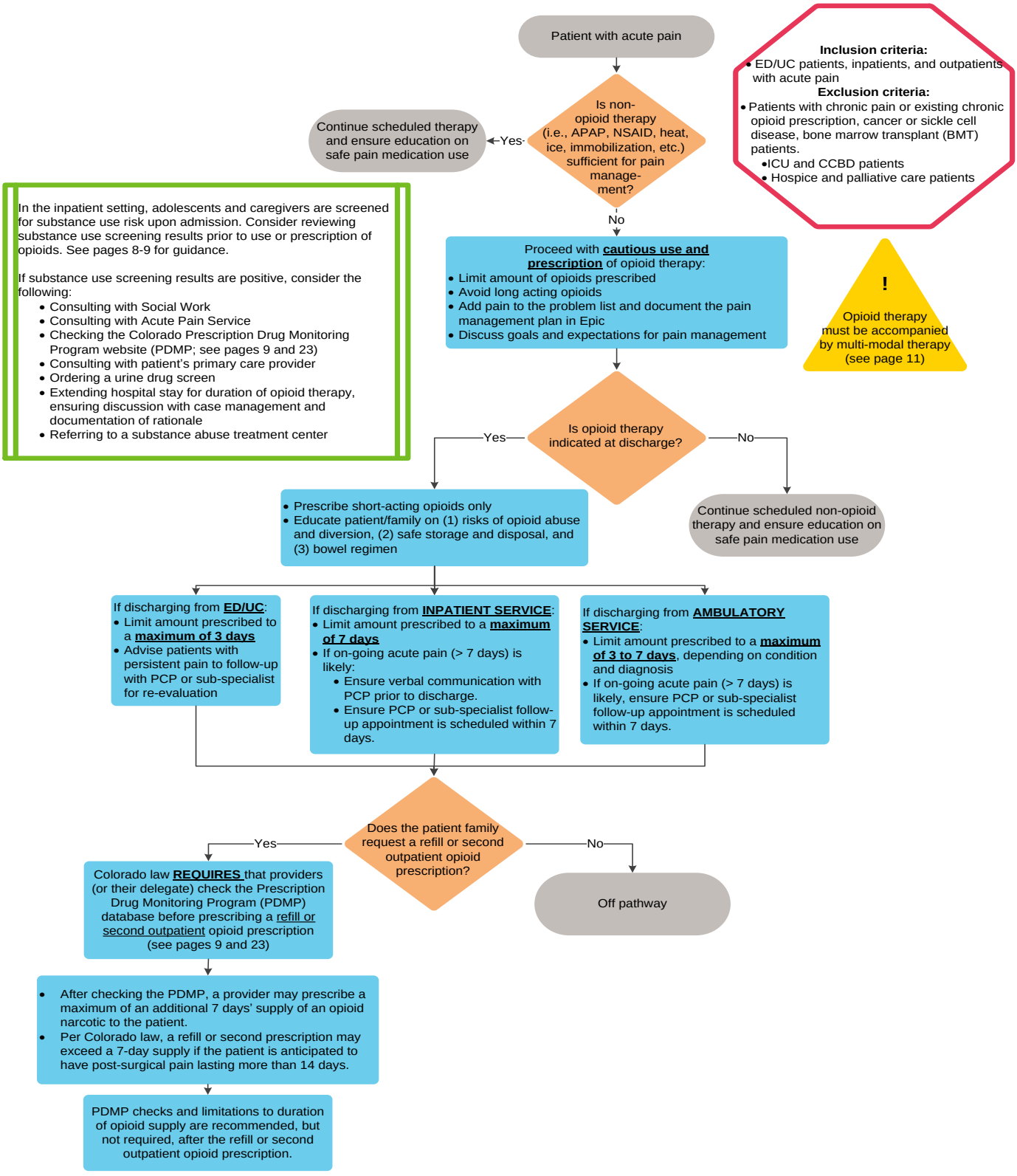
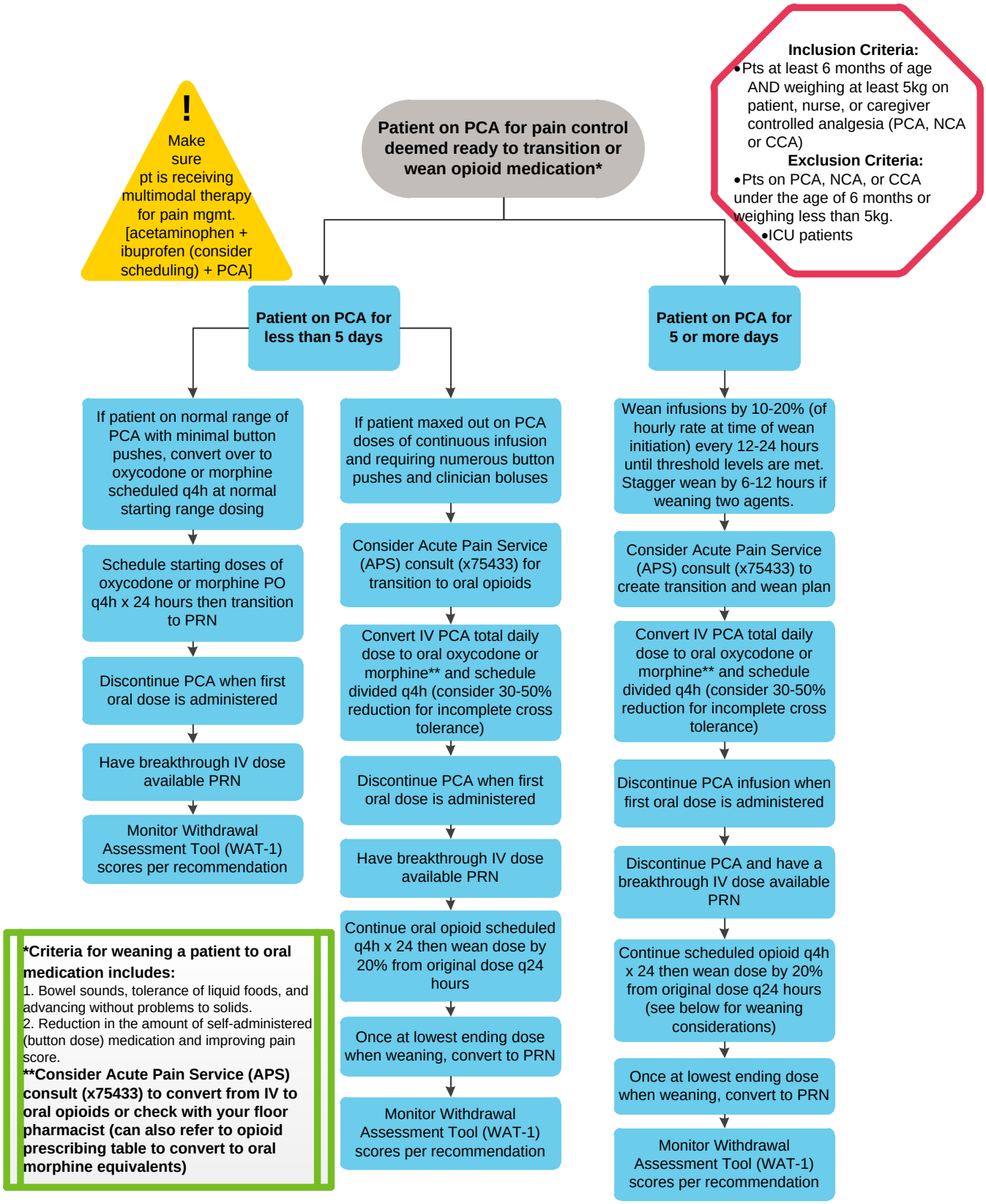
OPIOID PRESCRIBING PRACTICES

