



Compassionate Cannabis Clinic
425 Commercial Court, Suite C
Venice, FL 34292
www.venicecare.com

Dear Patient:

On behalf of myself and our entire staff we'd like to welcome you to Florida's medical cannabis program. We're excited to help you obtain a better sense of wellness utilizing a more natural substance.

This welcome packet contains important information about dosing, how to properly use the medicine, how the state ordering system works, how to place your first order, as well as contact information for the dispensaries and medical marijuana treatment centers. **Please read everything carefully and keep this packet in a safe place.** Should you ever need another copy, you can visit <https://venicecare.com/visit-guide/> to download a PDF version you can print at home.

A few quick points:

- Medicinal cannabis is unlike any conventional pharmaceutical medication. It puts you in direct control of your own treatment. If you're unwilling or unable to take a personal interest in your daily treatment regimen, this program will not work for you.
- You may be accustomed to a physician prescribing a medication, telling you to take it a set amount of days, then report back in 3-6 months to let them know how your treatment is progressing. Cannabis is a "use as directed" medicine and cannot be properly dosed. Results and effects vary from person to person. You must do your own research and learn as much as you can about utilizing cannabis to treat your specific conditions. Simply Googling your condition with the word "cannabis" or "marijuana" afterward can result in thousands of informative websites. We advise that you experiment with a variety of products until you find your optimal dose. To avoid adverse reactions, remember to start with a low dose and slowly increase over a period of days or weeks to acclimate your body to cannabinoids.
- Cannabis cannot be legally prescribed within the United States. Dr. Gordon provides recommendations for treatment, which the Supreme Court has upheld as a physician's protected First Amendment right. We don't prescribe, we recommend courses of treatment. As such, it is important to know that **you** will be controlling your own dose, method of injection, and the results associated.
- Florida law prohibits us from calling in specific product orders to the dispensaries on our patients' behalf. We'll provide you the basic education on products available, but you ultimately must make the decision on products and which dispensaries you'll use, as well as placing your order.
- While we are a medical practice that initially qualifies patients and enter them into the Registry, we have no control over the patient or caregiver application process. The Office of Medical Marijuana Use, a division of the Department of Health, is charged with application processing and approvals. If you have a question about the status of your application, you must call the OMMU at 1-800-808-9580 and inquire with them directly. To ensure you're initial application is not rejected, **follow all directions carefully and complete the application form completely.**
- Our office staff is always happy to answer quick questions, however you require a more detailed level of care, we will ask you to schedule an office visit.

With your continued dedication to your care and self-education of your own treatment, we're hopeful you'll see some incredibly positive results and obtain a better feeling of wellbeing.

Sincerely,

Patrick DeLuca
Chief Executive Officer

The Patient / Caregiver ID Card Application Process



The first step in obtaining legal patient status within Florida's medical cannabis program is being qualified by a physician authorized by the Department of Health to recommend cannabis.

After Dr. Gordon has had his in-person certification exam with you, you will be added to the state's Medical Marijuana Use Registry. Once added, you're given a Registry Patient ID Number that becomes attached to you for the duration of your participation in the program.

The law requires all qualified patients and caregivers to complete an ID card application. You may then complete the required application, either in paper form or electronically online. **If you complete your application online, you can pay the fee directly with a credit or debit card.**

Paper Application Requirements

- All spaces must be filled out (including the Registry Patient ID Number) and each application must be signed.
- A color 2" x 2" passport-style photo of your face and shoulders taken against a white background, without facial coverings or expressions must be attached.
- Adult residents must provide a copy of his or her valid Florida driver license or a copy of a valid Florida identification card. The Department will reject patient applications without a physical address, such as a PO box.
- For patients under the age of 18, the parent or legal guardian must provide the Department with a certified copy of a birth certificate or a current record of registration from a Florida K-12 school. Additionally, the parent or legal guardian must have a valid Florida driver license or Florida identification card.
- Patients that qualify as "seasonal" (or living within Florida for at least 31 consecutive days per year) may use two of the following instruments to prove their legal residency status:
 - A deed, mortgage, monthly mortgage statement, mortgage payment booklet or residential rental or lease agreement.
 - One proof of residential address from the seasonal resident's parent, step-parent, legal guardian or other person with whom the seasonal resident resides and a statement from the person with whom the seasonal resident resides stating that the seasonal resident does reside with him or her.
 - A utility hookup or work order dated within 60 days before registration in the medical use registry.
 - A utility bill, not more than two months old.
 - Mail from a financial institution, including checking, savings, or investment account statements, not more than two months old.
 - Mail from a federal, state, county, or municipal government agency, not more than two months old.
- Any other documentation that provides proof of residential address as determined by department rule.
- A check or money order made out to the Department of Health in the amount of \$75 must be sent in with the application or sent independently to the Department if the patient chooses to do the online application. **You must include your Registry Patient ID Number in the memo space of the check or money order.**



