MAT give for using particular combinations of substances.
  - A common reason is that patients have become dependent on the substance along with their opioid addiction.
  - Another common reason is the need to self-medicate withdrawal symptoms or uncomfortable affects (e.g., anxiety, depression, anger, loneliness) related to non–substance-induced mental disorders or difficult life situations.
  - Patients’ initial substance use experiences and continued attraction to drugs may indicate enhancement–avoidance reactions. The substances may be used to enhance an experience or to avoid or neutralize strong feelings.
  - Some patients develop unique drug regimens that vary throughout the day.

Activity: Substance Effects and Management
Summary
Participants examine the effects and management of substances.

Materials Needed
- TIP 43
- Handout 10-1 for each participant

Activity
- Explain the activity.
You will work alone and in pairs to complete Handout 10-1, which examines both the effects of additional substance use and the management of multiple substance use in MAT.

This handout consists of two large sections: “Substance Effects” and “Management.” Read the pages of TIP 43 indicated on the handout, and complete the section on the topic assigned to your group.

You have 10 minutes to complete your section of the handout.

After you finish your section, partner with someone who worked on the other section. Your partner will help you complete the section he or she worked on, and you will help your partner complete the section you worked on.

- Initiate the activity.
  - Form two groups. Assign one group the “Substance Effects” topic and the other group the “Management” topic.
  - Distribute the handout.

- Debrief the activity.
  - After all participants have finished filling out the handout, ask for volunteers to read their answers to selected questions. Choose questions at random.

Module Closing

Summary

- Ask participants whether they have any questions.
- Thank participants for attending.
- Remind participants of the next training session.

  - Our next session is scheduled for <date> at <time>. We will talk about Chapter 12, Treatment of Co-Occurring Disorders.
Handout 10-1: Substance Effects and Management

SECTION 1: Effects of Other Substance Use
Use pages 182–186 of TIP 43 to fill in the blanks.

Alcohol
1. The acute effects of alcohol are well known, including ____________, as well as ____________ of ____________, ____________, ____________ activity, ____________ time, and ____________ ____________.

2. Overdose deaths can occur when alcohol is used ____________ in high doses or in ____________ doses with opioid ____________ ____________ or ____________.

3. On average, patients in MAT who are ____________ ____________ have more medical and mental ____________, ____________ criminality, and poorer ____________ and ____________ ____________ than patients who are not ____________ ____________.

4. [Researchers] found an association between ____________ ____________ ____________ and ____________ ____________ for both heroin and alcohol.

Benzodiazepines
5. Benzodiazepines ... have ____________ and ____________ effects. [P]eople with other addiction disorders are ____________ ____________ to abuse benzodiazepines than are members of the general population.

6. [P]atients ... reported that ____________ ____________ the effects of [opioid treatment] medication. These effects likely result from an ____________ in which each drug potentiates the ____________ ____________ of the other—known on the street as “________________.”

7. High-dose benzodiazepines can cause ____________ ____________, including ____________ ____________ and ____________ risk of ____________ or ____________ ____________. These risks are potentiated when ____________ ____________ of ____________ are mixed with ____________ or other drugs that produce ____________ and ____________ ____________....

Nonbenzodiazepine Sedatives
8. Nonbenzodiazepine sedatives ... are ____________ ____________ than benzodiazepines to produce ____________ ____________ because people who abuse them develop
for their ____________ and ____________ effects but not for their
__________-__________ effects. Therefore, as these people ____________ their
dosages to ____________ ____________, they suddenly can overdose to ____________
__________.

9. People who are ____________ ____________ and ____________ nonbenzodiazepine
sedatives usually need ____________ ____________ before starting ____________.

**Cocaine and Other Stimulants**

10. The combination of ____________ and ____________ is popular because it can create a
__________-__________ high and ____________ ____________ feelings of
__________ than either substance alone.

11. Patients in MAT who abuse ____________ ____________ and ____________ are
significantly more ____________ to engage and retain in treatment than patients who do not abuse
__________ ____________ ____________.

12. The combination of alcohol and cocaine tends to have ____________ effects on ____________
__________ and may increase ____________ ____________ and _____________. The
mixture of ____________-, ____________-, and ____________ can be lethal and has been
identified as a ____________ cause of ____________ ____________.

13. [C]ocaine use appeared to ____________ the ____________ ____________ in blood. Borg
and colleagues found that ____________ doses of methadone seemed to ____________
ocaine use even though methadone ____________ ____________ ____________
__________ directly.

14. Traditionally, ____________ has been used to treat alcohol dependence. Petrakis and colleagues
evaluated disulfiram treatment for ____________ ____________, with and without alcohol
abuse, for patients in MAT. Patients who were treated with disulfiram significantly ____________
the ____________ and ____________ of their ____________ ____________...
10-3

Marijuana

15. In general, THC use is ______________ as prevalent as ______________ or ______________ use among patients in MAT.

16. The consensus panel recommends that OTPs ______________ patient THC use because, as with other ______________ ______________ ______________, THC ______________ the probability that patients will engage in ______________ that put them at ______________ ______________ of ______________ to ______________ ______________ and other health problems....

Nicotine

17. ______________ – ______________ illnesses are a ______________ cause of morbidity and ______________ among patients in MAT as they are in the ______________ ______________.

18. Frosch and colleagues found that patients in MAT who smoked ______________ were ______________ ______________ to abuse ______________ and ______________ than were patients who did not smoke heavily, suggesting an ______________ between ______________ and ______________ ______________.

19. The consensus panel believes OTPs should ______________ nicotine dependence ______________.

SECTION 2: Management of Multiple Substance Use in MAT

Use pages 186–188 of TIP 43 to fill in the blanks.

1. Some have argued for ______________ ______________ ______________ if patients continue ______________ ______________ ______________. In addition, some State regulations set ______________ ______________ for ______________, although the requirement is ______________ by research.

2. Patients who ______________ ______________ illicit drugs sometimes erode the ______________ of other patients, who may conclude that treatment ______________ and ______________ are ______________.

3. [S]ubstantial ______________ ______________ ______________ ______________ ______________ is a common and positive outcome of MAT....

4. Without ______________, a person [who abuses other substances] may ______________ ______________ ______________; ______________ ______________ with substance use;
experience severe ____________, ____________, and ____________ problems; and be at ____________ risk for ____________ ____________.

5. Given the importance of ____________ in MAT for ____________ outcomes, ... a policy of ____________ for other substance use is ____________ appropriate. Patient discharge should be done with ____________ ____________ ... and only when staff members have ____________ all ____________ ____________.

6. If ____________ must occur, staff members should ____________ ____________ ____________ ____________ to arrange transfer to ____________ ____________ where a ____________ ____________ is open and they can obtain more ____________.

**Other Procedures**

7. Because few ____________ ____________ respond to a single care model, OTPs need a ____________ of ____________ for patients who ____________ ____________ ____________.

8. ____________ patients who abuse multiple substances require a ____________ intensive level of care for a ____________ ____________.

9. OTPs should encourage ____________ from ____________ and ____________, but it is difficult to require it because these are ____________ ____________. However, OTPs may withhold ____________ if patients have consumed ____________ shortly before or are ____________ ____________ treatment....

10. [I]t is helpful ... to maintain the ____________ that opioid use is only the ____________ ____________ ____________ of patients’ problems and that the ____________ ____________ ____________ ... in patients’ lives and their ____________ ____________ lifestyle are other ____________ issues. Patients in MAT should ____________ that use of any ____________ undermines their ____________.

**Dosage Adjustments**

11. During the dosing period, OTPs should ensure that patients’ ____________ suppress ____________ and produce significant ____________ ____________ for ____________ ____________ ____________.

12. Patients may be ____________ other drugs to self-medicate ____________ ____________ caused by ____________ ____________ or other factors that affect ____________
In this case, ____________ ____________ ____________ or splitting doses may lessen other ____________ ____________.

**Increased Counseling and Other Psychosocial Services**

13. In a study of patients who abused ____________ ____________ and had co-occurring ____________ or ____________ histories, those who received ____________ ____________ cognitive behavioral treatments ____________ their cocaine use more than those in ____________ ____________ treatment.

**Increased Drug Testing**

14. One ____________ to ____________ other substance use during MAT is that ____________ ____________ ____________ primarily identify only those patients who use substances ____________....

15. Early ____________ and ____________ require occasional periods of more intensive, ____________ drug testing. OTPs, however, should have ____________ policies that require combining increased ____________ ____________ with more ____________ ____________.

**Inpatient Detoxification and Short-Term Stabilization**

16. Use of ____________ or other CNS depressants with ____________ may cause depression ____________ ____________, ____________ ____________ consciousness, ____________ - ____________ withdrawal reactions, and ____________ risk of ____________ ____________.

17. Signs and symptoms of withdrawal from ____________ depressants include ____________ body temperature, ____________, ____________ pulse, confusion, ____________, and intractable ____________.

18. When a patient in MAT abuses a ____________ ____________, the depressant should be withdrawn ____________ from the patient’s system, and the ____________ ____________ medication should be ____________....

19. The patient may require ____________ ____________ from CNS depressants and should ____________ MAT during the inpatient stay.
Answer Key for Handout 10-1: Substance Effects and Management

SECTION 1: Effects of Other Substance Use

**Alcohol**

1. The acute effects of alcohol are well known, including sedation, as well as impairment of judgment, coordination, psychomotor activity, reaction time, and night vision.

