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Screening, Brief Intervention & Referral to Treatment (SBIRT): Applications in Pain Management


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Objectives


Participants will be able to discuss and critically appraise:

- Brief overview of SBIRT as an evidence-based practice in primary care and emergency settings.
- SBIRT CPT and ICD-9 Codes for billable services.
- Review neurobiology of addiction and chronic pain.
- Additional screening and monitoring tools for patients with chronic pain: SOAPP, ORT, PADT, COMM
- Case study of chronic pain patient

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SBIRT Videoclips

- [Steve, 30 yo, CC: insomnia & anxiety](http://www.youtube.com/watch?v=b-ilxvHZJdc&NR=1)
<http://www.youtube.com/watch?v=b-ilxvHZJdc&NR=1>
- [Josh, 21 yo, college student, CC: URI & request for Ambien for sleep](http://www.youtube.com/watch?v=D6Tqal_wXzU&feature=relmfu)
http://www.youtube.com/watch?v=D6Tqal_wXzU&feature=relmfu

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Barriers to CP Management

- Providers concerns of CP patients' misuse or addiction to benzodiazepines (used as muscle relaxants) and opioids (pain).
- Providers limited knowledge of assessment or screening for alcohol or controlled substance abuse.
- Providers limited knowledge of managing risk associated with controlled substance use for pain.

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Definition of Terms

- Misuse
- Abuse
- Addiction
- Diversion
- DAWN
- REMS

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Misuse
"Use of a medication for a medical purpose other than as directed or as indicated, whether willful or unintentional, and whether harm resulted or not."⁴

Abuse
"Any use of an illegal drug, or the intentional self-administration of a medication for a nonmedical purpose such as altering one's mood, state of consciousness, e.g. getting high."⁴


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Addiction

Is a primary, chronic neurobiological disease with genetic, psychosocial and environmental factors that influence its development and manifestations.⁴

(Addiction) is characterized by one or more of the following behaviors:

- Impaired control over drug use,
- Compulsive use,
- Continued use despite harm, and
- Craving

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Diversion

"is the intentional transfer of a controlled substance from legitimate distribution and dispensing channels."⁴

Aberrant Behavior


"dysfunctional activities that indicate possible misuse, abuse, addiction or diversion"⁵ (of a controlled substance).

- Using more Rx than prescribed
- Selling prescriptions
- Losing prescriptions
- Reporting lost prescriptions
- Requesting frequent early refills
- Abusing alcohol or illicit drugs.


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REMS

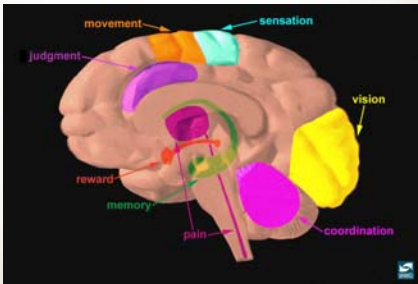
- Risk Evaluation and Mitigation Strategies
- FDA requirement to insure effective post-marketing surveillance of all adverse events, drug-drug interactions, and side-effects.
- No restriction on the range of products they can address.
- FDA medication list requiring REMS
<http://www.fda.gov/Drugs/DrugSafety/PostmarketDrugSafetyInformationforPatientsandProviders/ucm111350.htm>
- Oxycodone – Timed release tablets: REMS
<http://www.fda.gov/downloads/Drugs/DrugSafety/PostmarketDrugSafetyInformationforPatientsandProviders/UCM220990.pdf>

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The Neurobiology of Addiction and Chronic Pain

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Brain Regions & Pathways



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Pathway for Pain Sensation



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Dopamine Neurotransmission & Modulation by Endogenous Opiates

The diagram illustrates the process of dopamine neurotransmission and its modulation by endogenous opiates. It shows a presynaptic terminal where dopamine is synthesized and packaged into vesicles. An uptake pump is shown on the presynaptic membrane, which can transport dopamine back into the terminal. Dopamine is released into the synaptic cleft and binds to dopamine receptors on the postsynaptic membrane. Endogenous opiates, such as endorphin, are also shown binding to opiate receptors on the postsynaptic membrane. The binding of endorphin to its receptor is shown to modulate the dopamine neurotransmission process.

