# Introduction



## What Is Marijuana Brief Intervention?

Welcome to *Marijuana Brief Intervention*. An evidence-based program, *Marijuana Brief Intervention* provides information known to help people manage, reduce, or stop their marijuana use. It is a time-efficient program that uses evidence-based practices to assist adult and young adult marijuana users to change their patterns of use and quit once and for all.

Societal attitudes on marijuana are changing. Marijuana policy changes mean greater numbers of U.S. citizens have opportunities to use marijuana. More users means more people who need intervention and treatment.

Marijuana Brief Intervention works with people to address their marijuana use and enact change. It can also help to screen for marijuana addiction severity, whether mild, moderate, or severe. The program is designed to help people think, plan, and act to reduce or abstain from marijuana use.

More formally, *Marijuana Brief Intervention* follows a full Screening, Brief Intervention, and Referral to Treatment (SBIRT) model.

- 1. Screening people helps determine their severity of marijuana use.
- 2. Brief interventions use motivational interviewing to raise awareness of the consequences of use and to provide an incentive toward making positive change.
- 3. High-risk individuals are referred for further assessment and treatment.

Research shows that early interventions work, and SBIRT is increasingly used by health care professionals as an evidence-based approach to identify risky substance use and to prevent addiction, or to help those already addicted reduce their use, stop altogether, or receive assistance in finding a referral to treatment. SBIRT model programs have been found to reduce overall health costs and are becoming more widely used in primary care and emergency room settings. Research has indicated that SBIRT-based brief interventions can be effective when treating individuals with a substance use disorder.<sup>1</sup>

#### Step 1: Screening

Health care professionals—whether psychiatric professionals, addiction counselors, or general medical practitioners—can use the information in this guide to promote healthy marijuana choices among their patients. The SBIRT model begins with screening, using the five-question Severity of Dependence Scale (SDS) for cannabis. Because of their simplicity, the SDS questions fit easily into a doctor's routine screening of patients for alcohol, tobacco, and other drugs.

Often adults do not present for a cannabis use problem but for another mental health or physical health problem. For this reason, general practitioners and mental health professionals (for simplicity's sake, we'll use the terms *clinician* and *facilitator*) should learn to recognize the possible effects marijuana has, screen participants for use, and offer a brief intervention to participants who are open to it.

## Step 2: Brief Intervention

The screening segues into a one-session brief intervention or sets the stage for six follow-up sessions, whichever is possible in a given setting. Alternatively, there is a four-session format that can be delivered over the telephone. Each approach is backed by research studies showing statistically significant outcomes. This facilitator guide offers instructions for all three formats of the program. Each session runs approximately one hour, with the six sessions ideally held weekly.

While more sessions are desirable, an opportunistic intervention needs to be short and adaptable in order to have the greatest possible use. A clinician can configure this program in numerous ways to accommodate participants' time constraints and willingness to participate:

- screening only
- screening and a one-session brief intervention combined together in one meeting
- screening session followed at a later time by a one-session brief intervention
- six weekly brief intervention sessions
- four weekly brief intervention sessions, utilizing telephone-delivered facilitation
- screening and one-session brief intervention combined together in one meeting, followed by the remaining five sessions

Included with the facilitator guide are a video and a CD-ROM with supplemental materials, including a reproducible participant workbook and participant journal.

#### Step 3: Referral to Treatment

At completion of the brief intervention, a clinician may refer participants with a moderate or severe addiction for further assessment or for various treatment services. This last step of the SBIRT model is addressed in detail in the facilitation instructions.

## What Is Marijuana?

Marijuana is the most widely used illicit substance in the Western world. Recent data indicate that the prevalence of marijuana use among the general U.S. population has increased from 4.1 percent in 2001–2002 to 9.5 percent in 2012–2013.



Marijuana—or, to use its scientific name, cannabis—goes by many colloquial names, including weed, pot, grass, reefer, herb, Mary Jane and MJ, dope, skunk, boom, gangster, kif, dank, nug, and ganja. For the sake of simplicity, this facilitator guide refers only to marijuana, cannabis, or weed. You may find yourself using a broader range of terms, depending on what term a given participant uses during the sessions.

The drug is derived from the leaves, stems, seeds, and flowers of plants in the *Cannabis* genus, particularly *Cannabis sativa* and several other species, commonly called hemp plants. Hemp is an ancient crop with a diverse history of uses in industry, agriculture, medicine, religion, and recreation.

Because of its psychoactive properties, marijuana has been listed in the United States on Schedule I of the Controlled Substances Act of 1970. This makes it illegal by federal law to possess marijuana. In 1996, however, California passed legislation to legalize marijuana for medical use. More recently, as social resistance to marijuana use has ebbed, other states have legalized marijuana

for medical use with varying limitations and qualifications—twenty-three in total, along with the District of Columbia. Alaska, Colorado, Oregon, Washington, and the District of Columbia have legalized its recreational use. When marijuana is used recreationally—illicitly in most states—two cannabinoids produce the psychoactive effects the user is seeking.

*Cannabinoids* are organic chemical substances belonging to a group that comprises the unique active constituents of cannabis. The two main cannabinoids are delta-9-tetrahydrocannabinol (THC) and cannabidiol (CBD).