2. Overdose deaths can occur when alcohol is used alone in high doses or in lower doses with opioid treatment medication or sedatives.

3. On average, patients in MAT who are alcohol dependent have more medical and mental disorders, greater criminality, and poorer social and family functioning and peer relations than patients who are not alcohol dependent.

4. [Researchers] found an association between inadequate methadone doses and increased cravings for both heroin and alcohol.

**Benzodiazepines**

5. Benzodiazepines ... have antianxiety and sedative effects. [P]eople with other addiction disorders are more likely to abuse benzodiazepines than are members of the general population.

6. [P]atients ... reported that benzodiazepines increased the effects of [opioid treatment] medication. These effects likely result from an interaction in which each drug potentiates the sedative aspects of the other—known on the street as “boosting.”

7. High-dose benzodiazepines can cause serious problems, including severe intoxication and higher risk of injuries or fatal overdoses. These risks are potentiated when high doses of benzodiazepines are mixed with methadone or other drugs that produce sedation and respiratory depression....

**Nonbenzodiazepine Sedatives**

8. Nonbenzodiazepine sedatives ... are more likely than benzodiazepines to produce lethal overdose because people who abuse them develop tolerance for their sedative and euphoric effects but not for their respiratory-depressant effects. Therefore, as these people increase their dosages to get high, they suddenly can overdose to respiratory depression.

9. People who are opioid addicted and abuse nonbenzodiazepine sedatives usually need inpatient detoxification before starting MAT....

**Cocaine and Other Stimulants**

10. The combination of alcohol and cocaine is popular because it can create a more intense high and less intense feelings of inebriation than either substance alone.

11. Patients in MAT who abuse both alcohol and cocaine are significantly more difficult to engage and retain in treatment than patients who do not abuse all three substances.

12. The combination of alcohol and cocaine tends to have exponential effects on heart rate and may increase violent thoughts and tendencies. The mixture of opioids, cocaine, and alcohol can be lethal and has been identified as a leading cause of accidental overdose.
13. Cocaine use appeared to lower the methadone concentration in blood. Borg and colleagues found that adequate doses of methadone seemed to reduce cocaine use even though methadone does not target cocaine directly.

14. Traditionally, disulfiram has been used to treat alcohol dependence. Petrakis and colleagues evaluated disulfiram treatment for cocaine dependence, with and without alcohol abuse, for patients in MAT. Patients who were treated with disulfiram significantly decreased the quantity and frequency of their cocaine use.

**Marijuana**

15. In general, THC use is not as prevalent as cocaine or amphetamine use among patients in MAT.

16. The consensus panel recommends that OTPs address patient THC use because, as with other substances of abuse, THC increases the probability that patients will engage in activities that put them at higher risk of relapse to opioid use and other health problems.

**Nicotine**

17. Tobacco–smoking-related illnesses are a major cause of morbidity and mortality among patients in MAT as they are in the general population.

18. Frosch and colleagues found that patients in MAT who smoked heavily were more likely to abuse cocaine and opioids than were patients who did not smoke heavily, suggesting an association between nicotine and other substance use.

19. The consensus panel believes OTPs should address nicotine dependence routinely.

**SECTION 2: Management of Multiple Substance Use in MAT**

1. Some have argued for early treatment discharge if patients continue using multiple substances. In addition, some State regulations set specific timetables for compliance, although the requirement is unsupported by research.

2. Patients who continue using illicit drugs sometimes erode the morale of other patients, who may conclude that treatment compliance and abstinence are optional.

3. Substantial remission from all substance use is a common and positive outcome of MAT.

4. Without treatment, a person [who abuses other substances] may continue criminal activity; remain obsessed with substance use; experience severe financial, vocational, and personal problems; and be at increased risk for overdose death.

5. Given the importance of retention in MAT for positive outcomes, ... a policy of discharge for other substance use is seldom appropriate. Patient discharge should be done with great caution ... and only when staff members have exhausted all reasonable alternatives.

6. If discharge must occur, staff members should work with patients to arrange transfer to another program where a treatment slot is open and they can obtain more benefit.

**Other Procedures**

7. Because few chronic diseases respond to a single care model, OTPs need a variety of techniques for patients who abuse multiple substances.
8. Usually patients who abuse multiple substances require a more intensive level of care for a limited period.

9. OTPs should encourage abstinence from alcohol and nicotine, but it is difficult to require it because these are legal substances. However, OTPs may withhold medication if patients have consumed alcohol shortly before or are intoxicated during treatment....

10. [I]t is helpful ... to maintain the position that opioid use is only the most obvious part of patients’ problems and that the role of all intoxicants ... in patients’ lives and their overall substance-using lifestyle are other important issues. Patients in MAT should recognize that use of any intoxicant undermines their progress.

**Dosage Adjustments**

11. During the dosing period, OTPs should ensure that patients’ dosages suppress withdrawal and produce significant cross-tolerance for opioids of abuse.

12. Patients may be abusing other drugs to self-medicate withdrawal symptoms caused by inadequate dosages or other factors that affect medication metabolism. In this case, raising the dosage or splitting doses may lessen other substance use.

**Increased Counseling and Other Psychosocial Services**

13. In a study of patients who abused multiple substances and had co-occurring disorders or criminal histories, those who received more intensive cognitive behavioral treatments reduced their cocaine use more than those in less intensive treatment.

**Increased Drug Testing**

14. One obstacle to detecting other substance use during MAT is that infrequent drug tests primarily identify only those patients who use substances frequently....

15. Early detection and intervention require occasional periods of more intensive, random drug testing. OTPs, however, should have objective policies that require combining increased drug testing with more intensive counseling.

**Inpatient Detoxification and Short-Term Stabilization**

16. Use of alcohol or other CNS depressants with opioids may cause depression of respiration, loss of consciousness, life-threatening withdrawal reactions, and increased risk of lethal overdose.

17. Signs and symptoms of withdrawal from CNS depressants include elevated body temperature, hypertension, rapid pulse, confusion, hallucinations, and intractable seizures.

18. When a patient in MAT abuses a CNS depressant, the depressant should be withdrawn medically from the patient’s system, and the opioid treatment medication should be continued....

19. The patient may require inpatient detoxification from CNS depressants and should continue MAT during the inpatient stay.
Module 11: Treatment of Co-Occurring Disorders

Module Overview

The information in Module 11 covers Chapter 12 of Treatment Improvement Protocol (TIP) 43: Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs. This module takes 50 minutes to complete and is divided into 10 sections:

- Welcome and Objectives
- Discussion of Co-Occurring Disorders
- Discussion of Screening Procedures
- Discussion of Diagnosing Co-Occurring Disorders
- Activity: What Have We Learned?
- Activity: Treatment Outcomes
- Discussion of Treatment Issues
- Activity: Treatment Issues—Group Research
- Discussion of Resources and Review
- Module Closing

In addition to this training manual, you will need copies of Handout 11-1 and Handout 11-2 for participants.

Welcome and Objectives

Summary

The training begins with an overview of the learning objectives for Module 11.

PowerPoint Slides and Discussion

Slide 1, Module 11: Treatment of Co-Occurring Disorders

- Module 11 covers Chapter 12 of TIP 43. During today’s training, you will:
  - Identify common co-occurring disorders of patients who are opioid addicted
  - Study basic screening procedures for co-occurring disorders
  - List guidelines to make and confirm diagnoses of co-occurring disorders
What Is a Co-Occurring Disorder?
- A mental disorder that coexists with at least one substance use disorder.
- Patients with co-occurring disorders often exhibit behaviors or feelings that interfere with treatment.
- Studies have indicated that rapid, accurate identification of patients’ co-occurring disorders and immediate interventions improve medication-assisted treatment for opioid addiction (MAT) outcomes.
- Other types of disorders occur with substance use disorders, such as cognitive and medical disorders and physical disabilities. These require individualized treatment approaches.

Common Co-Occurring Disorders
- Mood disorders, such as major depressive disorder, dysthymic disorder, and bipolar disorder
- Anxiety disorders, such as generalized anxiety disorder, posttraumatic stress disorder (PTSD), social phobia, obsessive-compulsive disorder, and panic disorders
- Attention deficit/hyperactivity disorder (AD/HD)
- Schizophrenia and other psychotic disorders
- Cognitive disorders
- Eating disorders
- Impulse control disorders such as pathological gambling
- Sleep disorders.
### Slide 4, Common Co-Occurring Disorders

- **Axis II disorders**
  - Personality disorders: APD, borderline personality disorder, narcissistic personality disorder.
- **Studies comparing patients in MAT with the general population have confirmed higher rates of co-occurring Axis I and II disorders.**

### Slide 5, Prevalence of Co-Occurring Disorders

- **Some factors increase the prevalence of co-occurring disorders among people with substance use disorders, including older age, low socioeconomic status, residence in urban areas, homelessness, and incarceration.**
- Mental disorders and some affective and anxiety disorders are more prevalent among persons with substance use disorders than in the general population.

### Slide 6, Gender Differences in Co-Occurring Disorders

- **Studies have found that rates of co-occurring disorders differ between men and women.**
- More women have affective and anxiety disorders.
- More men have APD and are dependent on alcohol.
- Women are more likely than men to have Axis I diagnoses and/or borderline personality disorders and less likely to be diagnosed with APD or manifest problems with other substances.
- Female patients receiving methadone are more likely to have psychotic and affective disorders and are more likely to have PTSD.

