

Pain Management Glossary

Term	Definition
Acetaminophen	Analgesic antipyretic derivative of acetanilide. It has weak anti-inflammatory properties and is used as a common analgesic, but may cause liver, blood cell, and kidney damage.
Acupuncture	Analgesia produced by the insertion of acupuncture needles at certain acupuncture points on the body. This activates small myelinated nerve fibers in the muscle which transmit impulses to the spinal cord and then activate three centers - the spinal cord, midbrain and pituitary/hypothalamus - to produce analgesia.
Acute Pain	Intensely discomforting, distressful, or agonizing sensation associated with trauma or disease, with well-defined location, character, and timing.
Addiction	A primary, chronic, neurobiologic disease with genetic, psychosocial, and environmental factors influencing its development and manifestations. It is characterized by behaviors that include one or more of the following: impaired control over drug use, compulsive use, continued use despite harm (medical, legal, vocational, social/familial), and craving.
Adjuvant Analgesic	A group of drugs with a primary indication other than analgesia, which have also been found to have analgesic properties in some painful conditions. Major types of adjuvant analgesics are steroids, antidepressants and anti-epileptic drugs.
Allergy (drug)	Immunologically mediated adverse reactions to medicinal substances used legally or illegally.
Analgesic	Compounds capable of relieving pain without the loss of consciousness.
Anhedonia	Inability to experience pleasure due to impairment or dysfunction of normal psychological and neurobiological mechanisms. It is a symptom of many psychiatric disorders (e.g., depressive disorder, major; and schizophrenia).

Term	Definition
Anorexia	The lack or loss of appetite accompanied by an aversion to food and reduced interest in eating.
Anticoagulants	Agents that prevent clotting.
Antidepressant	Mood-stimulating drugs used primarily in the treatment of affective disorders such as depression and related conditions. Most antidepressants work via modulating catecholamine and monoamine levels in the central nervous system including serotonin, norepinephrine, and dopamine.
Antiepileptic (Anticonvulsant)	Drugs used to prevent seizures or reduce their severity.
Aromatherapy	Aromatherapy is the use of essential oils from plants (flowers, herbs, or trees) as therapy to improve physical, emotional, and spiritual well-being.
Around the Clock (ATC)	Also referred to as “By the clock.” Analgesic medications for moderate to severe pain should be given on a fixed dose schedule, not on an as needed basis.
Arrhythmia	Any disturbances of the normal rhythmic beating of the heart or myocardial contraction. Cardiac arrhythmias can be classified by the abnormalities in heart rate, disorders of electrical impulse generation, or impulse conduction.
Ataxia	Impairment of the ability to perform smoothly coordinated voluntary movements. This condition may affect the limbs, trunk, eyes, pharynx, larynx, and other structures.
b.i.d.	Drug dosing twice daily
Bolus	Drug dose as large as a single dose (usually intravenously)
Breakthrough Pain	Acute pain that comes on rapidly despite the use of pain medication.
Coagulopathy	A condition in which the blood's ability to clot is impaired.

Term	Definition
Congestive Heart Failure (CHF)	A condition marked by weakness, edema, and shortness of breath that is caused by the inability of the heart to maintain adequate blood circulation in the peripheral tissues and the lungs. The resulting clinical syndrome, consisting of shortness of breath, pitting edema, enlarged tender liver, engorged neck veins, and pulmonary rales.
Continuous Pain	Baseline pain that is always present throughout the day and night.
Continuous Positive Airway Pressure (CPAP)	A technique of respiratory therapy, in either spontaneously breathing or mechanically ventilated patients, in which airway pressure is maintained above atmospheric pressure throughout the respiratory cycle by pressurization of the ventilatory circuit.
Corticosteroids (also known as glucocorticoids)	Corticosteroids are drugs that closely resemble cortisol, a hormone that is naturally produced by the adrenal glands. Some corticosteroid medicines include cortisone, dexamethasone, prednisone, and methylprednisolone. Steroids work by decreasing inflammation and reducing the activity of the immune system.
Creatinine clearance	The creatinine clearance test helps provide information about how well the kidneys are working. The test compares the creatinine level in urine with the creatinine level in blood.
Cyclooxygenase-2 (cox-2) Inhibitor	A nonsteroidal anti-inflammatory drug used to relieve pain and inflammation.
Delirium	A disorder characterized by confusion; inattentiveness; disorientation; illusions; hallucinations; agitation; and in some instances autonomic nervous system overactivity. It may result from toxic/metabolic conditions or structural brain lesions.
Diversion	The transfer of prescription drugs from legal to illegal distribution and marketing networks.

