Morphine Equivalent Dose (MED) Override Program Summary

This program applies to Medicaid.

CLINICAL RATIONALE

Clinical Rationale(1-8,13)	It has been shown that risks for serious harms related to opioid therapy increase at higher opioid dosage and that opioid overdose risk increases in a dose-response manner. Experts note that daily opioid dosages close to or greater than 100 morphine milligram equivalents (MME) a day are associated with significant risks, that dosages less than 50 MME a day are safer than dosages of 50–100 MME a day, and that dosages less than 20 MME a day are safer than dosages of 20–50 MME a day. The Center for Disease Control and Prevention recommends that when opioids are started, clinicians should prescribe the lowest effective dosage. Clinicians should use caution when prescribing opioids at any dosage, should carefully reassess evidence of individual benefits and risks when considering increasing dosage to greater than or equal to 50 MME a day, and should avoid increasing dosage to greater than or equal to 90 MME a day or carefully justify a decision to titrate dosage to greater than or equal to 90 MME a day. Given the risks associated with chronic use of opiates, and the lack of data demonstrating efficacy for the treatment of chronic non-cancer pain, chronic opiate use is rarely a first-line therapy. If used long enough at a high enough dose, opiates can have substantial adverse effects (such as reduced testosterone levels), and ironically, chronic use of opiates may lead to the development of opioid induced hyperalgesia, so that the increased dose of an opiate may lead to increased pain. Prescribing chronic opiates for the treatment of chronic non-cancer pain should be approached with the same level of caution afforded other commonly prescribed medications that should be closely monitored, such as insulin or warfarin. It should also be noted that the efficacy of chronic opiate therapy for the treatment of chronic non-cancer pain remains controversial, partially because it only masks pain with very little curative effect. Clinicians should evaluate benefits and harms of continued therapy with patients every 3 months or more frequently. The CDC guideline for opioid prescribing note that patients with cancer, sickle cell disease, and patients receiving palliative or end of life care are exempt from these recommendations because of the unique therapeutic goals, ethical considerations, opportunities for medical supervision, and balance of risks and benefits with opioid therapy in such care.
Calculating Morphine Equivalent Dose(9-12)	The Morphine Equivalent Dose (MED) per day is used to translate the dose and route of each of the opioids the patient has received over the last 24 hours to a morphine equivalent using a standard conversion table. For patients taking more than one opioid, the MED of the different opioids must be added together to determine the cumulative dose (see Table 1). For example, if a patient takes six hydrocodone 5mg/acetaminophen 500mg and two 20mg oxycodone extended release tablets per day, the cumulative dose may be calculated as follows: 1. Hydrocodone 5mg x 6 tablets per day = 30mg per day 2. 30mg Hydrocodone = 30mg Morphine equivalents 3. Oxycodone 20mg x 2 tablets per day = 40mg per day 4. 40mg Oxycodone = 60mg Morphine equivalents

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	5. Cumulative dose is 30mg + 60mg = 90mg Morphine equivalents per day

Table 1. MED Conversion Factor

Target Drug	MED conversion factor*	Number of target drug mg/day to equal 90 MED	Number of target drug mg/day to equal 120 MED
Codeine	0.15	600 mg	800 mg
Hydrocodone	1	90 mg	120 mg
Hydromorphone	5	22.5 mg	30 mg
Morphine	1	90 mg	120 mg
Oxycodone	1.5	60 mg	80 mg
Oxymorphone	3	30 mg	40 mg
Tapentadol	0.4	225 mg	300 mg
Tramadol	0.2	900 mg	1200 mg
Fentanyl immediate release (e.g., transmucosal)	100-125	900 mcg	1200 mcg

*approximate oral conversion factor
MED = morphine equivalent dose

Table 2. Transdermal Fentanyl Conversion Factor

Fentanyl transdermal (patch)	Mg/day morphine*
25 mcg/hour	60-134
50 mcg/hour	135-224
75 mcg/hour	225-314
100 mcg/hour	314 to 404

