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Non-pharmacologic and non-opioid solutions for pain management

Issue:

Not all pain management requires medication. Some pain medications — specifically opioids — are high-risk medications that can put patients at risk for respiratory depression as well as abuse and addiction. Also, as more patients present with additional comorbidities, the risk that they may experience side effects or adverse events from opioids is increased.[1]

As health care organizations across the nation address their policies and processes regarding pain management, this *Quick Safety* provides guidance for evidence-based, non-opioid treatment options that can be considered for treating pain. When providers are developing a patient's individualized pain management plan, it is important to use a systematized approach to look at all aspects of the patient's situation, while focusing on symptomatic relief.

The use of non-opioid treatment options may be helpful in either eliminating the need for an opioid or reducing the amount of opiates used or prescribed. These reductions in opiate use can help reduce side effects as well as the potential for addiction and abuse. The Veterans Administration (VA) has successfully reduced morphine dosages through its THRIV program.[2]

Listed below are some evidence-based, non-opioid treatment options to consider for treating pain.

- **Behavioral/Cognitive Interventions/Psychological**
  - *Meditation techniques* utilized with mindfulness-based stress reduction (MBSR) have been shown to be effective for pain reduction and strong continued patient compliance.[3]
  - *Progressive muscle relaxation* can assist in regulating neurosystems found in muscle tension and situational stress commonly seen with pain.

- **Environmental-based Interventions**
  - *Lighting* alterations can create an environment that supports muscle relaxation.
  - *Music therapy* has been associated with statistically significant reduction in opioid and non-opioid analgesic use.[4]

- **Physical Interventions**
  - *Acupuncture* was recommended as a first-line treatment in lower back pain by the American College of Physicians.[5]
  - *Massage therapy* has shown to be effective in adult and pediatric populations with minimal risk of side effects.
  - *Spinal manipulation* has shown improvement in pain for patients experiencing chronic lower back pain, shoulder pain and migraines.[6,7]

- **Non-opioid pharmacologic interventions**
  - *Non-steroidal anti-inflammatory agents* (NSAIDs) can be useful in conditions where pain and inflammation are present.
  - *Acetaminophen* is an option that has multiple administration routes.
  - *Corticosteroids* can be useful but limited in applicability, dependent upon patient comorbidities.
  - *Topical products* have limited use in applicability, but can be helpful in certain clinical situations.

Note: This list is not all-inclusive. The treatment modality listed here does not imply that The Joint Commission supports any particular treatment type over another.

Safety actions to consider:

Health care organizations should provide clinicians with the information and support they need to facilitate the use of non-opiate treatment options for their patients.

The Joint Commission.

- When deciding which non-pharmacological and non-opioid pharmacological approaches to implement at your organization, take into account the population served by your organization,* and the source of the individual patient's pain. Building a system that encompasses pain management, whether for inpatients or outpatients, is key to treating patients. This system should have the following minimal characteristics:
  - Active involvement of the health care team, minimally including medical staff, nurses and pharmacists. Team members should include those who can conduct a comprehensive evaluation which allows for a treatment plan with realistic goals and an appropriate balance of pharmacological and non-pharmacological treatments.
  - Proper monitoring of the patient's progress as it relates to managing side effects, signs and symptoms of opiate abuse and ensuring treatment goals are met.
  - Determining when non-invasive options have been exhausted and proper referrals are made for additional treatment options.
- Provide adequate training on the modalities for members of the health care team.*
- Ensure that patients and their families receive sufficient education on the selected modality(ies). The goals of patient education should be to understand the:
  - Extent of pain relief expected
  - Frequency in which the treatment should be implemented
  - Potential side effects expected with each treatment

  Providing this knowledge will help to ensure ongoing treatment and reduce frustration from the potential over-expectation of treatment outcomes.

*These aspects are required by Leadership (LD) standard LD.04.03.13 (elements of performance 3 and 4).

Resources:

1. Tick H, et al. Evidence-Based Nonpharmacological Strategies for Comprehensive Pain Care. The Consortium Pain Task Force White Paper.
2. NBC Chicago. https://www.nbcchicago.com/investigations/As-Nation-Battles-Opioid-Abuse-Veterans-Find-New-Ways-to-Manage-Pain-480077423.html
3. Nahin RL, et al. Evidence-based evaluation of complementary health approaches for pain management in the United States. Mayo Clinic Proceedings, 2016:91(9):1292-1306.
4. Lee JH. The effects of music on pain: A meta-analysis. *Journal of Music Therapy*, 2016;53(4):430-477.
5. Qaseem A, et al. Noninvasive treatments for acute, subacute and chronic low back pain: A clinical practice guideline from the American College of Physicians. *Annals of Internal Medicine,* 2017;166(7):513-530.
6. Paige NM, et al. Association of spinal manipulative therapy with clinical benefit and harm for acute low back pain: Systematic review and meta-analysis. *Journal of the American Medical Association*. 2017;317(14):1451-1460.
7. Gross A, et al. Manipulation and mobilization for neck pain contrasted against an inactive control or another active treatment. *The Cochrane Database of Systematic Reviews.* 2015(9):CD004249.

Note: This is not an all-inclusive list.

Other resources from The Joint Commission:

R3 Report: Pain assessment and management standards for hospitals

Statement on Pain Management

Sentinel Event Alert Issue 49: Safe use of opioids in hospitals