Opioid Knowledge Self-Assessment

Healthcare facilities can use this assessment for practitioners who prescribe, dispense, and/or administer opioid products (e.g., fentaNYL, HYDROmorphone, morphine, oxyCODONE).* The assessment addresses selection, dosing, and patient monitoring when using opioid products, and it was developed by the Pennsylvania Patient Safety Authority in collaboration with the Pennsylvania Medical Society. Aggregating and analyzing the results of practitioner assessments can help healthcare facilities identify opportunities for improvement and aid in the development of targeted, high-leverage strategies to improve the safe use of opioids. The target answers are included in this copy of the assessment.

Adapted with permission from the Institute for Safe Medication Practices, Horsham, Pennsylvania

Demographics

1. Select the *one* answer that best describes your staff position in your facility:
   - ○ a. Attending or staff physician
   - ○ b. Resident physician or physician in training
   - ○ c. Physician assistant or nurse practitioner
   - ○ d. Registered nurse
   - ○ e. Pharmacist
   - ○ f. Other, please specify: _____

2. How long have you worked in this hospital?
   - ○ a. Fewer than 5 years
   - ○ b. 5 to 9 years
   - ○ c. 10 to 14 years
   - ○ d. 15 to 19 years
   - ○ e. 20 or more years

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1. Patients who are considered opioid-tolerant are those who have been:
   - ○ a. Taking acetaminophen 300 mg with codeine 30 mg, up to 5 doses a week.
   - ○ b. Taking oxyCODONE 10 mg with acetaminophen 325 mg 4 times daily for 5 days.
   - ○ c. Taking oxyCODONE 10 mg with acetaminophen 325 mg 4 times daily for 14 days.
   - ○ d. Taking extended-release morphine 15 mg twice daily for 1 week.
   - ○ e. All of the above

2. The most important predictor of respiratory depression in patients receiving intravenous (IV) opioid analgesics in the hospital setting is:
   - ○ a. Respiratory rate
   - ○ b. Patient-reported pain intensity
   - ○ c. Sedation level
   - ○ d. Blood pressure
   - ○ e. All of the above

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3. Which of the following statements about long-acting opioids is true?

- a. They are intended for use for pain on an as-needed basis.
- b. They are indicated for pain in the immediate postoperative period (12 to 24 hours following surgery).
- c. They are indicated for pain during the postoperative period, if the pain is not expected to persist for an extended period of time.
- d. They are only indicated if the patient is opioid tolerant and has already been receiving the drug prior to surgery.
- e. All of the above

Case 1: A 45-year-old, opioid-naïve patient with a history of hypercholesterolemia, hypertension (HTN), and obstructive sleep apnea has come into the emergency department with a metatarsal fracture. On assessment, he rates his pain intensity as 8 out of 10. He is prescribed a dose of morphine 2 mg IV for his pain. He reports moderate pain relief (pain intensity decreased to 6 out of 10) but significant pruritus following the administration of morphine. You elect to administer HYDROmorphone IV for additional pain control.

4. Which of the following best represents the equianalgesic dose of IV HYDROmorphone to IV morphine 2 mg?

- a. 0.4 mg
- b. 0.8 mg
- c. 1 mg
- d. 2 mg

5. Which patient-specific parameter(s) might cause you to consider reducing the initial dose of HYDROmorphone?

- a. Hypertension
- b. Sedation following administration of morphine
- c. A history of obstructive sleep apnea
- d. A and C
- e. B and C
- f. A, B, and C

Case 2: The patient receives a total of 0.6 mg of IV HYDROmorphone and reports moderate pain control. He is admitted overnight for surgery the following morning. He is placed on a demand-only IV patient-controlled analgesia HYDROmorphone with a 0.2 mg demand dose and a 10-minute lockout. At midnight, his nurse reports that the patient is requesting LORazepam for sleep. The patient has moderate sedation but, when awakened to obtain vital signs, reports inability to rest comfortably.

6. The best choice to manage this patient's pain and restlessness is to:

- a. Ask the nurse to provide reassurance to the patient and continue to monitor him for signs of increased sedation and respiratory depression.
- b. Administer diphenhydrAMINE 25 mg proper oral (PO).
- c. Administer diazepam 10 mg PO.
- d. Administer midazolam 2 mg IV.

7. Which of the following patient-specific parameters is/are the most important to monitor in patients receiving IV HYDROmorphone?

- a. Patient-reported pain intensity
- b. Level of sedation
- c. Adequacy of ventilation
- d. Respiratory rate
- e. A and D
- f. A, B, and C

Case 3: An 82-year-old female with a past medical history of depression, HTN, hyperlipidemia, and asthma is admitted for a fractured left hip. The patient's body mass index (BMI) is 31. Her medication list includes atorvastatin 20 mg by mouth daily, lisinopril/hydrochlorothiazide 20 mg/25 mg by mouth daily, Advair™ 250/50 1 puff twice daily, albuterol 90 mcg 2 puffs every 4 hours as needed, ALPRAZolam 2 mg 4 times daily as needed for anxiety, and FLUoxetine 20 mg by mouth daily. An order is written for HYDROmorphone 1 mg IV every 4 hours as needed for pain.

8. Which of the following statements is correct in regard to the HYDROmorphone 1 mg order?
   - a. The dose is appropriate since the patient has an insignificant past medical history.
   - b. The dose is too high because the patient is opioid naïve and over 80 years old.
   - c. The dose is too low because the patient's chronic medications will lead to rapid metabolism of HYDROmorphone.
   - d. The dose is too low based on her elevated BMI.

9. Which of the following agent(s) can potentiate the effects of HYDROmorphone on ventilation?
   - a. Atorvastatin
   - b. FLUoxetine
   - c. ALPRAZolam
   - d. A and C
   - e. B and C

Case 4: A 75-year-old diabetic patient with a history of type I diabetes, HTN, and coronary artery disease is admitted with right leg edema and ulcerations leading to significant pain. The patient is ordered IV HYDROmorphone 0.2 mg. The patient reports continued moderate to severe pain five minutes after the injection is completed.

10. What would be the best option to control this patient's pain?
    - a. Order a second dose of IV HYDROmorphone 1 mg.
    - b. Assess sedation level and then continue titration of IV HYDROmorphone 0.2 mg to 0.4 mg every 10 minutes.
    - c. Order a nonopioid pain reliever until the initial dose of HYDROmorphone starts to have an effect.
    - d. Order a dose of meperidine 25 mg IV.

11. Which patient-specific parameter(s) might cause you to consider reducing the subsequent dose of opioid?
    - a. Hypertension
    - b. Patient's age
    - c. Coronary artery disease
    - d. Sedation following the initial dose of HYDROmorphone
    - e. B and C

Answers: (1. c), (2. c), (3. d), (4. a), (5. e), (6. a), (7. f), (8. b), (9. c), (10. b), (11. d)

For more information, visit http://www.patientsafetyauthority.org.
This assessment tool accompanies
Grissinger M. Results of the opioid knowledge assessment from the PA Hospital Engagement Network adverse drug event collaboration. Pa Patient Saf Advis [online] 2013 Mar [cited 2013 Mar 5]. http://patientsafetyauthority.org/ADVISORIES/AdvisoryLibrary/2013/Mar;10(1)/Pages/home.aspx.

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