Delta-9-tetrahydrocannabinol (delta-9-THC, or simply THC) is the primary psychoactive ingredient in cannabis that causes its intoxicating effects.

*Dronabinol (Marinol)* is a synthetic version of THC prescribed to improve appetite in AIDS patients with weight loss problems. It also is used for preventing nausea and vomiting associated with cancer chemotherapy in patients who have failed to respond to standard drugs.

*Nabilone (Cesamet)* is another synthetic version of THC mainly prescribed for nausea and vomiting associated with chemotherapy when other therapies are not managing the condition.

Cannabidiol (CBD) is a major constituent of the plant, accounting for up to 40 percent of its extracts. It is found in inverse ratio to THC; in other words, as the level of THC rises, the level of CBD falls. Recent studies have suggested that CBD has antipsychotic and antianxiety properties.

*Epidiolex (CBD)* is a botanical CBD extract licensed for testing with severe childhood epilepsy syndromes. (At the time of publication, this drug was not yet FDA approved.)

Nabiximols (Sativex) is a botanical extract with an almost evenly balanced ratio of THC and CBD as an oral spray. It is licensed for use in spasticity related to multiple sclerosis where other medications have failed. It has also been tested for the management of cannabis withdrawal. (At the time of publication, this drug was not yet FDA approved.)

The human body produces chemicals that stimulate the brain's cannabinoid receptor system. One of these is known as *anandamide*, and it has similar but much milder effects than THC. Anandamide helps regulate a variety of brain functions, including pleasure, memory, thinking, concentration, movement, coor-

dination, appetite, pain, sensory perception, and time perception. THC from marijuana acts much more strongly on the brain's receptors and disrupts their natural functions.

#### Marijuana Use

Marijuana is usually used in one of three ways:

- Smoking the dried, shredded, or ground plant material, typically just the flowering heads. Traditionally, marijuana has been smoked in hand-rolled cigarettes (called *joints*), in pipes, or in water pipes (called *bongs* or *hoo-kahs*). More recently, *blunts* are being used, which are hollowed-out cigars in which the tobacco has largely been replaced with marijuana.
- 2. *Vaporizing* the plant to extract the chemicals responsible for the effect. Then the user inhales the vapor, which avoids inhalation of the smoke and leads to more rapid onset of effects. "Vape" pens from e-cigarettes are used in this manner. You can also vaporize marijuana extracts. These extracts come in various forms, such as hash oil, a soft solid called *wax* or *budder*, or hard amber-colored solids called *shatter*.
- 3. *Ingesting* the plant or its extracts orally. Some users may mix marijuana or its extracts into baked goods or brew it as a tea.

#### **Processing**

The cannabis plant material may be dried and shredded for smoking. Alternatively, it is processed into even more potent cannabis-derived extracts or products, such as edibles and oils. Hashish, a potent form of cannabis, is made by collecting and compressing trichomes, which are fine growths on the cannabis plants that produce a sticky resin.

Inhaling extracts, which is called *dabbing*, is increasing in popularity. Extracts, such as hash oil, wax, or shatter, deliver very high doses of THC leading to greater intoxication. (Because dabbing involves the use of butane lighter fluid, the process of making the extracts itself can be dangerous.)

Besides these marijuana products, a newer product wrongly called *synthetic marijuana* exists, which consists of laboratory chemicals that stimulate the same receptors in our brain but have nothing to do with THC and will be discussed in another section of this guide.

#### Changes in Potency, Incidence

The potency of the THC in marijuana varies widely. Generally, it is 1 percent to more than 20 percent in plant material and 10 percent to 20 percent in hashish. These percentages may be even higher depending on the manner of preparation.

Even if the plant is simply shredded or ground and not processed further, the THC levels in marijuana are much higher today than they were in the past. And as noted, extracts are designed to contain higher potency—some of which can be more than 80 percent THC.

These changes have increased marijuana's footprint—and correspondingly increased its use, addiction, and treatment rates. Marijuana today in form, potency, and availability is different than marijuana of the past.

## What Are the Effects of Using Marijuana?

Generally, marijuana intoxication lasts for a few hours. Effects vary among different users, but among those commonly described are euphoria, heightened sensory perception, relaxation, laughter, impaired motor skills, altered cognitive functions, impaired memory, increased heart rate, bloodshot eyes, and increased appetite.

Some users also experience other unpleasant effects, such as anxiety, fear, distrust, and panic. High doses can cause more severe panic and acute psychosis (disturbed perceptions and paranoia) in some users. In 2009, marijuana was a contributing factor in more than 375,000 emergency room visits.<sup>3</sup> By 2012, that number had increased to more than 450,000.<sup>4</sup>

#### **Functional**

According to evidence provided by the National Institute on Drug Abuse (NIDA), because marijuana impairs short-term memory and judgment and distorts perception, it can impair performance in school, at work, or at leisure and make it dangerous to drive an automobile or operate machinery.<sup>5</sup>

## Neurological

NIDA also points out that marijuana can affect adolescent brains that are still maturing, so regular use by teens may have negative and long-lasting effects on cognitive development.<sup>6</sup> This same report states that, contrary to the belief of some, marijuana can be addictive, and its use may make other forms of drug use or addiction more likely.

