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Introduction for the Learner (Resident/Fellow)

Prior to your evaluation of competency:

- Complete the web-based palliative care training program “Medical Resident Training in End-of-Life and Palliative Care” before you undergo this competency assessment. The training program is available on the UMMS Intranet, click on Physicians. The course is listed under “Helpful Links.” It is also available via the internet at http://134.192.120.12/canRes/htdocs/login.asp
- Review Part 1 (Learning Objectives), Part 2 (Teaching Outline) and Part 3 (Evaluation Checklist) of this document THOROUGHLY so that you are aware of what is required of you.
- Review Unit III, Modules 2 (Setting Treatment Goals) and 4 (Conducting a Family Conference) of the Web-based palliative care training program “Medical Residents Training in End-of-Life and Palliative Care.”
- Ask the attending physician to evaluate your competency early in the clinical rotation.
- When you think you are suitably prepared for testing your competency in this area, ask the attending physician on your inpatient clinical rotation to evaluate the selected competency when the appropriate clinical situation arises.
- Ascertain that the attending/faculty member is certified to conduct the Palliative Care Competency Evaluation.

Field evaluation of competency:

- During the course of the clinical rotation it is anticipated that you may have opportunities to demonstrate your competency in PAIN ASSESSMENT AND MANAGEMENT with a patient and/or family during morning work rounds with the attending, throughout the day or during times of night call or cross-coverage.
- ASK THE CLINICAL FACULTY MEMBER TO REVIEW THIS COMPETENCY ASSESSMENT TOOL AS SOON AS POSSIBLE SO THAT THEIR MEMORY WILL BE REFRESHED AS TO THE DESIRED CHARACTERISTICS OF PERFORMANCE THEY WILL BE EVALUATING.
- At the end of the rotation, the Clinical Faculty Evaluator completes the Evaluation Checklist (Part 3) of this document, and shares it with you.
- You will also complete the self-evaluation portion of the checklist as a measure of competency in practice based learning.
- Evaluation Checklist must be signed by faculty and Resident.
- Return Evaluation Checklist to Dr. Susan Wolfsthal, Internal Medicine Residency Director or Dr. Heather Mannuel, Hematology/Oncology Fellowship Director.

Introduction for the Clinical Faculty Evaluator

How to perform this competency assessment:

A Medical Resident or Oncology Fellow has requested that you assess their competency in a selected palliative care domain during the time you are the attending physician on this service. To assist you with this evaluation, please do the following.

Preparing for field evaluation of competency:

- Review this Competency Assessment Tool thoroughly including the Learning Objectives (Part 1), Teaching Outline (Part 2) and Evaluation Checklist (Part 3) prior to pre-discussion counseling with Resident (required).
- Review Unit III (Communication Techniques) Modules 2 (Setting Treatment Goals) and 4 (Conducting a Family Conference) of the web-based palliative care training program, “Medical Resident Training in End-of-Life and Palliative Care” available on any computer with internet access at http://134.192.120.12/canRes/htdocs/login.asp (optional).

Format of competency evaluation:

Pre-discussion counseling:

- Discuss with the Resident/Fellow possible pain management strategies.
- Review with the Resident/Fellow the circumstances of the patient situation. Check veracity of patient medical data, diagnostic tests, significance of diagnosis.

During the clinical rotation:

- Based on the Learning Objectives, Teaching Outline and Evaluation Checklist in this document and the content in Unit I of the palliative care training website, “Medical Resident Training in End-of-Life and Palliative Care,” evaluate how the Resident or Fellow manages his/her patients’ pain during this rotation.
- Some potential things to look for:
  - Does the learner report pain as the 5th vital sign during rounds?
  - Does the learner take an appropriate pain history?
  - Does the learner assess for different types of somatic pain (e.g., bone pain, visceral pain) and for neuropathic pain?
  - Are laboratory/imaging studies ordered appropriately to diagnose the source of the pain?
  - Are pain medications started and titrated appropriately for patient comfort while the workup of the pain source is ongoing?
  - Are WHO Step I, II and III pain medications started appropriately for the level of pain reported and titrated to the desired level of effect?
  - For chronic, continuous pain following titration with short-acting opioids, were long-acting opioids ordered appropriately?
  - Are side effects such as constipation, nausea, vomiting and pruritis anticipated? Are appropriate steps taken to counter these side effects?
- Are adjuvant medications considered in the cases of neuropathic pain, bone pain, and pain caused by edema?
- Does the learner document the pain management plan in the daily progress notes?
- See Learning Objectives (Part 1) and Evaluation Checklist (Part 3) for further suggestions.

**End-of-rotation feedback**

- Review strengths and weaknesses of competency assessment with Resident/Fellow.
- Provide constructive feedback to improve Residents/Fellows’ performance and patient outcomes.

**Complete Evaluation Checklist (Part 3 of this document)**

- Share with learner; allow learner to make his/her own self-assessment of performance.
- Faculty and Resident/Fellow must sign this Evaluation Checklist (Part 3).
- Learner is responsible for returning Evaluation Checklist to Dr. Wolfsthal (Residents) or Dr. Mannuel (Fellows).
Part 1: Learning Objectives

Note to learner and Clinical Faculty Evaluator: The Learning Objectives are listed in terms of fulfilling the six ACGME core competencies, listed below; these are reflected in Evaluation Checklist in Part 3 of this document.

