



Grassp



Grassp Health

Trusted Partner for Clinical Cannabis

What We Do:

- Science-Based Education on Clinical Cannabis
- Medical Cannabis Delivery
- Assistance with Medical Card Certification
- Dosing Recommendations for Chronic Health Conditions
- Ongoing Support
- Compliance w/ Regulations & Policies





Regulations



Policies



Grassp

MED

MARIJUANA

VS.

REC

MARIJUANA

Cannabis Is Medicine



MEDICAL USE STATUTE VS ADULT USE STATUTE

- Arizona Medical Marijuana Act (2010)
- Smart and Safe Arizona Act (2020)
- Decriminalization - Rec
- Potency Limitations - Rec
- Excise Taxes - Rec
- Home Growing - Rec
- Facility Restrictions and Policies - Medical
- Home Delivery - Medical

Presumption; Protections; Civil Penalty (Section 36-2811)

C. A physician shall not be subject to arrest, prosecution or penalty in any manner....based solely on providing written certifications or for otherwise stating that, in the physician's professional opinion, a patient is likely to receive therapeutic or palliative benefit from the medical use of marijuana to treat or alleviate the patient's debilitating medical condition or symptoms associated with the debilitating medical condition.

D. No person may be subject to arrest, prosecution or penalty in any manner:

1. Providing a patient marijuana paraphernalia.
2. Being in the presence or vicinity of the medical use of marijuana.
3. Assisting a registered qualifying patient with administering marijuana.



Marijuana vs. Hemp

Anatomy Lesson & Terminology



HEMP



MARIJUANA

CANNABIS SATIVA

Scientific Term for Marijuana

THC, CBD, CBG, CBN

Cannabinoids

HEMP

Thick stalk, containing mostly CBD

FLOWER

Most medicinal part of plant, terpenes

CBD (Cannabidiol) - *What does it do?*

- Anti-Inflammatory – Reduces Inflammation
- Anxiolytic - Reduces Anxiety
- Neuro-protectant – Protects Brain Cells from Deteriorating
- Nervine - Calms the Nerves
- Anti-depressant - Reduces Depression
- Anti-Convulsant – Controls Seizure Activity
- Anti-Cancer Properties – Anti-Proliferative, Anti-Migratory, Anti-Metastasis
- Sedative – Promotes Calm
- Non-Intoxicating – Does Not Produce a “High” or intoxicating effect
- Balance – Reduces Psychoactive Effects of THC
- Pharmaceutical Grade/Medical Grade/Over the Counter/Beware

THC (Tetrahydrocannabinol) - *What does it do?*

- Analgesic – Reduces Pain
- Sedative - Promotes Calm, Induces Sleep)
- Anti-Emetic - Decreases Nausea & Vomiting
- Anti-depressant - Reduces Depression)
- Antispasmodic - Reduces Muscle Spasms)
- Appetite Stimulant – increases appetite
- Anti-Tumor – Shrinks and Kills Cancerous Tumor Cells (in vivo and in vitro, clinical trials underway proving cannabinoids are pro-apoptotic)
- Intoxicating or Psychoactive at 10mg or over 9% THC –produces a “high” or euphoric feeling at higher doses, especially when used without CBD

Methods of Administration & Onset

(Beyond smoking, more medicinal)

- **Edibles** – Capsules, Gummies, Chocolate (45 min-2 hour onset)
- **Oils** (Oral or Sublingual) – Tinctures, Capsules, Topical and Liquid Syringe.
- **Topicals** – Creams, Ointments, Balms, Transdermal Patches.
- **Suppositories** – for patients with extreme nausea (20-30 minute onset)
- **Vaping** – Water vapor, Oil-Filled Cartridges or Flower (immediate onset)
- **Smoking** – Combusting flower (immediate onset)





Why Clinical Cannabis in Home Care?