## Mental Health

Frequent cannabis use has often been associated with greater possibility of developing another substance use disorder, such as ones related to alcohol, cocaine, or opioids. A high comorbidity rate exists between cannabis use disorder (addiction) and some mental health disorders, most commonly depression, anxiety, psychosis, and bipolar disorders.

## **Physical**

Because cannabis smoke contains high carcinogenic compound levels, users' risk for respiratory illnesses such as lung inflammation, bronchitis, or pneumonia is similar to that for tobacco smokers. Marijuana's effects also include an increased heart rate and an increased risk of stroke and heart attack.

#### Withdrawal

Marijuana users who take the drug daily or almost daily for at least several months may suffer withdrawal upon quitting abruptly. As characterized by the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders—Fifth Edition (DSM-5)*, withdrawal symptoms may include irritability, anger, aggression, anxiety, difficulty sleeping, decreased appetite, and/or a depressed mood. Withdrawal might also involve such physical symptoms as abdominal pain, tremors, sweating, fever, chills, or headaches. Marijuana withdrawal, like nicotine withdrawal, while uncomfortable, is not life threatening.

## What Is Synthetic Marijuana?

Synthetic marijuana, in fact, isn't marijuana at all. According to NIDA, synthetic marijuana refers to a wide variety of laboratory chemicals sprayed onto herbal mixtures that produce experiences similar to marijuana and are frequently wrongly marketed as "safe," legal alternatives to that drug. Synthetic cannabinoid products are created by spraying highly concentrated chemicals that are not THC, but are similar in its effects, onto other dried, shredded plant materials, making their psychoactive (mind-altering) effects much more powerful than marijuana. The more technical name for these synthetic cannabinoid products is synthetic cannabinoid receptor agonists (SCRA), but they are commonly known by brand names such as Spice, Spike, K2, fake weed, Yucatan Fire, and Moon Rocks. These synthetic marijuana products became available in Europe beginning in about 2004 and in the United States by 2008, and they could

be purchased in head shops, in gas stations, and via the Internet. However, in 2011, the Drug Enforcement Administration (DEA) designated the five active chemicals most frequently found in synthetic marijuana (JWH-018, JWH-073, JWH-200, CP-47,497, and cannabicyclohexanol) as Schedule I controlled substances, making it illegal to sell, buy, or possess them.<sup>10</sup>

Of the illicit drugs most used by high school seniors, NIDA states that synthetic marijuana is second only to marijuana itself. Its popularity is due in part to ongoing ease of access, the fact that the chemicals used in SCRA are not easily detected in standard drug tests, and the misperception that synthetic cannabinoids and related products are "natural" and therefore harmless. They are also used to avoid detection of marijuana use in workplace and roadside drug testing, thus their continued popularity even in states with legal recreational marijuana.

Although SCRA users report experiences similar to those produced by marijuana, in many cases the effects are much stronger than those of marijuana because the effects on the brain receptors are much more powerful. Because the chemical composition of many SCRA products sold as Spice, Kronic, or other brands varies, users also might experience unexpected and sometimes dramatically different effects. Some users report psychotic effects like extreme anxiety, paranoia, and hallucinations. SCRA users who have contacted poison control centers report symptoms that include rapid heart rate, vomiting, agitation, confusion, hallucinations, and seizures. Synthetic cannabinoids can also raise blood pressure and cause reduced blood supply to the heart (myocardial ischemia), and in a few cases their use has been associated with heart attacks. Regular users may also experience withdrawal symptoms. We still do not know the exact toxicity of these synthetic cannabinoids or all the ways they may affect human health in the short and long term.

Such uncertainty isn't likely to be resolved soon, because as the Centers for Disease Control and Prevention reports, "new versions continue to appear on the market because manufacturers change their chemical compounds to create a 'new' drug and circumvent existing laws." <sup>11</sup>

*Marijuana Brief Intervention* was not developed with synthetic cannabinoids in mind, and no participants with SCRA addiction were included in the relevant studies. However, the program's principles and approach could be applied to addressing concerns related to SCRA as well, particularly as use typically cooccurs with marijuana.

# Why Is Marijuana Brief Intervention Needed?

Almost everyone knows someone who has tried marijuana. In the United States in 2014, about 44 percent of high school seniors, 65 percent of thirty-year-olds, and 83 percent of fifty-five-year-olds reported having tried marijuana or hash one or more times.<sup>12</sup>

PEOPLE IN THE U.S. IN 2014 WHO REPORTED HAVING TRIED MARIJUANA OR HASH ONE OR MORE TIMES



According to the Substance Abuse and Mental Health Services Administration (SAMHSA), marijuana was the most commonly used illicit drug in 2013, with 19.8 million past-month users. In fact, during the six years between 2007 and 2013, daily or almost daily use of marijuana had increased by three million people, and the number of emergency room visits related to marijuana use also increased.