ALGORITHM 1. Opioid Prescribing Decision Making



ALGORITHM 2. Weaning Patients Off Patient Controlled Analgesia (PCA), Caregiver Controlled Analgesia (CCA), or Nurse Controlled Analgesia (NCA)



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TARGET POPULATION

Inclusion Criteria

- ED/UC patients, inpatients, and outpatients with acute pain

Exclusion Criteria

- Patients with chronic pain or existing chronic opioid prescription
- Patients with cancer
- Bone marrow transplant (BMT) patients
- Patients with sickle cell disease
- Patients of the Center for Cancer and Blood Disorders (CCBD)
- ICU Patients
- Hospice and palliative care patients

BACKGROUND | DEFINITIONS

Overview of the Opioid Crisis in the United States

- Prior concern about undertreating pain led to a move to address pain as the "fifth vital sign" in the late 1990s.
- In part because of that change in practice, opioid prescriptions in the United States skyrocketed between 1999 and 2010, including to the adolescent and young adult populations[1]. Rates of opioid prescribing to adolescents and young adults nearly doubled between 1994 and 2007[1].
- The increase in opioid prescribing over the last few decades has been associated with an increase in the rates of opioid misuse and abuse. In 2012, 12.5 million Americans reported abuse of prescription opioids, up from 4.9 million in 1992. Younger age (18-25 years) is associated with an increased risk of abuse. Between 13-31% of adolescents and young adults have reported lifetime nonmedical use of prescription medications[1].
- Recent research has identified a link between the duration of an initial opioid prescription and long-term use. In a sample of opioid-naïve, cancer-free adults, an initial opioid prescription lasting three or more days significantly increased the likelihood of chronic opioid use, with the sharpest increase in risk for chronic use occurring after the 5th and 31st days[2]. Given this correlation, **new CDC guidelines recommend that opioid prescriptions for adults with acute pain should be limited to the shortest possible duration. The CDC specifically recommends prescribing fewer than 7 days (and, for most patients, fewer than 3 days) of opioids when initiating acute pain treatment**[3].
- Given the national context of the opioid crisis, pediatric health care providers face four interrelated concerns[4]:

  1) Risk of unintentional opioid poisoning in children

  - Over 22,000 children were treated in US emergency departments for opioid poisoning between 2006 and 2012[5].
  - Children can experience life-threatening complications with exposures to even low doses of opioids.

  2) Risk that legitimate use of opioid prescriptions may contribute to non-medical use or abuse among adolescents and young adults

  - Nearly 80% of new heroin users have previously used opioid pain medications[6].
  - Children and adolescents who report "legitimate" use of prescription opioids prior to 12th grade are 33% more likely to misuse opioids as compared to those who had never used any prescription opioids[7].

  3) Risk of diversion of unused prescription opioids

  - A high percentage of opioids dispensed to children go unused, further increasing the risk for accidental poisoning, diversion, and misuse[8].

  4) A paucity of evidence to inform opioid prescribing practices for pediatric populations, which may contribute to over- or under-prescribing of opioid analgesics.

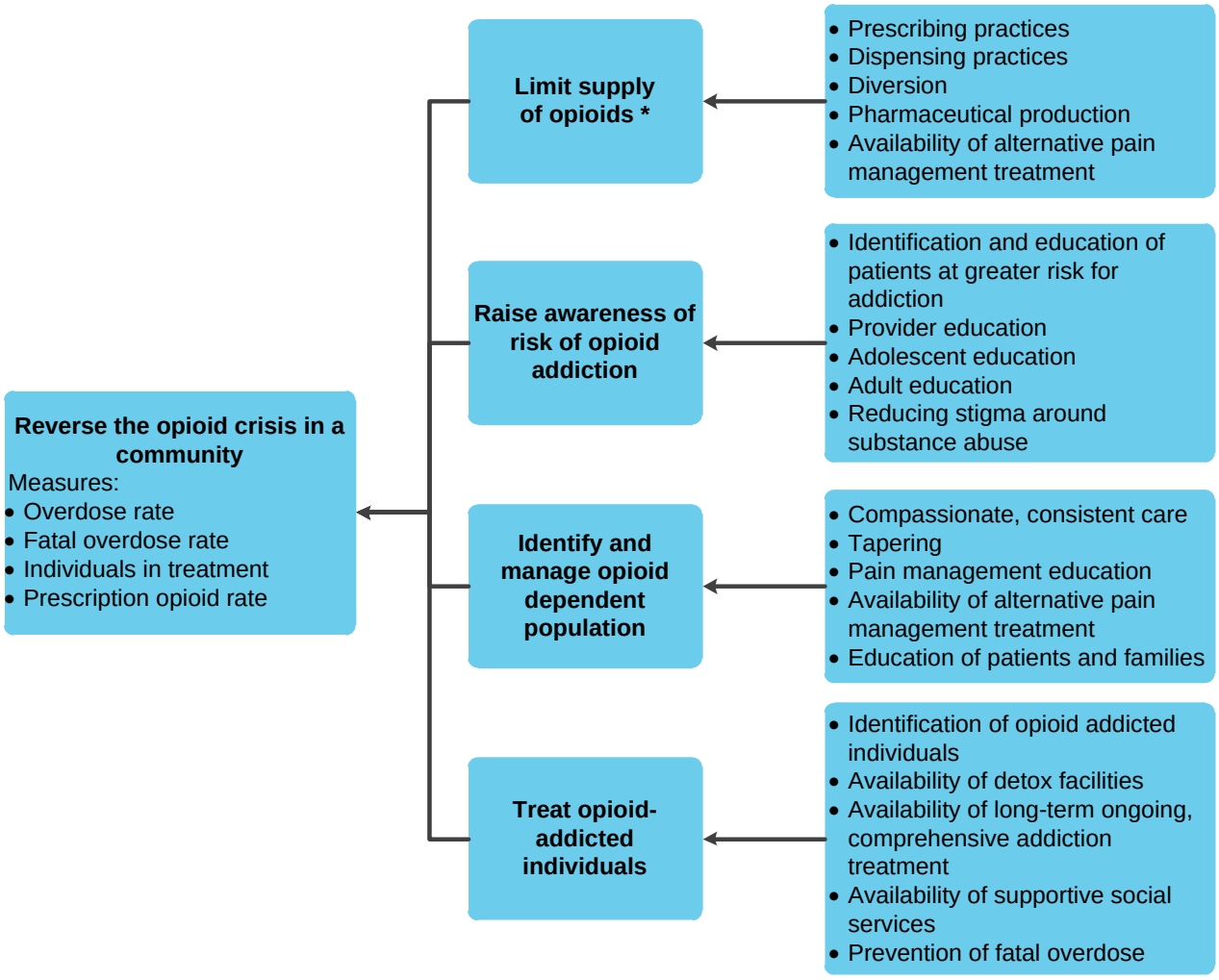
  - In the absence of pediatric-specific research and recommendations, prescribers must rely on clinical judgement, expert consensus, and adult-focused guidelines and studies.

