Medical Marijuana

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Outline

* Cannabis basics
* Benefits
* Concerns
* Legal landscape in Delaware
Endocannabinoid system

“Relax, eat, sleep, forget and protect”

* is a biological system composed of endocannabinoids, which are endogenous lipid-based neurotransmitters that bind to cannabinoid receptors

* An example In humans, the plasma concentration of certain endocannabinoids (i.e., anandamide) have been found to rise during physical activity = runner’s high
The Human Endocannabinoid System

**CB1** Receptors are mostly found in the Nervous System and Brain

- Liver CB1 & CB2
- Gall Bladder CB1 & CB2
- Vascular System CB1
- Pancreas CB1 & CB2
- Heart CB1 & CB2

**CB2** Receptors are mostly found in the peripheral organs, especially immune cells

- Brain CB1 & CB2
- Thyroid Gland CB1
- Spleen CB2
- Lungs CB1
- Large Intestine CB1 & CB2
- Small Intestine CB1 & CB2
- Male Reproductive Organs CB1
- Immune System CB2
- Female Reproductive Organs CB1
Tetrahydrocannabinol (THC) and Cannabidiol (CBD)

- THC and CBD are the 2 primary cannabinoids in Marijuana plants
CBD vs THC

* CBD is non psychoactive which means they will not get the user “high”
* THC is the main psychoactive component of the cannabis plant
  * in Marijuana products
    * % of THC in 1970s was 3%
    * % of THC in 2018 is 20-30%
Modes

- Smoking*
- Vaping
- Edibles*
- Tinctures
- Oils

*some states do not allow these options for med MJ (PA included) – you can bake things yourself though, they just don’t sell pre-made edibles
Route of Administration—oral/ingest

* a slow onset of effect (typically half to one hour)
* long duration of action (typically 4 to 12 hours)
* This may lead to inadvertent overdosing; when patients don’t experience effects as soon as they expect, they may take another dose, resulting in a cumulative overdose.
* This is especially likely by patients familiar with the rapid onset of smoked or inhaled cannabis.
Route of Administration: vaping

- a rapid onset of effect (typically minutes)
- relatively short duration of action (typically two to four hours)
- are preferred by some patients because they allow frequent and precise titration of dose to effect (eg, analgesia).
MEDICAL MARIJUANA

Epilepsy Treatment

Appetite

Multiple Sclerosis

THC

Production of medicines

CBD

Insomnia Treatment

Relaxation

Pain Relief

Inhibit cancer cell

Epithelial

Epithelial

Epithelial
Benefits

- Pain - most prevalent indication
- Appetite
- Nausea/vomiting
- Sleep
- Anxiety
- Spasticity
Concerns

* Sedative effect – (No respiratory depression effects)
  * Can potentiate other sedating meds (xanax etc)
  * Careful with heavy machinery, driving

* Drug interactions-
  * THC can effect metabolism of other drugs, so need to make sure share it with the doctor so they can check interactions
**DEBILITATING MEDICAL CONDITION**

Listed below are the ONLY qualifying debilitating medical conditions as stated in Title 16 of the Delaware Code, 4902A (3)

<table>
<thead>
<tr>
<th>Condition</th>
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</thead>
<tbody>
<tr>
<td>☐ Cancer</td>
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<tr>
<td>☐ Terminal Illness</td>
</tr>
<tr>
<td>☐ Positive status for Human Immunodeficiency Virus (HIV Positive)</td>
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<tr>
<td>☐ Acquired Immune Deficiency Syndrome (AIDS)</td>
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<tr>
<td>☐ Decompensated Cirrhosis</td>
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<tr>
<td>☐ Amyotrophic Lateral Sclerosis (ALS / Lou Gehrig’s Disease)</td>
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<tr>
<td>☐ Glaucoma</td>
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<tr>
<td>☐ Chronic debilitating Migraines</td>
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<tr>
<td>☐ Agitation of Alzheimer’s Disease</td>
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<tr>
<td>☐ Post-traumatic Stress Disorder (PTSD)</td>
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<tr>
<td>☐ Autism with aggressive behavior</td>
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<tr>
<td>☐ A chronic or debilitating disease or medical condition or its treatment that produces one or more of the following <em>(Specify in comments)</em>:</td>
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<tr>
<td>☐ Cachexia or Wasting Syndrome</td>
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<tr>
<td>☐ Severe, debilitating pain that has not responded to previously prescribed medication or surgical measure for more than three (3) months, or for which other treatment options produced serious side effects.</td>
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<tr>
<td>☐ Intractable Nausea</td>
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<tr>
<td>☐ Seizures</td>
</tr>
<tr>
<td>☐ Severe and persistent muscle spasms, including but not limited to those characteristic of Multiple Sclerosis</td>
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</table>
Who can certify?

- MD or DO with bona fide relationship with patient.
- Must be licensed in state of Delaware

- ** in some states need to complete a certification course
PHYSICIAN CERTIFICATION (CONTINUED)

PHYSICIAN CERTIFICATION

I have established a bona fide physician-patient relationship with ________________________, (patient) beginning _________________________ (date of first patient visit to your office).

This qualifying patient is under my care, either for primary care or the debilitating medical condition listed on this form _________________________ (physician initials)

I completed an assessment of the qualifying patient’s current medical condition, including presenting symptoms related to the debilitating medical condition I diagnosed or confirmed in accordance with Title 16, Chapter 49A of the Delaware Code (4902A(3)).

_________________________ (physician initials)

I have completed an assessment of the qualifying patient’s medical history, including medical records from other treating physicians for the qualifying condition. I have established a medical record of the qualifying patient with regards to the medical condition, continued treatment under my care, and will document follow-up to determine efficacy of the medical marijuana treatment.

_________________________ (physician initials)

I have assessed this patient for history of substance use disorder.

_________________________ (physician initials)

If a history of substance abuse has been identified, The Department of Health and Social Services (DHSS) requests your acknowledgement of the history of substance abuse, and you confirmation that medical marijuana is an appropriate treatment option to include a commitment to monitor patient closely. (Please initial here if indicated).

_________________________ (physician initials)

Physician’s Attestation

I ____________________________, (physician), hereby certify that I am a physician duly licensed to practice medicine. It is my professional opinion that the qualifying patient is likely to receive therapeutic or palliative benefit from the medical use of marijuana to treat or alleviate the patient’s qualifying debilitating medical condition or symptoms associated with the debilitating medical condition. Further, it is my professional opinion that the potential benefits of the medical use of marijuana would likely outweigh the health risks for this patient. I attest that the information provide in this written certification is true and correct.
Figure 1: Medical Marijuana Program Cards Issued by Type, Delaware, Fiscal Year 2018

Source: Delaware Health and Social Services, Division of Public Health, Medical Marijuana Program Database, July 2018.
Figure 13: Debilitating Conditions, Medical Marijuana Program, Delaware, Fiscal Years 2017 and 2018

Source: Delaware Health and Social Services, Division of Public Health, Medical Marijuana Program Database, July 2018.
How much does it cost patients?

* Cost of product
* $125 application fee
* There are some assistance programs through state – https://dhss.delaware.gov/dhss/dph/hsp/medmarhom e.html
Where do we go from here?

* Educate ourselves
* Contribute to the body of research on it
* De-stigmatize
Although the world is full of suffering, it is also full of the overcoming of it.

Helen Keller