### Slide 7, Etiology of Co-Occurring Disorders

- **One study identified four common models to explain the relationship between co-occurring and substance use disorders:**
  1. Primary substance use disorder and secondary co-occurring disorder. This “disease model” holds that substance use disorders cause most co-occurring disorders in MAT patients.
  2. Primary co-occurring disorder and secondary substance use disorder. This “self-medication model” argues that preexisting mental disorders are a significant cause of substance use disorders.

### Slide 8, Etiology of Co-Occurring Disorders

- **Common pathway. This model holds that shared genetic or environmental factors may cause both substance use and co-occurring disorders.**
4. **Bidirectional model.** This model emphasizes socio-environmental and interpersonal factors (such as poverty, social isolation, drug availability) that contribute to both substance use and co-occurring disorders through a complex interaction between environment and genetic susceptibility. The bidirectional model has not been evaluated thoroughly.

**Discussion of Screening Procedures**

**Summary**
Participants learn about screening procedures.

**PowerPoint Slides and Discussion**

**Slide 9, Screening Procedures**
- Admission and ongoing assessment should incorporate screening for co-occurring disorders, and a positive result should trigger detailed assessment.
- Opioid treatment programs (OTPs) should establish specific screening procedures for co-occurring disorders.
- When possible, screening for co-occurring disorders should be linked with other assessments.

**Slide 10, Specific Screening Procedures**
- Screening for co-occurring disorders usually entails determining:
  - An applicant’s immediate safety and self-control, including any suicide risk, aggression, or violence toward others; domestic or other abuse or victimization; and the ability to care for oneself
  - Previous diagnosis, treatment, or hospitalization for a mental disorder and, if applicable, why, when, and where, as well as the treatment received and its outcome
  - Current co-occurring disorder symptomatology based on Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV), criteria, including whether psychotropic medications have been prescribed or are being used
  - Trauma history
  - History of mental disorder-related symptoms among immediate relatives and their diagnoses, treatments, or hospitalization
  - Any unusual aspects of an applicant’s appearance, behavior, and cognition.

**Slide 11, Screening for Cognitive Impairment**
- The accuracy of instruments to screen for co-occurring disorders may be compromised if administered to patients with cognitive impairments.
Module 11: Treatment of Co-Occurring Disorders

- A brief preexamination of cognitive functioning during a mental status examination is recommended for individuals who are disoriented with respect to time, place, or person; have memory problems; or have difficulty understanding information in their first language.

**Slide 12, Screening Tools**
- Considerations in selecting a screening tool for co-occurring disorders include its psychometric properties, cultural appropriateness, and the literacy level required.

**Discussion of Diagnosing Co-Occurring Disorders**

**Summary**
Participants learn about guidelines for making and confirming diagnosis of co-occurring disorders.

**PowerPoint Slides and Discussion**

**Slide 13, Diagnosing Co-Occurring Disorders**
- After a possible co-occurring disorder is identified, an experienced, licensed mental health clinician should perform an evaluation to make or confirm a diagnosis.
- The most widely used systems to classify mental and substance use disorders are in DSM-IV and the International Classification of Diseases, 10th Edition (ICD-10).
- Both systems present diagnosis criteria accepted by national (DSM-IV) or international (ICD-10) experts.

**Slide 14, DSM-IV Criteria**
- DSM-IV divides substance-related disorders into substance use disorders and substance-induced co-occurring disorders.
- DSM-IV divides substance use disorders into abuse and dependence (with or without physiological features such as tolerance or withdrawal). It also makes distinctions pertaining to early or sustained remission; programs offering agonist, partial agonist, or agonist/antagonist therapy; and treatment while living in a controlled environment.

**Slide 15, DSM-IV Criteria**
- Substance-induced co-occurring disorders are associated with intoxication, withdrawal, and the persistent effects of substances of abuse.
- With substance-induced persisting disorders, substance-related symptoms continue long after a person stops using a drug. Different drugs have been associated with different co-occurring

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**DSM-IV Criteria**
- DSM-IV divides substance-related disorders into substance use disorders and substance-induced co-occurring disorders.
- DSM-IV divides substance use disorders into abuse and dependence (with or without physiological features such as tolerance or withdrawal). It also makes distinctions pertaining to early or sustained remission; programs offering agonist, partial agonist, or agonist/antagonist therapy; and treatment while living in a controlled environment.

**DSM-IV Criteria**
- Substance-induced co-occurring disorders are associated with intoxication, withdrawal, and the persistent effects of substances of abuse.
- With substance-induced persisting disorders, substance-related symptoms continue long after a person stops using a drug. Different drugs have been associated with different co-occurring

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**Screening Tools**
- Important considerations in selecting a screening tool for co-occurring disorders include its psychometric properties, cultural appropriateness, and, if the test is self-administered, the literacy level required.
disorders; some (such as opioids) have relatively few or no reported psychototoxic effects, whereas others have many.

**Slide 16, Interview Formats for Psychiatric Diagnoses**
- Instruments to determine DSM-IV or ICD-10 diagnoses include:
  - Structured Clinical Interview for DSM-IV Axis I and II Disorders, Clinical Versions
  - Composite International Diagnostic Interview, Core Version 2.1
  - Psychiatric Research Interview for Substance Abuse and Mental Health Disorders
  - Diagnostic Interview Schedule, Version 4
  - Alcohol Use Disorder and Associated Disabilities Interview Schedule.

**Slide 17, Differential Diagnosis**
- Assessment, including a family history, is critical to determine whether symptoms indicate independent co-occurring disorders, disorders induced by substance use, or a medical or neurological condition.
- Substance use can magnify symptoms of independent co-occurring disorders, heighten the mood swings of bipolar disorders; intensify the hallucinations and paranoid delusions of schizophrenia; or increase the risk of suicide, violence, and impulsive behaviors of individuals with antisocial or borderline personality disorders.

**Slide 18, Differential Diagnosis**
- Independent disorders tend to follow a typical course for each diagnosis and require specific, long-term treatment.
- Substance-induced disorders tend to follow the course of the substance use disorder itself and to dissipate with abstinence.

**Slide 19, Differential Diagnosis: Timing**
- Accurate diagnosis is difficult during the early phases of MAT.
- A definitive diagnosis often must wait until a patient is stabilized for a minimum of 5 days (but preferably 2 to 4 weeks) and any continuing substance use is eliminated.
- Symptoms of severe co-occurring disorders (e.g., suicidality, psychotic reaction) need prompt attention.

**Slide 20, Differential Diagnosis: Guidelines**
- To assist with a differential diagnosis, the following information should be collected and reviewed:
  - Previous history of mental disorders and treatment, focusing on temporal relationship of symptoms to substance use and response to previous treatment
Differential Diagnosis: Primary or Secondary Disorders?

- DSM-IV offers procedures to determine whether a co-occurring disorder is primary or secondary.
- Primary (not substance induced) if symptoms:
  - Symptoms developed before the substance use disorder
  - Symptoms have persisted during 30 days or more of abstinence
  - Symptoms are inconsistent with or exceed those produced by the abused substance at the dosage used
  - Substance use or another medical disorder cannot account better for the symptoms.

- Secondary (substance induced) if:
  - Symptoms developed only during periods of active substance use or within 1 month of intoxication or withdrawal
  - Symptoms are consistent with intoxication or withdrawal from substances used
  - Other features are atypical for primary co-occurring disorder
  - Another co-occurring or medical disorder does not account better for the symptoms.

Activity: What Have We Learned?

Summary
Participants review what they have learned about diagnosing co-occurring disorders.

Activity
- Explain the activity.
  - This activity gives you a chance to review the material discussed so far in Module 11.
Initiate the activity.
- What two significant things have you learned about diagnosing co-occurring disorders?
- Encourage participants to write down their answers.

Debrief the activity.
- Ask for volunteers to share their answers.
- Discuss as needed.
- Encourage participants to write down others’ answers.

Activity: Treatment Outcomes

Summary
Working in groups, participants investigate treatment outcomes.

Materials
- TIP 43
- Copies of Handout 11-1 for each participant

Activity
- Explain the activity.
  - You’ll work in groups to complete two sections of Handout 11-1, which focuses on how co-occurring disorders might affect treatment outcomes in MAT. You have 5 minutes to complete your sections.

- Initiate the activity.
  - Form three groups.
  - Distribute Handout 11-1. Assign each group two sections of the handout.

- Debrief the activity.
  - After 5 minutes review the information, asking for volunteers to read completed sections.
  - Review participants’ answers using the Answer Key.
  - Encourage participants to write down the information from other groups on their handouts.

Discussion of Treatment Issues

Summary
Participants examine treatment considerations for patients with co-occurring disorders.
Co-occurring disorders should not exclude people with opioid addiction from admission to an OTP.

The best strategy is to stabilize these patients’ opioid addiction while assessing their co-occurring disorder symptoms and choosing the most appropriate treatment course.

1. Treatment should be integrated or closely coordinated.
2. Staff members should know about treatments for both disorders.
3. Psychotropic medications should be prescribed only after patients are stabilized on treatment medication, unless an independent co-occurring disorder is evident.
4. All medications should be monitored carefully. Physicians should be careful about prescribing substances with abuse potential; if possible, less abusable drugs in a class should be chosen.
5. Patients should be assured that a psychiatric diagnosis can provide a better understanding of their problems and aid in their treatment.
6. Therapy for patients with co-occurring disorders should be intensive. The primary goal is abstinence from substances; remission of co-occurring-disorder symptoms is an important secondary goal.