In 2011, SAMHSA's Treatment Episode Data Set indicated that 18 percent of people ages twelve and older who were admitted to treatment nationally reported marijuana as their primary substance. For youth ages twelve to seventeen, about 75 percent reported marijuana as their primary substance.<sup>14</sup>

Estimates are that 9 percent of people (one out of eleven) who wait to try marijuana until they are at least eighteen years old will eventually develop a cannabis use disorder, which is about the same rate as for those who try alcohol. Of those who start use in their teens, 17 percent will develop a cannabis use disorder.<sup>15</sup>

Additionally, NIDA's Monitoring the Future 2014 survey showed continuing decline in perceived risk of harm associated with marijuana use among teens and a similar continuing decline in disapproval for marijuana use, attitudes that have been associated with increases in use over time.<sup>16</sup>

State policies on medical use and recreational use mean marijuana is having a greater social impact. Waning stigma against use suggests more people will use, resulting in increased harmful use and addiction. This presents a growing need for screening and brief intervention services for adults who meet mild-, moderate-, or severe-level *DSM-5* criteria for a cannabis use disorder.

Marijuana Brief Intervention helps to identify those with risky marijuana use, and a brief intervention helps them reduce or abstain from use. Some people will be unsure about changing their marijuana use, and this program guides them toward preparation and action. In some instances, it may be more appropriate for the facilitator to refer individuals for further assessment and treatment services, especially if the screening indicates severe addiction or the participant does not respond effectively to the intervention. Relapse can also occur, so repeated interventions may be needed for successful change.

### What Is a Cannabis Use Disorder?

Addiction is most commonly described as "compulsive drug seeking and use, despite harmful consequences." However, *DSM-5*, which contains descriptions and symptoms of all mental disorders classified by the American Psychiatric Association (APA), uses the term *substance use disorder* to describe addiction on a spectrum.

According to *DSM-5*, people experiencing problems related to marijuana use who meet certain diagnostic criteria are said to have a cannabis use disorder. A cannabis use disorder is categorized as *mild*, *moderate*, or *severe*, depending on the number of criteria, or symptoms, present. The criteria are related to impaired control, social impairment, risky use, and pharmacological indicators (tolerance and withdrawal). Meeting two or three symptoms within a twelve-month period indicates a *mild* cannabis use disorder; four to five symptoms, a *moderate* disorder; and six or more symptoms, a *severe* disorder.

People with a mild to moderate cannabis use disorder may be good candidates for a brief intervention by a health care provider. People with a moderate to severe cannabis use disorder may require more intensive and specialist addiction treatment.

Signs of cannabis use disorder include the following:

- loss of control over how much and how often the drug is used
- · unsuccessful efforts to quit or cut down
- tolerance
- withdrawal
- devotion of time and effort to obtaining the drug

- abandoning school- or work-related, social, and recreational activities in favor of using marijuana
- continued use despite negative consequences

Those who are diagnosed with cannabis use disorder may have a concurrent mental health disorder. In those individuals, their mental health disorder symptoms may have led to the marijuana use in an effort to address those symptoms. However, marijuana use may worsen other psychiatric symptoms. Withdrawal from cannabis, while uncomfortable, is not life threatening.

More detailed information on cannabis use disorder's diagnostic criteria, development and course, differential diagnosis, comorbidity, and cannabis intoxication and withdrawal is available in *DSM-5*, pages 509–19.

## Why Use an SBIRT Approach?

There has been an increased focus in recent years on the role health care settings can have in addressing substance use. Screening, Brief Intervention, and Referral to Treatment (SBIRT) programs aim to detect and intervene with participants who—regardless of whether they meet criteria for cannabis use disorder—are experiencing problems as a result of their use and are at risk of developing a more severe cannabis use disorder. Early interventions are generally opportunistic and are appropriate for participants who have not specifically sought help for their cannabis use but whose use is detected as being risky. Brief interventions aim to reduce the harm from using cannabis and can save on long-term health care costs. Engaging participants early in their marijuana use offers the opportunity to intervene before their behaviors become ingrained. An SBIRT program typically includes the provision of self-help material, a brief assessment/screen, advice and information, assessment of motivation for change, problem solving, goal setting, relapse prevention, harm reduction, and follow-up care.

Research has proven the SBIRT approach to be effective in achieving considerable harm reduction. Certainly abstinence will achieve the greatest reduction in harm, but not all participants are ready and motivated for it. Striving for and realizing intermediate goals, such as decreasing use or using in less risky situations, will allow participants to achieve mastery. Mastery, in turn, can increase a participant's motivation to work on goals more difficult to achieve, such as abstinence.

# What Are the Marijuana Brief Intervention Program Components?

Marijuana Brief Intervention is an evidence-based brief intervention program for adults age eighteen or older, primarily those who have a mild to moderate cannabis use disorder. The flexible program is designed to meet participants where they are in their marijuana use. It follows a full SBIRT model that integrates developmentally adjusted components of motivational interviewing, cognitive-behavioral therapy, and the Stages of Change Model.

In keeping with the SBIRT approach, this program includes instructions to measure the participant's marijuana use through a screening tool, pursue a brief intervention, and, if needed, refer to further treatment. The intervention can be delivered in a single session, a four-session format, or a six-session format.