Colorado's Legislative Response (Senate Bill 22)

- In May 2018, Governor John Hickenlooper signed into law Senate Bill 18-22 – Clinical Practice for Opioid Prescribing. This new law limits outpatient opioid prescriptions for patients meeting certain criteria to a 7 days' supply. Please click here for more information about this law.
- The legislation requires prescribers or their delegates to check the Colorado Prescription Drug Monitoring Program database prior to prescribing a second opioid prescription for certain patients.
- The law applies to physicians, physician assistants, advanced practice nurses with prescribing authority, podiatrists, optometrists, dentists, and veterinarians.

Key Drivers for Addressing the Opioid Crisis

The Institute for Healthcare Improvement's (IHI) Innovation Report on Addressing the Opioid Crisis in the United States (2016)[9] outlined four key drivers for reducing the opioid crisis, as depicted in the diagram below:



This clinical pathway aims to provide guidance to CHCO providers and other care team members regarding the first two drivers: ***limiting the supply of opioids*** and ***raising awareness of the risk of opioid addiction*** among health care providers, patients, and families. As such, the clinical pathway aims to integrate the best available evidence and expert consensus to inform opioid prescribing practices, effective pain management, and patient/family education on safe opioid use, storage, and disposal.

Definitions

Addiction- Primary, chronic, neurobiological 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, and craving[10].

Diversion – Any act or deviation that removes a prescription drug from its intended path from the manufacturer to the patient for which it was prescribed.

Equianalgesic dose – The dose at which two opioids (at steady state) provide approximately the same pain relief. Most tables are derived from single-dose studies and cannot fully address all clinical factors so must be used with caution[11].

Hyperalgesia – State of nociceptive sensitization caused by exposure to opioids. The condition is characterized by a paradoxical response whereby a patient receiving opioids for the treatment of pain could become more sensitive to certain painful stimuli[12].

Iatrogenic Withdrawal - Iatrogenic withdrawal occurs when opioid analgesic and sedating medications are stopped abruptly or weaned too rapidly, causing central nervous system hyperirritability, autonomic system dysregulation, gastrointestinal dysfunction and motor abnormalities. Factors associated with increased risk for withdrawal: younger age, pre-existing cognitive impairment, higher pre-weaning daily opioid requirement, or three or more pre-weaning sedative medications[13].

Incomplete cross tolerance – The development of tolerance to the effects of other structurally similar drugs in the same pharmacologic class after long term exposure. This effect is rarely complete in opioids.

Opioid analgesic – Act by binding to specific receptors of the μ and K types in the central and peripheral nervous systems. Narcotic analgesic derived at least in part synthetically.

Physical dependence – State of adaptation manifested by a drug class-specific withdrawal syndrome that can be produced by abrupt cessation, rapid dose reduction, decreasing blood levels of the drug, and/or administration of an antagonist[10].

Tolerance - State of adaptation in which exposure to a drug induces changes that result in a diminution of one or more of the drug's effects over time. It is the development of a need to increase the dose of an opioid agonist to achieve the same analgesic (or sedative) effect previously achieved with a lower dose. Rotating opioids can be helpful in preventing the need to continuously increase doses due to incomplete cross tolerance. NOTE: tolerance to the constipating effects rarely occurs[13].

WAT-1 - Withdrawal assessment tool. An assessment instrument for monitoring opioid and benzodiazepine withdrawal symptoms in pediatric patients[14].

Weaning - Decreasing the dose of opioid or sedating medication over time rather than abruptly discontinuing the medication to minimize withdrawal.

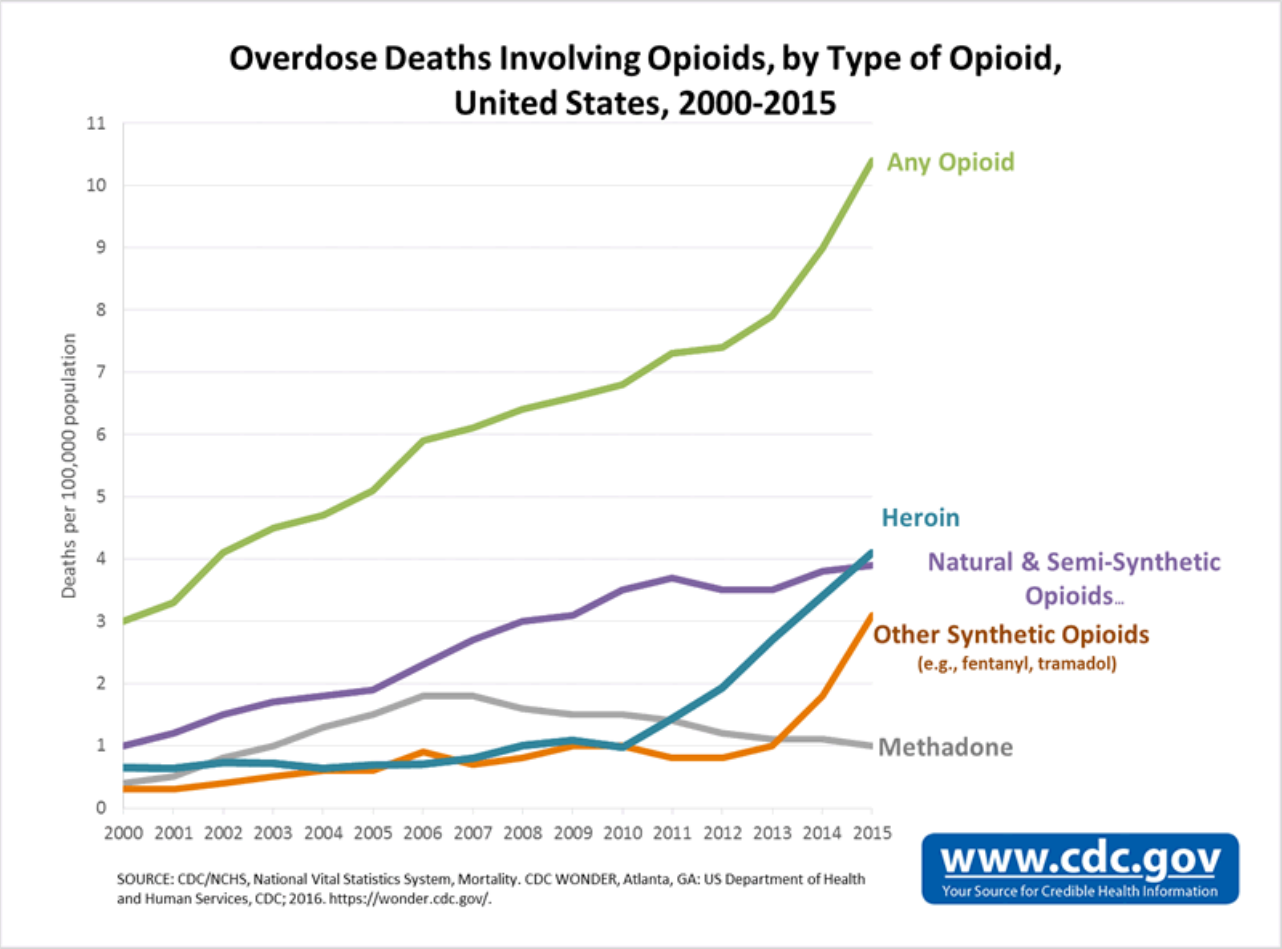
Opioid Types and Administration Routes

- Refer to Appendix A. Opioid Prescribing Table

Characteristics and Pharmacogenomics of Opioid Therapy

Desirable characteristics	Undesirable characteristics	Pharmacogenomics
• Analgesia for somatic and visceral pain • Anxiolytic • Euphoria effects	• Nausea/vomiting • Respiratory depressant • Constipation • Urinary Retention • Pruritus • Dysphoria • Cough suppression	Genetic factors may alter: • Perception of pain • Pharmacokinetic mechanisms making active drug available at site of action • Pharmacodynamic interaction of drug and intended target receptor • Metabolism and absorption of drugs

Diversion Risk by Type of Opioid



Note: Diversion risk changes frequently.