Activity: Treatment Issues—Group Research

Summary
Participants investigate treatment issues.

Materials
- TIP 43
- Copies of Handout 11-2 for each participant
Activity

- Explain the activity.
  - You’ll work in groups to complete Handout 11-2, which focuses on treatment issues for patients with co-occurring disorders.
  - You have 10 minutes to complete your section and identify two key ideas from the section.

- Initiate the activity.
  - Form three groups.
  - Distribute Handout 11-2. Assign each group a section.

- Debrief the activity.
  - After 10 minutes, ask for volunteers from each group to share two key ideas from their section of the handout.
  - Review participants’ answers using the Answer Key.

Discussion of Resources and Review

Summary

Participants review the module and learn about available resources.

Discussion

- Exhibits 12-3 and 12-4 on pages 203 and 204 provide resources and topics for mutual-help groups for people with co-occurring disorders.

- You may find it helpful to flag these two pages for future reference.

- What are the benefits of identifying and treating co-occurring disorders of patients who are addicted to opioids?

- Invite several participants to answer the question as time allows.

Module Closing

Summary

- Ask participants whether they have any questions.

- Thank participants for attending.

- Remind participants of the next training session.

  - Our next session is scheduled for <date> at <time>. We will talk about Chapter 13, MAT During Pregnancy.
Handout 11-1: Treatment Outcomes

Use pages 197–199 of TIP 43 to fill in the blanks.

Prognosis for Patients With Co-Occurring Disorders

Patients with co-occurring disorders ... have _______________ prognoses and [are] ______________ difficult to treat than those with diagnoses of either a _______________ _______________ or _______________ disorder. [P]ersons with co-occurring disorders are at higher risk of _______________, psychiatric _______________, legal difficulties and _______________, homelessness, life-threatening _______________ diseases, domestic _______________. _______________ or _______________ of their children, _______________ , and other interpersonal problems.

Effects of Co-Occurring Disorders on Treatment Outcomes

[U]nidentified, ______________ co-occurring disorders ______________ progress for patients ... and lead to difficulties in engaging patients in _______________, establishing a _______________ _______________ between _______________ and treatment providers, maintaining adherence to _______________ _______________, eliminating _______________ _______________ and other risky _______________ , and preventing premature _______________ or early _______________.

[M]any patients with co-occurring disorders did well when ______________ psychiatric and _______________ _______________ treatments were delivered.

Effects of Symptom Severity

Early studies found that the _______________ of ... symptoms, particularly in patients with _______________ or _______________. strongly predicted _______________ _______________.

However, later studies have found that _______________ _______________ _______________, although associated with _______________ levels of substance use and worse _______________ _______________, did not predict _______________ _______________.
Effects of Co-Occurring APD on Progress in MAT

APD has been estimated to affect 24 to 39 percent of people seeking treatment for __________ __________. Some studies have found that people with __________ and opioid addiction had more __________ activity, more history of early __________, and __________ behaviors, __________ likelihood of engaging in activities that risked __________ __________, more extensive and severe __________ abuse, and __________ onset of opioid use than persons who were opioid addicted __________ APD.

Patients with APD can __________ in MAT, and OTPs should be prepared to __________ and __________ aggressive, impulsive, or __________ __________ by patients.

Effects of Co-Occurring PTSD on Progress in MAT

[One study] found that women __________ symptoms of PTSD at __________ were significantly __________ likely than those __________ such symptoms to __________ to treatment __________. Patients with __________ PTSD symptoms had __________ drug abuse __________. These patients may need __________ attention paid to __________ and __________.

Effects of Co-Occurring AD/HD on Progress in MAT

[Researchers] studied 125 people admitted to OTPs over a 1-year period. Nineteen percent of patients had a __________ of AD/HD, and 88 percent with __________ AD/HD __________ had __________ symptoms. Patients ... showed __________ __________ during continuous __________ testing and __________ concurrent Axis I and II disorders. The AD/HD diagnosis was not a __________ predictor of decreased treatment __________, poor treatment __________, or __________ substance abuse.
Prognosis for Patients With Co-Occurring Disorders

Patients with co-occurring disorders ... have poorer prognoses and [are] more difficult to treat than those with diagnoses of either a substance use or mental disorder. [P]ersons with co-occurring disorders are at higher risk of suicide, psychiatric hospitalization, legal difficulties and incarceration, homelessness, life-threatening infectious diseases, domestic violence, abuse or neglect of their children, unemployment, and other interpersonal problems.

Effects of Co-Occurring Disorders on Treatment Outcomes

[U]nidentified, untreated co-occurring disorders impede progress for patients ... and lead to difficulties in engaging patients in treatment, establishing a therapeutic alliance between patients and treatment providers, maintaining adherence to treatment regimens, eliminating substance abuse and other risky behaviors, and preventing premature dropout or early relapse.

[M]any patients with co-occurring disorders did well when appropriate psychiatric and substance abuse treatments were delivered.

Effects of Symptom Severity

Early studies found that the severity of ... symptoms, particularly in patients with anxiety or depression, strongly predicted treatment outcomes.... However, later studies have found that higher symptom severity, although associated with higher levels of substance use and worse overall adjustment, did not predict treatment response.

Effects of Co-Occurring APD on Progress in MAT

APD has been estimated to affect 24 to 39 percent of people seeking treatment for opioid addiction. Some studies have found that people with APD and opioid addiction had more criminal activity, more history of early violent and aggressive behaviors, greater likelihood of engaging in activities that risked HIV transmission, more extensive and severe polydrug abuse, and earlier onset of opioid use than persons who were opioid addicted without APD.

Patients with APD can improve in MAT, and OTPs should be prepared to manage and limit aggressive, impulsive, or criminal behaviors by patients.

Effects of Co-Occurring PTSD on Progress in MAT

[One study] found that women with symptoms of PTSD at admission were significantly less likely than those without such symptoms to adhere to treatment requirements.... [P]atients with current PTSD symptoms had greater drug abuse severity. These patients may need special attention paid to depression and suicidal ideation.

Effects of Co-Occurring AD/HD on Progress in MAT

[Researchers] studied 125 people admitted to OTPs over a 1-year period.... Nineteen percent of patients had a history of AD/HD, and 88 percent with lifetime AD/HD diagnoses had current symptoms.... [P]atients ... showed poorer attention during continuous performance testing and more concurrent Axis I and II disorders.... [T]he AD/HD diagnosis was not a significant predictor of decreased treatment retention, poor treatment compliance, or continuing substance abuse.
Handout 11-2: Treatment Issues

SECTION 1: Co-Occurring Disorders and Treatment Planning
Use pages 200–202 of TIP 43 to fill in the blanks.

**Patients in Acute Psychiatric Danger**
1. Patients presenting with ________________________________
   ________________________________
   ________________________________
   ________________________________
   ________________________________.

2. Immediate administration of ________________________________
   ________________________________.

3. In emergencies, OTPs should ________________________________
   ________________________________.

**Patients With Established, Severe Co-Occurring Disorders**
1. Patients in MAT who are not in acute danger ________________________________
   ________________________________
   ________________________________
   ________________________________.

2. [T]hese patients can be treated on site. Otherwise, ________________________________
   ________________________________.

**Patients With Less Severe, Persisting or Emerging Symptoms of Co-Occurring Disorders**
1. Patients in MAT with nondisabling symptoms ________________________________
   ________________________________
   ________________________________
   ________________________________.

2. [I]t is desirable for patients to be stabilized on methadone [or] ________________________________....
3. Newer medications with relatively benign ________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________.

Patients With Less Severe, Presumptively Substance-Induced Co-Occurring Disorders
1. The consensus panel recommends that patients in MAT with symptoms of Axis I disorders _________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________.
2. Exceptions include patients who have acute, ________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________.

Effects of Co-Occurring Disorders on HIV Risk Behaviors and Comorbidity
1. Patients with co-occurring disorders in MAT ________________________________
____________________________________________________________________
____________________________________________________________________.
2. Patients who were HIV seropositive and had co-occurring disorders were ____________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________.
3. People with co-occurring disorders, particularly depression ________________________________
____________________________________________________________________
____________________________________________________________________.
4. Patients in MAT who injected drugs ________________________________
____________________________________________________________________
____________________________________________________________________.

Models of Care
1. If a program cannot provide onsite ancillary services, ________________________________
SECTION 2: Handling Emergency Situations
Use pages 202–204 of TIP 43 to fill in the blanks.

1. [P]atients with co-occurring disorders in MAT have reported ________________________
   ________________________
   ________________________
   ________________________.

2. [O]bservations should be documented and ________________________
   ________________________
   ________________________
   ________________________.