#### Screening

The screening starts by assessing the participant's level of cannabis use in the past, first within the past twelve months, then within the past three months. After screening for history of use, the screening tool the program uses is the Severity of Dependence Scale (SDS). The SDS is a five-item validated measurement tool and is the recommended screener, although the Cannabis Use Problems Identification Test (CUPIT) or another screening tool may be substituted (especially if use is less frequent, as the CUPIT and other tools may predict a developing disorder). Screening tools should have acceptable test-retest reliability and satisfactory predictive power. They offer an opportunity to save time and cost while estimating negative consequences from marijuana use and identifying at-risk people early.<sup>18</sup>

The SDS is a five-item questionnaire that takes less than a minute to complete. The items address control of marijuana use, degree of dependence, anxiety about use, desire to quit, and perceived difficulty of quitting to determine the severity of marijuana use or addiction. Each question is scored on a four-point scale (from 0 to 3). Adding the five scores delivers the total score. The higher the total, the more severe the cannabis use disorder. The scoring rubric is as follows:

3-5 = mild cannabis use disorder

6-10 = moderate cannabis use disorder

11–15 = severe cannabis use disorder

General medical providers might consider including the SDS for marijuana screening when they screen for alcohol and tobacco use. The screening step may also precede or be combined into the one-session intervention.

#### **One-Session Intervention**

A clinician can configure this program in numerous ways to accommodate participants' time constraints and willingness to participate. For example, a screening and one-session intervention may take place simultaneously or occur over two meetings.

The one-session intervention generally lasts sixty to seventy minutes. It touches on the same topics that the six-session version covers, but not to the same degree of depth. The topics include planning for change, deciding to quit or cut down, strategies for change, marijuana withdrawal, and slips and lapses.

Due to the limited time frame, the facilitator introduces the program, addresses each topic, and introduces the participant workbook and participant journal. The participant continues through the workbook exercises and journal entries individually after the session.

#### Six-Session Intervention

The six-session intervention will either involve six weekly brief intervention sessions or will instead have a combined screening and one-session brief intervention, followed by the five remaining sessions. Each session lasts about sixty minutes. One week between sessions is recommended. In the six-session intervention, the facilitator covers the following topics in the participant meetings.

Session 1: Preparing for Change—This session provides a program introduction and assessment to determine the severity of participants' cannabis use disorder. The Cannabis Problems Questionnaire—Revised (CPQ-R) is used to help identify existing problems associated with cannabis use. Activities focus on a decisional balance exercise, a decision to quit or cut down, and encouragement to continue the program.

Session 2: Strategies for Change—Participants use the High-Risk Confidence Questionnaire (HRC) to examine how they feel about resisting marijuana in certain situations. Activities focus on instruction on triggers, cravings, and high-risk situations; coping with cravings; identifying strategies for change; planning ahead; social support; and encouragement to continue the program.

Session 3: Managing Withdrawal—The participant is encouraged to select a quit or change date that coincides with the administration of this session. Activities focus on cognitive restructuring, drug-refusal skills, understanding withdrawal, managing slips, and encouragement to continue the program.

Session 4: Problem Solving—This session teaches skills for maintaining abstinence. Activities focus on problem solving, rewarding oneself, healthy sleeping, muscle relaxation, identifying drug-free activities, and encouragement to continue the program.

Session 5: Review—This session provides a detailed review and consolidation of previous sessions. Activities focus on a comprehensive review, addressing individual participant needs, developing coping skills, developing an action plan, and encouragement to continue the program.

Session 6: Keeping on Track—This session prepares the participant for selfreliance going forward. Activities focus on dealing with lapses, creating an emergency plan for relapse, and encouragement for new hobbies and activities.

Each of the six sessions builds on the previous week's discussion and skills, so they should be done in order.

#### Four-Session Intervention

The six-session format also incorporates instructions for adapting the material for four sessions facilitated over the telephone. The use of telephone-based interventions is novel and gaining popularity as a low-cost option. Session instructions should be explained to participants in detail at the time of the screening. Procedures for the number of attempted calls and for increasing the intensity or frequency of contact attempts following missed phone sessions need to be clearly established and documented.

#### Referral to Treatment

At the end of the brief intervention, the clinician may refer the participant for further assessment or for various treatment services if the participant's marijuana use suggests a more severe cannabis use disorder or if the clinician feels that additional help is necessary. Facilitation instructions are included for this final step of the SBIRT process.

#### **Program Elements**

The program includes a facilitator guide, a video on DVD, and a CD-ROM with supplemental materials.

The *Marijuana Brief Intervention* DVD provides a twenty-four-minute video. This video is optional and can be played after the screening, during the one-session intervention, or during session 1.

The CD-ROM holds supplemental materials, including

- the screening tool
- · the participant workbook
- · the participant journal
- · additional assessment tools and resources, and a fact sheet
- a list of relevant research articles

Participants use the participant workbook after the one-session intervention to continue learning and exploring their plans for change. Those in the six-session intervention may use some of the workbook exercises with the clinician during the sessions and complete others as homework between session meetings.

Daily monitoring is also an important aspect of behavior change. Session participants can use the participant journal to monitor use, triggers, cravings, and high-risk situations during the program and, perhaps as importantly, in the months to follow. Many of those who have used the journal have found it helpful, particularly through a six-month follow-up.

## In What Settings Can Marijuana Brief Intervention Be Used?

Marijuana Brief Intervention is adaptable for use in a variety of settings. Hospitals, health clinics, halfway houses, private therapy sessions, student service centers for colleges and universities, and criminal justice settings such as jails and prisons are a few examples. It would also be appropriate for someone on a waiting list for treatment to initiate thoughts on change.