Term	Definition
Dose	A quantity of a medication to be taken/administered at any one time.
Dose stacking	Occurs with repeated administration of drugs so close together that the peak effects of each dose coincide. Can result in excess drug effect or stacking of effects.
Dosing Schedule	Describes the interval between ordered doses of a medication, and whether the ordered doses are scheduled on a regular basis (for example every 4 hours around the clock) or to be administered 'as needed' or 'PRN.'
Drug Administration Schedule	Time schedule for administration of a drug in order to achieve optimum effectiveness and convenience.
Drug Holiday	A brief period during which a patient stops taking a prescribed medication to recover some normal functions, reduce side effects, or maintain sensitivity to the drug.
Effective Dose	The dose of an opioid which leads to a meaningful improvement for a patient in a pain outcome such as improvement in function or reduction in pain intensity by 30%.
Efficacy	Extent to which a drug or another treatment works or produces the desired analgesia.
End of Dose Failure	Describes escalating pain which predictably occurs when the pain-relieving effect of an analgesic is wearing off due to clearance of the drug.
Equianalgesia / Equianalgesic Dose	A dose of one opioid which produces the same pain-relieving effect of another opioid or opioid route of delivery. For instance, 1 mg of oral hydromorphone is approximately equianalgesic dose to 4 mg of oral morphine.
First Order Kinetics	The rate of elimination of a drug is proportional to its plasma concentration. A constant <i>fraction</i> of the drug is eliminated per unit of time (e.g., one half of the drug is eliminated each half-life) not a constant <i>amount</i> .

Term	Definition
Guided Imagery (Imagery Psychotherapy)	The use of mental images produced by the imagination as a form of psychotherapy.
Half-life	The time it takes for the amount of drug in the body to be reduced by 50%. Half-life changes according to the body's ability to clear the drug. Half-life increases with age.
Health Literacy	The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.
Hyperalgesia	Hyperalgesia is a poorly understood syndrome of worsening pain and agitation despite increasing doses of previously effective opioid analgesics. Risk factors for hyperalgesia are total daily doses of greater than 200 morphine equivalents, dehydration, and renal dysfunction and accumulation of toxic metabolites.
Iatrogenic Syndrome	Any adverse condition in a patient occurring as the result of treatment by a physician, surgeon, or other health professional, especially infections acquired by the patient during the course of treatment.
Immediate Release	An oral opioid formulation that is released systemically as quickly as it can be absorbed in the gastrointestinal tract, in contrast to a 'sustained release' opioid formulation.
Incident Pain	Pain associated predictably with a particular movement or event.
Incomplete Cross Tolerance	Drugs that work on the same receptor can produce different levels of analgesic impact and side effects. Therefore, a change from one opioid to an equianalgesic dose of a different opioid may result in greater than expected analgesia and side effects (such as sedation and nausea) Hence when switching opioids, reduce the dose of the new opioid by 25-50% to account for the possibility of incomplete cross tolerance. When switching from one opioid to another, it is vital to assume that cross-tolerance exists but will be incomplete.

Term	Definition
Informed Consent	Informed consent is the process by which the treating health care provider discloses appropriate information to a competent patient so that the patient may make a voluntary choice to accept or refuse treatment.
Intramuscular Injections	Forceful administration into a muscle of liquid medication, nutrient, or other fluid through a hollow needle piercing the muscle and any tissue covering it.
Intravenous Administration	Delivery of substances through venipuncture and veins.
Kyphosis	Kyphosis is a forward rounding of the back. Some rounding is normal, but the term "kyphosis" usually refers to an exaggerated rounding of the back. Age-related kyphosis often occurs after osteoporosis weakens spinal bones to the point that they crack and compress.
Liver failure	Severe inability of the liver to perform its normal metabolic functions, as evidenced by severe jaundice and abnormal serum levels of ammonia; bilirubin; alkaline phosphatase; aspartate aminotransferase; lactate dehydrogenases; and albumin/globulin ratio.
Long Term Opioid Use	Use of opioids on most days for >3 months
Maximum Daily Dose	There is no universal maximum safe or daily dose. Maximum safe dose is patient-specific and dependent on current and previous opioid exposure and should be titrated to a dose that provides adequate analgesia and minimizes adverse reactions.
Monitored Setting	The safe use of opioids in hospital settings relies on an accurate pain assessment and applying appropriate pain management techniques. Consider that drug levels may reach peak concentrations during transport. Monitoring should be individualized according to the patient's response.