LEGEND to ACGME core competencies: http://www.acgme.org/Outcome

<table>
<thead>
<tr>
<th>OBJECTIVES – A competent Medical Resident or Oncology Fellow will be able to:</th>
<th>ACGME Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledge that pain at the end-of-life can be effectively treated.</td>
<td>PC MK PBL I IPCS P SBP</td>
</tr>
<tr>
<td>Recognize that pain is best managed using a team approach to care.</td>
<td>X</td>
</tr>
<tr>
<td>Support the concept that a complaint of pain may include physical, psychological and spiritual dimensions.</td>
<td>X</td>
</tr>
<tr>
<td>Individualize drug and non-drug treatments.</td>
<td>X</td>
</tr>
<tr>
<td>Accept that chronic opioid therapy is not synonymous with drug addiction.</td>
<td>X X</td>
</tr>
<tr>
<td>Differentiate acute, chronic, non-malignant and chronic malignant pain.</td>
<td>X</td>
</tr>
<tr>
<td>Identify at least two cultural barriers to pain management.</td>
<td>X</td>
</tr>
<tr>
<td>Describe at least five medical barriers to pain management.</td>
<td>X</td>
</tr>
<tr>
<td>List at least three patient and family barriers to pain management.</td>
<td>X</td>
</tr>
<tr>
<td>Identify the neuro-anatomic and clinical characteristics of somatic, visceral and neuropathic pain.</td>
<td>X</td>
</tr>
<tr>
<td>Discuss at least one drug from each step of the WHO Pain Ladder.</td>
<td>X</td>
</tr>
<tr>
<td>Explain the use of external beam radiation used for analgesic purposes.</td>
<td>X</td>
</tr>
<tr>
<td>Compare the indications, pharmacology, side effects, and costs of three NSAIDs used for mild pain.</td>
<td>X</td>
</tr>
<tr>
<td>Compare the indications, pharmacology, side effects, and costs associated with morphine, hydromorphone, oxycodone, codeine, methadone, propoxyphene, meperidine, and fentanyl.</td>
<td>X</td>
</tr>
<tr>
<td>Compare the indications, pharmacology, side effects, and relative costs of oral, transdermal. Intravenous, subcutaneous, intramuscular, rectal and sublingual routes of opioid administration.</td>
<td>X</td>
</tr>
<tr>
<td>Differentiate the prophylactic and active treatment approaches to common opioid side effects.</td>
<td>X</td>
</tr>
<tr>
<td>Identify two patient and two drug-specific risk factors for opioid induced respiratory depression in a patient with pain.</td>
<td>X</td>
</tr>
<tr>
<td>Distinguish opioid tolerance, physical dependence, and psychological dependence.</td>
<td>X</td>
</tr>
<tr>
<td>Compare the indications, pharmacology, and side effects of one drug from each of the following adjuvant analgesic classes: tricyclic antidepressants, antiepileptics, and corticosteroids.</td>
<td>X</td>
</tr>
<tr>
<td>Task</td>
<td>PC</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----</td>
</tr>
<tr>
<td>Assesses patient cues which may signal psychological and/or spiritual pain.</td>
<td>X</td>
</tr>
<tr>
<td>State at least one pharmacological and one non-pharmacological treatment for procedure-related pain.</td>
<td></td>
</tr>
<tr>
<td>List consultation resources for difficult pain management issues.</td>
<td></td>
</tr>
<tr>
<td>Discuss federal and state regulations concerning controlled substance prescribing practices.</td>
<td>X</td>
</tr>
<tr>
<td>Differentiate the medical facts and ethical arguments concerning opioid induced respiratory depression, physician-assisted suicide, and euthanasia in relation to opioid analgesics.</td>
<td>X</td>
</tr>
<tr>
<td>Distinguish between patients taking opioids for pain from those taking opioids due to psychological dependence.</td>
<td>X</td>
</tr>
<tr>
<td>Illustrate the approach for treating pain in a terminally ill patient who is a current or former substance abuser.</td>
<td>X</td>
</tr>
<tr>
<td>Assess patient's pain at regular intervals.</td>
<td>X</td>
</tr>
<tr>
<td>Use pain scores recorded as the 5th vital sign to monitor need for and effectiveness of pain treatment.</td>
<td>X</td>
</tr>
<tr>
<td>Demonstrate communication and cognitive skills required to assess pain in adults, children, and patients with cognitive impairment.</td>
<td></td>
</tr>
<tr>
<td>Construct a differential diagnosis for the cause of pain in at least three patients.</td>
<td>X</td>
</tr>
<tr>
<td>Develop an initial and long-term treatment plan for at least three patients with pain.</td>
<td>X</td>
</tr>
<tr>
<td>Collaborate with other health care professionals to improve pain management.</td>
<td>X</td>
</tr>
<tr>
<td>Correctly convert doses of oral opioids to parenteral opioids while maintaining continuous analgesia.</td>
<td>X</td>
</tr>
<tr>
<td>Appropriately prescribe and titrate short-acting and/or long-acting opioids.</td>
<td>X</td>
</tr>
<tr>
<td>Appropriately prescribe and titrate adjuvant medications for pain management.</td>
<td>X</td>
</tr>
<tr>
<td>Appropriately refer patients who have psychological and/or spiritual pain.</td>
<td>X</td>
</tr>
<tr>
<td>Counsel patients appropriately in the use of pain medications.</td>
<td>X</td>
</tr>
<tr>
<td>Counsel patients appropriately who are fearful of taking opioid analgesics.</td>
<td>X</td>
</tr>
</tbody>
</table>

**LEGEND:**
- **PC** – Patient Care
- **MK** – Medical Knowledge
- **PBL&I** – Practice-Based Learning and Improvement
- **IPCS** – Interpersonal and Communication Skills
- **SBP** – Systems-Based Practice
- **PR** – Professionalism

Part 2: Teaching Outline for Learner and Clinical Faculty Evaluator (From Weissman, et al.)