- Manages multiple symptoms
- High Safety Profile
- Safe & Synergistic with Opioids
- Interacts safely with medications
- Improved quality of life
- Reduces Agitated Behaviors in Dementia
- Allows Caregivers to provide ADL's without resistance



Medical Cannabis and Dementia

(Managing Behaviors)

- Sundowning Behaviors
- Anxiety
- Agitation and Aggressiveness - hitting, biting, shoving, throwing furniture
- Nighttime disturbances - Insomnia, Wandering
- Eating Behaviors
- Social Behaviors
- Unexpressed Pain
- Pacing & Ambulating
- Depression, fear, emotional outbursts
- Fighting self-care: showering, changing, toiletry needs
- OCD Behaviors, Paranoia, Financial Concerns

How Caregivers Are Affected by Behaviors



- Depression
- Sadness
- Anxiety
- Hopelessness
- Anger/Frustration
- Exhaustion
- Stressed
- Caregivers (Employees) not wanting to come to work to due to behaviors
- Getting injured on the job
- Workers Comp Cases

Case Studies



Case studies where clinical cannabis has managed behaviors, improving quality of life for patients & Caregivers





Case Study I



Severe Agitation

- 89 Year Old Male, Dementia diagnosis, former physician
- Son Pain Management Physician
- Potential Admittance to Psychiatric Hospital
- Emergency Delivery
- 1:1 Oil
- Immediate Calming Effect
- Increased Dose Overtime –.5ml TID, to 1ML TID.
- Was able to remain on 3ML per day w/ 1ML PRN (13.3mg per ML – 6.6mgTHC:6.6mgCBD) until he passed away



Case Study 2



Severe Agitation & Violence

- 82 Year old Male, former attorney
- Alzheimer's Disease
- Patient pulled up plants, threw furniture through windows, lashed out at caregivers, geriatric psych
- Started on .5ml 1:1 Oil TID, increased to full ml TID, added 4, 5mg full THC gummies between oil dosing as he was titrated off other meds.
- Cannabis replaced all other meds and he was able to stay on current dosing for years (59.9mg per day) until peaceful end of life



Case Study III



Paranoia, Anxiety,
Sundowning, Minimal
Agitation

- 102 Year Old Male, Dementia Diagnosis
- Financial fear and paranoia, incessantly calling son, worried about theft, high anxiety, occasional agitation when triggered, weight loss, nighttime disturbances
- Slightly sensitive to medications
- 4:1 Oil, .25ml TID w/ PRN dose, (1.6mgTHC:6.6mgCBD per dose)
- After 1st week, caregivers reported, less anxiety & paranoia, decreased agitation, better sleeping and eating habits, less calls to son
- Same low dose since July

Cannabinoids and Dementia – Published Research



2006 National Institute of Health - [Delta-9-tetrahydrocannabinol for nighttime agitation in severe dementia.](#) – “The aim of the study was to measure the effect of the cannabinoid dronabinol (2.5mg) on nocturnal motor activity.” “The study suggests that dronabinol was able to reduce nocturnal motor activity and agitation in severely demented patients.” Berlin study.

2014 Journal Of Alzheimer's Disease –[The Potential Therapeutic Effects of THC on Alzheimer's Disease](#) – “The purpose of this study was to investigate the potential therapeutic qualities of Δ 9-tetrahydrocannabinol (THC) with respect to slowing or halting the hallmark characteristics of Alzheimer's disease.” “Data strongly suggest that THC could be a potential therapeutic treatment option for Alzheimer's disease through multiple functions and pathways.” **College of Pharmacy, University of Southern Florida.**

2016 Salk Institute Study - [Cannabinoids remove plaque-forming Alzheimer's proteins from brain cells](#) - David Schubert, professor at the Salk Institute and senior author on the study says, “Although other studies have offered evidence that cannabinoids might be neuroprotective against the symptoms of Alzheimer's, we believe our study is the first to demonstrate that cannabinoids affect both inflammation and amyloid beta accumulation in nerve cells.” – La Jolla study

2019 Review: [Safety and effectiveness of cannabinoids for the treatment of neuropsychiatric symptoms in dementia](#) – Dronabinol and THC were associated with significant improvements in a range of neuropsychiatric scores. The most common adverse drug event (ADE) reported was sedation.

