NCSBN GUIDELINES FOR THE NURSING CARE OF Patients Using Marijuana

APRNs Certifying a Medical Marijuana Qualifying Condition

Purpose of the Guidelines

Over 31 US jurisdictions (including the District of Columbia), Guam, and Puerto Rico passed legislation legalizing cannabis for medical use. Several other jurisdictions also have legalized cannabis for medical use.* Each medical marijuana program has unique characteristics. In the United States, cannabis is a Schedule I Controlled Substance. Therefore, medical cannabis is unlike most other therapeutics in that providers cannot prescribe cannabis, nor can pharmacies dispense cannabis. However, applicable jurisdiction statutes and rules provide for the manufacture, distribution, and use of cannabis for medical purposes.

These guidelines provide advanced practice registered nurses (APRNs) with principles of safe and knowledgeable practice to promote patient safety when certifying a medical marijuana qualifying condition.

Definitions

Cannabis. Any raw preparation of the leaves or flowers from the plant genus *Cannabis*. This report uses "cannabis" as a shorthand that also includes cannabinoids.

Cannabidiol (CBD). A major cannabinoid that indirectly antagonizes cannabinoid receptors, which may attenuate the psychoactive effects of tetrahydrocannabinol.

Cannabinoid. Any chemical compound that acts on cannabinoid receptors. These include endogenous and exogenous cannabinoids.

Cannabinol (CBN). A cannabinoid more commonly found in aged cannabis as a metabolite of other cannabinoids. It is nonpsychoactive.

Certify. The act of confirming that a patient has a qualifying condition. Many jurisdictions use alternative phrases such as "attest" or "authorize"; however, 13 of 29 jurisdictions use "certify" language in their statutes.

Clinical research. An activity that involves studies that experimentally assign randomized human participants to one or more drug interventions to evaluate the effects on health outcomes

Designated caregiver. An individual who is selected by the Medical Marijuana Program qualifying patient and authorized by the Medical Marijuana Program to purchase and/or administer cannabis on the patient's behalf. Also sometimes referred to as an "alternate caregiver."

Dronabinol. The generic name for synthetic tetrahydrocannabinol. It is the active ingredient in the U.S. Food & Drug Administration (FDA)-approved drug Marinol.

Endocannabinoid system. A system that consists of endocannabinoids, cannabinoid receptors, and the enzymes responsible for synthesis and degradation of endocannabinoids.

Marijuana. A cultivated cannabis plant, whether for recreational or medicinal use. The words "marijuana" and "cannabis" are often used interchangeably in various lay and scientific literature. These guidelines will primarily use the word "cannabis." When referring to a medical marijuana program, the guidelines will use the word "marijuana," as it is often used within program references.

Medical Marijuana Program (MMP). The official jurisdictional resource for the use of cannabis for medical purposes. Search the jurisdiction's website or Department of Health for "medical cannabis program" or "medical marijuana program."[1]

Nabilone. The generic name for a synthetic cannabinoid similar to tetrahydrocannabinol. It is the active ingredient in the FDA-approved drug Cesamet.

Schedule I Controlled Substance. Defined in the federal Controlled Substances Act[2] as those substances that have a high potential for abuse; no currently accepted medical use in treatment in the United States; and a lack of accepted safety for use of the substance under medical supervision.

Tetrahydrocannabinol (THC). One of many cannabinoids found in cannabis. THC is the primary substance responsible for most of the characteristic psychoactive effects of cannabis.[3]

* In Australia, cannabis for medical use is federally legal, with states allowed to implement as they see fit. Although Bermuda has not legislated use of marijuana, its Supreme Court ruled that citizens could apply for personal licenses to possess cannabis for medical use. Cannabis for medical use is federally legal in all provinces of Canada. In New Zealand, physicians may prescribe CBD and cannabis-based products.