Natural and semi-synthetic = morphine and codeine are natural; oxycodone, hydrocodone, hydromorphone, and oxymorphone are semi-synthetic

Synthetic = fentanyl and tramadol. Fentanyl is a synthetic opioid that is legally made as a pharmaceutical drug to treat pain, or illegally made as a non-prescription drug and is increasingly used to intensify the effects (or "high") of other drugs, such as heroin.

Non-Opioid Therapy

Non-opioid therapy	Benefits	Cautions/Risks
Acetaminophen	• Tried and true • Scheduled is good • Consider IV in special cases (Refer to CHCO formulary for restrictions)	• Watch maximum daily doses: Refer to CHCO formulary • Avoid acetaminophen containing opioid concoctions (keep it simple)
Anticonvulsants • Gabapentin • Pregabalin	• Stabilizes alpha-2-delta subunit of voltage dependent calcium channel • Not metabolized, few drug interactions • Significant anti-anxiety effects • Helpful for neuropathic pain when used at high doses	• Dose reduction necessary for renal dysfunction • Sedating, may cause ataxia, titrate slowly • Takes time to work • Delays in processing of information

NMDA receptor antagonist • Ketamine	• Can have excellent analgesic efficacy at subanesthetic doses • Can be maintained as an infusion • Opioid sparing and may assist in the prevention of tolerance	• Must consult Acute Pain Service for use on medical floors • May cause vivid nightmares and hallucinations
NSAIDs • Ibuprofen • Ketorolac • Naproxen • Celecoxib • Aspirin (not used for pain in pediatric patients)	• Analgesic • Antipyretic • Anti-inflammatory	• GI tract problems • Renal toxicity • Platelet inhibition • Hypersensitivity
Benzodiazepines • Clonazepam • Diazepam • Lorazepam • Midazolam	• Muscle relaxant/antispasmodic • Anxiolytic	• Sedating • Can cause respiratory depression when combined with opioids – use caution • Does not work directly for visceral pain
Muscle Relaxants* • Baclofen • Benzodiazepines • Cyclobenzaprine	• Diazepam often used for post-operative muscle spasms • Baclofen used for spasticity related to spinal cord injuries	• Sedation and CNS depression – especially when combined with opioids • Titrate slowly
Local Anesthetics • Lidocaine patch • Lidocaine gel	• Topical option for patients with localized pain • Can use if NPO • Lidocaine patch can be cut	• Watch maximum doses: Refer to CHCO formulary

*Alternative options exist but are non-formulary at CHCO.

Alternatives to Opioids (ALTOs) in the Emergency Department*

Specific alternatives to opioids (ALTOs) can be used **in the ED setting** for musculoskeletal pain and abdominal pain.

First line agents are bolded and highlighted in yellow. Please refer to your formulary for dosing and administration.

Musculoskeletal Pain		
Medication	**Route**	**Pearls**
Acetaminophen	PO, PR, IV	• Antipyretic • Dosing may vary based on route of administration.
Ibuprofen	PO	• Antipyretic, anti-inflammatory • Do not give in combination with other NSAIDs
Ketorolac	IV PO	• Antipyretic, anti-inflammatory • Therapy should be limited to 48 hours • Do not give in combination with other NSAIDs
Naproxen	PO	• Antipyretic, anti-inflammatory • Do not give in combination with other NSAIDs
Lidocaine	Topical	• Dosing based on weight and BSA • Multiple patches may be used simultaneously- see formulary for specific recommendations
Capsaicin	Topical	• Apply 3-4 times a day • Do not use on wounds or broken skin
Diazepam	PO, IV	• Great for musculoskeletal spasms or anxiolysis • May also consider other benzodiazepines

Abdominal Pain		
Medication	**Route**	**Pearls**
Metoclopramide	PO, IV, IM	• Caution with extrapyramidal side effects (can give diphenhydramine to decrease EPS and for additive effect)
Diphenhydramine	PO, IV	• Sedating • IV and PO dosing is the same
Prochlorperazine	PO, PR, IM, IV	• Sedating • Caution with extrapyramidal side effects; may give with diphenhydramine to reduce risk
Dicyclomine	PO	• Anticholinergic side effects, usually dose limiting • Should not be used in infants less than 6 months
Cyproheptadine	PO	• Well tolerated, may be sedating
Promethazine	PO, IV, IM	• IV, IM, and PO dosing is the same
Hyoscyamine	PO	• May cause anticholinergic side effects
Haloperidol	PO, IV	• Useful in cannabinoid hyperemesis syndrome • Avoid in children < 3 years old or psychiatric patients
Capsaicin	Topical	• Apply 3-4 times a day • Do not use on wounds or broken skin • May be helpful for cannabinoid hyperemesis syndrome when applied to abdomen

*Not all agents listed are available at each CHCO ED location.

INITIAL EVALUATION

Step 1. Assess Pain

Please refer to the CHCO Pain Assessment and Management Policy.

Step 2. Assess Sufficiency of Non-Opioid Analgesia

For patients experiencing acute pain, are alternatives to opioids (e.g., APAP, NSAIDs, heat, ice, immobilization, etc.) sufficient?

- **If YES**, continue with scheduled, non-opioid medications and/or non-pharmacologic/multi-modal therapy and ensure education on safe pain medication schedule and list.
- **If NO**, continue to step 3.

Step 3. Assess Risk

Providers should conduct (or review the results of) a multi-faceted risk assessment prior to prescribing opioid medications to identify patients who may be at high risk for misuse or addiction. This should include assessing risk in the family/home environment and, for adolescents, personal risk for substance use/misuse.

A. Assessing risk in the family/home environment

The following are established family/home risk factors that may increase risk for misuse, abuse, or diversion[15]. **Providers are advised to discuss the following questions with parents/caregivers and document the discussion in Epic in a progress note.**

- **Current or prior substance misuse/abuse by family members** [To be asked of parent/caregiver]
  - *Do you or anyone else in your home have a problem with alcohol or marijuana?*

- *Do you or anyone else in your home use medicine not prescribed to you, or any other type of drugs (such as cocaine, heroin or meth)?*

If the caregiver/parent responds "yes" to one or both questions, the patient is considered at moderate/high risk for opioid misuse.

- **If under 18, does the patient live with a responsible adult parent or guardian?**

If a patient under 18 does not live with at least one parent or guardian (e.g., homeless or emancipated minor), the patient may be considered at moderate/high risk for opioid misuse.