Term	Definition
Myoclonus/Myoclonic Jerking	Involuntary shock-like contractions, irregular in rhythm and amplitude, followed by relaxation, of a muscle or a group of muscles.
Narcotic	Medically, it means a drug which induces sleep. It is often used, imprecisely, as being synonymous to 'opioid.' 'Narcotic' is also used as a legal term to mean an illegal drug of abuse.
Nerve Block	Interruption of neural conduction in peripheral nerves or nerve trunks by the injection of a local anesthetic agent (e.g., lidocaine; phenol; botulinum toxins) to manage or treat pain.
Neuropathic Pain (Neuralgia)	Caused by injury or inflammation of neurons, within the central or peripheral nervous system. It may coexist with somatic or visceral pain. Distribution is commonly radicular or stocking-glove.
Nociceptors	Peripheral afferent neurons which are sensitive to injuries or pain, usually caused by extreme thermal exposures, mechanical forces, or other noxious stimuli. Their cell bodies reside in the dorsal root ganglia. Their peripheral terminals (nerve endings) innervate target tissues and transduce noxious stimuli via axons to the central nervous system.
Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)	Anti-inflammatory agents that are non-steroidal (not corticosteroids). In addition to anti-inflammatory actions, they have analgesic, antipyretic, and platelet-inhibitory actions. They act by blocking the synthesis of prostaglandins. Inhibition of prostaglandin synthesis accounts for their analgesic, antipyretic, and platelet-inhibitory actions; other mechanisms may contribute to their anti-inflammatory effects.

Term	Definition
Opioid	Compounds with activity like opiate alkaloids, acting at opioid receptors. Includes both naturally derived opiate analgesics such as morphine, as well as synthetically derived opioid receptor agonist molecules such as fentanyl and methadone. Properties include induction of analgesia or narcosis.
Opioid Agreement	Outlines the requirements for the patient when prescribed a controlled substance. May be written to be educational. May be written to establish warnings/consequences.
Opioid Naïve	A patient who has not been chronically receiving opioid analgesics on a daily basis and so has not developed significant tolerance.
Opioid Related Nausea	A side effect of opioid treatment. Typically it is short-lived, and patient develops tolerance to opioid related nausea within several days.
Opioid-Tolerant Patient	Patients who are chronically receiving opioid analgesics on a daily basis. Analgesic tolerance renders the patient less susceptible to the effects of opioids , including both pain relief and most adverse effects.
Opiophobia	The irrational fear experienced by clinicians or patients related to the appropriate use of opioid analgesics
Optimal Dose	A dose of an opioid that will improve function or reduce pain intensity by at least 30% without causing major adverse effects or complications.
Oral Administration	The giving of drugs, chemicals, or other substances by mouth.
Overdose	Accidental or deliberate use of a medication or street drug in excess of normal dosage.

Term	Definition
Pain	A state of physical, emotional, or mental lack of well-being or physical, emotional, or mental uneasiness that ranges from mild discomfort or dull distress to acute or unbearable agony, may be generalized or localized, and is the consequence of being injured or hurt physically or mentally or of some derangement of or lack of equilibrium in the physical or mental functions (as through disease), and that usually produces a reaction of wanting to avoid, escape, or destroy the causative factor and its effects.
Parenteral Infusions	Situated or occurring outside the intestine; usually refers to administration of a drug by intravenous, intramuscular or subcutaneous injection.
Patient Controlled Analgesia	Relief of pain, without loss of consciousness, through analgesic agents administered by the patients. It has been used successfully to control postoperative pain, during obstetric labor, after burns, and in terminal care. The choice of agent, dose, and lockout interval greatly influence effectiveness. The potential for overdose can be minimized by combining small bolus doses with a mandatory interval between successive doses (lockout interval).
Peak Effect	The time it takes to reach maximal serum concentrations (C_{max}) depends on the drug and route of delivery.
Persistent Pain	Pain that persists for more than 3 months and is characterized by physical and mental withdrawal - a poorly understood phenomena. Can coexist with depression, common in cancer patients. Characterized by anorexia (no appetite), anhedonia (lack of interest), lethargy and sleep disturbance and functional changes. It may or may not be associated with trauma or disease, and may persist after the initial injury has healed. Its localization, character, and timing are vaguer than with acute pain.

