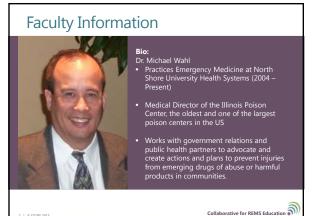
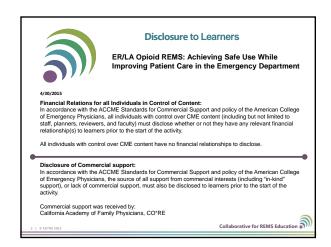
ER/LA OPIOID REMS:
Achieving Safe Use While Improving Patient Care in the
Emergency Department
Presented by CO*RE Collaboration for REMS Education www.core-rems.org





1 Stephen Anderson, 12/22/2014

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Collaborative for REMS Education

On July 9, 2012, the Food and Drug Administration (FDA) approved a Risk Evaluation and Mitigation Strategy (REMS) for extendedrelease (ER) and longacting (LA) opioid medications.

Founded in June, 2010, the Collaborative on REMS Education (CO*RE), a multi disciplinary team of 10 partners and 3 cooperating organizations, has designed a core curriculum based on needs assessment, practice gaps, clinical competencies, and learner self-assessment to meet the requirements of the FDA REMS Blueprint.

* Further tailoring of presentation by ACEP to maximize relevance

www.core-rems.org



Founding Partners

- American Pain Society (APS)
- · American Academy of Hospice and Palliative Medicine (AAHPM)
- American Association of Nurse Practitioners (AANP)
- American Academy of Physician Assistants (AAPA)
- American Osteopathic Association (AOA)
- American Society of Addiction Medicine (ASAM)
- California Academy of Family Physicians (CAFP)
- ♦ Healthcare Performance Consulting (HPC)
- Interstate Postgraduate Medical Association (IPMA)

Strategic Partners

- Physicians Institute for Excellence in Medicine which coordinates 15 state medical societies
- ◆ Medscape
- American Academy of Family Physicians
- American College of Emergency Physicians (New in 2015)

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llaborative for REMS Education	-11

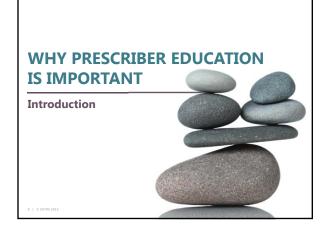
Content Development/Planner/Reviewer/Staff Disclosures

The following individuals disclose no relevant financial relationships:

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Cynthia Singh, MS	Director of Grant and Foundation Development , Emergency Medicine Foundation
Michael Wahl, MD	Director/Medical Director Illinois Poison Center, Senior Clinical Educator, University of Chicago

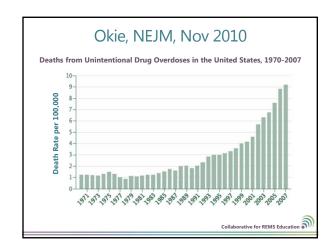
Acknowledgement Presented by The American College of Emergency Physicians, a member of the Collaborative on REMS Education (CO*RE), 13 interdisciplinary organizations working together to improve pain management and prevent adverse outcomes. This educational activity is supported by an independent educational grant from the ER/LA Opioid Analgesics REMS Program Companies. Please see http://ce.er-laopioidREMS.com/lwgCEUI/rems/pdf/List_of_RPC_Companie s.pdf for a listing of the member companies. Funding for this education was mandated by the FDA. This activity is intended to be fully compliant with the ER/LA Opioid Analgesics REMS education requirements issued by the U.S. Food & Drug Administration.

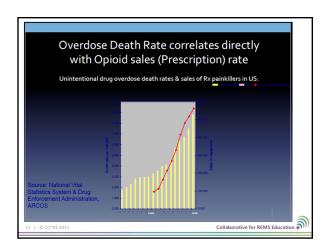
Products Covered by this REMS Generic Products • Avinza® morphine sulfate ER capsules Fentanyl ER transdermal Butrans® buprenorphine transdermal system Methadone hydrochloride tablets Dolophine® methadone hydrochloride tablets Duragesic® fentanyl transdermal system *Embeda® morphine sulfate/naltrexone ER capsules Methadone hydrochloride oral concentrate Exalgo® hydromorphone hydrochloride ER tablets Kadian® morphine sulfate ER capsules Methadone hydrochloride oral solution \bullet Methadose $^{\text{TM}}$ methadone hydrochloride tablets Morphine sulfate ER tablets • MS Contin® morphine sulfate CR tablets Nucynta® ER tapentadol ER tablets Morphine sulfate Opana® ER oxymorphone hydrochloride ER tablets OxyContin® oxycodone hydrochloride CR tablets Oxycodone hydrochloride ER tablets • †Palladone® hydromorphone hydrochloride ER capsules Targiniq[™] oxycodone hydrochloride/naloxone hydrochloride ER tablets Zohydro® hydrocodone bitartrate ER capsules

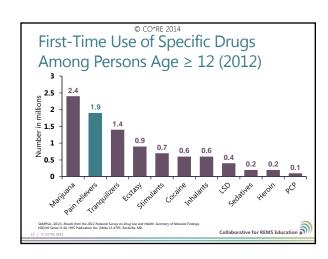


Opioid Misuse/Abuse is a Major Public Health Problem Improper use of any opioid can result in serious AEs including overdose & death This risk can be greater w/ ER/LA opioids ER opioid dosage units contain more opioid than IR formulations In 2012 37 million Americans age ≥12 had used an opioid for nonmedical use some time in their life In 2012 1 M88,004 ED visits involved nonmedical use of opioids - Methadone involved in 30% of prescription opioid deuris - Methadone involved in 30% of prescription

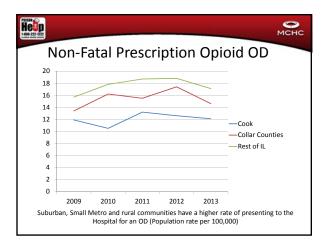
41,340 Americans DIED FROM DRUG POISONINGS
Nearly 17,000 deaths involved prescription opioids
For every I death there are:
32 ED visits for misuse or abuse
130 people who abuse or are addicted
825 nonmedical users
Stochess (St.), et al distinct Vall Dissorting Report \$211.00.1.11 (Ct.) vide Sign. Procycline Problem Commission for an of board of contribution or a quantification or provides \$221.5. Shower M, et al. Dougs pulsaring inferent in biolizer \$150, et al. \$150, other \$150, et al.