*approximate oral conversion factor

Online conversion tables

http://www.agencymeddirectors.wa.gov/Calculator/DoseCalculator

Number	Reference
1	Braden JB, Russo J, Fan MY, et al. Emergency department visits among recipients of chronic opioid therapy. *Arch Intern Med.* 2010;170(16):1425-1432.
2	Dunn KM, Saunders KW, Rutter CM, et al. Opioid prescriptions for chronic pain and overdose: a cohort study. *Ann Intern Med.* 2010;152(2):85-92.
3	Bohnert AS, Valenstein M, Bair MJ, et al. Association between opioid prescribing patterns and opioid overdose-related deaths. *JAMA*. 2011;305(13):1315-1321.
4	Gomes T, Mamdani MM, Dhalla IA et al. Opioid dose and drug-related mortality in patients with nonmalignant pain. *Arch Intern Med.* 2011;171:686-691.
5	Paulozzi LJ, Kilbourne EM, Shah NG, et al. A history of being prescribed controlled substances and risk of drug overdose death. *Pain Med.* 2012;13(1):87-95.
6	Angst MS, Clark JD. Opioid-induced hyperalgesia: a qualitative systematic review. *Anesthesiology.* 2006;104(3):570-587.

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Number	Reference
7	Mercadante S, Arcuri E. Hyperalgesia and opioid switching. *Am J Hosp & Palliat Care.* 2005;22(4):291-294.
8	Colameco S, Coren JS. Opioid-induced endocrinopathy. *J Am Osteopath Assoc.* 2009;109(1):20-25.
9	http://www.agencymeddirectors.wa.gov/Files/OpioidGdline.pdf
10	http://www.palliative.org/newpc/professionals/tools/medd.html
11	https://www.cdc.gov/opioids/providers/prescribing/pdf/calculating-total-daily-dose.pdf
12	Dowell D, Ragan KR, Jones CM, Baldwin GT, Chou R. CDC Clinical Practice Guideline for Prescribing Opioids for Pain — United States, 2022. MMWR Recomm Rep 2022;71(No. RR-3):1–95. Accessed at: https://www.cdc.gov/mmwr/volumes/71/rr/rr7103a1.htm
13	http://www.agencymeddirectors.wa.gov/Files/2015AMDGOpioidGuideline.pdf

CLINICAL CRITERIA FOR APPROVAL

Module	Clinical Criteria for Approval

	Doses greater than 90 MED per day will be approved when ONE of the following are met:
	
	1. ONE of the following:
	    A. The patient has a diagnosis of chronic cancer pain due to an active malignancy **OR**
	    B. The patient is currently enrolled in a hospice program **OR**
	    C. The patient is eligible for hospice (life expectancy of six months or less) or palliative care **OR**
	    D. The patient has a diagnosis of sickle cell disease **OR**
	2. Patient is undergoing treatment of chronic non-cancer pain and ALL of the following are met:
	    A. The prescriber has provided information that a formal, consultative evaluation which includes ALL of the following, was conducted for the primary pain state:
	        1. Diagnosis **AND**
	        2. The nature of pain **AND**
	        3. A complete medical history which includes previous and current pharmacological and non-pharmacological therapy **AND**
	        4. A patient-specific pain management plan is on file for the patient **AND**
	    B. The prescriber has reviewed the patient's records in the state's prescription drug monitoring program (PDMP) **AND**
	    C. Patient has been assessed for opioid induced hyperalgesia and if present, provider has provided information that the patient has an active treatment plan for his/her opiate therapy, such as a plan for ongoing treatment, a plan for opioid discontinuation, or a plan for switching to another product (opiate or non-opiate) **AND**
	    D. Patient is routinely (at least every 3 months) being assessed for function, pain status and opioid dose **OR**
	3. Patient qualifies for an emergency override when ALL of the following are met:
	    A. Prescriber has attested that the inability for his/her patient to get requested drug will precipitate severe pain or opioid withdrawal **AND**
	    B. Prescriber understands that this patient is using opioids (combined from all opioid drugs) that is at or above 90 MED **AND**
	    C. Prescriber understands that opioid dose at or above 90 MED is associated with substantially higher risk of overdose **AND**
	    D. Patient has not received another emergency override within the last 6 months
	
	Length of Approval:
	
	12 months for cancer/hospice diagnoses
	6 months for all other diagnoses

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Module	Clinical Criteria for Approval
	Emergency Override: 1 fill up to 1 month supply Morphine equivalent dose calculator can be found here: http://www.agencymeddirectors.wa.gov/Calculator/DoseCalculator

POLICY REVIEW CYCLE

Effective Date	Date of Origin	Status
06-01-2024	01-01-2015	Draft

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