Term	Definition
Physical Dependence	Physical condition in which a person needs a drug to function normally.
Physiologic Dependence	Physiologic dependence implies a person will develop withdrawal symptoms upon cessation of drug use or administration of a drug antagonist. While it is typically a component of addiction, physical dependence alone does not constitute addiction.
PO	Drug administration by mouth or orally.
Post mastectomy pain syndrome (PMPS)	A type of chronic neuropathic pain disorder that can occur following breast cancer procedures, particularly those operations that remove tissue in the upper outer quadrant of the breast and/or axilla, in the absence of an infection or recurrence. Pain can be severe enough to cause long-term disabilities and interfere with sleep, performance of daily activities, and use of the affected arm. Also consider differential diagnosis: bone metastasis or the pain could be associated with lymphedema. The swelling is uncomfortable and can be painful if it is severe.
Potency	The amount (e.g., milligrams) of a drug which is needed to achieve a given pharmacologic effect. A higher potency drug will require fewer milligrams to achieve a given pharmacologic effect than a lower potency drug.
PRN (As-needed) Dosing	When a patient begins taking an opioid, it should be given on an as-needed (PRN) basis, until the need for a standing dose is established. The frequency of PRN dosing is based on the time to maximal effect of the drug (onset of action) and depends on the route.
Progressive Muscle Relaxation	Progressive muscle relaxation is a technique that teaches patients to consciously and systematically relax muscles throughout their body in order to cause relaxation and reduce distressing symptoms.

Term	Definition
Pseudoaddiction	Behavioral changes in patients that seem similar to those in patients with opioid dependence or addiction but are secondary to inadequate pain control.
Psychological Dependence	Psychological or psychic dependence refers to the experience of impaired control over drinking or drug use. It is related to addiction, but should be differentiated from physical or physiologic dependence.
Q4	Drug given every 4 hours
QTc Interval	An electrocardiogram (ECG, also called an EKG) measures electrical impulses as they travel through your heart. An ECG measures electrical impulses as five distinct waves. Doctors label these five waves using the letters P, Q, R, S and T. The waves labeled Q through T show electrical activity in your heart's lower chambers. The space between the start of the Q wave and the end of the T wave (Q-T interval) corresponds to the time it takes for your heart to contract and then refill with blood before beginning the next contraction.
Rectal Administration	The insertion of drugs into the rectum, usually for confused or incompetent patients such as children, infants, and the very old or comatose.
Relaxation Therapy	Treatment to improve one's health condition by using techniques that can reduce physiological stress, psychological stress, or both.
Renal insufficiency	Conditions in which the kidneys perform below the normal level in the ability to remove wastes, concentrate urine, and maintain electrolyte balance; blood pressure; and calcium metabolism. Renal insufficiency can be classified by the degree of kidney damage (as measured by the level of proteinuria) and reduction in glomerular filtration rate.

Term	Definition
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Rescue Dose	The use of an immediate release opioid on an ‘as needed’ or PRN basis to treat breakthrough, incident, or end-of-dose failure pain.
Respiratory Depression	Clinically meaningful reduction in respiratory rate and tidal volume leading to increased blood pCO ₂ and decreased oxygen levels. Respiratory depression can be a complication of opioid therapy, if opioid doses have been escalated too rapidly and out of proportion to a patient’s symptoms. Risk of respiratory depression is most closely related to rapidity of rise of opioid serum levels, particularly in the opioid naïve. Clinically meaningful respiratory depression is exceedingly rare if opioids are dosed within guidelines, even for dyspnea.
Risk	The probability that an event will occur. It encompasses a variety of measures of the probability of a generally unfavorable outcome.
RTA- Renal Tubular Acidosis	A group of genetic disorders of the kidney tubules characterized by the accumulation of metabolically produced acids with elevated plasma chloride, hyperchloremic metabolic acidosis. Defective renal acidification of urine (proximal tubules) or low renal acid excretion (distal tubules) can lead to complications such as hypokalemia, hypercalcinuria with nephrolithiasis and nephrocalcinosis, and rickets.
Screening	Detection of drugs that have been abused, overused, or misused, including legal and illegal drugs.
Sedation	A relaxed, calm, or sleepy condition that results from taking a drug. It is a common side-effect of opioids, but one to which patients rapidly develop tolerance.
Serious Illness	Medical diseases and processes that are either life-threatening, life-limiting, or associated with long-term morbidity and impairments of quality life.
Seriously Ill Patient	The patient for whom a medical illness is life-altering, possibly life-threatening, and requires ongoing medical management focused both on treatment of disease(s) and on maximizing function and quality of life.

