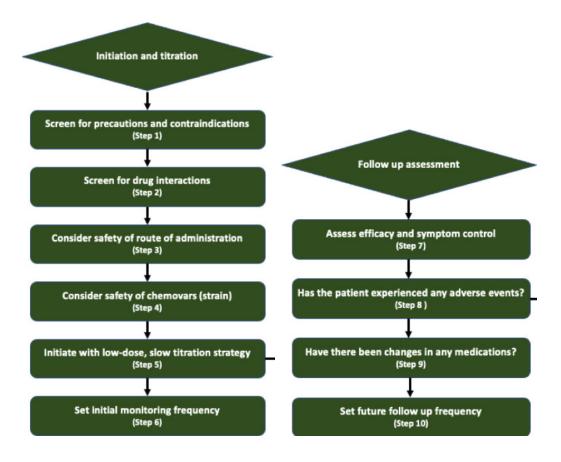
"Is medical cannabis safe for my patients?" A practical review of cannabis safety considerations

Caroline A MacCallum, Lindsay A Lo, Michael Boivin European Journal of Internal Medicine, 2021

- 1. Can medical cannabis be safely used in this patient?
- 2. What strategies can be used to ensure that any harms from medical cannabis are mitigated?

In order to ensure optimal patient outcomes, safety considerations should be assessed at each step of a patient's cannabis journey.

This framework, based on available evidence and expert clinical opinion, provides clear recommendations for patients being considered for cannabis, in addition to risk mitigation and monitoring strategies.



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Precautions and Contraindications to Cannabis Use

Considerations	Precautions	Relative Contraindications	Contraindication*
 Immunocompromised Chronic Kidney Disease Older adults Patients with concurrent medical conditions Polypharmacy Potential drug interactions 	 Concurrent mood or anxiety disorder Have risk factors for cardiovascular disease Tobacco use E-cigarette use Severe liver dysfunction /disease Medications associated with sedation or cognitive impairment Driving or safety sensitive occupations 	 Under 25 years of age Current or past cannabis use disorder Current or past substance use disorder 	 Unstable cardiovascular disease Respiratory disease (if smoking cannabis) Personal or strong family history of psychosis/ bipolar Pregnant, planning on becoming pregnant, or breastfeeding

*If it is deemed there may be a benefit, clinicians should consider referral to a specialty, and experienced medical cannabis prescriber, to ensure the appropriateness of this therapy.

Low dose, slow titration strategy	Low dose,	slow	titration	strategy
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Step	Oil	Vaporization
Step 1	Start with 5 mg CBD oil BID	Start with one inhalation
Step 2	Titrate dose by 5 mg CBD every 2-3 days (if no adverse events or until patient reaches goals of therapy).	Wait 15-30 minutes
Step 3	If CBD alone is not reaching treatment goals (usually at doses of ≥ 40 mg CBD), clinicians can consider adding THC after assessment of benefit vs risk Recommended starting dose is 1- 2.5 mg THC at bedtime. Titrate by 1-2.5mg THC every 2-7 days If daytime THC is needed, starting dose is 1 mg THC. Titrate by 1-2.5mg THC every 2-7 days.	Increase by 1 inhalation every 15-30 minutes until patient reached goals of therapy (providing no adverse events)
Step 4	Doses above 40 mg/day of THC are rarely required. If reached, clinicians should re-assess risk-benefit ratio for patient	Final dose = total consecutive inhalation doses within a dosing session required to reach goals of therapy

Route of Administration	Strain Selection	Appropriate Patient Population
Oral Oil or Capsules	 Based on safety concerns for the following patient populations, consider initiating with a CBD dominant product: Older adults < 25 years of age History of mental health Heart conditions Personal or strong family history of psychosis/BPD Concurrent mood or anxiety disorder Severe liver disease Other conditions or medication regime associated with sedation or cognitive impairment (may compound effects) Individuals in safety-sensitive occupations Polypharmacy At risk for pharmacodynamic drug interactions * 	Recommended for most patients with chronic symptoms Strongly recommended for patients with or at risk for respiratory disease
Vaporization* Generally THC or balance THC:CBD products are most effective for vaporization		Recommend for patients requiring rapid onset of action (Migraines, Nausea, Acute Pain, Appetite, Initiation of Sleep) Generally, not recommended for patients with respiratory disease

Recommendations for initial route of administration and strain selection