- Recommend reviewing Unit I of the Web-based “Medical Resident Training in End-of-Life and Palliative Care,” available on the UMMS Intranet, click on Physicians. The course is listed under “Helpful Links.” It is also available via the internet at http://134.192.120.12/canRes/htdocs/login.asp

Pain Assessment

- Pain is the 5th vital sign and should be reported on morning rounds along with other VS. Report the maximum pain level in the last 24 hours and the current pain level (Pmax and Pm). A SIGNIFICANT PAIN SCORE REQUIRES EVALUATION AND A NOTE IN THE CHART, JUST AS WOULD BE DONE FOR FEVER, HYPERTENSION, ETC.
- Location, duration, temporal pattern, modifiers (better/worse)
- Quality:
  - somatic: dull/aching, well localized - fracture, bone met, muscle strain
  - visceral: dull/sharp/colicky; well localized or referred - gastri tus, gallstones
  - neuropathic: burning, stabbing, itching - radicular or stock ing-glove distribution; numb - H. Zoster, spinal disc, diabetic neuropathy
- Intensity - 0 to10 scale (0=no pain; 10=worst possible pain)
- Treatments - what has the patient used - drug and non-drug; response to treatments
- ADL’s - impact of pain on sleep, eating, movement, mood
- Review patient understanding of pain causality and control of the pain.
- Determine patient goals for pain relief (numerical 0-10; functional - sleep, moving)

Drug Therapy

Mild Pain

- O.T.C. drugs - ASA, acetaminophen, ibuprofen, naprosyn
  - side effect profile and cost should determine choice of drug
  - no clear immediate analgesic benefit of one drug compared to another
  - NSAIDs may take weeks to have anti-inflammatory effects, assisting in pain control.

Moderate Pain

- Drugs: single agents
  - codeine 30 mg, 60 mg (tablet of liquid)
  - oxycodone 5 mg tabs (Roxicodone - tablet or liquid)
  - propoxyphene (Darvon) 65 mg – not for the elderly
  - tramadol (Ultram) 50 mg, 100 mg – renal toxicity
- Drugs: combination products
  - acetaminophen with codeine 30 mg (Tylenol #3), 60 mg (Tylenol #4)
  - acetaminophen 325-500 mg or ASA 325 mg with oxycodone 2.5-10 mg (Percocet, Percodan, Tylox)
  - acetaminophen 325-750 mg or ASA 500 mg with hydrocodone (5-10 mg) (Vicodin, Lortab, Loracet)
  - acetaminophen with propoxyphene (Darvon-N-50/100, Wygesic)
- Potency - oxycodone = hydrocodone > codeine = tramadol > propoxyphene
- Duration - q3-4h for all products except tramadol (q6h)
- Cost - generic codeine or oxycodone << hydrocodone products
- NOTE: the acetaminophen or ASA in combination products limits dose escalation; do not exceed 4.0 grams of acetaminophen or ASA per 24 hours

Severe Pain

TITRATE to desired effect with short-acting drugs, then convert to equianalgesic doses of long acting drugs, plus breakthrough pain medication (after correcting for incomplete cross tolerance).

Short-acting drugs:

- Oral - 2-4 hours duration with onset in 15-30 minutes; peak effect in 60-90 minutes
- Parenteral - 1-4 hours duration with onset in 2-15 minutes; peak effect in 10-30 minutes
- morphine
- hydromorphone (Dilaudid)
- oxycodone (Roxicodone) - oral only
- meperidine
  - shortest acting
  - generally not recommended for use; use only for procedure-related pain
  - duration only 2-3 hours
  - use for ≤ 48hours, no more than 600 mg/24 hours due to accumulation of toxic metabolite

Long-acting drugs:

- MS Contin or Oramorph SR - half-life 8-12 hours
- Oxycontin - half-life 12 hours
  - long acting form of oxycodone
  - dose like MS Contin/Oramorph SR
- Kadian - half-life 12-24 hours
  - long-acting morphine preparation
  - can be opened and sprinkled on food
- Transdermal Fentanyl (Duragesic Patch) - functional half-life
  - 48-72 hours duration
  - takes 18-24 hours to reach full effect
- Ultra-short-acting drug:
  - Transmucosal fentanyl (Actiq)
    - for breakthrough pain
    - onset 5-15 minutes
    - duration 1-2 hours
Variable-duration drugs - continued use leads to longer duration of action:

- Methadone
  - Potentially long and variable half life 8-54 hours
  - Analgesic half-life 4-8 hours THEREFORE, VIGILANCE IS REQUIRED DURING CONVERSION TO METHADONE AND UPWARDS TITRATION OF METHADONE.