Important Information

Application processing time varies due to staffing limitations at the Office of Medical Marijuana Use. Our systems only allow us to see if patients are approved or not, and do not give us any access to if applications have been received, are in process, or have been rejected. **Patients are advised to call the Office of Medical Marijuana Use directly at 1-800-808-9580 Monday – Friday from 8 AM – 5 PM to inquire about application status.**

Once your application is approved, you'll receive an email from the Medical Marijuana Use Registry to the email address given to our office when you had your appointment. Within 2-3 weeks of your initial approval, you'll be mailed your physical Patient ID Card. Keep it on your person at all times.

If you have any life changes (such as marriage or a move), you'll need to fill out a Department Change of Address form and send it back to the Office of Medical Marijuana Use along with a \$15 check or money order.

Patient ID cards are valid for one year from the date of approval. The Department of Health recommends patients renew their licenses 45 days prior to their expiration so there is no lapse in legal patient status.

For more information on the application process, visit <http://flhealth.gov/ommu>.

Accessing The Medical Marijuana Use Registry Online

When a patient or caregiver is added to the Registry by their qualifying physician, they're assigned a Patient Registry ID Number and are sent two automatic emails from the Medical Marijuana Use Registry to the email address we have on file. One email contains a username and link, the other email contains a temporary password.

Use your email address and temporary password to log into the Registry at <https://mmuregistry.flhealth.gov>. When you log in for the first time, the system will prompt you to enter your temporary password and create a new password.

If you forget your password (or if you never receive your temporary password email), you can click the Forgot Password link in the log in screen to have a new temporary password generated and sent to your email address.

Once logged into the Registry, patients can utilize the ID Card feature from the menu to complete and sign their Patient ID Card application and pay their annual patient or caregiver ID card fee.

The Registry will also allow patients to see active and expired orders (what the doctor has to enter into the system), and how many milligrams are left for dispensement for each active order.

Patients can also process their own renewal for their ID cards directly online.

Step By Step Online Application Process

Applying for your Patient or Caregiver ID card online requires a bit of computer savvy, but usually expedites the application process. To apply for your card online:

1. Visit <https://mmuregistry.flhealth.gov/> and click LOG IN from the top menu. Enter your email address and temporary password.
2. When you first login, you will be prompted to change your temporary password. You must enter the temporary password emailed to you, then enter a new password that consists of at least **10 digits, one capital letter, and a special character**.
3. Once logged into the Registry, click **ID Card** from the top menu. You must complete the online application by uploading and attaching your proof of residency, passport photo (unless your driver's license/ID photo has been automatically pulled from the Motor Vehicle Database), and signing by entering your first and last name.
4. After you've completed your online application, you can pay the annual card fee directly within the Registry by entering your credit or debit card information.



What does my recommendation look like?

The doctor enters your order within the Physician Portal inside of the Medical Marijuana Use Registry. Florida requires physicians to specify dose in milligrams, regimen (number of times per day), and duration (up to 70 days).

In addition to the above, when physicians enter their recommendations into the system they must provide method of ingestion. The doctor can order up to two methods of delivery per dose and can select whether or not the patient can also purchase a “cannabis delivery device” such as a vape pen.

The allowed methods of ingestion in Florida currently are inhalation (vape), oral (capsules), sublingual (under the tongue drops), topical (on the skin), or suppository (rectal) form.

The physician must also create separate orders for low-THC (high-CBD) or medical marijuana (full potency).

Because Florida is forcing doctors to essentially write a prescription for a controlled substance (which is prohibited for physicians within the United States), Dr. Gordon has been providing a uniform dosage for all of his patients - both for low-THC and medicinal marijuana.

Once you have an active order into the system, the dispensaries will be able to see and verify your order when you call and will be able to talk to you about products and pricing. Note that patients that no show for appointments will have their orders automatically cancelled, and we can not resubmit orders until you've been seen by Dr. Gordon.

What dispensary should I use?