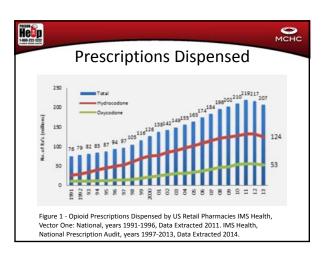






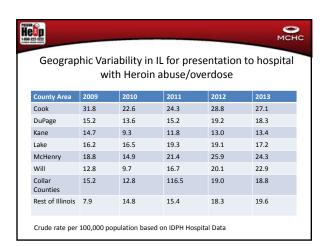
Geographic Variability in IL for presentation to hospital with prescription opioid abuse/overdose							
County Area	2009	2010	2011	2012	2013		
Cook	11.9	10.5	13.2	12.6	12.1		
DuPage	11.7	15.7	15.7	16.4	13.6		
Kane	14.4	13.6	13.0	13.0	9.9		
Lake	11.9	14.9	13.9	19.9	16.6		
McHenry	15.5	17.2	20.7	22.0	20.7		
Will	15.6	19.6	16.5	17.6	14.8		
Collar Counties	13.4	16.2	15.5	17.4	14.6		
Rest of Illinois	15.7	17.8	18.7	18.8	17.1		
Crude rate per	100,000 po	oulation based	on IDPH Hospit	al Data			

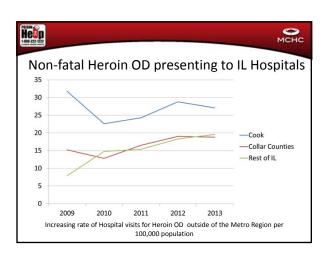




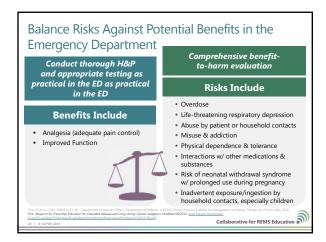


- Heroin is less expensive than pain medication
- CDC Estimates that 80% of new heroin users transitioned from Prescription Pain Medications
- So what is happening with heroin abuse?
- Where is its growth?





	1
Learning Objectives	
Describe appropriate patient assessment for treatment with ER/LA opioid analgesics, evaluating risks and potential benefits of ER/LA therapy, as well as possible misuse.	
Apply proper methods to initiate therapy, modify dose, and discontinue use of ER/LA opioid analgesics, applying best practices including accurate dosing and conversion techniques, as well as appropriate discontinuation strategies.	
Demonstrate accurate knowledge about how to manage ongoing therapy with ER/LA opioid analgesics and properly use evidence-based tools while assessing for adverse effects.	
Employ methods to counsel patients and caregivers about the safe use of ER/LA opioid analgesics, including proper storage and disposal.	
Review/assess general and product-specific drug information concerning ER/LA opioid analgesics and identifying potential adverse effects of ER/LA opioids.	
22 C COI ME 2015 Collaborative for REMS Education	
Misuse, abuse, divergence and overdose of ER/LA opioids is a major	
public health crisis in the Emergency Department .	
YOU and YOUR TEAM can have an	
immediate and positive impact on this	
crisis while also caring for your patients appropriately.	
23 0 CO-46 2013 Collaborative for REMS Education	
ASSESSING PATIENTS FOR	
TREATMENT WITH ER/LA OPIOID ANALGESIC THERAPY	
Unit 1	



Adequately **DOCUMENT** all patient interactions, assessments, test results, & treatment plans

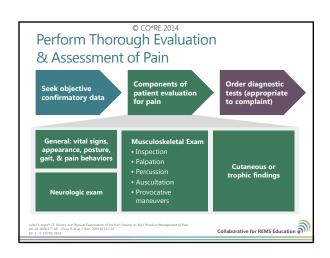
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Collaborative for REMS Education

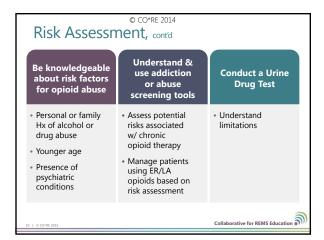
Clinical Inte	© CO*RE erview: Pat	zient Medic	al History						
Illness relevant to (1) effects or (2) metabolism of opioids									
	Pulmonary disease, constipation, nausea, cognitive impairment Hepatic, renal disease								
Illness possibl	Illness possibly linked to substance abuse, e.g.:								
Hepatitis	HIV	Tuberculosis	Cellulitis						
STIs	Trauma, burns	Cardiac disease	Pulmonary disease						
Chou R, et al. J Pain: 2009;10:113-30. Zacharoff Newton, MA: Inflixion, Inc., 2010. Department or Guideline for Monogement of Opioid Therapy for C 27 © CO*RE 2015	f Veterans Affairs, Department of Defense.	VA/DoD Clinical Practice	porative for REMS Education						

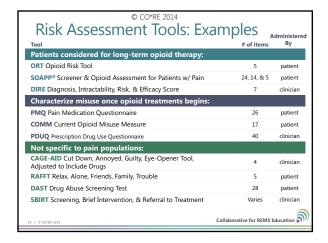


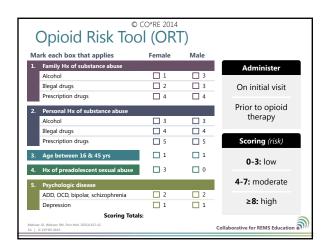


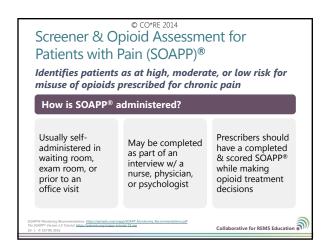


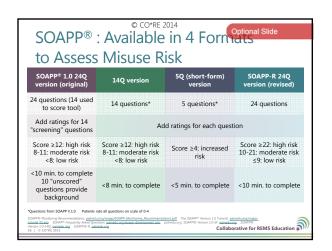
© CO*RE 2014 Assess Risk of Abuse, Including Substance Use & Psychiatric Hx: As Practical in Emergency Setting Obtain a complete Hx of current & past substance use • Prescription drugs Social history also • Illegal substances relevant • Alcohol & tobacco Substance abuse Hx does not prohibit treatment w/ ER/LA opioids but may Employment, cultural require additional monitoring & expert consultation/referral background, social network, marital history, • Family Hx of substance abuse & psychiatric disorders legal history, & other behavioral patterns • Hx of sexual abuse Collaborative for REMS Education