Cannabinoids and Dementia – Published Research



In vivo Evidence for Therapeutic Properties of Cannabidiol (CBD) for Alzheimer’s Disease - The studies demonstrate the ability of CBD to reduce reactive gliosis and the neuroinflammatory response as well as to promote neurogenesis. Importantly, CBD also reverses and prevents the development of cognitive deficits in AD rodent models. Interestingly, combination therapies of CBD and $\Delta 9$ -tetrahydrocannabinol (THC), the main active ingredient of cannabis sativa, show that CBD can antagonize the psychoactive effects associated with THC and possibly mediate greater therapeutic benefits than either phytocannabinoid alone.

Safety and Efficacy of Medical Cannabis Oil for Behavioral and Psychological Symptoms of Dementia: An-Open Label, Add-On, Pilot Study - OBJECTIVE: To measure efficacy and safety of medical cannabis oil containing THC as an add-on to pharmacotherapy, in relieving behavioral and psychological symptoms of dementia. RESULTS: significant decrease were: Delusions, agitation/aggression, irritability, apathy, sleep and caregiver distress. CONCLUSION: Adding MCO to AD patients’ pharmacotherapy is safe and a promising treatment option.

An update on the advancements in the treatment of agitation in Alzheimer’s disease - Neuropsychiatric symptoms (NPS) in Alzheimer’s disease (AD) are associated with significant negative outcomes for patients and their caregivers. Agitation, one of the most distressing NPS, lacks safe and effective long term interventions. A review of several clinical trials was completed: ...cannabinoids show promise in treating agitation.

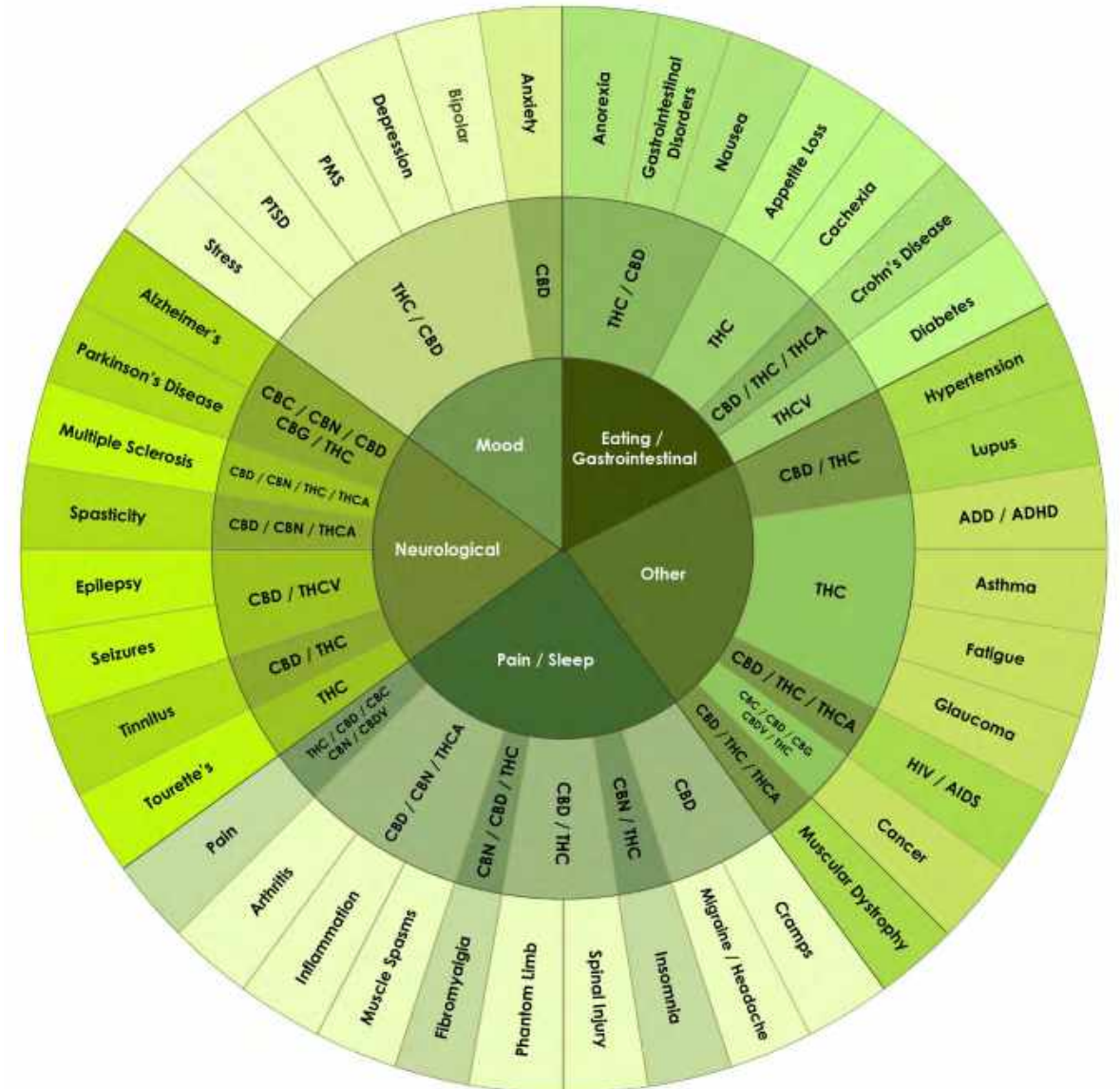
Who Can Benefit from Clinical Cannabis?