Pricing, discounts, delivery fees, and product selection varies with each dispensing organization. We advocate doing some of your own research to see what products may fit your needs best, and then calling the dispensaries and asking informed questions. **Additionally, you're not legally bound to one dispensing organization.** You can fill your order in full or in partial with any dispensary.

Simple Google searches using your condition and cannabis within the search bar can yield a variety of results. Sites like leafly.com offer a comprehensive strain and condition database.

Low-THC vs. Full Potency Marijuana

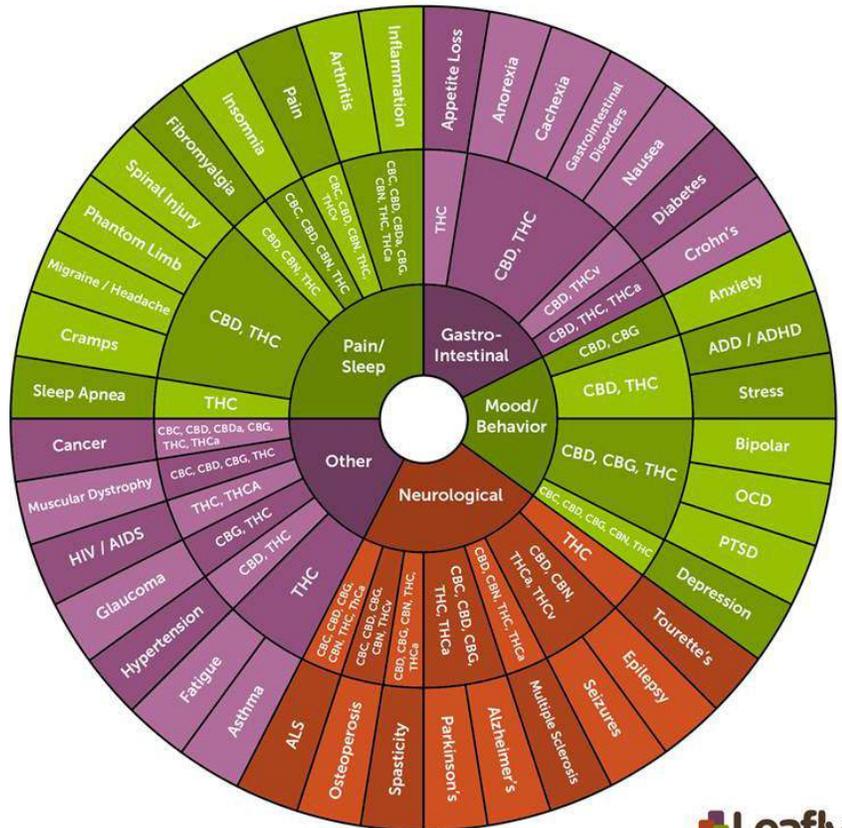
In many instances, a bad first experience may be enough for someone to tragically banish cannabis from his or her life forever. Typically, the reason for doing so has to do with the anxious, paranoid side effects associated with THC, but what first-timers might not realize is there are a few ways to minimize those unpleasant feelings. For those beginners, we've compiled three basic tips, tricks, and recommendations for finding that perfect first-time experience.

Both medical marijuana and low-THC cannabis are available currently within Florida.

Unlike THC, CBD is a non-psychoactive compound with relaxing and medicinal properties. CBD actually helps counteract the anxiety associated with THC, so it's a perfect starting point for new users.

The wheel to the right contains some common qualifying conditions and which combinations have been shown to be the most successful for treatment.

While some patients may not initially prefer the psychoactive effects of THC, it is a vitally important component of successful cannabis therapy. Science has identified what is known as the “entourage effect”, a benefit found from the sum of all parts of the plants.



How is Cannabis dispensed in Florida?

When you call or visit a dispensing organization, they'll look your information up within the Compassionate Use Registry and verify that you're a legal patient and what the doctor has ordered you.

When the doctor puts the order into the system, the daily dose and regimen is multiplied by the number of days of the order. For example, an inhalation order of 200 milligrams taken once per day for 70 days would equal 14,000 milligrams total (200 x 1 x 70), meaning the patient could purchase up to 14,000 milligrams of vape juice in that 45 day order period. **You do not have to purchase the full amount of milligrams with each order.** You are permitted to purchase the full amount or break it up into however many days you'd like to purchase.

Since medical marijuana and low-THC must be ordered separately, unless you specify otherwise to the doctor he will have placed both orders in the system for you.