B. Assessing risk among adolescent patients: The CRAFFT © Screening Interview – INPATIENT ONLY

The CRAFFT © is a brief behavioral health screening tool developed and validated for screening adolescents and young adults age 12-18 for substance use disorders[16-19]. The three-question pre-screen and six-question tool are designed to determine whether further assessment and conversation around substance use and risks is warranted. The CRAFFT © is recommended by American Academy of Pediatrics' Committee on Substance Abuse.

The CRAFFT (version 2.0) © Screening Interview is integrated in the inpatient nursing admissions database in Epic. To view the screening questions, please click here or refer to Appendix B. To access the CRAFFT (version 2.0) © in languages other than English, please click here.

Two or more YES answers on any of the nine CRAFFT © questions indicate that the patient is considered at moderate/high risk for opioid misuse.

CLINICAL MANAGEMENT

Prescribing Decision-Making

Note: ED/UC providers may not provide replacement prescriptions for opioids that are lost, destroyed or stolen.

All Patients Regardless of Risk Category:

- Proceed with cautious use and prescription of opioid therapy, limiting the amount prescribed while ensuring pain management. Refer to Appendix A. for recommended drugs, doses, etc.
- No long acting opioids may be prescribed in the ED/UC. It is recommended to avoid long acting opioids in inpatient and surgical settings as well.
- Ensure pain is listed on the problem list and document the pain management plan in Epic.
- Recommend use of non-pharmacologic and multi-modal approaches to pain management.
- If pharmacogenomic testing is available or has been completed, it should be considered for all patients.
- Discuss goals and expectations for pain management (for example, patient may not be pain free).

Moderate/High Risk Patients:

Risk stratification should not be used to deny pain treatment. Consider the following options/resources prior to prescribing opioid therapy:

- Discussing concern with patient and/or caregiver
- Consulting with Social Work for additional assessment
- Consulting with the Acute Pain Service
- Checking the Colorado Prescription Drug Monitoring Program Website
  - The Colorado Prescription Drug Monitoring Program (PDMP) is an electronic database that tracks prescriptions for controlled substances dispensed by registered pharmacies in Colorado. Information found

can include patient identification, prescription characteristics (type, quantity, etc.), prescriber, pharmacy, payer source, and date prescribed.

- Colorado licensed individuals can register to access the PDMP, including: Physicians, Dentists, PAs, NPs, Pharmacists, and Resident/Fellow Physicians. Prescribers and pharmacists to authorize up to three delegates to access the PDMP for their patients. Please refer to these FAQs for more information about authorizing delegates.
- The State of Colorado and the CDC recommend that prescribers (or their delegate) check the PDMP prior to prescribing an opioid medication[20, 21]. The CDC notes that using the PDMP is a promising intervention to identify individuals who may be at high-risk for misuse and who may benefit from intervention[20, 21].
- As of May 2018, Senate Bill 18-22 **REQUIRES** that prescribers (or their delegate) check the PDMP registry before prescribing a refill or second outpatient prescription for certain patients. Please click here for more information about this requirement.
- To register with or access the Colorado PDMP, visit this website.
- For further information, please refer to Appendix C.

If one or more of the following characteristics are found in the PDMP, the patient is considered at moderate/high risk for opioid misuse:

- Multiple opioid prescriptions in a short time interval (within past 6 months)
- Multiple providers (>2) prescribing an opioid
- Multiple pharmacies (>2) dispensing an opioid
- Large amount prescribed (duration > 7 days)

If a provider identifies concerns in the PDMP, it is advised to address them with the patient and/or parent/caregiver. The following are suggestions to guide that conversation:

- **Normalize the conversation** and set the stage with example language such as: "I review the state's prescription drug monitoring program database so I can ensure I understand everything you are taking"
- **Identify any areas of concern** and discuss them with the patient and/or caregiver/family: "Something I saw in the database concerned me. Can you tell me more about _____?"; "Can you help me understand why you are getting prescriptions from so many providers/pharmacies?"
- **Document** any PDMP concerns and the discussion in Epic in a progress note.

- Consulting with patient's primary care provider
- Obtaining both a standard urine toxicology screen (for immediate results), and expanded panel (pain clinic monitoring profile) to assess for drug abuse/misuse prior to opioid administration. If positive, strongly consider alternative therapies. However, if patient continues to need opioid therapy, strict follow up and limited prescribing is essential. Follow up of the expanded panel will be required by PCP, or managing specialty to evaluate the concern for misuse as an outpatient.
- Extending hospital stay for duration of opioid therapy, ensuring discussion with case management and documentation of rationale for an extended stay.
- Referring to substance abuse treatment center and communication with PCP or managing specialty about the referral.
- If patient has history of addiction or overdose, consider prescribing intranasal naloxone. Refer to pediatric administration guidelines for dosing.
  - Intranasal naloxone is available at Walgreens at CHCO location
  - For other pharmacies: http://stoptheclockcolorado.org/
  - Additional educational videos pertaining to naloxone standing orders and intranasal administration: https://prescribetoprevent.org/patient-education/videos

If Discharge Opioid Analgesics are Indicated

- Colorado law requires providers to **limit outpatient opioid prescriptions** for patients meeting certain criteria to **a 7-day supply**. Click here for more information.
- Prescribe short-acting opioids only. Refer to PO-IR formulations listed in Appendix A.
- Recommend use of non-pharmacologic and multi-modal approaches to pain management.
- Refer to the Parent | Caregiver Education section below for key points to discuss.
- Refer to Appendix A. for recommended drugs, doses, duration, etc.
- **ED/UC setting**: Recommend limiting discharge prescriptions to a **maximum of 3 days**. Advise patients with persistent pain to follow-up with PCP or sub-specialist for re-evaluation.
- **Inpatient setting**: Recommend limiting discharge prescriptions to a **maximum of 7 days**. If the patient/family screened moderate/high risk for substance use **OR** if on-going (> 7 days) acute pain is likely:
  - Ensure verbal communication with PCP prior to discharge.
  - Ensure PCP or sub-specialist follow-up appointment is scheduled within 7 days.
- **Ambulatory setting**: Recommend limiting outpatient prescriptions to a **maximum of 3 to 7 days**, depending on condition and diagnosis. If the patient/family screened moderate/high risk for substance use **OR** if on-going (> 7 days) acute pain is likely, ensure PCP or sub-specialist follow-up appointment is scheduled within 7 days.
  - As of May 2018, Senate Bill 18-22 **REQUIRES** that prescribers (or their delegate) check the Prescription Drug Monitoring Program (PDMP) registry before prescribing a refill or second outpatient prescription for certain patients. Please click here for more information about this requirement.