Term	Definition
Side Effect	Unintended or unwanted effects that medicines can cause.
Somatic (Nociceptive) Pain	Caused by the activation of peripheral or central nociceptors through tissue damage to skin, soft tissue, muscle or bone. Well-localized distribution – patients can often point with one finger to the location of their pain.
Steady State	The rate at which drug availability and excretion of a drug are equal.
Strong Opioid	Third step recommendation by the World Health Organization for moderate to severe pain (i.e., Morphine, Oxycodone, Hydromorphone, Fentanyl, Methadone).
Subcutaneous Injections	Forceful administration under the skin of liquid medication, nutrient, or other fluid through a hollow needle piercing the skin. Not to be confused with intramuscular injections.
Substance Use Disorder	Patterns of symptoms resulting from the use of a substance which the individual continues to take despite experiencing problems as a result.
Sustained Release	An oral or transdermal opioid formulation that is designed to release the active drug slowly in the gastrointestinal tract, causing a sustained duration of analgesia, typically 8-24 hours depending on the formulation. Synonymous with ‘extended release’ or ‘controlled release.’ Note that methadone is naturally long-acting without specialized pill formulations.
Sympathetic Nervous System	The part of the autonomic nervous system that is concerned especially with preparing the body to react to situations of stress or emergency.
Tamoxifen	Tamoxifen is a medicine that blocks the effects of the estrogen hormone in the body. It is used to treat breast cancer in women or men. It may also be used to treat other kinds of cancer.

Term	Definition
Teach-Back Communication	Providing the patient, family or others information, and then allowing them to take an action or restate the information in their own words. The clinician prefaces communications with a statement framed to show the clinician has the burden of effective communication rather than the patient.
Thrombocytopenia	A subnormal level of blood platelets.
Tolerance	Tolerance describes a long-term adaptation to opioid exposure that causes one or more opioid effects to diminish over time at any given dose. Tolerance typically develops rapidly to sedation and nausea (hours to days), rarely for analgesia and never for constipation.
Total Pain	The concept of total pain as the suffering that encompasses all of a person's physical, psychological, social, spiritual, and practical struggles.
Toxicity	Disorders that result from the intended use of pharmaceutical preparations. Included in this heading are a broad variety of chemically-induced adverse conditions due to toxicity, drug interactions, and metabolic effects of pharmaceuticals.
Transcutaneous Electric Nerve Stimulation (TENS)	The use of specifically placed small electrodes to deliver electrical impulses across the skin to relieve pain.
Transdermal (Cutaneous) Administration	Absorption of a drug across the skin, usually intending a systemic effect. Most commonly refers to a drug-impregnated adhesive patch applied to the skin.
Treatment Agreement	Outlines the joint responsibilities of prescriber and patient and are indicated for opioid or other controlled medications.
Urine Screen	A urine drug screen is used to detect illegal and some prescription drugs in the urine.

Term	Definition
Vegetative State (Persistent)	Vegetative state refers to the neurocognitive status of individuals with severe brain damage, in whom physiologic functions (sleep-wake cycles, autonomic control, and breathing) persist, but awareness (including all cognitive function and emotion) is abolished.
Visceral Pain	Caused by the activation of nociceptors in the visceral organs such as gallbladder, intestines, liver, lower esophagus, and heart. May be accompanied by nausea, vomiting, or sweating. Distribution can be characterized as colicky, diffuse, 'pressure-like' or referred.
Weak Opioid	Opioid with a ceiling effect associated with a low affinity for opioid receptor sites. Generally available as fixed-dose combination products with aspirin or acetaminophen. The toxicity of the non-opioid limits the dose of the opioid that can be administered daily. Because of this, weak opioids should not be used for moderate to severe pain. They are also limited by a short duration of action (no sustained-release forms available) and are available in oral forms only.
Withdrawal	The wide range of symptoms that occur after stopping or dramatically reducing opioid drugs after heavy and prolonged use (several weeks or more).