What do I do if I have an issue with the product?

If you have an issue with the product that isn't related to your health (poor quality, broken cannabis delivery device, missing product), you'll need to call the dispensary you purchased it from.

Should you have a question about your medication regimen, daily dose, or delivery method, feel free to call our office during normal business hours.

While drug interactions and negative side effects are rare with cannabis, they can occur. **If you are ever experiencing a health emergency, you need to call 9-1-1 immediately.** If you have any negative side effects, please call us as soon as possible.

Tips For Beginners

Some common sense tips to reduce bad reactions from cannabis for beginners:

1. Until you know the effects of the medication on you, remember to **start low and go slow**. As you become more acquainted with cannabis and it's effects, you can better gauge your level of therapy necessary.
2. If you're ever experiencing an adverse effect after taking cannabis focus on your breathing and calm yourself. A quick sniff of black pepper or chewing on a peppercorn is known to reduce effects of THC. Additionally, a dose of low-THC cannabis can counteract the effect of THC.
3. Keep a cannabis journal and make sure you notate your experiences with therapy.



Patient Ordering Instructions

As a patient of our clinic, you have been provided with a copy of our Cannabis Basics training and have acknowledged that you fully read and understand what you were provided. This information is vital to your treatment and is considered “doctors orders” similar to discharge instructions. Please keep this documentation handy and refer to it if you have questions about dosing or products.

If you have questions about your application status, you must contact Florida’s Office of Medical Marijuana Use. Their phone number is 1-800-808-9580 and their contact email address is medicalmarijuanause@flhealth.gov.

1. Verify your order within the Registry and understand what the doctor has ordered for you.

- You can login to your account by going to the Medical Marijuana Use Registry at <https://mmuregistry.flhealth.gov>. If you don’t have your original temporary password email, click the forgot password link, put in your email address, and click submit to have another temporary password email sent to you.
- Our standard order includes oral and inhalation methods of administration for both low-THC and full potency cannabis. Oral products include edibles, capsules, tinctures, some concentrates, and oil suspensions. Inhalation products include vape cartridges, nasal sprays, or any product that must be inhaled.

2. Do your research on products available at the various MMTC’s (dispensaries). Visit their websites, find their product catalogs, and read up. Look for specials and discounts. If you have specific questions about products, call the MMTC directly and ask them for an answer. If the customer service representative can’t answer your question satisfactorily, ask to speak to a supervisor. Current MMTC contact information can be found in the Cannabis Basics packet.

3. You may call a MMTC or visit any legal dispensary in the state to purchase your medication. You do not have to exclusively purchase medicine from one MMTC. **We advise patients to shop around until they find the most effective products to treat their conditions.** Most importantly, don’t purchase a huge variety of products until you find your optimal dose. There is no need to spend thousands of dollars in products as you get accustomed to your treatment. When you call or visit an MMTC, make sure you have your Patient or Caregiver Identification card with you.

4. If you have an issue with a product or cannabis delivery device, you must call the MMTC where it was purchased.

If you’re ever experiencing an adverse effect after taking cannabis focus on your breathing and calm yourself. Additionally, low-THC dosages are known to counteract the psychoactive effects of THC

Dispensary Contact Information

Dispensaries (or Medical Marijuana Treatment Centers) are currently open and selling product daily within the state. The closest physical location to our clinic is currently Surterra in North Port, but many dispensing organizations offer home delivery of product:

Aphria	aphria.ca	1-844-427-4742	Delivery Available
Green Solution	tgsflorida.com	1-800-429-1987	Delivery Available
GrowHealthy	Growhealthy.com	863-223-8882	Delivery Available
Knox Medical	knoxmedical.com	1-888-441-5669	Delivery Available
CuraLeaf	curaleaf.com	1-877-303-0741	Delivery Available
Surterra Wellness	surterra.com	1-850-391-5455	Delivery Available
Trulieve	trulieve.com	1-844-878-5438	Delivery Available



Cannabis BASICS



Cannabis is a flowering plant that has fibrous stalks used for paper, clothing, rope, and building materials leaves, flowers, and roots used for medicinal purposes, and seeds used for food and fuel oil. Cannabis leaves and flowers are consumed in several forms: dried flower buds or various types of concentrated, loose, or pressed resin extracted from the flowers or leaves through a variety of methods. Once mature, the plant's leaves and flowers

are covered with trichomes, tiny glands of resinous oil containing cannabinoids and terpenes that provide physical and psychoactive effects.