This program may be especially useful for general medical practitioners. General practitioners are in an ideal position to identify problematic cannabis use, given the high proportion of the population who visit primary health care settings each year. Brief interventions like *Marijuana Brief Intervention* are reimbursable using CPT codes 99408 and 99409.

#### Primary Health Care

Primary health care settings provide an excellent opportunity for delivering an SBIRT program to address problematic cannabis use. In most cases, participants will not present in these settings requesting help for marijuana use. Utilizing a screening tool and inquiring about lifestyle choices (including drug use) may help identify whether marijuana use is contributing to present health concerns. Some participants may avoid conversations about their use and will be relieved

that the practitioner initiated the conversation about marijuana. In addition, clinicians and general practitioners should pick up on any marijuana references, since participants may be feeling out whether it is safe to discuss marijuana use. At a minimum, such settings should provide prevention information such as fact sheets, but SBIRT services are strongly encouraged.

#### **Student Services**

This program may be part of a student services offering at colleges and universities. With the number of students who go to student service centers in post-secondary educational settings, including continuing education programs, screening for marijuana use could assist with harm reduction among student populations.

## **Adult Treatment Settings**

Marijuana Brief Intervention could be offered at residential treatment clinics as part of its service offerings. In these settings, cannabis use may not be specifically targeted but dealt with in the context of a general substance use treatment program. If an adult has been assessed for treatment, but use is not severe enough to warrant treatment, this brief intervention program could be offered as an alternative method of reducing or eliminating use. Given the prevalence of marijuana use with co-occurring disorders (including other substance use disorders), it is strongly recommended that treatment centers offer at least one group that specifically targets cannabis use.

### Mental Health Settings

Often adults do not present for a cannabis use problem but for another mental health problem. Screening for use with a participant who uses marijuana could help identify if marijuana use presents a concern in addition to any co-occurring disorders. This environment could then include *Marijuana Brief Intervention* with its service offerings.

# Waiting Lists

Adults who are on waiting lists for treatment services may be good candidates for *Marijuana Brief Intervention*. The program could offer a therapeutic transition by introducing the participant to treatment principles and reinforcing thoughts of change. The facilitator can begin this process by discussing change and its possible benefits.

## **Group Administration**

The *Marijuana Brief Intervention* program has not been tested in a group administration format. The emphasis is on tailored individual feedback, so individual facilitation is favored over group administration. It may be possible to run a supplementary support group for those participating in the brief intervention in order to reinforce the principles of craving management and relapse prevention.

## Who Can Implement the Marijuana Brief Intervention Program?

All clinicians working with adults who are experiencing cannabis-related problems are in a position to implement this program. Some examples include (but are not limited to) substance use specialists, nurses and nurse practitioners, mental health professionals, physicians, psychologists, psychiatrists, postsecondary student services professionals, probation and parole officers, and general medical practitioners. For simplicity's sake, throughout these guidelines, we refer to you as *clinician* or *facilitator* and the person seeking help as the *participant*.

Research has shown that a strong therapeutic relationship is a necessary, but not sufficient, condition for effective psychotherapy. According to Ackerman and Hilsenroth, <sup>19</sup> a strong therapeutic relationship involves flexibility, honesty, respect, trustworthiness, warmth, confidence, interest, and openness. A clinician's judgment plays an important role in this program, as do individual participants' perspectives, needs, and goals. This is especially true when working with cannabis users, as most do not voluntarily seek help for their cannabis use. Use these guidelines to tailor the program in a way that utilizes the clinician's professional expertise and addresses individual participant needs. Marijuana use may be secondary to other drug use, health concerns, or mental health conditions.

These evidence-based guidelines are not designed to teach core clinical skills and do not replace specialist training courses. A facilitator should have experience in the following areas:

- basic counseling, such as building a therapeutic alliance, active listening, and active reflections
- · general alcohol and other drug screening
- knowledge of common mental health conditions, such as anxiety and depression
- evidenced-based approaches, such as motivational enhancement therapy and cognitive-behavioral therapy
- cultural sensitivity

Early dropout (i.e., attending only one session) is common, so prioritizing key messages, engaging the participant, and building motivation for change in the first session is important. Studies do suggest that single sessions can be effective, but continued care may be appropriate, depending on individual circumstances. At the end of the brief intervention, the clinician may refer the participant for further assessment or for various treatment services if the participant's marijuana use suggests a more severe cannabis use disorder or if the clinician feels that additional help is necessary.

## Who Can Benefit from Marijuana Brief Intervention?

In general, *Marijuana Brief Intervention* is an evidence-based brief intervention program for adults who have a mild to moderate cannabis use disorder. In practice, however, the program may prove beneficial to those who are undiagnosed or those who have a severe cannabis use disorder. Those who have co-occurring disorders might also be treated in the program—if the co-occurring condition is being treated and the participant is willing to engage.

Participants may be ambivalent about change, but the program can help people who have not yet thought about or are still thinking about changing their use. Individual tailoring allows the clinician to meet participants where they are at in their willingness to change. Additional tailoring can take into account individual participant circumstances, including cultural and ethnic differences.