Non-Pharmacologic Interventions | Multimodal Approach to Pain Management

Opioid therapy must be accompanied by non-pharmacologic interventions to ensure a multi-modal approach to pain management. A multi-modal approach:

- Uses multiple methods to achieve highest patient and family satisfaction
- Hits multiple targets
- Minimizes side effects and toxicity
- Maximizes function

Consider the following non-pharmacologic interventions by age and type of pain:

Infants and young children	Older children and adolescents
• Non-nutritive sucking (with sugar water) • Swaddling and tucking • Massage • Environment modification • Rocking • Video distraction • Structured non-parent involvement	• Movement/Exercise • Positioning • Temperature therapy • Preparation/Education/Information • Coping skills training • Parent training/modeling positive coping behaviors • Distraction Relaxation Imagery • Desensitization • Positive reinforcement/verbal praise • Education/information • Hypnosis • Biofeedback • Cognitive Behavioral Therapy • Mindfulness • Medical Meditation

Titration

- "Turning off" at the end of a dose period typically requires increasing the dose, not the frequency.
- When you need to titrate up, typically increase dose by 10-20%, and then wait 2-3 doses before increasing again.
- Always go back to the question "Do I have a good non-opioid baseline ensuring around the clock multimodal analgesia when appropriate, considering the risks and benefits?"
- Start low and go up carefully in patients with sleep disordered breathing, sleep apnea, or significant neuromuscular disease.
- Consider switching opioid agents if no analgesic benefit is obtained after multiple titrations.

Consult with Pharmacy and/or the Acute Pain Service for further guidance.

Weaning Plan and Recommendations

Note: The ICUs are excluded from the scope of this clinical pathway. For PICU patients, please refer to the Ready For Extubation and Weaning Pathway.

Iatrogenic withdrawal occurs when opioid analgesic and sedating medications are stopped abruptly or weaned too rapidly, causing central nervous system hyperirritability, autonomic system dysregulation, gastrointestinal dysfunction and motor abnormalities. The information in this section and the related algorithm is intended to minimize opioid withdrawal by guiding weaning of opioids and benzodiazepines in patients that are at risk for withdrawal.

Refer to Algorithm 2. Weaning Patients Off Patient Controlled Analgesia (PCA), Caregiver Controlled, or Nurse Controlled Analgesia.

Withdrawal Assessment Tool (WAT-1)

The **Withdrawal Assessment Tool (WAT-1)** is a standardized assessment tool of iatrogenic withdrawal syndrome from weaning off opioids and benzodiazepines in hospitalized term infants and pediatric patients. The WAT-1 is integrated in Epic and should be used with:

- Any term or older NICU patient who has received continuous infusion sedation/pain medications for longer than 5 days and is now weaning.
- Patient transitioned to oral methadone/lorazepam/clonidine, due to weaning off medications given in the hospital.

Please click here **for more information about the WAT-1.**

Weaning Considerations

- **NOTE: these recommendations DO NOT include long acting opioids**. For assistance prescribing and weaning extended release opioids and methadone, please contact Acute Pain Service (APS) – extension x75433.
- **The criteria for weaning a patient to oral medication includes:**
  - Bowel sounds, tolerance of liquid foods, and advancing without problems to solids
  - Self-administered (demand dose) medication attempts/doses delivered and pain scores are trending down (or observed functionality of the patient if clinically improving)
- **NOTE:** Make sure patient is receiving multimodal therapy for pain management [acetaminophen + ibuprofen (consider scheduling) + PCA].
- All patients weaning off opioids should have a Withdrawal Assessment Tool (WAT-1) score ordered as well.
- Once a wean is created, it should be documented in the patient's medical record and communicated to the family. Once the patient is tolerating the wean and the plan is finalized, a calendar should be given to the family along with the signs and symptoms of withdrawal patient handout.

- Use for patients currently on scheduled opioids that need to wean off that are greater than 90 days old (for example: patients transferring from the Intensive Care Unit (ICU) who have been on continuous infusion opioids)
- Wean one medication at a time (example: wean oxycodone completely off and then wean benzodiazepine and then clonidine if applicable)
- Consider incomplete cross tolerance when converting from IV to PO opioids and reduce the oral dose by 20-50% in initially
- If weaning a patient on a Patient Controlled Analgesia (PCA) – wean all components (continuous rate, demand dose, and clinician bolus) by the same amount (for example, wean all components by 20% every 24 hours)
- In general, wean 10-20% from **original total daily dose** every 24 hours and adjust wean as needed
- **CONTINUE WEAN:**
  - Withdrawal Assessment Tool (WAT) scores are less than 4 for 24 hours – continue current wean plan
  - Wean to lowest ending dose (see table below) scheduled every 4 hours then consider every 6-hour schedule once at lowest ending dose. Once at every 6 hours, next step is PRN (as needed). Follow WAT scores for 72 hours.
- **ADJUST WEAN:**
  - If WAT scores are 4 or greater or patient having breakthrough pain, then nurse to give breakthrough dose of agent ordered (50% of scheduled dose).
  - If more than 2 breakthrough doses are required in 24-hour period, then slow wean (recommendations as follows):
    - If weaning patient by 20% every 24 hours, hold wean for 24 hours and restart by weaning 10% every 24 hours
    - If weaning patient by 10% every 24 hours, hold wean for 24 hours and restart by weaning 10% every 48 hours
    - If weaning patient by 20% every 48 hours, hold wean for 24 hours and restart by weaning 10% every 48 hours
    - If weaning patient by 10% every 48 hours, hold wean for 24 hours and restart by weaning 10% every 72 hours

LOWEST ENDING DOSE WHEN WEANING MEDICATIONS (intermittent dosing only)				
Medication	**Lowest Ending Dose mg/kg PO (less than 50kg)**	**Lowest Ending Dose mg PO (50kg or greater)**	**Lowest Ending Dose mg/kg IV (less than 50kg)**	**Lowest Ending Dose mg IV (50kg or greater)**
Morphine	0.1mg/kg/dose PO	5mg PO	0.05mg/kg/dose IV	2mg IV
OxyCODONE	0.05mg/kg/dose PO	2.5mg PO	N/A	N/A
HYDROmorphone	0.03mg/kg/dose PO	1mg PO	0.005mg/kg/dose IV	0.25mg IV
Methadone	0.05mg/kg/dose PO	2.5mg PO	0.05mg/kg/dose IV	2mg IV
DiazePAM	0.05mg/kg/dose PO	2mg PO	0.05mg/kg/dose IV	2mg IV
LORazepam	0.05mg/kg/dose PO	2mg PO	0.05mg/kg/dose IV	2mg IV

PARENT | CAREGIVER EDUCATION

The following education topics should be discussed with parents/caregivers prior to prescribing opioid medications:

1. Benefits of opioid use, including:
   - Increase function and mobility for participation in activities of daily living
   - Pain relief
   - Modulates body's stress response
2. Risks of opioid use, including:
   - Acetaminophen (APAP)-containing products
   - Interactions with other medications and substances
   - Adverse side effects: sedation and respiratory depression, constipation, nausea and vomiting, itching, cognitive impairment, urinary retention
   - Potential for misuse (including diversion and abuse)
   - Importance of taking medications as directed
3. Risk of diversion:
   - Opioid prescriptions are intended for patient only, not for anyone else.
   - Safe storage
     - Keep in child resistant packaging.
     - Store package in a secure, locked location.
     - Refer to this brochure for more information.
   - Safe disposal of unused medications
     - Click here for the FDA's guidance on safe disposal of unused medications, including the list of medications that can be flushed.
     - Click here for the EPAs guidance on safe disposal.
     - View a list of authorized collectors by zip code here or call the call the DEA Office of Diversion Control at 1-800-882-9539 to find your nearest location.