Cannabinoids

Concentrations or percent of each type of cannabinoid ranges widely from plant to plant and strain to strain.

The first identified and best-known cannabinoid is **THC (delta-9-tetrahydrocannabinol)**. THC has the most significant psychoactive effect of the cannabinoids. The ratio of THC to other cannabinoids varies from strain to strain. While THC has been the focus of breeding and research due to its various psychoactive and therapeutic effects, non-psychoactive cannabinoids have physiologic effects that can be therapeutic.

- **Cannabidiol (CBD)** relieves convulsions, inflammation, anxiety and nausea—many of the same therapeutic qualities as THC but without psychoactive effects. It is the main cannabinoid in low-THC cannabis strains, and modern breeders have been developing strains with greater CBD content for medical use.

- **Cannabinol (CBN)** is mildly psychoactive, decreases intraocular pressure, and seizure occurrence.
- **Cannabichromene (CBC)** promotes the analgesic effects (pain relief) of THC and has sedative (calming) effects.
- **Cannabigerol (CBG)** has sedative effects and antimicrobial properties, as well as lowers intraocular pressure.
- **Tetrahydrocannabivarin (THCV)** is showing promise for type 2 diabetes and related metabolic disorders.

In addition to cannabinoids, other cannabis plant molecules are biologically active. A few other molecules known to have health effects are flavonoids and terpenes or terpenoids (the flavor and smell of the strain). Cannabinoids, terpenoids, and other compounds are secreted by the glandular trichomes found most densely on the floral leaves and flowers of female plants

Effects of Cannabis

Different people have different experiences. One individual may feel stress release, while another feels over-stimulated and stressed, while another feels energized and on-task. There are many factors that impact the effect:

- ✚ Amount used (dosage)
- ✚ Strain of cannabis used and method of consumption
- ✚ Environment/setting
- ✚ Experience and history of cannabis use
- ✚ Biochemistry
- ✚ Mindset or mood
- ✚ Nutrition or diet
- ✚ Types of Cannabis

Though cannabis is biologically classified as the single species Cannabis Sativa, there are at least three distinct plant varieties: Cannabis Sativa, Cannabis Indica, and Cannabis Ruderalis, though the last is rare. There are also hybrids, which are genetic crosses between sativa and indica varieties. Cannabis used for

fiber is typically referred to as hemp and has only small amounts of the psychoactive cannabinoid THC, usually less than 1%.

Genetic “breeders” of the cannabis seed have developed thousands of different strains of cannabis from these three varieties. There are marked differences between sativa, indica, and hybrid. Today, we mostly find hybrids. It can be difficult to find pure indica or sativa.

All types of medical cannabis produce effects that are more similar than not, including pain and nausea control, appetite stimulation, reduced muscle spasm, improved sleep, and others. But individual strains will have differing cannabinoid and terpene content, producing noticeably different effects. Many people report finding some strains more beneficial than others. For instance, strains with more CBD tend to produce better pain and spasticity relief. As noted above, effects will also vary for an individual based on the setting in which it is used and the person's physiological state when using it.



In general, sativas and indicas are frequently distinguished as follows:

Sativas

The primary effects are on thoughts and feelings. Sativas tend to produce stimulating feelings, and many prefer it for daytime use. Some noted therapeutic effects from use of Sativas:

- ✚ Stimulating/energizing
- ✚ Increased sense of well-being, focus, creativity
- ✚ Reduces depression, elevates mood
- ✚ Relieves headaches/migraines/nausea
- ✚ Increases appetite

Some noted Side-Effects from use of Sativas:

- ✚ Increased anxiety feelings
- ✚ Increased paranoia feelings

Indicas

Indicas tend to produce sedated feelings and many prefer it for nighttime use.

Cannabis Consumption Basics

How Can I Use Cannabis More Safely?

One of the great aspects of cannabis is that there are many ways to use the medicine effectively.

Ingest via Eating

This is one of the safest ways to consume your medication, but understand that the effects from eaten cannabis may be more pronounced and onset of the effects will be delayed by an hour or more and typically last longer than inhalation. Using edible cannabis effectively will usually take some experimentation with particular product types and dosage. Digesting cannabis also metabolizes the cannabinoids somewhat differently and can produce different subjective effects, depending on the individual.

Use small amounts of edibles and wait 2 hours before gradually increasing the dose, if needed. Take care to find and use the right dose-excessive dosage can be uncomfortable and happens most often with edibles.