Cannabinoids for Improving Various Health Conditions

Qualifying Conditions in Arizona

- **Severe and Chronic Pain** – Examples: Migraines, Arthritis, Fibromyalgia, Back Pain, Neuropathy, Orthopedic Issues, Gastro-intestinal issues, TBI
- **Cancer**
- **Glaucoma**
- **AIDS / HIV**
- **Hepatitis C**
- **ALS**
- **Crohn's Disease**
- **Agitation from Alzheimer's Disease**
- **Cachexia or Wasting Syndrome**
- **Severe Nausea**
- **Seizures**
- **Severe and Persistent Muscle Spasms (Parkinson's, Huntington's, MS)**
- **PTSD**





Social Workers & Liaison's



What should Social Workers & Homecare Liaison's know before conducting an evaluation?

"I am more convinced than ever that it is irresponsible to not provide the best care we can, care that often may involve marijuana.

I am not backing down on medical marijuana; I am doubling down."

- Dr. Sanjay Gupta

CNN Chief Medical Correspondent

March 5, 2014



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Screening Tactics - Chronic Pain



- Unsustainable Opioid Use
- Opioid-induced hyperalgesia
- Unwanted Side Effects
- Difficult to Treat Pain
- Mood/Quality of Life

Published Research from PubMed:

- [Cannabinoid Delivery Systems for Pain and Inflammation Treatment](#)
- [Cannabinoids in the management of difficult to treat pain](#)
- [A Scoping Review on Clinical Trials of Pain Reduction With Cannabis Administration in Adults](#)



Screening Tactics - Movement Disorders

(Multiple Sclerosis, Parkinson's
Disease, Huntington's Disease)



- Unwanted Side Effects from Pharmaceuticals
- Symptoms Not Controlled (ALS)
- Insomnia, Poor Appetite
- Quality of Life/Mood

Published Research from PubMed:

- [Clinical experiences with cannabinoids in spasticity management in multiple sclerosis](#)
- [Promising cannabinoid-based therapies for Parkinson's Disease](#)
- [The Therapeutic Potential of Cannabinoids for Movement Disorders](#)
- [Cannabinoids for Treatment of Dystonia in Huntington's Disease](#)



Screening Tactics - Cancer



- Side effects from Chemo
- Side effects from Radiation
- Quality of Life

Published Research from PubMed:

- [Cannabis sativa L. and Nonpsychoactive Cannabinoids: Their Chemistry and Role against Oxidative Stress, Inflammation, and Cancer](#)
- [Anticancer mechanisms of cannabinoids](#)
- [Marijuana and Cancer](#)