4. Support/getting help:
   - Consult social work if the risk screening process indicates a patient is at moderate to high risk of opioid misuse.
   - Refer to Appendix D for community-based substance abuse resources.
5. Review and, as necessary, provide guidance on multimodal analgesia and weaning.
6. Review criteria for when to seek follow-up if pain persists.
7. Review bowel regimen.
8. Consider providing the following patient/caregiver handouts:
   - Opioid Medicine: English and Spanish
   - Helping pain after surgery: English and Spanish
   - Guided Breathing and Imagery Script: Ways to help your Child to Relax and Relieve Pain: English and Spanish
   - Distraction, Relaxation and Imagery: English and Spanish

RELATED DOCUMENTS

CHCO Policies and Procedures:

- Pain Assessment and Management
- Pain Management: Intravenous Patient Controlled Analgesia (IV PCA) Set-Up, Administration and Documentation
- Investigating and Reporting Drug Diversion

Colorado Policies & Resources:

- Colorado Senate Bill 18-22 – Clinical Practice for Opioid Prescribing
- Colorado Department of Regulatory Affairs (DORA) Policy for Prescribing and Dispensing Opioids
- Colorado Department of Health Care Policy and Financing (HCPF): Opioid Policy Update: FAQs for Providers
- Colorado Department of Health Care Policy and Financing (HCPF): Opioid Policy Update: FAQs for Members
- Colorado Prescription Drug Monitoring Program
- The Colorado Consortium for Prescription Drug Abuse Prevention
- Colorado Department of Public Health and Environment (CDPHE) Prescription Drug Overdose Prevention

National Resources:

- Centers for Disease Control and Prevention Guideline for Prescribing Opioids for Chronic Pain (Note: Refer to Recommendation 6 for guidance related to opioids prescribing for acute pain)

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APPENDIX A. OPIOID PRESCRIBING TABLE

IR = immediate release **ER** = extended release. In ER forms, it takes 3-5 half lives of the medication to reach steady blood level

IV = intravenous; PO = oral; IT = intrathecal

*This table should only be used to determine the morphine equivalent dose and **should NOT be used to determine doses when converting a patient from one opioid to another**. For assistance in converting a patient from one opioid to another, **please contact Pain Management Service or your floor pharmacist**.

The Morphine Equivalent Dose (MED) Conversion Factor is derived from the Department of Health and Human Services (DHHS) Centers for Medicare and Medicaid Services (CMS) "Opioid Morphine Equivalent Conversion Factors" table. Available at https://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovContra/Downloads/Opioid-Morphine-EQ-Conversion-Factors-March-2015.pdf

An MED calculator is also available here: http://www.agencymeddirectors.wa.gov/Calculator/DoseCalculator.htm

Drug	Dosing/ Dosage Forms	Route	Onset	Peak Effect	Half-life	Duration	Morphine Equivalent Dose (MED) Conversion Factor*	Comments	Estimated cash price at Walgreens (2016)
fentaNYL	Refer to CHCO Formulary	IV	1-3 minutes	5-10 minutes	5 mo-4.5yr: 2.4 hours Adults: 2-4 hours	30-60 minutes			
		Topical	6-8 hours	24 hours	17 hours	72 hours	Consult pain specialist for conversions	Useful when PO route not available. Is lipophilic, requires some subcutaneous fat for proper absorption.	$$
HYDROcodone (in Vicodin®, Lortab® elixir) **NOTE: some formulations contain acetaminophen**	Refer to CHCO Formulary	PO	10-20 minutes	2 hours	3.8-4.5 hours	3-6 hours	1	Must watch preparations and avoid exceeding maximum acetaminophen doses.	$$ (oral tablets)
								Available as extended release capsule and tablet outpatient	$$$ (oral solution)
HYDROmorphone	Refer to CHCO Formulary	PO	15-30 minutes	30-90 minutes	1-3 hours	4-5 hours	4	Very potent opioid, with fewer reported side effects than morphine sulfate or oxycodone.	$$
								Abuse deterrent formulation available: Exalgo®	
		IV	2-5 minutes	15-30 minutes	2.5 hours	4-5 hours			

Drug	Dosing/ Dosage Forms	Route	Onset	Peak Effect	Half-life	Duration	Morphine Equivalent Dose (MED) Conversion Factor*	Comments	Estimated cash price at Walgreens (2016)
methadone	Refer to CHCO Formulary	PO	30-60 minutes	2-4 hours	~23 hours	6-8 hours (22-48 hours with repeat dosing)	Consult pain specialist for conversions	QTc prolongation at higher doses. Multiple drug-drug interactions.	$
		IV	10-20 minutes	1-2 hours	~23 hours	6-8 hours (22-48 hours with repeat dosing)			
morphine	Refer to CHCO Formulary	PO-IR	15-60 minutes	1 hour	Neonates: 7-8 hours + 1-3 months: 6 hours 6 mo-2.5 years: 3hours 3-19 years: 1-2 hours Adults: 2-4 hours	3-5 hours	1	Used as the standard comparison for all opioid analgesics Caution in renal failure	$$ (IR oral tablets and solution)
		PO-ER	1-2 hours	3-4 hours		8-12 hours	1	Long-acting, available generically Covered by CO Medicaid (see notes at bottom of table for formulary link) Abuse deterrent formulation: Embeda® capsule	$
		IV	2-10 minutes	20 minutes		2-4 hours			
		IT	5-10 minutes	1 hour		12-24 hours		NOTE: peak respiratory depression 2-3 hours	

Drug	Dosing/ Dosage Forms	Route	Onset	Peak Effect	Half-life	Duration	Morphine Equivalent Dose (MED) Conversion Factor*	Comments	Estimated cash price at Walgreens (2016)
oxyCODONE (in Percocet®, Roxicet®) **NOTE: some formulations contain acetaminophen**	Refer to CHCO Formulary	PO-IR	15-60 minutes	1 hour	2-10 years: 1.8 hours Adults: 3.7 hours	4-5 hours	1.5	Must watch preparations with acetaminophen and avoid exceeding maximum acetaminophen doses. Abuse deterrent formulation: Oxaydo® immediate release tablet	$$ (oral tabs) $$$ (oral solution)
		PO-ER	1-2 hours	3-4 hours	Adults: 4.5-8 hours	12 hours	1.5	Duration of action varies, has high diversion value. Abuse deterrent formulations available: Xtampza™ ER capsule, Oxycontin® ER tablet Not covered by CO Medicaid	$$$
traMADol	Refer to CHCO Formulary	PO-IR	1 hour	2-4 hours	6-8 hours (active metabolite: 7-9 hours)	3-6 hours	0.1	Half-life elimination prolonged in renal or hepatic impairment Not recommended in patients less than 12 years of age	$$
		PO-ER		4-12 hours	8-10 hours			Can lower seizure threshold	$$$

Pricing Legend (numbers estimated for a 50kg patient for a 7-day supply)

$ = $0 - $20

$$ = $21 - $50

$$$ = greater than $50

NOTES:

- Codeine is no longer recommended for pain management in pediatric patients per the updated FDA warning. It was removed from CHCO formulary in 2012: FDA Drug Safety Communication
- Colorado Medicaid update on opioid prescribing regarding day supply: Opioid Policy Update FAQs for Medicaid Members
- Colorado Medicaid formulary: CO Medicaid Formulary

APPENDIX B. THE CRAFFT SCREENING INTERVIEW (VERSION 2.0)

The CRAFFT Interview (version 2.0)

Begin: "*I'm going to ask you a few questions that I ask all my patients. Please be honest. I will keep your answers confidential.*"

Part A

During the PAST 12 MONTHS, on how many days did you:

1.	Drink more than a few sips of beer, wine, or any drink containing **alcohol**? Say "0" if none.	☐ # of days
2.	Use any **marijuana** (pot, weed, hash, or in foods) or "**synthetic marijuana**" (like "K2" or "Spice")? Say "0" if none.	☐ # of days
3.	Use **anything else to get high** (like other illegal drugs, prescription or over-the-counter medications, and things that you sniff or "huff")? Say "0" if none.	☐ # of days

Did the patient answer "0" for all questions in Part A?