Potency Ratios (these are estimates):

- 30 mg oral morphine = 20-30 mg oral oxycodone = 7.5 mg oral hydromorphone =
- 10 mg IV/SQ morphine = 1-2 mg IV/SQ hydromorphone

**Duragesic patch size (microgram)** = 24 hour oral morphine dose divided by 2.0

- NOTE: 2 Percocet q4h = 10 mg oral morphine q4h = 30 mg MS Contin Q12 = 1 mg/hour MS continuous IV or Subcutaneous infusion = 25 mg Fentanyl patch.

**NOTE:** always calculate the equianalgesic value when changing from one opioid to another to avoid initial under or overdosing and then titrate to individual response.

**Route:**

- Oral is the preferred route.
- IV, or SQ will produce equianalgesic effects although IV will have the fastest onset of action little if any indication for IM route
- Rectal is equianalgesic to oral (approved rectal preparations include morphine and hydromorphone.
- Long-acting morphine (MS Contin) can be used rectally but is not FDA approved for such use in the US

**Dosage escalation/Frequency of adjustment:**

- Dosage escalates by 50-100% for severe/uncontrolled pain
- 25-50% for mild-moderate pain - irrespective of starting dose.
- Short-acting drugs can be dose escalated as often as every 1-2 hours
- MS Contin, Oramorph SR or Oxycontin every 24 hours
- Fentanyl Patch or Methadone no more frequently than every 48-72 hours

**Prescribing Recommendations:***

- use prn orders only for
  - truly episodic pain
  - any patient on a long-acting opioid needs a short acting opioid prn for breakthrough pain
- never order more than one prn opioid/non-opioid combination product at one time
- use a continuously administered opioid for continuous pain (e.g. long-acting morphine or fentanyl patch)
- never order more than one long-acting product at a time
- do not use dosing modifiers (e.g. Percocet prn for moderate pain)
- use equianalgesic tables to calculate doses when changing drug or route – SEE “Medical Resident Training in End-of-Life and Palliative Care” Web-based learning program, Unit I, Module 3); Note: consider 50% dose reduction when changing drug, due to incomplete cross-tolerance.

**Toxicity:**

- Constipation - prophylaxis with bowel stimulant (senna or bisacodyl) +/- detergent laxative (docusate)
- Nausea - is not an allergy and will resolve after a few doses for most patients; use an anti-emetic prn (e.g. prochlorperazine)
- Sedation/confusion - will resolve after a few doses/days for most patients
- Respiratory depression
  - very rare with short-acting oral opioids
  - tolerance develops rapidly
  - risk factors include: rapid IV push, new liver/renal dysfunction, removal of painful stimulus, rapid dose escalation, particularly of the fentanyl patch or methadone
- Pruritus –
  - common, especially with morphine
  - least reported with fentanyl
  - not a true allergy
  - not a contraindication to opioid use
  - H1/H2 blockers usually not helpful
  - wears off quickly
  - consider switching to opioid of a different pharmacological class

**Toxicities of Methadone:** in addition to the common opioid toxicities above, methadone has unique toxicities of which you should be aware:

- Cardiac toxicity
  - QT prolongation, Torsades de Pointes, usually but not always seen at high doses (>200 mg/day)
  - Use with care in patients with hypokalemia, hypomagnesemia
  - monitor EKG
- Drug-drug interactions – Metabolized by CYP450 system
  - In patients on methadone, adding CYP450 inducers associated with withdrawal symptoms: rifampin, phenytoin, carbamazepine, Phenobarbital, St. John’s Wort
  - CYP450 inhibitors may cause decreased clearance of methadone (Ketoconazole, erythromycin)
  - Anti-retroviral agents associated with increased clearance and decreased plasma levels of methadone
- Potential interactions with MAO inhibitors – caution advised

**Tolerance / addiction:**

- Tolerance - need to increase dose to get same effect; NOTE: tolerance does not equal addiction
- Physical dependence - withdrawal reaction if drug discontinued or antagonist given; NOTE: physical dependence does not
equal addiction
- Psychological dependence (addiction)
  - Overwhelming involvement with acquisition/use of drug for
    non-medical purposes
  - No improvement in QOL
  - Best defined as “loss of control” or “use despite harm”

**Regulations:**
- Schedule II
  - All opioids except those listed as Schedule III/IV
  - Up to 30 day supply
  - No refills
  - Telephone or fax only in emergencies (hard copy of prescrip-
    tion must be sent within 72 hours)
  - Prescription valid for only 30 days
- Schedule III/IV
  - Hydrocodone (e.g., VicodinTM, LortabTM) or codeine com-
    bination products and propoxyphene products
  - Up to 34 day supply
  - 5 refills within 6 months
  - Telephone prescribing ok

**Use of Adjuvant Medications**
- Neuropathic and bone pain are relatively resistant to opiate
  therapy.
- Use of adjuvant medications may allow better pain control and
  reduction of opioid dose if current doses are resulting in toxic-
  ity (e.g., sedation, myoclonus).