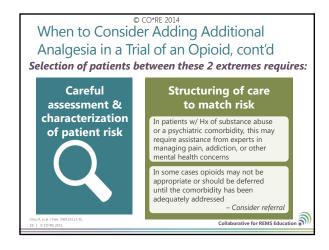






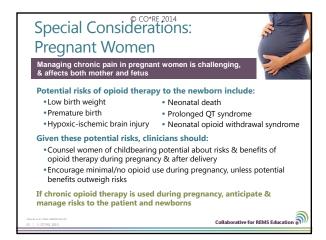




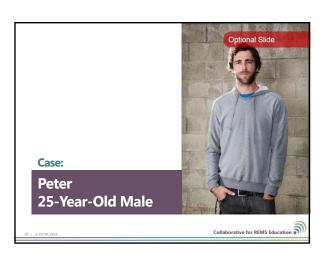


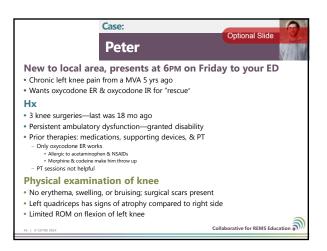


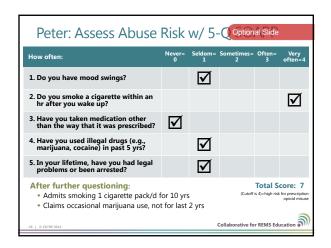


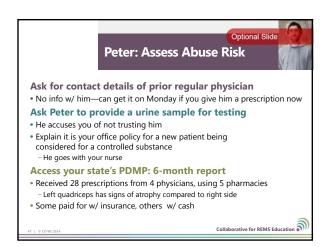


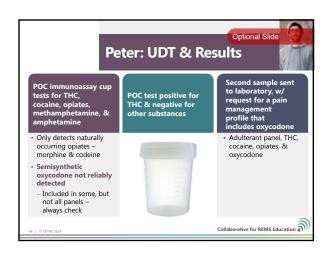


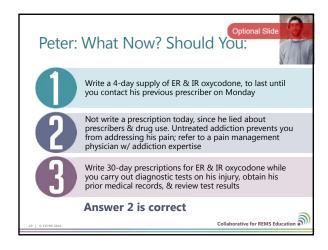




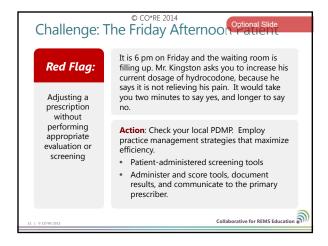


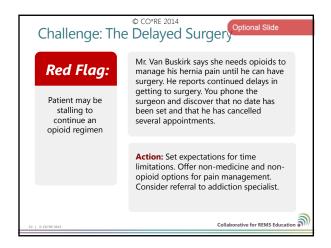












Unit 1 ○ CO*RE 2014

Pearls for Practice

• Document EVERYTHING

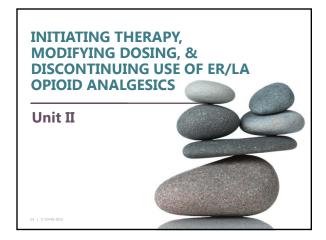
• Conduct a Comprehensive H&P

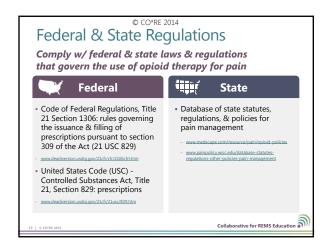
- General and pain-specific

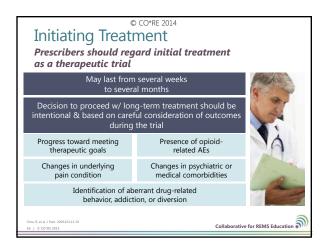
• Assess Risk of Abuse

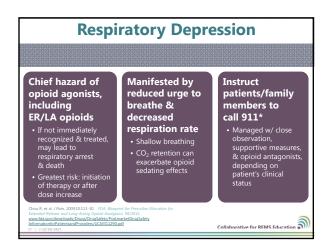
• Compare Risks with Expected Benefits

• Determine whether appropriate additions or change in Tx is in order, in consultation with managing prescribers









© CO*RE 2014 ER/LA Opioid-Induced Respiratory Depression

More likely to occur

- In elderly, cachectic, or debilitated patients
- Contraindicated in patients w/ respiratory depression or conditions that increase risk
- If given concomitantly w/ other drugs that depress respiration

Reduce risk

- Proper dosing & titration are
- Do not overestimate dose when converting dosage from another opioid product
- Can result in fatal overdose w/ first dose
- Instruct patients to swallow tablets/capsules whole
- Dose from cut, crushed, dissolved, or chewed tablets/capsules may be fatal, particularly in opioid-naïve individuals

Initiating & Titrating: **Opioid-Naïve Patients**

Drug & dose selection is critical

Some ER/LA opioids or dosage forms are only recommended for

opioid-tolerant patients

- ANY strength of transdermal fentanyl or hydromorphone ER
- Certain strengths/doses of other ER/LA products (check drug PI)

Monitor patients closely for respiratory depression

Especially within 24-72 h of initiating therapy & increasing dosage

Individualize dosage by titration based on efficacy, tolerability, & presence of AEs Check ER/LA opioid

product PI for minimum titration intervals

Supplement w/ IR analgesics (opioids & nonopioid) if pain is not controlled during titration