Recommendations

Essential Knowledge

1. The APRN shall have a working knowledge of the current state of legalization of medical and recreational cannabis use.
   - *The Drug Enforcement Agency (DEA) classifies cannabis as a Schedule I Controlled Substance. This classification not only prohibits practitioners from prescribing cannabis, it also prohibits most research using cannabis, except under rigorous oversight from the government.*[4]
   - *The process for obtaining cannabis for federally funded research purposes is a cumbersome process and unlike any other drug research. Currently, the only legal source of cannabis for research purposes is grown in limited quantities at the University of Mississippi.*[5] *The DEA sets a quota for the amount of cannabis that can be grown for research studies.*[6] *Applications to use this source of cannabis must be made to the U.S. Food & Drug Administration (FDA), DEA, and National Institute on Drug Abuse.*[7]
   - *Over 31 jurisdictions (including the District of Columbia), Guam, and Puerto Rico passed legislation legalizing cannabis for medical purposes. In these laws, the jurisdiction has adopted exemptions legalizing the use of cannabis for medical purposes. Although the use of marijuana pursuant to authorized medical marijuana programs (MMPs) conflicts with federal law and regulations, at present there is no controlling case law holding that Congress intended to preempt the field of regulation of cannabis use under its supremacy powers.*[8]
   - *An increasing proportion of jurisdictions have also decriminalized or legalized recreational cannabis use.*[9]
   - *The federal government's position on prosecuting the use of cannabis that is legal under applicable jurisdiction law has been set out in U.S. Department of Justice position papers. In 2009, the U.S. Attorney General took a position that discourages federal prosecutors from prosecuting people who distribute or use cannabis for medical purposes in compliance with applicable jurisdiction law; further similar guidance was given in 2011, 2013, and 2014.*[10] *In January 2018, the U.S. Office of the Attorney General rescinded the previous nationwide guidance specific to marijuana enforcement. The 2018 memorandum*[11] *provides that federal prosecutors follow the well-established principles in deciding which cases to prosecute, namely, the prosecution is to weigh all relevant considerations, including priorities set by the attorneys general, seriousness of the crime, deterrent effect of criminal prosecution, and cumulative impact of particular crimes on the community.*
2. The APRN shall have knowledge of the jurisdiction's MMP.
   - *MMPs are defined and described within the statute and rules of the specific jurisdiction. The relevant statute or rules are most easily located through the jurisdiction's Department of Health and MMP.*[12] *Laws and rules regarding MMPs are an evolving process. Always confirm use of the most recent versions.*
   - *A health care provider does not prescribe cannabis.*
   - *The MMP will specify the qualifying conditions and the certifying process as well as the type of health care provider who can certify a qualifying condition.*[13]
   - *Specific MMP statutes define the bona fide health care provider–patient relationship necessary for authorization to certify a patient as having a qualifying condition. Some statutes require a preexisting and ongoing relationship with the patient as a treating health care provider; others note that the relationship may not be limited to issuing a written certification for the patient or a consultation simply for that purpose.*[14] *Verification of the existence of the required provider-patient relationship and documentation of the certification within the jurisdiction's MMP is essential.*
   - *The MMP will specify whether an APRN can certify a qualifying condition and whether a specific course or training is required in order to participate in certifying an MMP qualifying condition.*[15]
   - *After the qualifying condition is certified, the patient registers with the MMP. Once registered, the patient can obtain cannabis from a jurisdiction-authorized cannabis dispensary.*
   - *Procurement and administration of cannabis for medical purposes is limited to the patient and/or the patient's designated caregiver. The MMPs will specify whether designated caregivers are permissible as well as the applicable process for registration as a designated caregiver.*[16]
   - *In some jurisdictions, the MMP allows an employee of a hospice provider or nursing or medical facility, or a visiting nurse, personal care attendant, or home health aide to act as a designated caregiver for the administration of medical marijuana.*[17]
3. The APRN shall have an understanding of the endocannabinoid system, cannabinoid receptors, cannabinoids and the interactions between them.
   - *The endocannabinoid system consists of endocannabinoids, cannabinoid receptors, and the enzymes responsible for synthesis and degradation of endocannabinoids.*[18]
   - *Discovered in 1973, this system includes a series of cannabinoid receptors throughout the body embedded in cell membranes that, when stimulated by endocannabinoids, are thought to promote homeostasis.*[19]
   - *Endocannabinoids are naturally occurring substances within the body, while phytocannabinoids (plant substances that stimulate cannabinoid receptors) are found in cannabis.*[20]
   - *The most well known of these cannabinoids is tetrahydrocannabinol (THC); however, cannabidiol (CBD) and cannabinol (CBN) are gaining interest in therapeutic use.*[21]
4. The APRN shall have an understanding of cannabis pharmacology and the research associated with the medical use of cannabis.