Try cannabis pills made with hash or cannabis oil or ingest via Tinctures/Sprays

Find your ideal dosage to enhance your therapeutic benefits. **Start with no more than two drops and wait at least an hour before increasing the dosage, incrementally and as necessary.**

Some noted Therapeutic Effects from use of Indicas:

- ✚ Provides relaxation/reduces stress
- ✚ Relaxes muscles/spasms
- ✚ Reduces pain/inflammation/headaches/migraines
- ✚ Helps sleep
- ✚ Reduces anxiety
- ✚ Reduces nausea, stimulates appetite
- ✚ Reduces intra-ocular pressure
- ✚ Reduces seizure frequency/anti-convulsant

Some noted side-effects from use of Indica's:

- ✚ Feelings of tiredness
- ✚ "Fuzzy" thinking

Hybrids

Strains bred from crossing two or more varieties, with typically one dominant. For example, a sativa-dominant cross may be helpful in stimulating appetite and relaxing muscle spasms. Crosses are reported to work well to combat nausea and increase appetite.

Apply via Topicals

This is one of the safest ways to consume your medication and may be the best option for certain pains or ailments. Rubbing cannabis products on the skin will not result in a psychoactive effect.

Inhale via Vaporizer

This is the safest way to inhale your medicine because it heats the cannabinoid-laden oils to the point where they become airborne vapors, without bringing the other plant material to combustion, drastically reducing the amount of tars and other chemical irritants that you otherwise would inhale. Vaporizers also emit much less odor than any type of smoking.

Know Your Variety

Cannabis comes in many varieties, roughly divided between sativa's that originated near the equator and indica's that come from northern latitudes, though modern breeding programs have created a wide range of hybrids. Each variety has its own cannabinoid and terpene profile and subtly different effects. Whether you use Sativa-dominant, Indica-dominant, or a Hybrid makes a difference.





- ✚ Take note of what effect each variety produce for you (therapeutic and side effects); keeping a log can be helpful.
- ✚ Use higher potency cannabis so you use less medicine. Concentrates can be useful, particularly if you need higher doses.
- ✚ Experiment with high CBD strains, particularly for nausea, appetite, and pain.
- ✚ Take a medicine vacation occasionally. While cannabis does not produce tolerance in the way opiates do, reducing or ceasing cannabis use can yield enhanced effects when restarted. Either reduce or stop for however long it feels comfortable for you.
- ✚ Change the variety if the one you're using seems to be losing its effectiveness.
- ✚ Whenever possible, choose organic cannabis products. Never consume cannabis that has been treated with pesticides.

Think About Drug Interactions

No significant interactions between cannabis and other drugs are known at this time, though research indicates cannabis enhances the effects of opiate painkillers. Little is known about the interaction of cannabis and other pharmaceutical medications, but it is important to consider any complementary effects.

Some studies show interactions with barbiturates, theophylline, fluoxetine, disulfiram, sedatives, antihistamines, etc.

A synergistic effect can occur with alcohol use; limit mixing the two.

Consider Safety. For yourself and your community.

Indicas can cause drowsiness-avoid driving or operating heavy machinery when using your medicine.

Keeping a Cannabis Log

To establish an optimal treatment regime with cannabis, you will need to balance the effects of different strains, doses, and methods of ingestion. It may be helpful to record your therapeutic relationship with cannabis on an ongoing basis. One method is through keeping a cannabis-use log that captures your experience, including thoughts, feeling and behaviors. Periodically reviewing the log can help both you and your doctor make decisions about what works best.

To start, keep a detailed log, as described below, for at least one week. Once you've got a week's worth of information, complete the self-assessment worksheet that follows. This worksheet will help you better understand many things about yourself, including: your ailments and symptom patterns, your treatment behaviors, and the efficacy and side effects of the cannabis medicines you use.