Yes ☐ → **Ask CAR question only, then stop**

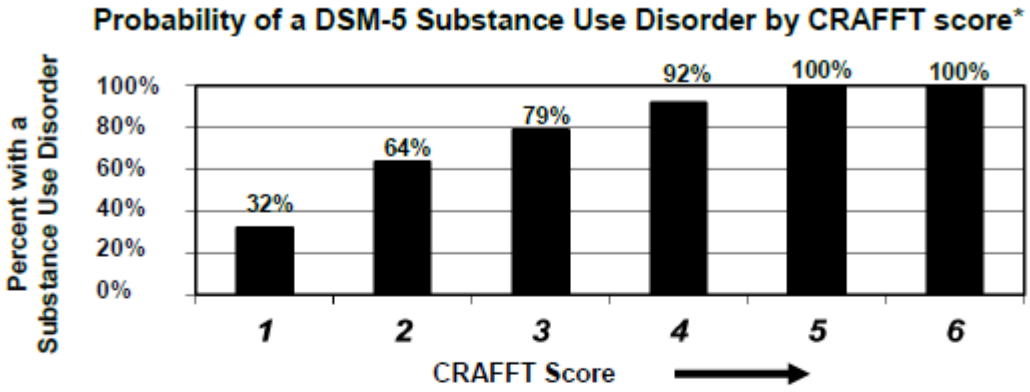
No ☐ → **Ask all six CRAFFT* questions below**

Part B		No	Yes
C	Have you ever ridden in a **CAR** driven by someone (including yourself) who was "high" or had been using drugs	☐	☐
R	Do you ever use alcohol or drugs to **RELAX**, feel better about yourself, or fit in?	☐	☐
A	Do you ever use alcohol or drugs while you are by yourself, or **ALONE**?	☐	☐
F	Do you ever **FORGET** things you did while using alcohol or drugs?	☐	☐
F	Do your **FAMILY** or **FRIENDS** ever tell you that you should cut down on your drinking or drug use?	☐	☐
T	Have you ever gotten into **TROUBLE** while you were using alcohol or drugs?	☐	☐

***Two or more YES answers suggest a serious problem and need for further assessment. See back for further instructions →**

NOTICE TO CLINIC STAFF AND MEDICAL RECORDS:
The information on this page is protected by special federal confidentiality rules (42 CFR Part 2), which prohibit disclosure of this information unless authorized by specific written consent. A general authorization for release of medical information is NOT sufficient.

1. Show your patient his/her score on this graph and discuss level of risk for a substance use disorder.



*Data source: Mitchell SG, Kelly SM, Gryczynski J, Myers CP, O'Grady KE, Kirk AS, & Schwartz RP. (2014). The CRAFFT cut-points and DSM-5 criteria for alcohol and other drugs: a reevaluation and reexamination. Substance Abuse, 35(4), 376–80.

2. Use these talking points for brief counseling.

1. **REVIEW** screening results
   For each "yes" response: *"Can you tell me more about that?"*
2. **RECOMMEND** not to use
   "As your doctor (nurse/health care provider), my recommendation is not to use any alcohol, marijuana or other drug because they can: 1) Harm your developing brain; 2) Interfere with learning and memory, and 3) Put you in embarrassing or dangerous situations."
3. **RIDING/DRIVING** risk counseling
   "Motor vehicle crashes are the leading cause of death for young people. I give all my patients the Contract for Life. Please take it home and discuss it with your parents/guardians to create a plan for safe rides home."
4. **RESPONSE** elicit self-motivational statements
   Non-users: *"If someone asked you why you don't drink or use drugs, what would you say?"* Users: *"What would be some of the benefits of not using?"*
5. **REINFORCE** self-efficacy
   "I believe you have what it takes to keep alcohol and drugs from getting in the way of achieving your goals."

3. Give patient Contract for Life. Available at www.crafft.org/contract

APPENDIX C. COLORADO PRESCRIPTION DRUG MONITORING PROGRAM LOGIN INFORMATION

ARE YOU PRESCRIBING OPIOID ANALGESICS?

Consider using the Colorado *Prescription Drug Monitoring Program (PDMP)*

Available to Colorado licensed individuals including: Physicians, Dentists, PAs, NPs, Pharmacists, and Resident/Fellow Physicians

Colorado law REQUIRES providers to check the PDMP prior to writing an outpatient refill or second opioid prescription (exceptions: chronic pain, cancer, hospice, palliative care, post-surgical pain anticipated to last more than 14 days).

Information from the PDMP will provide information to help guide appropriate prescribing and dispensing.

To access, visit this website:

https://www.colorado.gov/dora-pdmp

***IF YOU HAVE NEVER LOGGED INTO THE SYSTEM, SELECT "PRESCRIBER/DISPENSER NEW REGISTRATION"**

PLEASE REFER TO THE COLORADO PDMP USER SUPPORT MANUAL FOR MORE INFORMATION ABOUT REGISTERING AND ACCESSING THE SYSTEM.

APPENDIX D. SUBSTANCE ABUSE RESOURCES

Addition Research and Treatment Services (ARTS), Synergy Adolescent Treatment Services **- Department of Psychiatry University of Colorado Anschutz Medical Campus**

Referrals for Residential and Outpatient Services
Lindsey Berman (303) 282-2603
Lindsey.Berman@ucdenver.edu

Director, Synergy Adolescent Treatment Services
Irene Arguelles, LPC, CAC III
(720) 283-3620
Irene.Arguelles@ucdenver.edu

The Substance Abuse Treatment Education and Prevention (STEP) Program **- Denver Health**
Rose Medina
(303) 602-1893
RoseMarie.Medina@dhha.org

Sandstone Care**- Denver, Broomfield/Boulder**
Substance abuse disorders and co-occurring disorders for adolescent Day Treatment, Intensive Outpatient, and General Outpatient
Phone: (303) 223-6404

Substance Use Intensive Outpatient Program **- Porter Adventist Hospital**
Clients are expected to attend group every week for 12 weeks.
- Monday 6-9 p.m. - DBT Skills Group
- Wednesday 6-9 p.m. - 12-Step Group
- Thursday 6-9 p.m. - Process/Therapy Group

Phone: (303) 778-2541

ENCOMPASS: Integrated Treatment for Adolescents and Young Adults **- University Hospital and Children's Hospital Colorado**

Dr. Paula Riggs
Paula.riggs@ucdenver.edu or 303-724-2235

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Pharmacy & Therapeutics Committee – October 5, 2017; ED ALTO updates reviewed on 12/5/19
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REVIEW | REVISION SCHEDULE

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