Due to government restrictions on research involving cannabis, the surge of legislation has outpaced research, leaving nurses with few resources when caring for patients who use medical cannabis. Therefore, information regarding medicinal use of cannabis must be derived from moderate- to high-quality evidence using randomized placebo-controlled studies. These particular studies are the most likely to elucidate causality in treatments

and are the only trusted source of evidence for cannabis as a clinical intervention. Research on cannabis is an evolving body of work. As with any scientific literature, it is important to rely on the most recent high-quality evidence.

a. Current scientific evidence exists for the use of cannabis for the following qualifying conditions:
   - *Moderate- to high-quality evidence exists for*
     - *cachexia*
     - *chemotherapy-induced nausea and vomiting*
     - *pain (resulting from cancer or rheumatoid arthritis)*
     - *chronic pain (resulting from fibromyalgia)*
     - *neuropathies (resulting from HIV/AIDS, multiple sclerosis {MS}, or diabetes)*
     - *spasticity (from MS or spinal cord injury)*[22]
   - *No human studies have confirmed evidence for neuroprotective, anti-inflammatory, antitumoral, and antibacterial effects of cannabinoids. Some preclinical animal and cellular studies do provide evidence for those effects; however, no generalizations can be made to the human population.*[23]
   - *The treatment of some symptomology might be attributed to the more general and well-known effects of cannabis. Cannabis is a known sedative, appetite stimulant, and euphoriant. Instead of cannabis treating underlying symptoms, these three effects of cannabis may only mask symptoms and increase a subjective sense of well-being, which could improve self-reported quality of life in patients that have difficulty sleeping, chronic pain, or poor appetite.*[24]

b. Adverse effects of cannabis are influenced by the patient's condition and current medications
   - *The patient's propensity for the following may be exacerbated by cannabis: increased heart rate, increased appetite, sleepiness, dizziness, decreased blood pressure, dry mouth/dry eyes, decreased urination, hallucination, paranoia, anxiety, impaired attention, memory, and psychomotor performance.*[25]
   - *Some participants report fatigue, suicidal ideation, nausea, asthenia, and vertigo as adverse effects of cannabis.*[26]
   - *People with asthma, bronchitis, and emphysema should be cautioned not to use smoked cannabis. People with cardiac disease, alcohol or other drug dependence, or whose illnesses may be exacerbated by cannabis use should be cautioned.*[27]
   - *Cognitive impairment by cannabis may be dose- and age-dependent.*[28]
   - *It is highly likely that cannabis will exacerbate symptoms of poor balance and posture in patients with dyskinetic disorders. Similarly, cannabis may worsen mental faculties in conditions that cause cognitive deficits. Patients who suffer from diseases with neurologic symptomology may show greater cognitive impairment.*[29]
   - *Higher-than-normal blood concentrations of cannabinoids, usually from overconsumption of edible cannabis product, can cause prolonged and often debilitating psychoses or hyperemesis syndrome.*[30]
   - *Cannabinoid receptors are effectively absent in the brainstem cardiorespiratory centers. This is believed to preclude the possibility of a fatal overdose from cannabinoid intake.*[31]
   - *Cannabis use disorder is defined as a problematic pattern of cannabis use leading to clinically significant impairment or distress; the clinical indications are included in the* DSM-5.[32]
   - *Cannabis withdrawal syndrome has been identified as a syndrome seen in some patients whose cannabis use has been heavy and prolonged (i.e., usually daily or almost daily use over a period of at least a few months). The withdrawal syndrome has varying symptomatology, including insomnia, loss of appetite, physical symptoms, and restlessness initially, irritability/anger, then vivid and unpleasant dreams after a week.*[33]

c. Variable effects of cannabis are dependent on type of product and route of administration
   - *The only reliably studied method for the administration of nonsynthetic cannabinoids is smoked cannabis. Insufficient evidence exists for vaporized cannabis, edibles, dabbing, etc. However, FDA-approved synthetic THC drugs (dronabinol and nabilone) are administered orally or by an oromucosal route.*[34]
   - *Edible cannabis products may have delayed effects.*[35]
   - *Therapeutic topical applications of cannabis have not been reliably studied. Tinctures have a wide range of possible applications (oromucosal, food additive, tea, etc.) and not all methods of administration have been reliably researched. Patients must be aware that concentrations may vary from those listed and to purchase these formulations from a reliable dispensary.*[36]
   - *Sublingual and mucosal sprays have the benefit of directly accessing the bloodstream. Oromucosal doses have less dosage variability than smoked cannabis and edibles, but are limited by slower absorption and lower rate of THC delivery to the brain.*[37]
   - *Smoked and vaporized cannabis has the advantage of rapid absorption into the bloodstream. Vaporization creates fewer pyrolytic compounds that irritate respiratory tissue. However, both methods show significant loss of active compounds lost to combustion and exhalation.*[38]
   - *Routes of administration other than oral, oromucosal, smoked, or vaporized have not been studied in a clinical setting.*
   - *Butane honey oil (or other oils used for superheated vaporization known as "dabbing"),*[39] *hashish, and other solvent-extracted resins often carry impurities, especially when manufactured by nonprofessionals. These methods of administration have not been adequately studied in a clinical setting.*

d. Principles of dosage titration
   - *Since medical cannabis is not an FDA drug, there is no recommended dosage.*
   - *There is a wide variability of cannabis concentration in different cannabis preparations. Due to this wide variability, principles of dosage titration (start low, go slow) and evaluation of specific effect are beneficial.*