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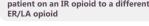
Initiating: Opioid-Tolerant Patients

If opioid tolerant -

no restrictions on which products can be used

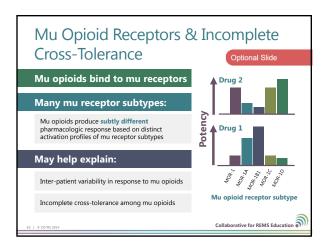
Patients considered opioid tolerant are taking at least

- 60 mg oral morphine/day
- 25 mcg transdermal fentanyl/hr
- 30 mg oral oxycodone/day
- 8 mg oral hydromorphone/day
- 25 mg oral oxymorphone/day An equianalgesic dose of another opioid
- Still requires caution when rotating a patient on an IR opioid to a different

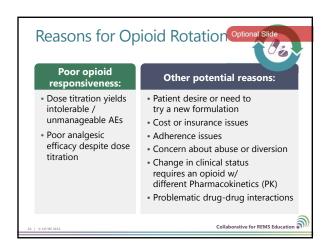


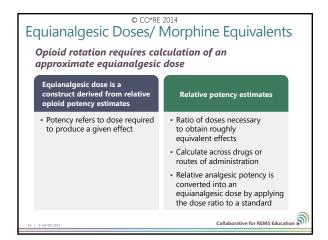


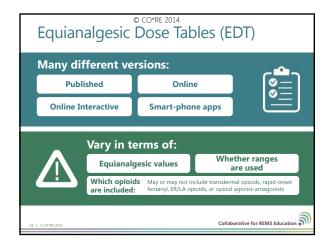
Opioid Rotation Definition: Change from an existing opioid regimen to another opioid w/ the goal of improving therapeutic outcomes or to avoid AEs attributed to the existing drug, e.g., myoclonus Rationale: Differences in pharmacologic or other effects make it likely that a switch will improve outcomes • Effectiveness & AEs of different mu opioids vary among patients • Patients show incomplete cross-tolerance to new opioid — Patient tolerant to 1st opioid can have improved analgesia from 2nd opioid at a dose lower than calculated from an EDT

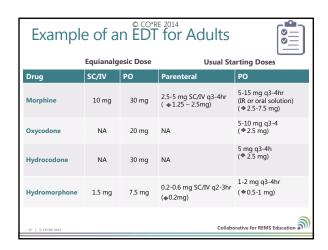


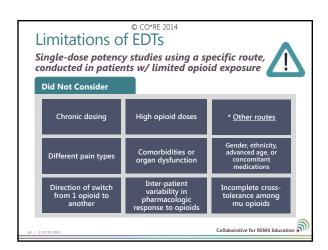




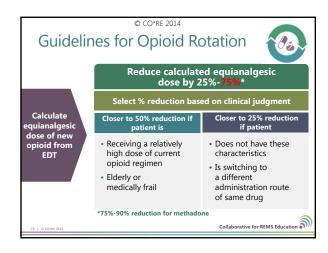






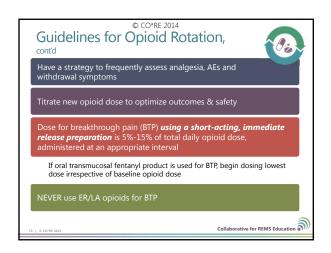


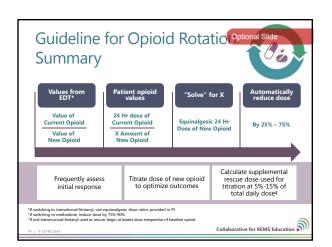
© CO*RE 2 Utilizing Equianalge	 -		
Incomplete cross-toleran variability require use of when converting from o Equianalgesic dose a starting point i	conservative dosing ne opioid to another		
Intended as General Guide			
Calculated dose of new drug based on EDT must be reduced, then titrate the new opioid as needed	Closely follow patients during periods of dose adjustments		
Follow conversion instructions in indiv	idual ER/LA opioid PI, when provided		
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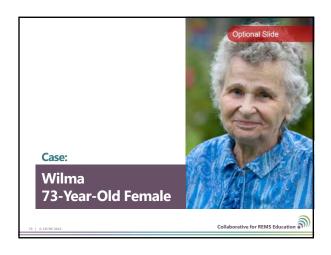
Guidelines for Opioid Rotation, cont'd If switching to methadone: • Reduce calculated equianalgesic dose by 75%-90% • For patients on very high opioid doses (e.g., ≥1,000 mg morphine equivalents/d), be cautious converting to methadone ≥100 mg/d - Consider inpatient monitoring, including serial EKG monitoring If switching to transdermal: • Fentanyl, calculate dose conversion based on equianalgesic dose ratios included in the PI • Buprenorphine, follow instructions in the PI

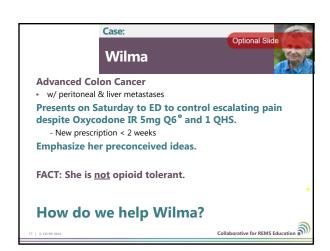
Guidelines for Opioid Rotation, cont'd If switching to methadone: Standard EDTs are less helpful in opioid rotation to methadone In opioid tolerant patients, methadone doses should not exceed 30-40 mg/day upon rotation. Consider inpatient monitoring, including serial EKG monitoring In opioid-naïve patients, methadone should not be given as an initial drug If switching to transdermal: Fentanyl, calculate dose conversion based on equianalgesic dose ratios included in the Package Insert (PI) Buprenorphine, follow instructions in the PI