**Neuropathic Pain**
- Anti-depressants
  - All tricyclic anti-depressants have analgesic effects
  - Start at low dose, escalate dose slowly (q2-3 days) to maxi-
    mally tolerated dose
  - Discontinue if no response within one week at maximal dose.
- Anti-convulsants
  - Gabapentin, phenytoin, carbamazepine, valproic acid
  - Use like anti-convulsants
  - Follow blood levels
  - Discontinue if no response after one week at good blood
    levels.
- Corticosteroids
  - of limited long-term use due to side effects
  - dosing is empiric: dexamethasone 2-8 mg/day
  - dosing is empiric: prednisone 20-80 mg /day.
- Systemic local anesthetics
  - IV lidocaine or oral mexilitine may offer relief for refractory
    neuropathic pain.
- Ketamine
  - Oral or IV for refractory neuropathic pain
  - Can have marked psychological effects

**Bone pain**
- Non-steroidal anti-inflammatory agents
  - Have been of considerable benefit when combined with
    opioid treatment for severe bone pain caused by cancers and
    other chronic conditions.
  - Use caution in prescribing NSAIDs in patients with severe
    thrombocytopenia (as is the case in many cancer patients on
    chemotherapy) or other clotting disorder.

**Non-Drug Therapy**
- Physical modalities
  - Heat
  - Cold
  - Massage
  - Physical therapy
- Behavioral treatments
  - Relaxation
  - Imagery
  - Education
- Other: discussion of anesthetic/neurosurgical treatments are
  beyond the scope of this discussion.

**Annotated Bibliography for Pain**
Alford DP, Compton P, Samet JH. Acute pain management for
patients receiving maintenance methadone or buprenorphine

Even patients in drug treatment programs need acute pain
management from time to time – how to do it safely.
Arnold, R, Weissman DE. Fast Facts and Concepts #36: CAL-
CULATING OPIOID DOSE CONVERSIONS; March, 2001.
End-of-Life Physician Education Resource Center
www.eperc.mcw.edu.

Benedetti F, Lanotte M, Lopiano L, Colloca L. When words are
painful: unraveling the mechanisms of the nocebo effect.
Neuro-

Bolen J. Pain Policy and Regulation: Maryland: Guidelines
for the Use of Controlled Substances for the Treatment of Pain.
www.medscape.com/resources/opioid/opioid-maryland

Provides guidelines for the prescription of controlled sub-
stances in Maryland; other states’ policies can also be access
through this website.
Buppert C. Federal laws on prescribing controlled Substances.
available online www.medscape.com/viewarticle/587412

Overview by a nurse practitioner and attorney regarding fed-
eral law on prescribing controlled substances – the TO DO’s
and the NOT TO DO’s.

Carey LB, Newell CJ, Rumbold B. Pain control and chaplaincy

Chaplains can help the patient deal with pain, and can help
physicians sort out pain complaints.  

- Excellent review of pain syndromes and their management.  

- How pain specialists do it.  

- We’re learning much more about neuropathic pain, and this has direct consequences for therapeutic interventions.  


- How are we doing with pain management? How can we do better?  

- Section 8 – The principles of drug use in palliative medicine  
- Section 10 – The management of common symptoms and disorders  
  - Sections 10.1.1 through 10.1.13 address pathophysiology, assessment, types of pain, and a variety of pharmacological and nonpharmacological management strategies.


- Reflex sympathetic dystrophy is out, CRPS is in – yet it remains difficult to treat effectively. All physicians should be able to recognize these syndromes and refer appropriately.  

- Might want to leave the Colace on the windowsill and see if this does the same job.  

- Why “this is only going to hurt a little” is the wrong thing to say. And what we should say.  

- Need to do something, now. Are we set up to react?  
www.nccn.org

- These are the standards by which pain management is measured and compared to others.  

- Perhaps chronic pain could be avoided sometimes…  

- A nice practical little review of how to approach different pain syndromes.  

- Pain affects the mind, and the mind affects pain, as well as everyone around the patient in pain.  

- A basic review of pain categorization and approaches to management.  

- What does good pain management look like, and how do we get there.  

- Just giving opioids for pain is not enough; Consider the etiology of pain and what specific interventions can be given.  

- A prime time for pain mismanagement is in transitions. Should we in Maryland be using our LST Options form more often?  
**Definitions**

- **Tolerance** - need to increase the amount of drug to obtain the same effect.
- **Physical dependence** - development of withdrawal reaction upon discontinuation or antagonism of drug.
- **Pseudoaddiction**
  - behavioral manifestations of addiction occurring as a result of under treated pain
  - typically in the setting of severe continuous pain when drugs are administered at inadequate doses at excessive dosing intervals.
- **Addiction** - a.k.a. psychological dependence
  - overwhelming involvement in the acquisition and use of drugs for non-medical purposes.
  - characterized by one or more of the following behaviors
    - impaired control over drug use
    - compulsive use
    - continued use despite harm
    - craving
  - tolerance and physical dependence may or may not be present
  - presence of tolerance or physical dependence does not prove psychological dependence.
- **Criteria suggesting addiction include**
  - continued use despite negative personal, medical and legal problems;
  - frequent intoxication at times when one is expected to fulfill major life roles or when substance abuse is dangerous;
  - much time spent in obtaining, using and thinking about drug abuse;
  - reduction in important social, occupational or recreational activities due to substance abuse.

**Assessment**

- Obtain a thorough pain assessment including
  - quantitation
  - quality
  - descriptors
  - impact on activities of daily living
- Obtain a complete database of information relative to concerns you may have regarding addiction. Important questions related to addiction assessment include the following (Note: Multiple clues from the following list are typically present to establish a diagnosis of subsistence abuse).
  - Treatment plan reliability

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**Appendix I**

**Opioid Equivalency Pocket Card**

Equianalgesic doses are approximate. Individual patient response must be observed.