- *Patients will need to titrate their dosage to establish an efficacious and stable dosing schedule over 1 to 2 weeks.*[40]
- *Continual patient assessment of perceived efficacy and adverse effects is recommended. Useful strategies include tracking dose, symptoms, relief, and adverse effects in a journal for review with the authorizing practitioner.*

e. Risks to particular groups of patients
- *Adolescents. Many studies show a correlation between cannabis use and poor grades, high dropout rates, lower income, lower percentage of college degree completion, greater need for economic assistance, unemployment, and use of other drugs.*[41] *Although these trends are related to recreational rather than cannabis for medical use, the trends cannot be ignored but should be balanced with the benefits of cannabis for medical use.*
- *Fertility. Two preclinical studies indicate that interference with endogenous cannabinoids might increase chances of failed embryo implantation*[42] *and cannabinoids are capable of dysregulating hormones, which in turn can affect spermatogenesis.*[43]
- *Neonates. Presently there are no reliable data for neurodevelopmental outcomes with early exposure to cannabis in neonatal life, through either breastfeeding or secondhand inhalation.*[44,45,46]
- *Cannabis can be a drug of abuse and precautions should be taken to minimize the risk of misuse and abuse.*
- *Individuals with a risk of suicide or history of suicide attempt, schizophrenia, bipolar disorder, or other psychotic condition should be cautioned that cannabis use might exacerbate existing psychoses.*[47]

5. The APRN shall be able to recognize signs and symptoms of cannabis use disorder and cannabis withdrawal syndrome.
   - *Cannabis use disorder is defined as a problematic pattern of cannabis use leading to clinically significant impairment or distress; the clinical indications are included in the* DSM-5.[48]
   - *Cannabis withdrawal syndrome has been identified as a syndrome seen in some patients whose cannabis use has been heavy and prolonged (i.e., usually daily or almost daily use over a period of at least a few months). The withdrawal syndrome has varying symptomatology, including insomnia, loss of appetite, physical symptoms, and restlessness initially, then irritability/anger, vivid and unpleasant dreams after a week.*[49]
6. The APRN shall have an understanding of the safety considerations for patient use of cannabis.
   - *Administration of cannabis for medical use can only be carried out by the certified patient and/or designated caregivers registered to care for the patient.*
   - *Cannabinoids have the possibility of altering the metabolic breakdown of certain drugs. Departures from normal drug metabolism can result in higher or lower than expected plasma levels, which can cause dangerous drug interactions.*[50] *Information on possible interactions is available for the synthetic cannabinoids dronabinol and nabilone on the Drug Information Portal.*[51] *The interactions listed in the Drug Information Portal are not exhaustive and not directly transferable to nonsynthetic cannabinoids. Many of the listed interactions are probable interactions, as there are not sufficient studies into cannabinoid interactions.*
   - *Storage considerations include:*
     - *keeping cannabis out of the reach of children, minors, and nonregistered individuals*
     - *storing all cannabis products in a locked area*
     - *keeping cannabis in the original child-resistant packaging*
     - *storing raw cannabis in a cool, dry, place*
     - *following labeling guidelines for storage and expiration dates*
   - *Disposal of unused cannabis products should be completed according to the DEA's Disposal Act.*[52] *Generally, one can locate a collection receptacle via the DEA registration Call Center (800-882-9539).*

Clinical Encounter And Identification Of A Qualifying Condition

1. The APRN shall perform a clinical assessment within the framework of a professional provider/patient relationship during an in-person encounter, including a complete assessment of the patient and a review of diagnostic information in order to identify whether the patient has a condition specified in the MMP.

An in-person encounter is the appropriate setting for a comprehensive and systematic assessment as a foundation for decision making related to the patient's condition and whether the condition meets the qualifying conditions in the particular MMP.

2. The APRN shall review the patient's current treatment for the qualifying condition and the response to that treatment.

Safe practice includes review of treatment history for the qualifying condition and the effectiveness of the past and current treatment.

3. The APRN shall complete a thorough medication reconciliation as well as a review of the jurisdiction's prescription drug monitoring program.

Safe practice includes a thorough review of the medication history, including any potential drug precautions or interactions with cannabis.