**ETHICAL
CONSIDERATIONS**



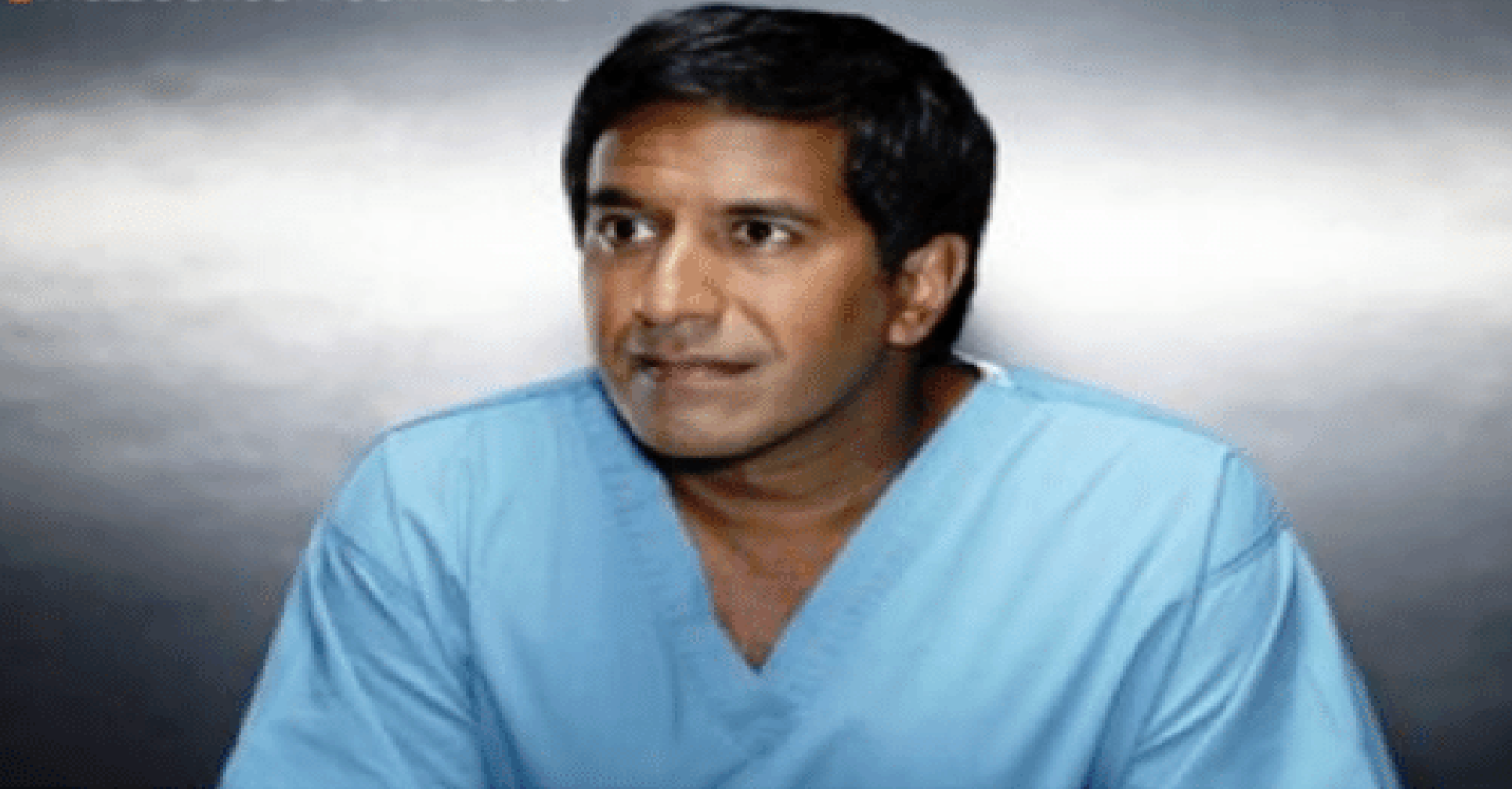
We have been terribly and systematically misled for nearly 70 years in the United States.

— Sanjay Gupta —

AZ QUOTES



The seizures were so severe Charlotte's heart stopped a number of times. Doctors suggested putting the child in a medically induced coma to give her small, battered body a rest.



Most frightening to me is that someone dies in the United States every 19 minutes from a prescription drug overdose, mostly accidental. Every 19 minutes. It is a horrifying statistic. As much as I searched, I could not find a documented case of death from marijuana overdose.

-Dr. Sanjay Gupta

Clinical Cannabis – Getting Started

Step-By-Step Instructions:

1. Health Consultation
2. Medical Card
3. Product/Dosing recommendations
4. Delivery
5. Contact Grassp Health if adequate symptom relief is not achieved, for further guidance



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