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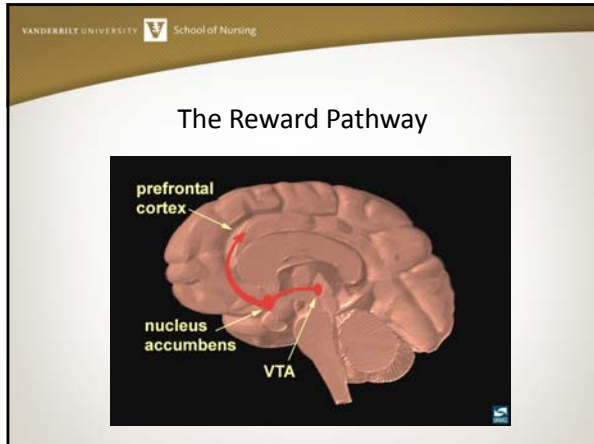
Opiates Binding to Opiate Receptors in the Nucleus Accumbens (Increased DA Release)

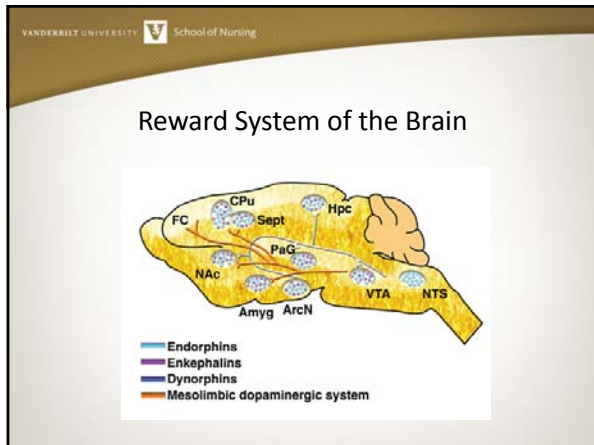
The diagram shows the nucleus accumbens, a region of the brain involved in reward and addiction. It illustrates how opiates, such as morphine, bind to opiate receptors on the postsynaptic membrane. This binding leads to an increase in dopamine (DA) release from the presynaptic terminal.

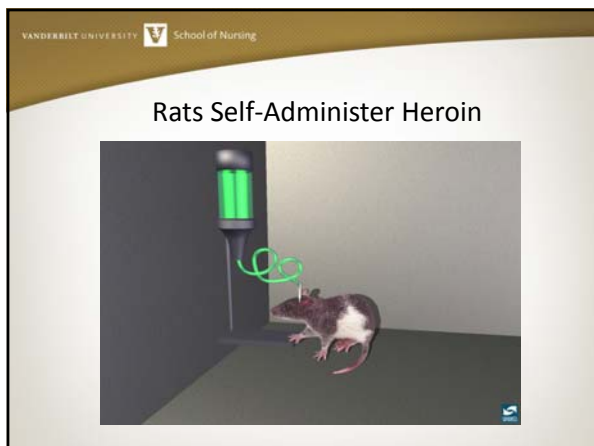
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Localization of Opiate Binding Sites

The diagram shows a cross-section of the brain, highlighting the localization of opiate binding sites. The sites are shown to be concentrated in the nucleus accumbens and the ventral tegmental area (VTA).



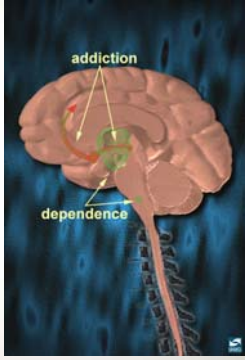




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Brain Mediates Pain

- One can be dependent on morphine for analgesia
- And not addicted
- Though often are dependent & addicted



The diagram shows a sagittal view of the human brain. A green circle highlights a region in the midbrain labeled 'addiction'. A red circle highlights a region in the limbic system labeled 'dependence'.