4. The APRN shall review the patient's mental health, alcohol, and substance use history and if present, seek a consultation or referral for that use.

Cannabis can be a drug of abuse and precautions should be taken to minimize the risk of misuse and abuse.[53] *Additionally, individuals with a risk of suicide or history of suicide attempt, schizophrenia, bipolar disorder, or other psychotic condition should be cautioned that cannabis use may exacerbate existing psychoses.*[54]

5. The APRN shall gather specific historical and current information regarding the patient's experience with cannabis and discuss the patient's values, preferences, needs, and knowledge related to cannabis use.

Although there is a growing cultural acceptance of cannabis for medical indications, it has long been known as an illegal substance. The negotiation of patient-centered, culturally appropriate, evidence-based goals and modalities of care is necessary in nursing care, especially when discussing medical marijuana as a treatment option.

6. The decision to certify the MMP qualifying condition is not to be predicated on the existence of a qualifying condition alone. The APRN shall consider the available scientific evidence for the specific qualifying condition prior to certifying the qualifying condition including:
   - *present scientific evidence for cannabis use with the specific qualifying condition*
   - *adverse effects according to the patient's clinical presentation*
   - *variable effects of cannabis*
   - *principles of dose titration*
   - *risks to particular groups of patients, such as those of childbearing age, pregnant, neonates, adolescents, and individuals at risk for substance abuse*
7. The APRN shall determine the ongoing monitoring and evaluation of the patient.

Active participation via ongoing monitoring, patient diaries, follow-up appointments, and evaluation of effects and response to medical marijuana is advisable.

Informed and Shared Decision Making

1. The APRN shall provide information to the patient and family members/caregivers regarding:
   - *scientific evidence for cannabis for the qualifying condition*
   - *adverse effects of cannabis use based on the patient's condition and current medications*
   - *variable effects of cannabis*
   - *lack of cannabis product standardization*
   - *principles of dosage titration*
   - *safety considerations for the use of cannabis*
   - *individualized goals of medical marijuana therapy*
     - *Disclose to the patient that the current evidence regarding the medical use of cannabis is largely based on case reports and observational studies. The patient's response to cannabis may be different. Until more clinical evidence is collected, it is difficult to predict how cannabis will affect the patient.*
     - *Medical marijuana is not covered by health insurance and costs can vary depending on the frequency of dosage.*
   - *requirements for ongoing monitoring and evaluation*
     - *Recommendations include active patient participation in ongoing monitoring via patient diary/journal, follow-up appointments, and evaluation of effects and response to cannabis.*
2. Together, the APRN and the patient shall make the decision whether or not to proceed with certifying the qualifying condition.

When all reasonable options have been discussed, and the patient understands the possible outcomes of each option, it is the patient's right to choose the course of care.

Documentation and Communication

1. The APRN shall document the patient assessment, reasoning underlying the therapeutic use of cannabis for the qualifying condition, goals of therapy, means to monitor and evaluate response, and education provided to the patient.

Essential documentation for good clinical communication should specifically include the evidence base for any practice decisions, treatment goals, and patient education.

2. The APRN shall communicate the patient's plan of care for use of medical marijuana to other health team members.

Clear, complete, and accurate documentation in a health record ensures that all those involved in a patient's care have access to information upon which to plan and evaluate their interventions.

Ethical Considerations

1. In addition to ethical responsibilities under the jurisdictional law, the APRN shall approach the patient without judgment regarding the patient's choice of treatment or preferences in managing pain and other distressing symptoms.

Awareness of one's own beliefs and attitudes about any therapeutic intervention is vital, as nurses are expected to provide patient care without personal judgment of patients.

2. The APRN shall take all appropriate steps to ensure that the APRN is not placed in a position where there is or may be an actual conflict, or potential conflict of interest between the APRN and a cannabis dispensary or cultivation center.

A conflict of interest exists when a nurse's personal interests or concerns are or may be perceived as inconsistent with the best interest of the patient (e.g., when an APRN recommends a treatment in which the APRN has a financial stake).

3. The APRN shall not certify a MMP qualifying condition for oneself or a family member.

An emerging conflict of interest in the medical field is when practitioners treat their own family members. The emotional attachment to the patient may cause a practitioner's judgment to be compromised.

Special Considerations

- Follow specific employer policies and procedures, terms of the collaborative agreement, standard care arrangement, and facility policy and procedures regarding certifying a qualifying condition.

Always check with the facility, collaborative agreement, and local Department of Health or MMP for more information on the statutes of your jurisdiction when caring for a patient who can legally use cannabis for medical purposes.[55]

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