Risk Factors and Predictors for Suicidal Ideation and Threats
1. People who are opioid addicted ________________________
   ________________________
   ________________________
   ________________________

2. Substance intoxication or withdrawal ________________________
   ________________________
   ________________________
   ________________________

3. [A] high-risk profile merits ________________________
   ________________________
   ________________________

4. [O]verdoses usually were accidental and ________________________
   ________________________
   ________________________

5. [Studies have] found that accidental overdoses ________________________
   ________________________
   ________________________

Protocol for Identifying and Handling Suicide and Homicide Risk
1. [Q]uestion at-risk patients routinely ________________________
   ________________________
   ________________________
2. This is important for patients who appear ____________________________

   ____________________________

   ____________________________

   ____________________________

3. All programs should have protocols in place that specify
   a. Who asks ____________________________

       ____________________________

   b. How ____________________________

   c. Who is informed about risks ____________________________

       ____________________________

4. Any patient suspected of suicide or ____________________________

       ____________________________

5. Decisions should be made about using ____________________________

       ____________________________

6. Medication-assisted treatment of acute ____________________________

       ____________________________

       ____________________________

7. Patients identified as being at imminent risk ____________________________

       ____________________________

8. Some key factors in this decision are ____________________________

       ____________________________

       ____________________________

9. If a referral is made, ____________________________
Counseling, Psychotherapy, and Mutual-Help Groups for People With Co-Occurring Disorders in MAT

1. Programs should encourage participation in ________________.

Mutual-Help Groups for People With Co-Occurring Disorders

a. ________________

b. ________________

c. ________________

d. ________________

Psychoeducation for Patients With Co-Occurring Disorders in MAT

1. Group sessions presenting information about topical issues can help patients with ________________.

Topics for Psychoeducational Groups for People With Co-Occurring Disorders

a. ________________

b. ________________

c. ________________

d. ________________

e. ________________

f. ________________

g. ________________
h. ________________
SECTION 3: Pharmacotherapy for Patients With Co-Occurring Disorders in MAT

Use pages 204–208 of TIP 43 to fill in the blanks.

1. Several pharmacological treatments for co-occurring disorders are ____________________________
   ____________________________________________.

2. Most medications are more effective ________________________________________________
   ____________________________________________.

3. When psychotropic medications are used in an OTP, they should be prescribed:
   a. ____________________________________________
      ____________________________________________.
   b. ____________________________________________
      ____________________________________________.
   c. ____________________________________________
      ____________________________________________.

4. If patients in an OTP are prescribed other medications ... :
   a. ____________________________________________
      ____________________________________________.
   b. ____________________________________________
5. Consider a hierarchical approach

6. Depending on severity and acuity of symptoms,

7. Providers should select psychiatric medications with the

8. Psychiatric medications should be,

9. Other factors to consider include:
   a. 
   b. 
   c. 
   d. 

10. Methadone may, by itself,
Medications for Major Depression and Bipolar Disorder

1. Antidepressants have been used successfully.

2. There is no theoretical reason to presume that.

3. Antidepressants also may be helpful for.

4. Bipolar disorder in patients in MAT.

5. Mood stabilizers shown to be effective include.

6. also has been shown to be effective.

Anxiety Disorders

1. Anxiety disorders, including.

2. These disorders can be treated effectively.

3. Patients sometimes respond better to.

4. Some antidepressants also have.

5. The well-documented abuse potential of.
6. [E]vidence suggests major differences

7. [Benzodiazepines] with a slower onset of action such as oxazepam

8. [P]atients who have a history of benzodiazepine abuse

**AD/HD**
1. Stimulants such as methylphenidate (Ritalin®)

2. Use of cocaine could be

3. If AD/HD is severe, treatment providers should consider

**Schizophrenia**
1. Patients in MAT who have schizophrenia often have

2. Newer atypical antipsychotic medications for schizophrenia
Answer Key for Handout 11-2: Treatment Issues

SECTION 1: Co-Occurring Disorders and Treatment Planning

Patients in Acute Psychiatric Danger
1. Patients presenting with suicidal or homicidal ideation or threats—whether resulting from acute intoxication or withdrawal or from an independent co-occurring disorder—or those manifesting psychotic symptoms (e.g., hallucinations, paranoia) that may interfere with their safety and ability to function should be assessed and treated immediately.

2. Immediate administration of antipsychotic drugs, benzodiazepines, or other sedatives may be required to establish behavioral control.

3. In emergencies, OTPs should send patients to affiliated hospital emergency rooms.

Patients With Established, Severe Co-Occurring Disorders
1. Patients in MAT who are not in acute danger but have been diagnosed or treated for severe co-occurring disorders (e.g., schizophrenia, bipolar disorder) should receive medication with the lowest abuse potential for their condition.

2. These patients can be treated on site. Otherwise, they should be referred to an OTP with these qualifications.

Patients With Less Severe, Persisting or Emerging Symptoms of Co-Occurring Disorders
1. Patients in MAT with nondisabling symptoms of less severe co-occurring disorders (e.g., mood, anxiety, and personality disorders), psychiatric treatment histories, or verified diagnoses and current prescriptions for medications to treat such disorders (regardless of whether they are used) should continue or begin medication, psychotherapy, or both for their co-occurring disorders.

2. It is desirable for patients to be stabilized on methadone or buprenorphine...

3. Newer medications with relatively benign side effects can be initiated sooner (e.g., selective serotonin reuptake inhibitors [SSRIs]) if a primary mental disorder is indicated.

Patients With Less Severe, Presumptively Substance-Induced Co-Occurring Disorders
1. The consensus panel recommends that patients in MAT with symptoms of Axis I disorders but no history of primary co-occurring disorders receive no new psychotropic medications until they are stabilized on MAT because their symptoms might remit or significantly diminish after a period of substance abuse treatment.

2. Exceptions include patients who have acute, substance-induced disorders such as extreme anxiety or paranoia that are likely to be transitory but require temporary sedation or antianxiety medication.

Effects of Co-Occurring Disorders on HIV Risk Behaviors and Comorbidity
1. Patients with co-occurring disorders in MAT were at higher risk for contracting and transmitting HIV than those without these disorders.

2. Patients who were HIV seropositive and had co-occurring disorders were more likely than those without co-occurring disorders to continue using drugs, less likely to be prescribed HIV medications or to adhere to medication regimes, and more likely to develop AIDS.

3. People with co-occurring disorders, particularly depression or dysthymia, were more likely than those without Axis I disorders to continue needle sharing and other high-risk behaviors.
4. Patients in MAT who injected drugs and had APD were at higher risk for contracting and spreading HIV.

Models of Care
1. If a program cannot provide onsite ancillary services, it is important that staff members identify co-occurring disorders early so that they can refer patients to appropriate resources.

SECTION 2: Handling Emergency Situations
1. Patients with co-occurring disorders in MAT have reported suicide attempts or difficulty controlling violent behavior during their lifetime.
2. Observations should be documented and communicated to designated staff members who can take necessary action, including appropriate medication, notification of family members and involved agencies (e.g., probation office, children’s protective services), or transfer of patients to more secure or protective settings.

Risk Factors and Predictors for Suicidal Ideation and Threats
1. People who are opioid addicted have high rates of suicide and attempted suicide, ranging from 8 to 17 percent in some studies with even higher rates among certain groups.
2. Substance intoxication or withdrawal can cause or exacerbate suicidal ideation or threats, and the presence of co-occurring disorders further increases the risk.
3. A high-risk profile merits immediate and ongoing attention.
4. Overdoses usually were accidental and not predictive of subsequent suicide attempts.
5. Studies have found that accidental overdoses were three times more likely than suicidal ones.

Protocol for Identifying and Handling Suicide and Homicide Risk
1. Question at-risk patients routinely about suicidal or homicidal thoughts or plans.
2. This is important for patients who appear withdrawn, depressed, angry, or agitated or are known to have experienced a recent significant loss or other source of stress—especially if a co-occurring disorder is suspected or diagnosed or if a patient still is intoxicated or withdrawing from a psychoactive substance.
3. All programs should have protocols in place that specify
   a. Who asks what questions or uses what specific tool to identify these types of risk
   b. How identified risks are documented
   c. Who is informed about risks and is responsible for taking actions and what resources he or she can use (e.g., medications, referral/transfer, family involvement).
4. Any patient suspected of suicide or homicide risk should be referred immediately to a mental health clinician for further evaluation.
5. Decisions should be made about using antipsychotic medications, benzodiazepines, or other sedatives to establish behavioral control rapidly.
6. Medication-assisted treatment of acute suicidality should be on an inpatient basis unless family members or friends are willing to be responsible for administering the drugs regularly, keeping the at-risk patient safe, and monitoring his or her reactions.
7. Patients identified as being at imminent risk of committing suicide or homicide might need hospitalization for short-term observation.

8. Some key factors in this decision are clearly expressed intent, specific and lethal plans, accessible means, limited social or familial resources, severe symptoms of mental illness or psychosis, command hallucinations, hopelessness, and previous suicide or homicide attempts.

9. If a referral is made, the patient should not be left alone until responsibility for monitoring safety is transferred to the referred facility.

**Counseling, Psychotherapy, and Mutual-Help Groups for People With Co-Occurring Disorders in MAT**

1. Programs should encourage participation in mutual-help groups that focus on the needs of people with co-occurring disorders.

**Mutual-Help Groups for People With Co-Occurring Disorders**

a. Double Trouble in Recovery (www.doubletroubleinrecovery.org)

b. Dual Recovery Anonymous (www.draonline.org)

c. Dual Disorders Anonymous (847-781-1553 or P.O. Box 681268, Schaumburg, IL 60168)

d. Dual Diagnosis Recovery Network (www.dualdiagnosis.org) (active mostly in California)

**Psychoeducation for Patients With Co-Occurring Disorders in MAT**

1. Group sessions presenting information about topical issues can help patients with co-occurring disorders and their families.