In keeping a medication log, try to keep things standardized, and be as consistent as possible. Here are some logging tips on useful information to collect:

1. **Date/Time:** Record every time you consume cannabis with the current date and time of day.
2. **Amount:** The amount of cannabis used (gram estimate or other consistent measure).
3. **Strain:** The name, strain or variety of the cannabis strain or variety of cannabis medicine used. If you don't know the name, write a detailed description of the medicine.
4. **Code:** Strains are generally described as Indica, Sativa, or hybrid. You may want to code your entries: I=Indica, S=Sativa, S/I=Sativa-dominant Indica Cross, and I/S= Indica-dominant Sativa Cross.
5. **Type** is the form of cannabis consumed: dried bud flower, concentrates, tincture/sprays, edibles/drinks or topical. You may want to use: F=flower, C=concentrate, T=tincture/spray, E=edible, TO=topical.
6. **Cannabinoid Content:** refers to the percent of THC, CBD and/or CBN. If you have this information available to you, write down percentages of each cannabinoid. If you're using edibles or similar, a description of potency and preparation is helpful.
7. **Mode:** Write down how you used your medication. Either inhale via S=smoke or V=vaporize, E=eat/digest, T=tincture or spray, TO=topical.
8. **Therapeutic Effects:** List any positive effects experienced (physical, mental, social, behavioral, etc).
9. **Negative Side Effects:** List your negative effects
10. **Timing:** How quickly did you experience the first therapeutic effects? When did you feel the peak of relief? When did it start to noticeably dissipate? How long until effects were gone?
11. What prompted your cannabis use? List the specific factors that told you it was time for medicine, as well as the general symptoms or conditions being treated (e.g. pain, nausea, anxiety, etc).
12. How did you feel (mindset)? Record your mood and feelings before and after you used cannabis.
13. Where were you (setting)? Were you at home, at a collective, in your office? Sitting, standing, lying down?
14. Who were you with? Were you by yourself, with a friend, a large group, among other cannabis consumers, etc?
15. What were you doing? Just before you used cannabis, what was going on? What were the activities or circumstances leading up to it?



Proper Dosage

There are some things worth mentioning about the dosing and administration of cannabis first. In small doses, cannabis it can be helpful for things like nausea, appetite, pain, sleep, mood and anxiety. However, in larger doses, cannabis can have the opposite effect, leading to an increase in anxiety, pain and/or depression.



The bi-directional effects of cannabis make it is essential that patients "**start low and go slow**" to avoid experiencing any adverse reactions. The most common side effects of Delta-9 tetrahydrocannabinol (THC) are **dizziness, dry eyes and mouth, euphoria, increased heart rate, decreased blood pressure, fatigue and increased appetite.**

Cannabidiol (CBD) can cause psycho-activity: **dizziness, jitteriness, diarrhea, palpitations and even decreased appetite with prolonged use.** With proper guidance, patients can utilize medical cannabis with optimal results and minimal adverse reactions.

Delivery Methods

Today we have many different delivery methods for cannabis. Long gone are the days in which the only option was smoking. Now patients can choose from vaporizing, edibles, tinctures, suppositories, topicals and even transdermal patches. There are pros and cons to each delivery method.

Inhalation

The most well-known and popular delivery method for deriving effects from cannabis is smoking. Smoking cannabis flowers provides relief of symptoms within 5 to 15 minutes. For many patients with chronic pain, anxiety or acute nausea and vomiting, this delivery method is ideal. The number one concern with smoking cannabis is potential lung damage and/or cancer. Tashkin looked at the possible long-term effects on the lungs in chronic cannabis smokers, and found that there was no link to an increased risk of lung cancer or chronic obstructive lung disease. In fact, researchers found that cannabis may have some protective effects against these illnesses in users who smoke it.

When patients smoke cannabis in a joint or pipe, they are heating the medicine at a high temperature (close to 600 degrees). At that temperature, burning cannabis is more likely to produce carcinogens and tars. While smoking has not been correlated with any increased risk of lung damage or cancer, it can lead to chronic bronchitis and/or chronic cough.

It should also be noted that smoking raw cannabis is currently prohibited under Florida law.

Vaporizing

An alternative to smoking is vaporization. There are many different products available for vaping. Some patients vaporize the flowers or buds of the cannabis plant, while others prefer to vaporize concentrated cannabis. Some other names of concentrated forms of cannabis are oils, dabs, waxes, shatter, nail hits and rosin. Concentrated forms of cannabis are often extracted with chemical solvents such as butane. Testing for residual solvents is a must to avoid inhaling high levels of residual solvent chemicals. Also, some concentrated forms of cannabis oil have been mixed with propylene glycol to ease inhalation administration.

Inhalation of propylene glycol has been linked to respiratory and immune disorders. The concentrated forms are higher potency ranging from 50% to 90% THC. There is much debate about whether high potency cannabis is truly medicinal or just an attempt by people to get extremely intoxicated. For many patients with neuropathic or cancer-related pain, highly concentrated cannabis is most effective at relieving their pain.

