SAN FRANCISCO HEALTH PLAN
Here for you

Opioid Dosing

Clinical Guidelines for Safe and Cost-Effective Prescribing

SFHP restricts the use of some opioids including Oxycontin, Kadian, and Opana. Morphine sulfate ER and methadone are SFHP's preferred long-acting opioids. Fentanyl transdermal patches are second line.

In an effort to support quality of care and decrease drug costs, SFHP has adopted strategies for safe and cost-effective prescribing of opioids. We hope this information is helpful in converting your patients over to long-acting opiates on the SFHP formulary.

These are only general guidelines and the dose and choice of opioid should be individualized for each member, based on type of pain, tolerance, risk factors, compliance, medical conditions, and potential side effects.

General Guidelines:

- Analgesia is more dependent on dose than drug.
- Patients show incomplete cross-tolerance. Consider stopping the old opioid and starting the new opioid at 50% of the predicted morphine equivalent dose (Table 1).
- Short-acting opioids can be used to manage breakthrough pain during transition.
- Doses should be gradually increased over several days based on response and patient tolerability, and short-acting opioids should be tapered down.
- Methadone's long half life requires dosing to be adjusted at weekly intervals.

Table 1: Morphine Equivalent Dose (MED)

Opioid	Approximate oral Equianalgesic Dose
Morphine (reference)	30mg
Codeine	200mg
Fentanyl transdermal	12.5mcg/hr
Hydrocodone	30mg
Hydromorphone	7.5mg
Methadone†	See Section on Methadone Dosing
Oxycodone	20mg
Oxymorphone	10mg

*Adapted from The Medical Letter, 4/1/10

Table 2: Conversion Table for Oxycodone

Total Daily Dose of Oxycodone*	Total Daily Morphine Equivalent Dose (MED)	Available tablet strengths of morphine sulfate ER (dose may be rounded to nearest tablet strength*)
20mg	**30mg**	30mg
40mg	**60mg**	60mg
60mg	**90mg**	30mg and 60mg
80mg	**120mg**	60mg x 2
120mg	**180mg**	60mg x 3
160mg	**240mg**	200mg x 1 and 30mg x 1
180mg	**270mg**	200mg x 1 and 60mg x 1
240mg	**360mg**	100mg x 3 and 60mg x 1

***Includes total daily dose of long- and short-acting oxycodone.

Available tablet strengths for morphine sulfate ER:
15mg, 30mg, 60mg, 100mg, and 200mg.
Available tablet strengths for morphine sulfate IR:
15mg, 30mg

General Guidelines for Methadone Conversion:

- The equianalgesic dose of methadone is not well established in opioid-tolerant patients.
- Methadone requires slow, careful dose titration. "Start low and go slow."
- Methadone is dosed daily for management of addiction, but must be dosed tid to qid to effectively manage pain.
- Methadone is more potent in patients on high dose opiates. When converting from high doses of Oxycontin or other opiates to methadone, less methadone will be required (see table).
- Start with lower methadone doses for older patients, those with renal, liver or lung disease, or those on high doses of opiates.
- Monitor for QT prolongation in members on high doses of methadone or on other drugs that may cause QT prolongation. EKG should be done on initiation, after 30 days, and at least annually (uptodate.com, Medical Letter April 2011)
- Doses should be titrated every 7 days due to long half-life of the drug. Methadone is highly lipid soluble with potential delayed and prolonged side effects that outlast analgesic efficacy.
- Methadone is metabolized by CYP450. Some common drugs that increase methadone effect include SSRIs, TCAs, macrolide antibiotics, metronidazole, azole antifungals, and grapefruit juice.

Morphine Equivalent Dose (MED) per day	Estimated equianalgesic methadone dose per day (percentage of total daily MED)
Less than 90 mg per day	**25% of total daily MED** *(eg: 50 mg MED, start with 2.5 mg methadone tid)*
90-300mg per day	**12% of total daily MED** *(eg: 200 mg MED, start with 7.5 mg methadone tid)*
Greater than 300mg per day	**8% of total daily MED** *(eg: 400 mg MED, start with 10 mg methadone tid)* Consider pain mgt consultation

Appropriate steps for conversion to methadone:

1. **Stop** or taper the original opioid.
2. **Start** methadone at a dose of 2.5mg to 5mg TID. Consider starting with BID dosing in patients with severe liver or kidney failure.
3. **Short-acting** opioids can be used to manage breakthrough pain during transition.
4. **Increase** daily methadone by 5-15 mg every 7 days as clinically appropriate.
5. **Target** dose may vary significantly, based on opiate tolerance

San Francisco Health Plan is committed to working closely with you to help your patients transition safely to formulary medications. Please call our pharmacist if you would like assistance, or if you have any questions.

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