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Neurobiology of Opioids



- Binds to opioid receptors in brain: μ , δ , and K
- Produces quick, intense feeling of pleasure (euphoria)
- Followed by sense of well-being, calm, drowsiness
- Brain becomes dependent on opioids
- Highly addictive


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Opium-Based Drugs / Synthetic Drugs


Common examples:

- Heroin
- Morphine
- Codeine
- Hydrocodone
- Oxycodone
- Fentanyl

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Opioid Dependence

- Tolerance
- Increasing amounts of time spent drug-seeking
- Interference of drug or drug-seeking behavior with social, occupational, or school functioning
- Continued use of drugs despite social, legal, occupational, or interpersonal problems stemming from drug use
- Desire or efforts made to decrease or stop drug use
- Withdrawal symptoms

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Opioid Withdrawal Symptoms

– General achiness	– Piloerection (goose flesh)
– Fever	– Uncontrollable shivering, tremors
– Sweating	– Bone pain
– Chills	– Restlessness
– Craving	– Rhinorrhea (Tearing eyes, runny nose)
– Diarrhea	– Yawning
– Nausea, vomiting	– Panic
– Sleeplessness	– Irritability
– Abdominal pain	
– Muscle aches	

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Opioid Withdrawal Protocols

When referral for opioid detox is indicated:

NIDA/SAMHSA Short-Term Opioid Withdrawal Using Buprenorphine: Findings and Strategies from Clinical Trials Network
<http://www.nida.nih.gov/blending/shortterm.html>

Mental Health & Addictions Services: Brief Social/Detox Unit
http://www.quadrant.net/cps/pdf/Opioid_Withdrawal_Protocol.pdf

Clinical Opioid Withdrawal Scale (COWS)
www.pcsmmentor.org/pcss/resources_clinicaltools.php

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Who is at risk for opioid dependence / addiction?

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Multivariate Logistic Regressions Predicting Life-time and Current Prescription Opioid Dependence Based on DSM-IV Criteria (n = 705).^a

Predictor variables	Model 1: life-time dependence*			Model 2: current dependence**		
	OR	95% CI	P-value	OR	95% CI	P-value
Less than 65 years old	2.80	1.83–4.28	<0.001	2.33	1.55–3.53	0.001
Pain interferes-life/work	1.94	1.21–3.10	0.010	1.54	0.94–2.50	0.079
History of opioid abuse	3.95	2.39–6.53	<0.001	3.81	2.56–5.67	<0.001
Hx high dependence	3.00	1.58–5.69	0.003	1.85	1.38–2.46	0.001
Opioid orders past 3 yrs + screen antisocial PDO	1.75	1.18–2.58	0.009	-	-	-
Hx major depression	1.44	1.09–1.91	0.015	-	-	-
Current use psych Rx	-	-	-	1.29	1.05–1.60	0.022
	-	-	-	1.73	1.21–2.47	0.006

^aAll results adjusted/weighted for response bias and data clustering. *Area under ROC curve = 0.79; Hosmer-Lemeshow χ^2 = 4.3; P = 0.75. **Area under ROC curve = 0.77; Hosmer-Lemeshow χ^2 test = 13.1; P = 0.11. CI: confidence interval; OR: odds ratio.

Boscarino, JA, et al., (2010). Risk factors for drug dependence among out-patients on opioid therapy in a large U.S. health-care system. *Addiction*, 105, 1776-1782.

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Odds Ratios for Opioid Dependence by Risk Factors among OPTs on Opioid Therapy (Boscarino et al., 2010)

Risk Factor	Odds Ratio
Age	2.33
Age+Pain	3.59
Age+Pain+Depression	4.63
Age+Pain+Depression+Meds	8.01
Age+Pain+Depression+Meds+Screen	14.8
Age+Pain+Depression+Meds+Screen+History	56.36

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Practice Guidelines for Use of Chronic Opioid Therapy for Pain Management

- Balancing Clinical and Risk Management Considerations for Chronic Pain Patients on Opioid Therapy (CME Monograph)
http://www.aafp.org/online/etc/medialib/aafp_org/documents/news_pubs/mono/painmono/chronicpain.Par.0001.File.tmp/painmono.pdf
- Clinical Guidelines for the Use of Chronic Opioid Therapy in Chronic Noncancer Pain.
 (Chou, Fanciullo, Fine et al. Journal of Pain, 2009;10(2):113-130)