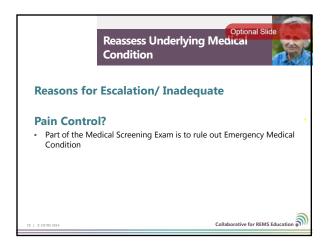


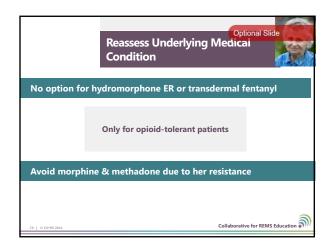


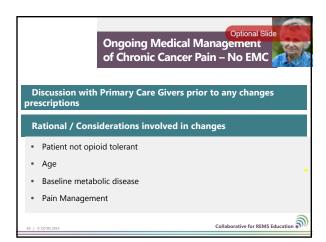
_	Breakthrough Pain in Chronic Pain Patients					
Patients on stable ATC opioids may experience BTP	Therapies	Consider adding				
Disease progression or a new or unrelated pain	Directed at cause of BTP or precipitating factors Nonspecific symptomatic therapies to lessen impact of BTP	PRN IR opioid trial based on analysis of benefit versus risk Risk for aberant drug-related behaviors High-risk: only in conjunction w/ frequent monitoring & follow-up - Low-risk: w/ routine follow-up & monitoring Nonopioid drug therapies Nonpharmacologic treatments				
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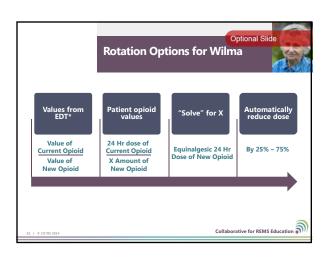


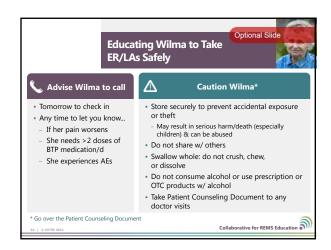


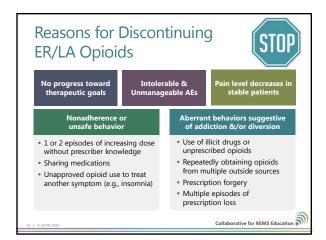


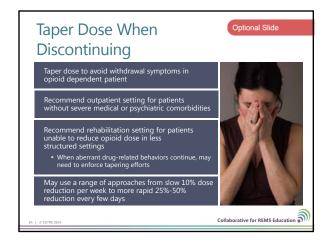


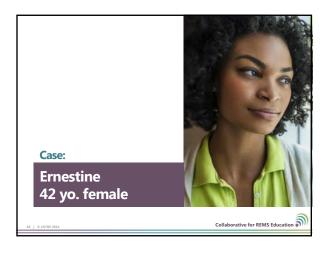












Case:

Ernestine

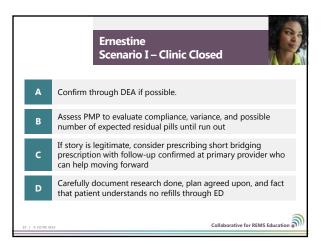
42 yo. female with severe Rheumatoid Arthritis followed through local pain clinic for 2 years with escalating Opiate requirements.

Presently on Oxycodone ER 20mg Q12 and Hydrocodone 5mg Q6 prn breakthrough pain.

Presents Saturday at 2pm because:

Scenario I – Local clinic closed by DEA secondary to violation of State Pill Mill Regulations.

Scenario II – Fired from pain clinic on Friday because of UDT (+) FOR Methadone & Methamphetamine in violation of pain contract.



	Ernestine Scenario II – Violation of contract
А	Provider is not the villain. Stick to rules, and understand violation of contract has consequences. Contact prior provider as needed
В	Explore alternatives to ease symptoms of withdrawal:
	I. NSAID I. Clonidine patch for Blood pressure swings II. Anti-emetics II. Muscle relaxant (non-restricted) III. Anti-histamines IV. Other
С	Look for inpatient detoxification programs at patients request
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Pearls for Practice

Treat Initiation of Opioids as a Therapeutic Trial

Anticipate ER/LA Opioid-Induced Respiratory Depression

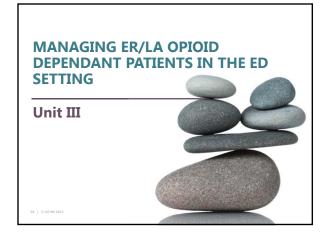
It can be immediately life-threatening

Be Conservative and Thoughtful In Dosing

When initiating, titrating, and rotating opioids

First calculate equinalgesic dose, then reduce dose appropriately

Discontinue ER/LA opioids slowly and safely



Before initiating a trial of opioid analgesic therapy, confirm patient understanding of informed consent to establish: Analgesic & functional goals of treatment Expectations Potential risks Alternatives to opioids Alternatives to opioids Discrete and provided analgesic therapy, confirm patient understanding of informed consent to establish: The potential for & how to manage: • Common opioid-related AEs (e.g., constipation, nausea, sedation) • Other serious risks (e.g., abuse, addiction, respiratory depression, overdose) • AEs after long-term or high-dose opioid therapy (e.g., hyperalgesia, endocrinologic or sexual dysfunction)

Patient-Prescriber Agreement (PPA)

Document signed by both patient & prescriber at time an opioid is prescribed

Clarify treatment plan & goals of treatment w/ patient, patient's family, & other clinicians involved in patient's care

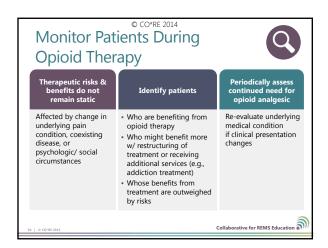
Assist in patient education

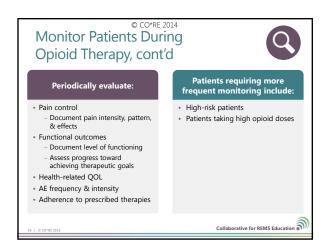
Inform patients about the risks & benefits

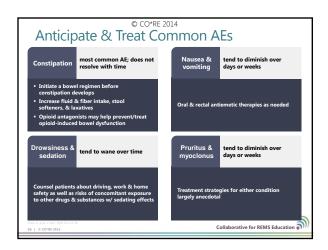
Document patient & prescriber responsibilities

© CO*RE 2014 Consider a PPA Reinforce expectations for appropriate & safe opioid use Obtain opioids from a • Commitments to return for single prescriber follow-up visits • Fill opioid prescriptions at a designated pharmacy Comply w/ appropriate monitoring - E.g., random UDT & pill counts Safeguard opioids Do not store in medicine · Frequency of prescriptions cabinet · Enumerate behaviors that Keep locked (e.g., use a may lead to opioid medication safe) discontinuation Do not share or sell • An exit strategy • Appropriate indications to go • Instructions for disposal when to the emergency department no longer needed