<table>
<thead>
<tr>
<th>Short Acting Drugs</th>
<th>Dose (mg) Parenteral</th>
<th>(mg) Oral</th>
<th>Duration (hour)</th>
</tr>
</thead>
<tbody>
<tr>
<td>morphine (MS soluble, MSIR)</td>
<td>1,2,3</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td>hydromorphone (Dilaudid)</td>
<td>1,2,3</td>
<td>1.5</td>
<td>7.5</td>
</tr>
<tr>
<td>oxycodone</td>
<td>1,5</td>
<td>30</td>
<td>2-4</td>
</tr>
<tr>
<td>hydrocodone</td>
<td>6</td>
<td>30</td>
<td>2-4</td>
</tr>
<tr>
<td>fentanyl</td>
<td>4</td>
<td>0.1</td>
<td>0.5-2</td>
</tr>
<tr>
<td>meperidine</td>
<td>7</td>
<td>100</td>
<td>300</td>
</tr>
</tbody>
</table>

1. Available as a liquid
2. Available as a suppository
3. May be used as an IV or subcutaneous infusion
4. May be used as an IV infusion
5. Percocet comes in 4 dosing strengths (2.5/5/7.5/10 mg oxycodone per tablet)
6. Available only in combination with acetaminophen, ASA, or NSAID in tablet form; dosages range from 2.5-10.0 mg/tablet
7. Maximal dose 600 mg IV/IM in 24 hours, not indicated for chronic pain

<table>
<thead>
<tr>
<th>Long Acting Drugs</th>
<th>Strengths Available</th>
<th>Duration/hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oramorph SR</td>
<td>1</td>
<td>15, 30, 60, 100 mg</td>
</tr>
<tr>
<td>MS Contin</td>
<td>1</td>
<td>15, 30, 60, 100, 200 mg</td>
</tr>
<tr>
<td>Kadian</td>
<td>2</td>
<td>20, 50, 100 mg</td>
</tr>
<tr>
<td>Oxycontin</td>
<td>1,3</td>
<td>10, 20, 40, 80 mg</td>
</tr>
<tr>
<td>Fentanyl Patch</td>
<td>4</td>
<td>25, 50, 75, 100 mcg</td>
</tr>
</tbody>
</table>

1. Must be given as intact pills, cannot be crushed, or used in G or J tubes
2. Capsule may be opened and sprinkled in food
3. Consult package insert for conversion ratios for short acting to long acting opioids
4. 24 hour oral morphine dose ÷ by 2=mcg/hour for the TTS fentanyl patch

For methadone, the conversion from opioids is not linear; use caution when switching from any opioid to methadone, particularly in patients who are tolerant to high doses of opioids. Suggest reading Ripamonti et al, 1998 Switching from morphine to oral methadone in treating cancer pain: What is the equianalgesic ratio? J Clin Oncology. 16:3216-3221.

2 Percocet (5/325) q 4 hours

= 30mg MS Contin or Oramorph SR Q 12hours (60mg in 24 hours)
= 1mg/hour morphine or 0.2 mg/hour Dilaudid as continuous IV or Subcutaneous infusion
= 25 mcg fentanyl patch
Pain Assessment and Management

- compliance with prescribed drugs
- follow-up with clinic visits and recommended consultations
- Loss of control of drug use
- partially used bottles of medications at home argues against addiction
- Adverse life consequences
- loss of job, marriage, children due to drugs
- legal and medical problems due to drugs
- Drug-seeking behaviors
- “lost medications”
- demands for drugs of high street value
- “allergies” to many opioids
- scripts from many MD’s filled at many pharmacies, ER visits for refills
- Abuse of other drugs
- ETOH, benzodiazepines, cocaine, heroin, amphetamines
- Contact with street culture
- friends/family who are users

**Diagnostic Categories**

- Patients with a past history of addiction--currently in recovery
- patients currently participating in a drug abstinence program
- patients not participating in a drug abstinence program
- Patients currently abusing drugs
  - prescription meds only
  - prescription meds plus alcohol and/or street drugs
- Patients who do not meet criteria for substance abuse but have other major psychiatric disorders (see below)