Recent immigrants and some racial and ethnic groups may view alcohol, cannabis, and other substance use and addiction treatment through the lens of their culture and experiences. Cultural perspectives may affect a participant's willingness to participate, so the following tips can be helpful when planning for a brief intervention.

- Include ethnic and cultural perspectives in your program approach.
- Identify any family, religious, or community associations with the participant's use.
- Consider translating materials and include a translator if necessary.
- Consider the participant's social contexts and support systems.
- Assist with literacy issues if necessary.
- Offer screening or facilitation with someone of the same culture.
- Involve other family members to accommodate family dynamics and structure, but only with the participant's explicit permission.

- Consider cultural stigmas that might exist around mental health.
- Understand that health care services and institutions may be regarded with mistrust.
- Relay expertise sensitively for those who do not understand specialist education and experience.
- Be sensitive to participant concerns over the collection of personal information and confidentiality.
- Take other concerns into account, such as housing, transportation, child care, school, employment, domestic violence, and so forth.

## What Is the History and Research behind Marijuana Brief Intervention?

Marijuana Brief Intervention has its roots in a randomized controlled trial of the one- and six-session versions of the brief intervention. It was further developed from Management of Cannabis Use Disorder and Related Issues, a set of clinical guidelines developed by Jan Copeland, Amie Frewen, and Kathryn Elkins for the National Cannabis Prevention and Information Centre (NCPIC), University of New South Wales (UNSW), Sydney, Australia. Funded by what was then the Australian Government Department of Health and Ageing, it was published in 2009. The program's guidelines were the culmination of more than a decade of research into the screening, assessment, and management of cannabis-related problems.

The author's original 1999 randomized controlled trial of brief cognitive-behavioral therapy (CBT) interventions for cannabis dependence was undertaken in Australia with a total of 229 participants assessed and randomly assigned to either a six-session CBT program (6CBT), a single-session CBT intervention (1CBT), or a delayed-treatment control (DTC) group. The participants were assisted in acquiring skills to stop cannabis use and maintain abstinence. Participants were followed up a median of 237 days after their last attendance.

Participants in the 1CBT and 6CBT intervention groups reported better treatment outcomes than the DTC group. They were more likely to report abstinence, were significantly less concerned about their control over cannabis use, and reported significantly fewer cannabis-related problems than those in the DTC group. Those in the 6CBT group also reported more significantly reduced levels of cannabis consumption than the DTC group reported. A secondary analysis of the 6CBT and 1CBT groups showed that treatment compliance was

significantly associated with decreased dependence and cannabis-related problems. This study supports the attractiveness and effectiveness of individual CBT interventions for cannabis use disorders and the need for multisite replication trials.

Dr. Copeland has adapted the program to be *DSM-5* compliant, to include a full SBIRT approach and complete facilitation instructions, and to pair the product with a twenty-four-minute video specific to marijuana. *Marijuana Brief Intervention* maintains the original one- and six-session versions, as well as the four-session telephone version, which has also been tested in a randomized controlled trial (where 39 percent of participants reported clinically significant improvement in measures of cannabis-related problems and dependence severity at a twelve-week follow-up, compared to 14 percent in the control group).

# What Evidence-Based Approaches Are Used in Marijuana Brief Intervention?

Evidence-based approaches used throughout the program include motivational interviewing, cognitive-behavioral therapy, and stages of change. The following brief summary is not a substitute for training in these techniques. Any clinician who is working with this program is strongly urged to obtain and maintain skills in these areas.

#### Motivational Interviewing

Motivational interviewing (MI) is a clinical strategy designed to enhance participant motivation for change and is supported by a considerable amount of clinical research. MI aims to increase the participant's awareness of the potential problems caused, consequences experienced, and risks faced as a result of a type of behavior. Using a nonjudgmental and nonconfrontational approach, the main goals are to establish rapport, reduce resistance, elicit conversation related to change, and establish commitment language from the participant. Ambivalence is accepted as normal in this approach, and as a result *Marijuana Brief Intervention* is an appropriate program for participants who are not voluntary treatment seekers (e.g., who are court diverted) or who are contemplating change but not quite ready to move into the action phase.

A collaborative approach—seeking to understand the participant's point of view, particularly via reflective listening, summarizing, and affirmation—is fundamental to MI. Eliciting and selectively reinforcing the participant's own self-motivational statements is important, as is monitoring the participant's

willingness to change and matching the approach to the participant's stage of change. All of these considerations help promote the participant's sense of autonomy.

Miller and Rollnick have described the following four basic motivational principles underlying  ${\rm MI.^{21}}$ 