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Additional Risk Assessment Tools

- Pain Education Information
<http://www.painedu.org/index.asp>
- SOAPP-R
 Screener and Opioid Assessment for Patients with Pain – Revised⁷
http://www.painedu.org/load_doc.asp?file=SOAPP-R.pdf
- ORT
 Opioid Risk Tool⁸
<http://www.painknowledge.org/physiciantools/ORT/ORT%20Physician%20Form.pdf>

SOAPP-R

The following are some questions given to patients who are on or being considered for medication for their pain. Please answer each question as honestly as possible. There are no right or wrong answers.

	Never	Seldom	Sometimes	Often	Very Often
	0	1	2	3	4
1. How often do you have mood swings?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. How often have you felt a need for higher doses of medication to treat your pain?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. How often have you felt impatient with your doctors?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. How often have you felt that things are just too overwhelming that you can't handle them?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. How often is there tension in the home?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. How often have you counted pain pills to see how many are remaining?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. How often have you been concerned that people will judge you for taking pain medication?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. How often do you feel bored?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. How often have you taken more pain medication than you were supposed to?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. How often have you worried about being left alone?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. How often have you felt a craving for medication?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. How often have others expressed concern over your use of medication?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Scoring for the ORT

Sum of Questions

0 - 3 is Low Risk
 4 - 7 is Moderate Risk
 ≥ 8 is High Risk

No available Sensitivity & Specificity

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PROGRESS NOTE Pain Assessment and Documentation Tool (PADT™)

Patient Name: _____ Room #: _____
 Assessment Date: _____

Current Analgesic Regimen

Drug name	Strength (mg)	Frequency	Maximum Total Daily Dose

The PADT is a patient-oriented instrument that is the outcome of the assessment, and the clinician records the response. The Padt™ instrument of this design and content does not constitute a medical device. It is not intended to be used as a substitute for professional judgment or advice. The National Pain Management Best Practice Guidelines and Evidence Review can be found at the following URL: <http://www.vanderbilt.edu/ort>

Analgesia		Activities of Daily Living	
<p>1. What was your pain level on average during the past week? (Please circle the appropriate number)</p> <p>No Pain: 0 1 2 3 4 5 6 7 8 9 10 Pain as bad as it can be</p>		<p>1. Physical functioning <input type="checkbox"/> Better <input type="checkbox"/> Same <input type="checkbox"/> Worse</p>	
<p>2. What was your pain level at its worst during the past week?</p> <p>No Pain: 0 1 2 3 4 5 6 7 8 9 10 Pain as bad as it can be</p>		<p>2. Family relationships <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>	
<p>3. What percentage of your pain has been relieved during the past week? (Write in a percentage between 0% and 100%)</p> <p>0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%</p>		<p>3. Social relationships <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>	
<p>4. In the amount of pain relief you are now obtaining from your current pain relief(s) enough to make a real difference in your life?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>		<p>4. Mood <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>	
<p>5. Query to clinician: Is the patient's pain relief clinically significant?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unsure</p>		<p>5. Sleep patterns <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>	
<p style="text-align: right;"><small>(Continued on reverse side)</small></p>		<p><small>If the patient is receiving this or has had PADT assessment, the clinician should complete the patient's functional status with other reports from the last 24 hours.</small></p>	

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PROGRESS NOTE Pain Assessment and Documentation Tool (PADT™)

Adverse Events

1. In your assessment, are you observing any side effects from current pain relief(s)? No Yes

Ask patient about potential side effects:

	None	Mild	Moderate	Severe
a. Nausea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Vomiting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Constipation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Itching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Pruritus/itchiness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Sweating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Fatigue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Drowsiness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Patient's overall severity of side effects?
 None Mild Moderate Severe

Potential Aberrant Drug-Related Behavior
 This section must be completed by the clinician.
 Please check any of the following items that you document during your assessment with the patient. Please note that the presence of any of these items does not indicate that the patient is abusing or misusing the medication, but rather that the clinician should be alert for potential abuse.