**Topics for Psychoeducational Groups for People With Co-Occurring Disorders**

a. Causes, symptoms, and treatment for substance use and co-occurring disorders

b. Medical and mental effects of co-occurring disorders

c. Psychosocial effects of co-occurring disorders

d. The recovery process for co-occurring disorders

e. Medications to treat co-occurring disorders, their side effects, and medication management

f. Coping with cravings, anger, anxiety, boredom, and depression

 g. Changing negative or maladaptive thinking

h. Developing a sober support system

i. Addressing family issues

j. Learning to use leisure time constructively

k. Spirituality in recovery

l. Joining 12-Step and co-occurring disorder recovery mutual-help groups

m. Risk factors in ongoing recovery

n. Understanding and getting maximum benefits from psychotherapy and counseling
SECTION 3: Pharmacotherapy for Patients With Co-Occurring Disorders in MAT

1. Several pharmacological treatments for co-occurring disorders are available and should be used when indicated.

2. Most medications are more effective when used with counseling or psychotherapy in comprehensive MAT.

3. When psychotropic medications are used in an OTP, they should be prescribed:
   a. In a comprehensive program that integrates medical, psychiatric, and social interventions and supports patient compliance with medication dosing schedules.
   b. In the context of a multidisciplinary-team approach in which regularly scheduled team meetings ensure that all members are aware of the patient’s progress in treatment.
   c. With careful selection of medications because some patients may attempt to get high on any medication prescribed.

4. If patients in an OTP are prescribed other medications ...
   a. All prescribed psychotropic medications should be used to treat suspected or confirmed co-occurring disorders, not to alleviate normal discomfort.
   b. Fixed, rather than “prn” or “as needed,” doses of psychotropic medications should be prescribed because, especially early in MAT, patients addicted to opioids have difficulty regulating medications of any kind.
   c. Patients receiving psychotropic medications should be educated about each drug’s expected benefits, potential disadvantages and limitations, side effects, implications for pregnancy and breast-feeding, length of time before full effects should begin, and potential to cause tolerance and withdrawal.
   d. An onsite (full- or part-time) physician or psychiatrist should have regular contact with each patient with a co-occurring disorder to review medication response and compliance.

5. Consider a hierarchical approach to treating patients with co-occurring disorders, starting with psychosocial interventions such as increased counseling or psychotherapy (unless the patient has a disorder clearly needing medication).

6. Depending on severity and acuity of symptoms, treatment providers may be able to use nonpharmacological approaches such as psychotherapy either alone or with psychiatric medications.

7. Providers should select psychiatric medications with the lowest abuse potential that are likely to be effective.

8. Psychiatric medications should be, in most instances, adjunctive to other ongoing interventions, not a substitute for them.

9. Other factors to consider include:
   a. The potential effect of medication side effects on compliance
   b. Potential negative interactions with addiction treatment medication or other drugs
   c. Lethality if the drug is used impulsively or intentionally for suicide
   d. Potential effects on a patient’s physical condition—for example, whether the drug might injure an already damaged liver or increase blood pressure in a hypertensive patient.
10. Methadone may, by itself, relieve some symptoms of mood and anxiety disorders but not Axis II personality disorders.

**Medications for Major Depression and Bipolar Disorder**

1. Antidepressants have been used successfully to treat depression in patients in MAT.
2. There is no theoretical reason to presume that tricyclic medications are unique among antidepressants improving mood, and SSRIs are much safer and may be the preferred treatment.
3. Antidepressants also may be helpful for anxiety disorders.
4. Bipolar disorder in patients in MAT can be treated with antipsychotic or mood-stabilizing medications.
5. Mood stabilizers shown to be effective include lithium, valproate, and carbamazepine.
6. Lamotrigine (Lamictal®) also has been shown to be effective.

**Anxiety Disorders**

1. Anxiety disorders, including panic disorder, PTSD, and others, can be treated with psychotherapy, pharmacotherapy, or both.
2. These disorders can be treated effectively with antidepressant medications such as the SSRIs, venlafaxine (Effexor®), and the tricyclics.
3. Patients sometimes respond better to one drug class or a specific drug in a class.
4. Some antidepressants also have sedative effects (e.g., mirtazapine [Remeron®], trazodone, and some tricyclic antidepressants), which might be beneficial for patients with insomnia when these drugs are taken before bedtime, or for patients with high levels of anxiety.
5. The well-documented abuse potential of benzodiazepines has led to a common belief that they are contraindicated in patients receiving methadone.
7. Benzodiazepines with a slower onset of action such as oxazepam rarely are mentioned as substances of abuse, have a wide margin of safety, and are effective in reducing anxiety, even over extended periods.
8. Patients who have a history of benzodiazepine abuse should not be disallowed from receiving previously prescribed benzodiazepines, provided that they are monitored carefully and have stopped the earlier abuse.

**AD/HD**

1. Stimulants such as methylphenidate (Ritalin®) are the treatment of choice for childhood AD/HD.
2. Use of cocaine could be an attempt to control symptoms of AD/HD.
3. If AD/HD is severe, treatment providers should consider treatment with medications such as methylphenidate, amphetamine, or atomoxetine (Strattera®) because these medications reduce AD/HD symptoms and address cocaine or other stimulant use.
Schizophrenia

1. Patients in MAT who have schizophrenia often have profound impairment in thinking and behavior and are unlikely to fit in well in many OTPs.

2. Newer atypical antipsychotic medications for schizophrenia are preferred over older “typical” agents, which carry a risk of movement disorders such as tardive dyskinesia, a neurological syndrome caused by long-term use or neuroleptic medications.
Module 12: MAT During Pregnancy

Module Overview

The information in Module 12 covers Chapter 13 of Treatment Improvement Protocol (TIP) 43: Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs. This module takes 50 minutes to complete and is divided into 10 sections:

- Welcome and Objectives
- Discussion of Methadone Maintenance
- Discussion of Medical and Obstetrical Complications
- Discussion of Methadone Dosage and Maintenance Strategies
- Discussion of Postpartum Treatment Issues
- Discussion of Buprenorphine Use
- Discussion of Comprehensive Services
- Discussion of Nutritional Issues
- Activity: Answer and Question Game
- Module Closing

In addition to this training manual, you will need copies of Handout 12-1 for participants.

Welcome and Objectives

Summary

The training begins with an overview of the learning objectives for Module 12.

PowerPoint Slides and Discussion

Slide 1, Module 12: MAT During Pregnancy

Module 12 covers Chapter 13 of TIP 43. During today’s training, you will:

- Examine common medical and obstetrical complications for pregnant patients in medication-assisted treatment for opioid addiction (MAT)
- Discuss strategies for methadone dosage and maintenance in pregnant patients
- Investigate issues of postpartum treatment
Methadone Maintenance as Standard of Care

- Methadone has been accepted since the late 1970s to treat opioid addiction during pregnancy.
- In 1998, an NIH consensus panel recommended methadone maintenance as standard of care for pregnant women with opioid addiction.
- Methadone is currently the only opioid medication approved by FDA for MAT in pregnant patients who are addicted to opioids.

Effective medical maintenance treatment with methadone has the same benefits for pregnant patients as for patients in general. Methadone reduces fluctuations in maternal serum opioid levels and protects the fetus from repeated withdrawal episodes.

Diagnosing Opioid Addiction in Pregnant Patients

- Many women confuse amenorrhea with infertility.
- Methadone normalizes endocrine function, and it is possible to become unintentionally pregnant early in MAT.
- Women who are opioid addicted may not acknowledge pregnancy or may misinterpret pregnancy signs for withdrawal symptoms.
- Pregnant women may sometimes increase their use of illicit opioids to alleviate these symptoms. However, this increased use of illicit opioids or other substances does not alleviate perceived withdrawal symptoms; instead, it exposes the fetus to increased opioid serum levels.

Diagnosing Opioid Addiction in Pregnant Patients

- Procedures for diagnosing opioid and other addictions in pregnant women should incorporate information from:
  - Medical and substance use histories
  - Physical examinations

Discussion of Methadone Maintenance

Summary
Participants examine methadone maintenance as the standard of care for pregnant patients.

PowerPoint Slides and Discussion

Slide 2, Methadone Maintenance as Standard of Care
- Methadone has been accepted since the late 1970s to treat opioid addiction during pregnancy.
- In 1998, a National Institutes of Health (NIH) consensus panel recommended methadone maintenance as the standard of care for pregnant women with opioid addiction.
- Methadone is the only opioid medication approved by the U.S. Food and Drug Administration (FDA) for MAT in pregnant patients.

Slide 3, Methadone Maintenance as Standard of Care
- Effective medical maintenance treatment with methadone has the same benefits for pregnant patients as for patients in general.
- Methadone reduces fluctuations in maternal serum opioid levels and protects the fetus from repeated withdrawal episodes.

Slide 4, Diagnosing Opioid Addiction in Pregnant Patients
- Many women confuse amenorrhea with infertility.
- Methadone normalizes endocrine function, and it is possible to become unintentionally pregnant early in MAT.
- Women who are opioid addicted may not acknowledge pregnancy or may misinterpret pregnancy signs for withdrawal symptoms.
- Pregnant women may sometimes increase their use of illicit opioids to alleviate these symptoms. However, this increased use of illicit opioids or other substances does not alleviate perceived withdrawal symptoms; instead, it exposes the fetus to increased opioid serum levels.