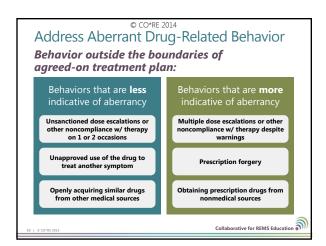
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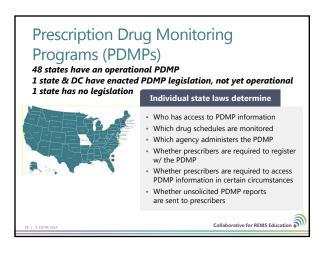






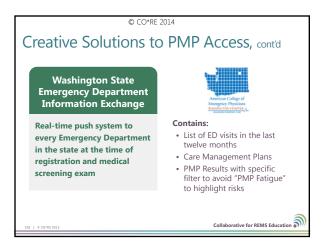
Monitor Adherence and Aberrant Behavior Routinely monitor patient adherence to treatment plan Recognize & document aberrant drug-related behavior In addition to patient self-report also use: State PDMPs, where available UDT Positive for nonprescribed drugs Positive for illicit substance Negative for prescribed opioid Family member or caregiver interviews Monitoring tools such as the COMM, PADT, PMQ, or PDUQ Medication reconciliation (e.g., pill counts)





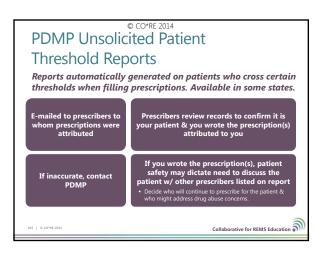
© CO*RE 2014 **PDMP Benefits** Record of a patient's **Provide warnings of** controlled substance potential misuse/abuse prescriptions • Existing prescriptions not reported by patient • Some are available online 24/7 Opportunity to discuss Multiple w/ patient prescribers/pharmacies • Drugs that increase overdose risk when taken together Patient pays for drugs of abuse w/ cash Prescribers can check their own prescribing Hx

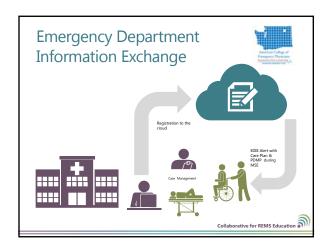
Creative Solutions to PMP Access Record of a patient's Provide warnings of controlled substance potential misuse/abuse prescriptions • Some are available online 24/7 Existing prescriptions not reported by patient Opportunity to discuss Multiple w/ patient prescribers/pharmacies • Drugs that increase overdose risk when taken together Patient pays for drugs of abuse w/ cash Prescribers can check their own prescribing Hx

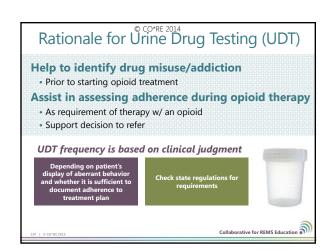


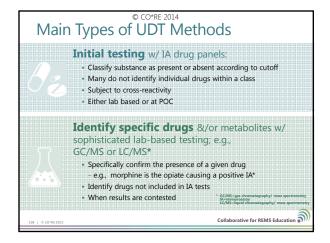
		Si	ina	le P	rovide	r			
Date	Rx II	Drug Name and strength					Patient Name	Data of Dieth	Bau Course
1/14/2014	1234567	Oxycontin 30mg	60	30	Pharmacy A		Test Patient	12/1/1800	Work Com
1/14/2014	1234568	Alprazolam 1mg	90	30			Test Patient	12/1/1800	Work Com
1/14/2014	1234569		30	30	Pharmacy A		Test Patient	12/1/1800	Work Com
2/12/2014	2345671	Oxycontin 30mg	60	30	Pharmacy A		Test Patient	12/1/1800	Work Com
2/12/2014	1234568		90	30	Pharmacy A		Test Patient	12/1/1800	Work Com
2/12/2014	1234569	Zolpiodem 10mg	30	30	Pharmacy A		Test Patient	12/1/1800	Work Com
3/13/2014	3456712		90	30	Pharmacy A		Test Patient	12/1/1800	Work Com
3/13/2014	1234568	Alprazolam 1mg	90	30	Pharmacy A		Test Patient	12/1/1800	Work Com
3/13/2014	1234569	Zolpiodem 10mg	30	30	Pharmacy A		Test Patient	12/1/1800	Work Com
4/11/2014	4567123	Oxycontin 30mg	90	30	Pharmacy A		Test Patient	12/1/1800	Work Com
4/11/2014	4567124	Oxycodone 5mg	120	30	Pharmacy A		Test Patient	12/1/1800	Work Com
4/11/2014	1234568	Alprazolam 1mg	90	30	Pharmacy A		Test Patient	12/1/1800	Work Com
4/11/2014	1234569	Zolpiodem 10mg	30	30	Pharmacy A		Test Patient	12/1/1800	Work Com
5/8/2014	5671234		90	30	Pharmacy A		Test Patient	12/1/1800	Work Com
5/8/2014	5671235		120	30	Pharmacy A		Test Patient	12/1/1800	Work Com
5/8/2014	1234568	Alprazolam 1mg	90	30	Pharmacy A		Test Patient	12/1/1800	Work Com
5/8/2014	1234569		30	30	Pharmacy A		Test Patient	12/1/1800	Work Com
6/6/2014	6712345	Oxycontin 40mg	60	30	Pharmacy A		Test Patient	12/1/1800	Work Com
6/6/2014	6712346	Oxycodone 10mg	90	30	Pharmacy A		Test Patient	12/1/1800	Work Com
6/6/2014	1234568	Alprazolam 1mg	90	30	Pharmacy A		Test Patient	12/1/1800	Work Com
6/6/2014	1234569		30	30	Pharmacy A		Test Patient	12/1/1800	Work Com