- 1. Express empathy. Respect the participant by avoiding communications that imply a superior-inferior relationship. Instead, a clinician using MI employs a blended role of supportive companion and knowledgeable consultant. Persuasion is gentle, subtle, and allows the participant to decide to change and carry out that choice. Reflective listening is a key skill in motivational interviewing. It communicates an acceptance of participants as they are and supports them in the process of change.
- 2. Develop discrepancy. Motivation for change occurs when people perceive a discrepancy between where they are and where they want to be. When a participant is not actively engaged in thinking about change, the clinician should aim to develop a discrepancy by raising the participant's awareness of the adverse consequences of his or her use. Such information, when properly presented, can precipitate motivation for change. When a participant is actively engaged in change or thinking about change at program initiation, it takes less time and effort to encourage the participant to change.
- 3. Roll with resistance. MI strategies do not meet resistance head-on, but rather "roll with" the momentum, with a goal of shifting participant perceptions in the process. New ways of thinking about problems are invited, but are not imposed. Ambivalence is viewed as normal, not pathological, and is explored openly. Solutions are usually evoked from the participant rather than provided by the clinician.
- 4. Support self-efficacy. Participants must be persuaded that they can change their marijuana use and thereby reduce related problems. This might be called hope or optimism, although it is not an overall optimistic nature that is crucial here but rather participants' specific belief that they can change their drug use. Unless this element is present, a discrepancy crisis is likely to result in defensive coping (e.g., rationalization or denial) to reduce discomfort—a natural and understandable protective process, but one that does not result in changing behavior.

#### Cognitive-Behavioral Therapy

Cognitive-behavioral therapy (CBT) works on the premise that cognitions and behaviors are often intrinsically linked. For many participants taking part in this program, marijuana use will be a deeply entrenched habit and will sometimes be the primary coping mechanism for a range of situations, both negative (such as distressing ones) and positive (such as celebrations and rewards). An emphasis on skills training can help participants to unlearn old habits and replace those with new, more functional skills. CBT allows participants to develop, under clinical supervision, new coping skills or to re-establish old skills that have become neglected.

Many faulty or irrational thought processes are automatic, habitual, and resistant to change. The development of techniques to change or challenge such thought processes, together with other cognitive and behavioral coping responses, can lead to reduced severity of marijuana use. Thus, CBT is a skills-based approach and works on helping participants to develop a range of therapeutic techniques for overcoming habitual reliance on marijuana use as a coping mechanism. The approach is structured and goal oriented, with "homework" tasks that require participants to develop specific skills by practicing set exercises. Specific skills or techniques used can be varied according to the needs of the individual participant. Some critical coping skills include

- techniques for managing cravings
- recognition of triggers for drug use
- personal strategies for avoiding or dealing with triggers, managing withdrawal symptoms, and preventing relapse
- techniques for managing low mood
- stress-management skills
- · assertiveness and communication skills
- relaxation skills

# Stages of Change

The Stages of Change Model is categorized by the steps people progress through in management of successful behavioral change.<sup>22</sup>

PRECONTEMPLATION ► CONTEMPLATION ► PREPARATION ► ACTION ► MAINTENANCE

# Precontemplation

People in this stage are not seriously thinking about change and are not seeking help. Key approaches with participants in this stage include identifying "the problem," understanding the difference between reason and rationalization, using MI to raise awareness and doubt, increasing perception of risks and consequences, and guiding the participant toward contemplation.

## Contemplation

People in this stage are more aware of consequences of use and may consider the possibility of changing, but they are likely ambivalent about it. Key approaches include considering the pros and cons of use and pros and cons of change, gathering information about past change attempts (partial successes, not failures), exploring participant-identified options for change and encouraging healthy choices (if the participant is open to suggestions), and guiding the participant toward preparation.

# Preparation

People in this stage feel that change is imminent. Key approaches include recognizing that things can't stay the same, defining what the goals for change are (interim, incremental, and even temporary steps toward larger goals), defining what next steps are, discussing how to overcome barriers, and establishing a plan for action.

#### Action

People in this stage have made behavioral changes. Key approaches include reaffirming commitment, focusing on previous partial successes, highlighting successful changes already made, offering additional successful change options, setting follow-up appointments, and discussing ongoing maintenance.

#### Maintenance

People in this stage have successfully made specific behavioral changes and are engaged in relapse prevention. With increased longevity, risk of relapse decreases and confidence in successful change increases. Key approaches include discussing ongoing risk factors and coming up with ways to reduce them, discussing additional relapse prevention skills, establishing a relapse response plan, recognizing achievements, addressing concerns, having empathy, offering additional information, and offering future support.

# Tips for Using the Marijuana Brief Intervention Program

- 1. The digital files include reproducible forms that can be printed and distributed. Familiarize yourself with all of the materials included and pay attention to the materials needed for each session.
- 2. Screening will help identify the best course of action for individual participants, including whether *Marijuana Brief Intervention* is appropriate. The effectiveness of the screening tool included in the program is backed by research, but other screeners with proven reliability and validity could also be used.
- 3. The facilitation of *Marijuana Brief Intervention* includes the use of multiple questionnaires. It is preferred that participants fill these out prior to the sessions in which they will be reviewed, as it saves time. For participants who have difficulty reading, or for participants who do not fill them out in advance, the facilitator and the participant can fill them out together. However, in this instance, joint completion of these handouts will add to overall administration time.
- 4. As part of the program, the participant will receive a participant workbook and a participant journal. These are reproducible files found on the CD-ROM. Some of the exercises in these handouts will be completed with the facilitator, and others will be completed by the participant on his or her own. The participant should bring these materials to each session and may need to be reminded to do so. Additionally, the participant may wish to keep using these materials after completion of the program as part of ongoing maintenance.
- 5. Use of CBT as a tool to encourage movement from precontemplation or contemplation to a further stage of change should be more of a consideration in the early sessions. However, after that, participants' engagement should indicate that they are past these early stages of change.

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