**Management**

- Pain assessment
  - There is no reliable indicator of pain, therefore, autonomic signs or physical behaviors (crying, grimacing, etc.) are not useful for deciding when a patient is in pain.
  - Placebos should be avoided as they instill mistrust and are unreliable in establishing a diagnosis of addiction or “true pain”.
  - Use standard verbal pain reports of pain quality and intensity with frequent charting of pain level and response to treatments.
- Patient involvement
  - Involve the patient in the pain treatment plan
  - Discuss with them what will be available and how you will respond if the pain is not adequately treated.
- Pharmacological treatment
  - Opioids
    - Medications to treat pain should be prescribed in appropriate doses and intervals whether or not the patient is an addict.
    - Restricting doses and prescribing at excessive intervals will encourage behaviors that may suggest addiction in the pain patient (a.k.a. pseudoaddiction).
- choice of drug
  - For mild to moderate pain the use of NSAID’s, acetaminophen or weak opioid-non-opioid combinations should be used.
  - Note that the combination products (Tylenol #3, Percocet, etc) should be prescribed q4h, not q6h.
  - For moderate to severe pain there is no “best” opioid. However, the drug of choice for moderate to severe pain is morphine.
  - Meperidine use should be discouraged due to its toxic metabolite and short duration of action.
  - Prescribe opioids with a fixed dose and interval that makes pharmacological sense (ex. MS 10 mg PO q4h), using prn dosing only if pain is truly episodic.
  - Do not specify a range of doses, dosing intervals or use pain descriptors (e.g. meperidine 50-75 mg q4-6 h prn severe pain).
  - If the patient is a known addict who also has pain it is best to avoid parenteral dosing and short-acting drugs; use long-acting oral agents when possible.
- choice of route
  - Oral drugs are preferred
  - IM route should be discouraged as there is no indication for this necessarily painful method of drug delivery.
- Non-opioids
  - Many alternative drugs can be useful including NSAID’s, anticonvulsants, antidepressants, steroids and systemic local anesthetics.
  - The benzodiazepines (e.g. lorazepam (Ativan)) and antihistamines (e.g. Vistaril) are frequently given to patients with pain. These agents are not analgesics, they typically cause sedation but by themselves result in no significant pain relief.
- Non-pharmacological treatments
  - heat and cold application
  - TENS
  - Massage
  - behavioral treatments and more invasive procedures such as nerve blocks or spinal opioids
  - The least invasive/costly treatments should be recommended in all patients, especially those with a history of addiction.

**Management of the Suspected Addict**

This is the patient who knows exactly what drug they want, typically meperidine (Demerol) or hydromorphone (Dilaudid), who proclaims to be “allergic” to all other opioids or says they just
don’t work and who may or may not “look” like they are in pain. Some of these patients may be *Malingers*, have a *Factitious* disorder or a *Somatization* disorder (see below). The dilemma is in sorting out which of these patients has a substance abuse disorder versus those patients truly hurting who have learned that this behavior will get them what they really need for pain. Using the assessment guide above and getting as much past history as possible may help you decide which group your patient fits in. In many cases it will be impossible to tell if you have no prior knowledge of the patient and few records.

Here are some general recommendations:

• Suggest use of opioids other than meperidine upon admission, especially IV Morphine for severe pain. Some patients may initially refuse this in favor of meperidine only to agree to such a switch one or more days later if their pain is not relieved.

• Avoid major conflicts over the initial choice of medication. If the patient insists on meperidine and refuses your alternative suggestions, proceed with meperidine while maintaining open dialogue regarding other drugs and non-drug treatments. Note: increasingly, hospitals are removing meperidine from the formulary, or have patient care treatment pathways that avoid meperidine use, so that meperidine will not even be an option.

• Whichever drug you prescribe, give it in pharmacologically meaningful doses at appropriate intervals using frequent assessments to guide dose titration.

• Ask for assistance from a substance abuse health professional if you think substance abuse is the predominant issue.

• Discharge planning—the transition to the outpatient setting is typically the weakest link in patient management. All patients with frequent episodes of severe acute pain or chronic non-malignant pain, where a decision has been made for long-term chronic opioids, need careful and consistent follow-up. For patients who are known addicts or those in recovery this is especially true. General principles of management, which should be established prior to discharge, include the following:
  - consider using a written treatment plan (opioid contract)—this specifies the physician and patient responsibilities and consequences to the patient of non-compliance
  - only one designated physician should prescribe medications, using only one dispensing pharmacy
  - get permission to obtain information from non-patient sources
  - consultation with an addiction specialist and/or pain management specialist when appropriate
  - patients in recovery should be urged to re-start or increase involvement in drug abstinence programs

**Other Psychiatric Disorders that Often Present as “Pain”**

• Psychiatric co-morbidity—primary psychiatric diagnoses where pain is commonly the presenting complaint or existing pain is worsened
  - depression; panic/anxiety attacks
  - physical or sexual abuse; PTSD

• Somatization disorder
  - women >> men; begins before age 30
  - history of many physical complaints including
    - 4 pain symptoms
    - 2 gastrointestinal
    - 1 sexual
    - 1 neurological
  - complaints either cannot be explained or seem excessive
  - symptoms are not intentional
  - patients feel “pain”

• Pain Associated with Psychological Factors (old term was psychogenic pain, or somatoform disorder)
  - pain in one or more anatomic areas sufficient to seek medical attention
  - pain causes significant distress or impairment with social or occupational function
  - psychological factors have an important role in pain onset, severity and maintenance of the pain
  - symptoms are not intentional
  - patients “feel” pain

• Hypochondriasis
  - preoccupation with the belief/fear of a serious disease
  - men = women; can occur in later life
  - exaggerated sense of bodily symptoms
  - patients “feel” pain

• Factitious Disorder
  - primary gain is fulfillment of a psychological need
  - symptoms produced consciously, although motivation may be unconscious
  - purely fictitious problem or a self-created problem (e.g. insulin injection)
  - very willing to undergo invasive procedures
  - improvements followed by relapse
  - patient can forecast exacerbation
  - patient resists psychiatric consultation
  - poor continuity of care
  - multiple doctors

• Malingering (consciously motivated)
  - primary need is a secondary gain
  - relief from noxious events: work, jail
  - narcotics to abuse or sell (income source)
  - monetary award from litigation or disability
  - patients are less willing to undergo invasive procedures
Part 3: Evaluation Checklist

Learner name: ___________________________ Evaluator/Attending: ___________________________

☐ Resident PGY Level: [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
☐ Fellowship Year: [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