Slide 5, Diagnosing Opioid Addiction in Pregnant Patients
- Procedures for diagnosing opioid and other addictions in pregnant women should incorporate information from:
  - Medical and substance use histories
  - Physical examinations
Diagnosing Opioid Addiction in Pregnant Patients

- Using an opioid antagonist to diagnose addiction in pregnant women is absolutely contraindicated.
- Inducing even mild withdrawal can cause adverse fetal effects.

Discussion of Medical and Obstetrical Complications

**Summary**

Participants learn about common medical and obstetrical complications for pregnant patients in MAT.

**PowerPoint Slides and Discussion**

**Slide 7, Common Medical Complications**

- Pregnant women who abuse substances have a greater-than-normal risk of medical complications.
- Programs should monitor regularly for signs of problems.
- Prescribed medications other than methadone should be monitored for compliance with usage directions and for adverse effects.

**Slide 8, Common Medical Complications**

- Chronic substance use in pregnancy can cause medical complications, including infections.
- Infections can be profoundly harmful to both women and their fetuses if they are unrecognized and untreated during gestation.
- Hepatitis B and C, bacterial endocarditis, septicemia, tetanus, cellulitis, and sexually transmitted diseases (STDs) are frequent.
- Exhibit 13-1 on page 213 lists the most common medical complications found in pregnant patients with opioid addiction.

**Slide 9, Common Medical Complications: Hepatitis B**

- The rate of vertical perinatal transmission of the hepatitis B virus (HBV) ranges from 70 to more than 90 percent, especially if a pregnant woman had active infection in the third trimester or within 5 weeks postpartum.
- If a mother’s antigen is positive for hepatitis B, the neonate should receive hepatitis B vaccine and hepatitis B immune globulin.
The rate of perinatal transmission of hepatitis C virus (HCV) is lower than that of HBV.

Slide 10, Common Medical Complications: Hepatitis C
- Pregnant women who inject drugs are at high risk for HCV and should be screened for anti-HCV antibody.
- They should receive HCV ribonucleic acid (RNA) testing if an anti-HCV antibody test is positive.
- Infants whose mothers have hepatitis C should receive HCV RNA testing along with antibody testing for HCV.

Slide 11, Common Medical Complications: HIV/AIDS
- Pregnant women who are opioid addicted and HIV positive present a unique treatment problem.
- In the early 1990s, perinatal HIV transmission rates were 18 to 25%.
- Between 1996 and 2000, after the implementation of new guidelines, perinatal transmission rates dropped to 5 to 6 percent.
- Studies find prenatal transmission rates below 2 percent, when antenatal antiretroviral drugs (AZT) are combined with cesareans.
- AZT prophylaxis reduces the risk of perinatal HIV infection, but monotherapy is often inadequate to treat a mother’s HIV disease.
- Combination antiretroviral therapy is now the standard of care.

Slide 12, Common Medical Complications: HIV/AIDS
- Studies have shown that pregnancy has no effect on HIV progression.
- Studies have not found increases in birth defects or fetal malformation related to HIV infection.
- Women who are opioid addicted and HIV infected should receive additional counseling and support during the postpartum period.
- Breast-feeding by women who are HIV infected may increase the risk of HIV transmission and should be discouraged.

Slide 13, Common Obstetrical Complications
- The rates of obstetrical complications in pregnant women who are opioid addicted are the same as the increased rates in all women.
who lack prenatal care. When obstetrical complications are confirmed, standard treatments, including the use of medications to arrest preterm labor, can be initiated safely.

- Exhibit 13-3 on page 215 lists the most common obstetrical complications found in pregnant patients with opioid addiction.

Discussion of Methadone Dosage and Maintenance Strategies

Summary
Participants examine methadone dosage and maintenance.

PowerPoint Slides and Discussion

Slide 15, Methadone Treatment
- The pharmacology of methadone in pregnant women has been evaluated thoroughly.
- As pregnancy progresses, the same methadone dosage produces lower blood methadone levels because of increased fluid volume, a larger tissue reservoir for methadone, and altered opioid metabolism in both the placenta and the fetus.

Slide 16, Methadone Treatment
- Women often experience symptoms of withdrawal in later stages of pregnancy.
- Dosage increases are required to maintain blood levels of methadone and avoid withdrawal symptoms.
- The daily dose can be increased and administered singly or split into twice-daily doses.

Slide 17, Methadone Treatment
- Historically, treatment providers have based dosing decisions on the need to avoid or reduce the incidence of neonatal abstinence syndrome (NAS).
- However, this low-dose approach has been contradicted by studies.
- Higher dosages have been associated with increased weight gain, decreased illegal drug use, and improved compliance with prenatal care.
- Reduced methadone dosages may result in continued substance use and increased risks to both women and their fetuses.

Slide 18, Methadone Treatment: Induction and Stabilization
- Pregnant women should be maintained at prepregnancy doses.
- Pregnant women who were not maintained on methadone should be either inducted in an outpatient setting or admitted to a hospital.
Twice-daily observation should continue until the patient is stabilized.

If evidence of intoxication or withdrawal emerges, adjust patient’s dosage immediately.

Most patients are stabilized within 48 to 72 hours.

In outpatient settings, fetal monitors are usually unavailable; it is crucial that patients record fetal movement at set intervals.

**Slide 19, Methadone Treatment: Managing Polysubstance Use**

- Many pregnant women continue to use substances.
- It is essential that patients be monitored for their use of licit and illicit drugs and alcohol during perinatal care.
- Polysubstance use is a special concern during pregnancy because of the adverse effects of cross-tolerance, drug interactions, and potentiation and the serious maternal and fetal health risks from continued substance use and lack of adequate prenatal care.

**Slide 20, Management of Acute Opioid Overdose in Pregnancy**

- Opioid overdose in pregnancy threatens pregnant women and their fetuses.
- Naloxone should be given to pregnant patients as a last resort.
- Special care is needed to avoid acute opioid withdrawal, which can harm the fetus.

**Slide 21, Managing Withdrawal From Methadone**

- Medically supervised withdrawal (MSW), or dose tapering, is not recommended for pregnant women.
- Programs should conduct a thorough assessment because the procedure may result in relapse to opioid use. MSW patients:
  - Live where methadone maintenance is unavailable
  - Have been stable in MAT and request MSW before delivery
  - Refuse to be maintained on methadone
  - Plan to undergo MSW through a structured treatment program

**Slide 22, Managing Withdrawal From Methadone**

- Patients should be withdrawn from methadone only by a physician experienced in perinatal addiction treatment.
- Patients should receive fetal monitoring.
- MSW usually is conducted in the second trimester because danger of miscarriage may increase in the first trimester and danger of premature birth is greatest in the second trimester.
Managing Withdrawal From Methadone
- Fetal movement should be monitored twice daily in outpatient MSW.
- Stress tests should be performed at least twice weekly.
- MSW should be discontinued if it causes fetal stress or threatens to cause preterm labor.

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- Fetal movement should be monitored twice daily in outpatient MSW.
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Discussion of Postpartum Treatment Issues
Summary
Participants investigate issues of postpartum treatment in pregnant patients.

PowerPoint Slides and Discussion
Slide 24, Postpartum Treatment of Mothers in MAT
- Current treatment practices include continuing methadone after delivery at dosages similar to those before pregnancy.
- For women who began methadone maintenance during pregnancy, treatment should continue at approximately half the dosage received in the third trimester.
- However, no empirical data support these approaches, and any decrease should be based on signs of overmedication, withdrawal symptoms, or patient blood plasma levels.

Slide 25, Breast-Feeding
- Mothers maintained on methadone can breast-feed if they are not HIV positive, are not abusing substances, and do not have a disease or infection in which breast-feeding is contraindicated.
- Hepatitis C is no longer considered a contraindication for breast-feeding.
- Studies have found minimal transmission of methadone in breast milk regardless of maternal dose.

Effects on Neonatal Outcome: NAS
- Infants prenatally exposed to opioids have a high incidence of NAS.
- NAS is characterized by hyperactivity of the central and autonomic nervous systems, reflected in changes in gastrointestinal tract and respiratory system.
- NAS babies often suck frantically on fists or thumbs but may have extreme difficulty feeding.
- Withdrawal symptoms begin minutes to hours after birth; most appear within 72 hours.
- NAS babies often suck frantically on their fists or thumbs but may have extreme difficulty feeding.
- Withdrawal symptoms may begin to appear minutes or hours after birth and up to 2 weeks later; most symptoms appear within 72 hours.
Effects on Neonatal Outcome: NAS
- Many factors influence NAS onset:
  - Types of substances used by mothers
  - Timing and dosage of methadone before delivery
  - Characteristics of labor
  - Type and amount of anesthesia or analgesic during labor
  - Infant maturity and nutrition
  - Metabolic rate of the infant’s liver
  - Presence of intrinsic disease in infants

Perinatal Outcomes
- Some studies found reduced fetal mortality and greater birth weights for infants of women maintained on methadone whereas others found no differences.
- Researchers investigating neurobehavioral characteristics in newborns undergoing opioid withdrawal consistently found differences in behavior between these infants and infants born to women not opioid addicted.
- These infants are frequently difficult to nurture, causing poor mother-infant bonding.

Slide 27, Effects on Neonatal Outcome: NAS
- Many factors influence NAS onset:
  - Types of substances used by mothers
  - Timing and dosage of methadone before delivery
  - Characteristics of labor
  - Type and amount of anesthesia or analgesic during labor
  - Infant maturity and nutrition
  - Metabolic rate of the infant’s liver
  - Presence of intrinsic disease in infants.