Inhalation is a quick and easy way to medicate. Contrary to popular belief, inhalation is low-dose and easiest to control. Patients can titrate up slowly. While the onset of relief is fast, the length of relief is only around 2-3 hours. Inhalation requires more frequent administration and may not be ideal for long-lasting relief.

Ingestible Cannabis



Ingestibles can include anything from cookies, brownies, candies, capsules, tinctures, sprays, tea, and oils. The advantage of ingesting cannabis is that it will provide much longer relief than inhalation. In general, patients can

experience a reduction in their symptoms for 6-8 hours or more. Most ingestibles in the form of edibles (cookies, brownies, candies, sodas) come in dosages that far exceed the necessary amount to obtain relief.

When cannabinoids are ingested they are processed through the liver. The liver converts delta-9 tetrahydrocannabinol (THC) into 11-hydroxy-THC (11-OH-THC) which is a much more potent form of THC. The bio-availability of ingested cannabis ranges from 4% to 20%. Cannabis is fat soluble, delaying full onset of action from 1-3 hours. These factors make it difficult to dose a majority of THC rich-edibles. The high variability of ingested cannabis, coupled with the delayed onset of effectiveness, can lead to potential over-medicating. Often, while a patient is waiting for relief they will consume more than they need, thinking that they didn't take enough originally.



Unfortunately, this leads to side effects that can be unpleasant and uncomfortable. In higher dosages of 10 mg or more, patients can experience anxiety, paranoia and/or hallucinations.

Edibles

Edibles, such as baked goods, lozenges and capsules, can be difficult to part out in equal amounts. Take the example of a brownie that has 100 mg of cannabinoids per package. How can you guarantee, when you break that brownie down into several small pieces, that within each piece the cannabis is evenly distributed? In a cannabis-naïve patient, a recommended starting dose is generally between 2.5mg to 10 mgs of cannabinoid. The more potent the product, the higher chance a patient has of over-medicating.

Dosage	Experience	Edible Recommendations
1 - 10 mg	Beginner	 Tinctures (Provides measured dosing)
11 - 20 mg	Intermediate	 Hard Candy (Pre-determined dosing)
21 - 65 mg	Moderate	 Syrups (Provides creative options)
66 mg +	Expert	 Baked Goods (High THC content per cost)

Tinctures, Sprays and Oils

Liquid forms of cannabinoids can be a great way to start low and slow. As long as the products are clearly labeled with dosing, patients can start with as little as one drop or one spray. By definition, a tincture is in an alcohol or glycerin base. Among many cannabis products, tinctures are now being developed in an oil base (such as olive oil, coconut oil or medium chain triglycerides (MCT) oil).

Sprays can also be a great way to start low and slow. Many cannabis sprays deliver a metered dose allowing patients to self-titrate.

Topicals and Transdermals

Topical cannabis products can be beneficial for localized issues. Pain, muscle spasms, eczema, psoriasis, bug bites and/or burns can be treated with topical cannabis. The advantage is that the cannabinoids will act locally (and not regionally), thereby decreasing the potential for systemic side effects. Animal studies have shown that THC topically is two times stronger than hydrocortisone. Topical THC can be effective at reducing itching and inflammation on the surface of the skin. CBD has also been shown to decrease inflammation, muscle tightness and itching. As a topical, CBD absorbs into the skin 10x better than THC. When using a topical, patients can expect to experience relief within 20 minutes, and that relief can last for several hours.

Transdermal products can come in patches and/or topical gel pens. The transdermal products have been designed to penetrate the skin and reach the blood stream for more systemic relief. Patches can provide relief within 20 minutes, and the effects can last for 12 hours. Additionally, if a patch is removed, the adverse reaction will dissipate within 20 to 30 minutes. It can be a great way to introduce cannabis into a patient who is concerned about negative side effects and allow them some control over dosing and administration.

Special Considerations

As with all cannabis products, patients should be looking for medicines free of pesticides, solvents, molds, fungus and bacteria. Without standards in place, pesticide use in growing cannabis is unregulated. Solvents, such as butane, hexane and isopropyl alcohol are used to extract concentrated forms of cannabis. Testing the final cannabis product for pesticides, mycotoxins, residual solvents and potency would help ensure the safety of the medicine being consumed.

Finally, cannabis is best when it is individualized to the patient. Dosing is not a one-size-fits-all model, nor is it a silver bullet.