- Psychological assessment
- Negative mood change
- Anxiety increased
- Increasing tolerance or required
- Insomnia or not an effective
- Requests frequent early refills
- Increased dose without authorization
- Requests less or no other prescriptions
- Attempts to obtain prescriptions from other doctors
- Change route of administration
- Uses pain medication in response to situational response
- Uses on certain medications by name
- Contact with other drug culture
- Allowing alcohol or other drugs
- Handling the packaging of medication
- Arrived by police
- Victim of abuse
- Other: _____

Assessment: (This section must be completed by the clinician)
 In your overall impression, does the patient's benefits (eg. benefits, such as pain relief, outweigh side effects) from current therapy? Yes No Unsure

Comments: _____


Specific Analgesic Plan

- Continue present regimen
- Adjust dose of present regimen
- Switch analgesic
- Add/adjust concomitant therapy
- Discontinue/adjust opioid therapy

Comments: _____

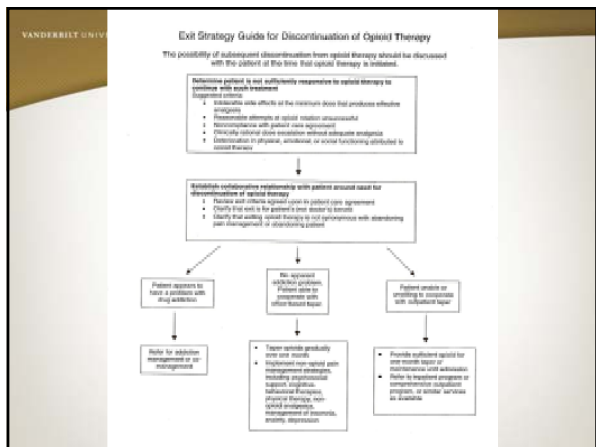
Date: _____ Physician's Signature: _____


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Exit Strategy Guide for Discontinuation of Opioid Therapy


http://www.painknowledge.org/physiciantools/opioid_toolkit/components/Exit_Strategy.pdf



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Mike

- 38 y/o MWM construction supervisor who sustained crushing injury to lower back on the job in 2007.
- Spinal fusion of L1-L4 within 2 months of injury left him with residual chronic pain, inability to return to his former employment role, depression, strained marital and family relations.
- Changed medical providers 6 times since injury trying to find “someone with an answer to my back pain.”
- Pending workman’s compensation hearing for final settlement.

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You are Mike's new PCP
or asked by PCP for Psych NP consult:

- What other information do you want?
- What lab tests would you order?
- What screening tools would you use?
- What treatment goals do you explore with Mike?

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Additional Information


- Current meds:
 - Fentanyl patch 75 mcg/hr every 3 days
 - Cymbalta 60 mg every morning
- Urine drug screen:
 - Positive for opioids, marijuana, ETOH

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Complementary & Alternative Interventions


National Center for Complementary & Alternative Medicine
<http://nccam.nih.gov/>
<http://nccam.nih.gov/health/pain/chronic.htm>

NCCAM Site reviews the latest research on efficacy of various CAM interventions that demonstrate efficacy.

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General Practice Guidelines for Chronic Pain Management

- Practice Guidelines for Chronic Pain Management (*Anesthesiology*, 2010;112(4):1-24)
Link to pdf from this webpage:
<http://nccam.nih.gov/health/providers/digest/chronicpain.htm>
- Diagnosis & Treatment of Low Back Pain (*Annals of Internal Medicine*, 2007;147(7):478-491)
<http://www.annals.org/content/147/7/478.full.pdf+html>
- Pain Management Task Force Final Report (*Office of The Army Surgeon General, 2010*)
http://www.armymedicine.army.mil/reports/Pain_Management_Task_Force.pdf

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Key Points

- Risk factors for opioid / substance abuse in chronic pain patients
- Modify basic SBIRT screen for chronic pain patients
- Add the SOAPP-R, ORT, PADT, COMM when indicated
- Consult & collaborate with addiction specialist when needed (e.g. Opioid Detox)

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