Rotation Site: [ ] Inpatient Cancer Center [ ] Inpatient GIM [ ] Oncology Clinic [ ] Continuity GIM clinic [ ] Other

Please rate the trainee's competency/skills/knowledge/attitude using the following scales:

For competency/skills
4 = Competent to perform independently
3 = Competent to perform with minimal supervision
2 = Competent to perform with close supervision / coaching
1 = Needs further basic instruction
n/o = not observed

For knowledge and attitudes (e.g. Medical Knowledge)
4 = Superior
3 = Satisfactory
2 = Below average
1 = Insufficient – needs further learning
n/o = not observed

OBJECTIVES

Patient Care

4 3 2 1 n/o Consistently reported pain as the 5th vital sign on morning rounds, including Pmax and Pc.
4 3 2 1 n/o Consistently elicited a complete pain history from patients with pain.
4 3 2 1 n/o Prescribed pain medications commensurate with the patient's level of pain.
4 3 2 1 n/o For moderate to severe pain, titrated short acting opioids appropriately to achieve relief of pain with minimal side effects.
4 3 2 1 n/o For moderate to severe pain, when titration is complete, appropriately converted dosing a long-acting opioid.
4 3 2 1 n/o Appropriately prescribed/recommended non-drug therapies for patient pain.
4 3 2 1 n/o Prescribed and titrated adjuvant therapy appropriately for neuropathic pain.
4 3 2 1 n/o Questioned all patients on opioid therapy at least daily about bowel movements.
4 3 2 1 n/o Prescribed a bowel laxative regimen appropriate for the amount of opioid used to treat chronic pain.
4 3 2 1 n/o Appropriately prescribed/recommended non-drug therapies for patient pain.

Overall Performance:

<table>
<thead>
<tr>
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Medical Knowledge

4 3 2 1 n/o Displayed knowledge of the pharmacology, routes of administration, dosing and side effects of pain medications used in Steps 1, 2, and 3 of the WHO pain ladder.
4 3 2 1 n/o Correctly converted one opioid to another, including consideration of incomplete cross-tolerance.
4 3 2 1 n/o Correctly switched opioid routes of administration.
4 3 2 1 n/o Displayed knowledge of modalities of non-drug treatment of pain.
4 3 2 1 n/o Recognized when patients are requesting opioids because of psychological dependence.
4 3 2 1 n/o Displayed good working knowledge of the pharmacology, dosing and toxicity of medications used as adjuvants to opioids for neuropathic pain.
4 3 2 1 n/o Displayed working knowledge of the pharmacology, dosing and toxicity of medications used as adjuvants to opioids for bone pain.
4 3 2 1 n/o Considered non-drug modalities in the case of opioid-resistant pain.
4 3 2 1 n/o Displayed knowledge of risk factors for opioid-induced respiratory depression.

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Date: ___________________________
### Part 3: Evaluation Checklist (Continued)

#### OBJECTIVES (Continued)

**Practice-Based Learning and Improvement**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Rating</th>
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<tbody>
<tr>
<td>Documented pain assessment and pain scores in daily progress notes.</td>
<td>4</td>
</tr>
<tr>
<td>Formulated comprehensive plan for pain management in the daily progress notes.</td>
<td>4</td>
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**Overall Performance:**

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**Interpersonal and Communication Skills**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Rating</th>
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</thead>
<tbody>
<tr>
<td>Considered patient, family and cultural barriers into pain assessment.</td>
<td>4</td>
</tr>
<tr>
<td>Where appropriate, demonstrated techniques of discerning pain in non-verbal/non-communicative patients.</td>
<td>4</td>
</tr>
<tr>
<td>Reviewed the patient's understanding of pain causality.</td>
<td>4</td>
</tr>
<tr>
<td>Determined patient goals for pain relief.</td>
<td>4</td>
</tr>
<tr>
<td>Individualized pain management regimen to patient.</td>
<td>4</td>
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</tbody>
</table>

**Overall Performance:**

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**Systems Based Practice**

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<tbody>
<tr>
<td>Can contact the pain team and other pain management consultation resources (e.g., radiation therapy, palliative care team) for pain that is difficult to manage.</td>
<td>4</td>
</tr>
<tr>
<td>Utilized pain management consultation resources appropriately.</td>
<td>4</td>
</tr>
<tr>
<td>Utilized appropriate consultation services for patients who are requesting opioids because of psychological dependence.</td>
<td>4</td>
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**Overall Performance:**

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**Professionalism**

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<tr>
<th>Objective</th>
<th>Rating</th>
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<tbody>
<tr>
<td>Recognized that patients with chronic diseases such as metastatic cancer can have multiple sources and types of pain simultaneously and tailors pain assessment accordingly.</td>
<td>4</td>
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**Overall Performance:**

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### Part 3: Evaluation Checklist (Continued)

#### OBJECTIVES (Continued)

**Resident/Fellow strengths:**

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**Resident/Fellow areas for improvement:**

**Overall impression:** Did the Resident/Fellow demonstrate competency in a manner so as to do no harm?

**Resident/Fellow self-evaluation of performance:** May comment on any of the above checklist items or other reflections on performance; perceived strengths, and need for improvement and learning.

---

Clinical Faculty Evaluator/Attending

Resident/Fellow

Clinical Faculty Evaluator/Attending – PRINTED NAME/DATE

Resident/Fellow – PRINTED NAME/DATE