Slide 28, Perinatal Outcomes
- The relationship between maternal methadone dosage and NAS has been difficult to establish.
- Early research on intrauterine growth of infants is inconsistent.
- Some studies found reduced fetal mortality and greater birth weights for infants of women maintained on methadone, whereas others found no differences.
- Researchers consistently found differences in behavior between these infants and infants born to women who are not opioid addicted.
- These infants were frequently difficult to nurture, causing poor mother–infant bonding.
- Research on developmental sequelae associated with in utero methadone exposure found that infants through age 2 function well within the normal developmental range.

Discussion of Buprenorphine Use

Summary
Participants learn about the use of buprenorphine in pregnant patients.

PowerPoint Slides and Discussion
Slide 29, Use of Buprenorphine During Pregnancy
- Buprenorphine use for pregnant women has not been approved in the United States but may be used with pregnant patients under certain circumstances.
- The consensus panel recommends that buprenorphine be used only when the prescribing physician believes that the potential benefits justify the risks.
Such patients may continue on buprenorphine with careful monitoring.

**Slide 30, Use of Buprenorphine During Pregnancy**
- Potential candidates for buprenorphine include:
  - Women who are opioid addicted but cannot tolerate methadone
  - Those for whom program compliance has been difficult
  - Those who are adamant about avoiding methadone.

**Slide 31, Use of Buprenorphine During Pregnancy**
- In such circumstances, the patient’s record should clearly document that the patient:
  - Has refused methadone maintenance treatment or that such services are unavailable
  - Has been informed of the risks of using buprenorphine, which has not been thoroughly studied in pregnancy
  - Understands these risks.

**Slide 32, Use of Buprenorphine During Pregnancy**
- When treating pregnant patients, providers should use buprenorphine monotherapy tablets (Subutex®).
- Patients already maintained on buprenorphine-naloxone combination tablets, who become pregnant, can be transferred directly to buprenorphine monotherapy tablets.

**Slide 33, Buprenorphine Effects on NAS**
- Infants born to women receiving methadone and infants of women receiving comprehensive prenatal care plus buprenorphine had improved birth outcomes.
- Buprenorphine-associated NAS can appear within 12 hours and can last as long as 10 weeks.
- Buprenorphine-associated NAS was found to be less intense than that associated with methadone.

**Slide 34, Breast-Feeding During Buprenorphine Treatment**
- Research indicates that only small amounts of buprenorphine pass into breast milk.
- These data are inconsistent with product labeling, which advises against breast-feeding.
- Women maintained on buprenorphine are encouraged to breast-feed.
Discussion of Comprehensive Services

Summary
Participants investigate the importance of integrated, comprehensive services for pregnant patients.

PowerPoint Slides and Discussion

Slide 35, Integrated, Comprehensive Services
- Comprehensive treatment services, including individual, group, and family therapy, address the physiological and psychological effects of substance use and psychosocial factors.
- Services should eliminate substance use, develop personal resources, improve family and interpersonal relationships, eliminate socially destructive behavior, and help new parents cope.
- Integrated services should be woman centered and directly address traumatic events.

Slide 36, Psychosocial Barriers
- Women addicted to opioids typically face financial, social, and psychological difficulties that affect their options and treatment progress.
- Histories of negative experiences with the legal system or children’s protective services and guilt and shame, coupled with low self-esteem and self-efficacy, produce difficult behaviors.
- Care should be provided in a gender-specific, non-punitive, non-judgmental, nurturing manner, with attention to each patient’s fears and cultural beliefs.

Slide 37, Contingency Management Treatment Strategies
- Contingency management strategies have been effective in treating a range of substance use disorders.
- Voucher-based reinforcement therapy is effective in increasing abstinence from substances and strengthening positive behaviors.
- Positive-contingency rewards for abstinence or treatment attendance can improve pregnancy outcomes.
- Many pregnant women who receive MAT discontinue treatment prematurely, with the highest dropout rates occurring on transfer from residential to outpatient treatment.
- For pregnant women maintained on methadone, using an escalating reinforcement procedure both decreased substance use and increased full-day outpatient treatment attendance.
Discussion of Nutritional Issues

Summary
Participants review nutritional issues for pregnant patients in MAT.

PowerPoint Slides and Discussion

Slide 38, Nutrition Assessment, Counseling, and Assistance

- People with substance use disorders are often poorly nourished.
- Other lifestyle factors associated with substance use disorders, including poverty, poor eating and exercise habits, lack of concern about nutrition and health, and diets restricted by physiological conditions, play a significant role.

Slide 39, Nutrition Assessment, Counseling, and Assistance

- Pregnant patients in MAT should receive:
  - An assessment of nutritional status, eating habits, and weight
  - Education on appropriate diet and weight
  - Counseling
  - Supplemental nutrients when nutritional needs cannot be met by dietary changes
  - Information and referral to food assistance programs.

Activity: Answer and Question Game

Summary
Participants review material presented in the module.

Materials
- TIP 43
- Copies of Handout 12-1 for each participant

Activity
- Explain the activity.
  - This activity is patterned after the TV program Jeopardy! I’ll say a statement and you have to look in TIP 43 for the question that corresponds with that statement. When you have the
answer, raise your hand, but remember to put your response in the form of a question or your answer doesn’t count!

• Initiate the activity.
  – Read each statement and the page number where the statement can be found in TIP 43.
  – Allow participants 30 seconds to form a question for the statement.
  – Continue until all the statements have been addressed or 5 minutes are left in the session.

• Debrief the activity.
  – Distribute copies of Handout 12-1 so that participants can review the material on their own.
  – If time allows, ask for final thoughts and questions.

Module Closing

Summary
  • Ask participants whether they have any questions.
  • Thank participants for attending.
Handout 12-1: Answer and Question Game

1. A: This medication has been accepted since the late 1970s to treat opioid addiction during pregnancy (page 211).
   Q: What is methadone?

2. A: Using this type of drug to diagnose addiction in pregnant women is absolutely contraindicated (page 212).
   Q: What is an opioid antagonist?

3. A: Hepatitis B and C, septicemia, tetanus, cellulitis, and this infection are especially frequent in pregnant women (page 212).
   Q: What is bacterial endocarditis?

4. A: If a new mother is antigen positive for this infection, her newborn should receive both vaccine and immune globulin (page 213).
   Q: What is hepatitis B?

5. A: The rates of perinatal transmission of this virus are lower than that of hepatitis B (page 213).
   Q: What is hepatitis C?

6. Q: Recent studies find perinatal transmission rates for this virus below 2 percent when antenatal drugs are combined with C-section (page 214).
   A: What is HIV?

7. A: For women infected with HIV, engaging in this activity has been associated with increased risk of HIV transmission to their babies and should be discouraged (page 215).
   Q: What is breast-feeding?

8. A: Obstetrical complications in pregnant women who are opioid addicted are the same as those seen in all women who lack this type of care (page 215).
   Q: What is prenatal care?

9. A: Pregnant women often require dosage increases to maintain blood levels of this drug to avoid withdrawal symptoms (page 216).
   Q: What is methadone?

10. A: In outpatient settings, this equipment is usually unavailable, so it is crucial that patients record fetal movements at set intervals (page 217).
    Q: What are fetal monitors?

11. A: It is essential that patients be monitored for use of these substances to appropriately manage the perinatal care of both mothers and infants (page 217).
    Q: What are drugs and alcohol?

12. A: Opioid overdose in pregnancy threatens pregnant women and their fetuses. This medication should be given to pregnant patients only as a last resort (page 217).
    Q: What is naloxone?

13. A: Although medically supervised withdrawal is not recommended for pregnant women, it can be attempted in this trimester (page 218).
    Q: What is the second trimester?

14. A: This type of movement should be monitored twice daily throughout medically supervised withdrawal (page 218).
    Q: What is fetal movement?
15. A: This virus is no longer considered a contraindication for breast-feeding (page 218).
   Q: What is hepatitis C?

16. A: Studies have found minimal transmission of this medication in breast milk regardless of maternal dose (page 218).
   Q: What is methadone?

17. A: Infants prenatally exposed to opioids have a high incidence of neonatal abstinence syndrome, characterized by hyperactivity of these systems (page 218).
   Q: What are the central and autonomic nervous systems?

18. A: This medication has not been approved for use in pregnant women in the United States, although it may be used under certain circumstances (page 220).
   Q: What is buprenorphine?

19. A: Many women receiving comprehensive prenatal care plus buprenorphine experienced this type of outcome (page 221).
   Q: What is an improved birth outcome?

20. A: Buprenorphine-associated NAS was found to be less intense than that associated with this medication (page 221).
   Q: What is methadone?

21. A: Because buprenorphine is likely to be poorly absorbed by infants orally, women taking buprenorphine are encouraged to engage in this activity with their babies (page 222).
   Q: What is breast-feeding?

22. A: Comprehensive treatment services are needed for women, including individual, group, and this type of therapy (page 222).
   Q: What is family therapy?

23. A: Evidence indicates that these types of rewards for abstinence or treatment attendance can improve pregnancy outcomes (page 223).
   Q: What are positive-contingency rewards?

24. A: This U.S. agency has created a survey to assess respondents’ knowledge of nutrition (page 224).
   Q: What is the U.S. Department of Agriculture?

25. A: Pregnant women in MAT who are nutritionally at risk or financially needy may be eligible for this type of assistance (page 224).
   Q: What is supplemental food assistance?