		B.4I	41	L. D					
Multiple Providers									
Date	Rx #	Drug Name and strength	Quantity	Days Supply	Dispensing Pharmacy	Prescriber	Patient Name	DOB	Pay Source
1/5/2014	1234567	Morphine ER 30mg	60	30	Pharmacy A	Prescriber A	Test Patient	10/1/1700	Medicaid
1/5/2014	1234568	Lorazepam 1mg	60	30	Pharmacy A	Prescriber A	Test Patient	10/1/1700	Medicaid
2/1/2014	9876543	Morphine ER 30mg	90	30	Pharmacy B	Prescriber B	Test Patient	10/1/1700	Medicald
2/1/2014	9876544	Alprazolam 2mg	60	30	Pharmacy B	Prescriber B	Test Patient	10/1/1700	Medicaid
2/28/2014	6543217	Kaidan 20mg	60	30	Pharmacy C	Prescriber C	Test Patient	10/1/1700	Medicald
2/28/2014	6543218	Alprazolam 2mg	90	30	Pharmacy C	Prescriber C	Test Patient	10/1/1700	Medicald
2/28/2014	6543219	Temazepam 30mg	30	30	Pharmacy C	Prescriber C	Test Patient	10/1/1700	Medicaio
3/25/2014	9518473	Oxymorphone 30mg	90	30	Pharmacy A	Prescriber D	Test Patient	10/1/1700	Medicaio
3/25/2014	1234568	Lorazepam 1mg	60	30	Pharmacy A	Prescriber A	Test Patient	10/1/1700	Medicaid
3/27/2014	6543219	Temazepam 30mg	30	30	Pharmacy C	Prescriber C	Test Patient	10/1/1700	Medicaid
4/19/2014	13456798	Hydromorphone 8mg ER	90	30	Pharmacy B	Prescriber E	Test Patient	10/1/1700	Medicaid
4/19/2014	13456799	Alprazolam 2mg	90	30	Pharmacy B	Prescriber E	Test Patient	10/1/1700	Medicaid
4/19/2014	13456800	Zolpidem10mg	30	30	Pharmacy B	Prescriber E	Test Patient	10/1/1700	Medicaid
5/15/2014	14567983	Hydromorphone 8mg ER	90	30	Pharmacy B	Prescriber E	Test Patient	10/1/1700	Medicaid
5/15/2014	13456799	Alprazolam 2mg	90	30	Pharmacy B	Prescriber E	Test Patient	10/1/1700	Medicaid
5/15/2014	13456800	Zolpidem10mg	30	30	Pharmacy B	Prescriber E	Test Patient	10/1/1700	Medicaid
5/17/2014	6543219	Temazepam 30mg	30	30	Pharmacy C	Prescriber C	Test Patient	10/1/1700	Cash
6/14/2014	15679834	Oxycontin 20mg	60	30	Pharmacy B	Prescriber B	Test Patient	10/1/1700	Medicaid
6/14/2014	15679835	Oxycodone 10mg	120	30	Pharmacy B	Prescriber B	Test Patient	10/1/1700	Medicaid
6/14/2014	15679836	Lorazepam 2mg	60	30	Pharmacy B	Prescriber 8	Test Patient	10/1/1700	Medicaio
6/14/2014	6543219	Temazepam 30mg	30	30	Pharmacy C	Prescriber C	Test Patient	10/1/1700	Cash









Detecting Opioids by UDT

Most common opiate IA drug panels

- Detect "opiates" morphine & codeine, but doesn't distinguish
- Do not reliably detect semisynthetic opioids
- Specific IA panels can be ordered for some
- Do not detect synthetic opioids (e.g., methadone, fentanyl)
 - Only a specifically directed IA panel will detect synthetics

GC/MS or LC/MS will identify specific opioids

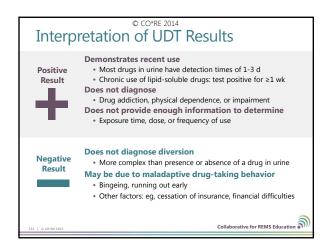
- Confirm presence of a drug causing a positive IA
- Identify opioids not included in IA drug panels, including semisynthetic & synthetic opioids
- Identify opioids not included in IA drug panels, including semisynthetic & synthetic opioids

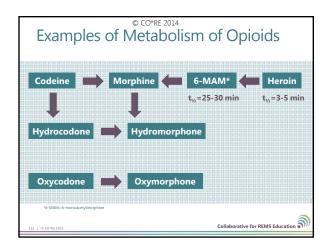
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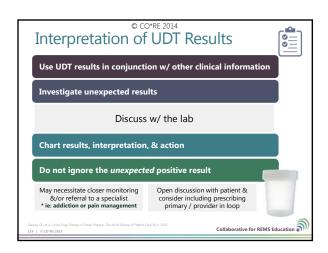
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Specific Windows of Drug Detection How long a person excretes drug &/or metabolite(s) at a concentration above a cutoff **Detection time of drugs in urine** Governed by Chronic use of various factors; lipid-soluble e.g., dose, drugs increases route of For most drugs detection time; administration, it is 1-3 days e.g., marijuana, metabolism, fat diazepam, ketamine solubility, urine volume, & pH

Specific Windows of Drug Dete Optional Slide Drug in urine Amphetamines ≤3 d THC (depending on grade & frequency of use) 1-3 d - Single use < 30 dBenzoylecgonine after cocaine use 2-4 d Opiates (morphine, codeine) 2-3 d Methadone ≤3 d EDDP (methadone metabolite) Days to wks Benzodiazepines (depending on drug & dose) EDDP=2-ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine

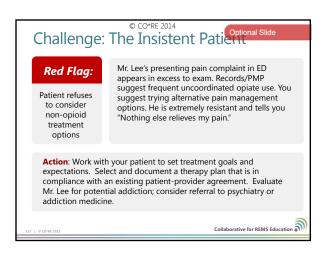


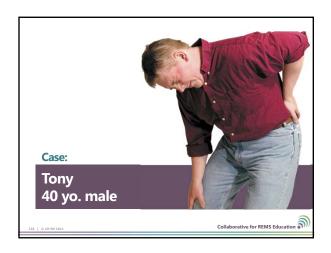


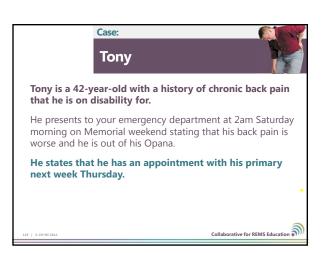


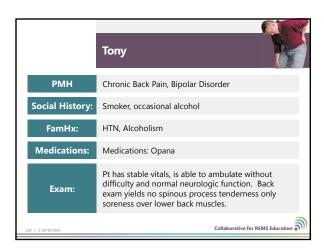


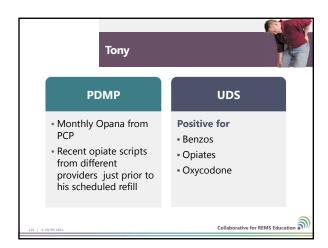


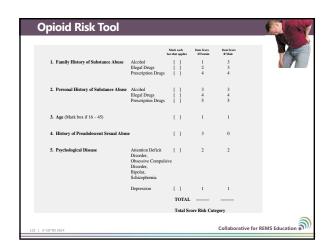


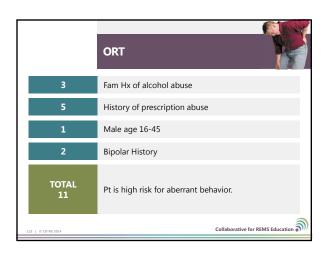












Case: **How to Proceed?** It's a busy holiday weekend and writing him a script for 10 pills should get him out of your hair quickly. Say no to Opana and offer NSAIDs and muscle relaxant and discharge. **Contact primary prescriber to discuss** case. Discuss the treatment option with pt which will include NSAID, Muscle relaxant, Gabapentin. Case: **How to Proceed?** It's a busy holiday weekend and writing him a script for 10 pills should get him out of your hair quickly. Say no to Opana and offer NSAIDs and muscle relaxant and discharge. CORRECT Contact primary prescriber to discuss case. Discuss the treatment option with pt which will include NSAID, Muscle relaxant, Gabapentin. Case: **Escalating Patient** Tony states "I'll either be back tomorrow, in withdrawal, or I'll just have to go back to heroin, and neither of us want me to do that!" You discuss with pt his PDMP results and talk about his contract with his PCP. Pt's escalating behavior makes him the highest risk patient.

Be clear on the rules and threats don't change the rules. Reemphasize his contract with his PCP and that you will not violate the contract. 2 Emphasize that you care and that you are listening. 3 Offer medications to help with withdrawal symptoms such as: clonidine patch, muscle relaxant, anti-nausea & anti-diarrheal meds, dicyclomine, anti-histamines. 4 Offer referral to substance abuse program or see if patient qualifies for inpatient help as pt desires

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Pearls for Practice

Anticipate and Treat Common Adverse Effects

Use Informed Consent and refer to Patient Provider Agreements

Use UDT and PDMP as Valuable Sources of Data About your Patient

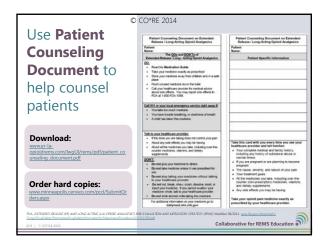
However, know their limitations

Assess for Patient Adherence, Side Effects, Aberrant Behaviors, and Clinical Outcomes

Refer Appropriately if Necessary

Coordinate ED management with Primary Prescribing Provider





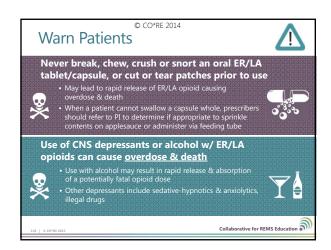
Counsel Patients About Proper Use Instruct patients/ Explain caregivers to • Read the ER/LA opioid Product-specific information about the prescribed ER/LA opioid **Medication Guide** received from pharmacy • How to take the ER/LA opioid as every time an ER/LA prescribed opioid is dispensed • Importance of adherence to At every medical dosing regimen, handling missed doses, & contacting appointment explain all medications they take their prescriber if pain cannot be controlled Collaborative for REMS Education

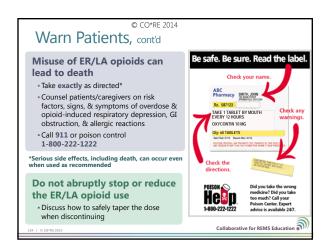
Counsel Patients About Proper Use, cont'd

Counsel patients/caregivers:

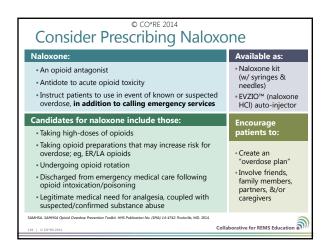
On the most common AEs of ER/LA opioids
About the risk of falls, working w/ heavy machinery, & driving
Call the prescriber for advice about managing AEs
Inform the prescriber about AEs

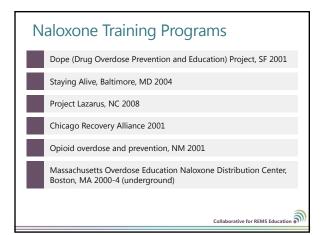
Prescribers should report serious AEs to the FDA:
www.fda.gov/downloads/AboutFDA/ReportsManualsForms
/Forms/UCM163919.pdf
or 1-800-FDA-1088



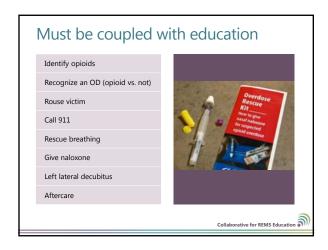




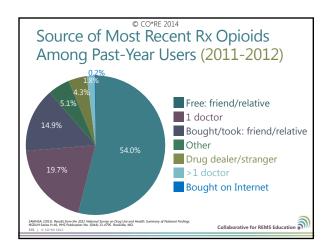


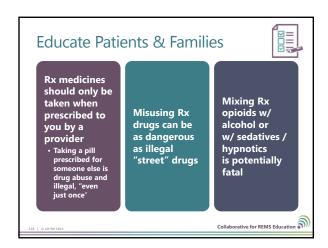


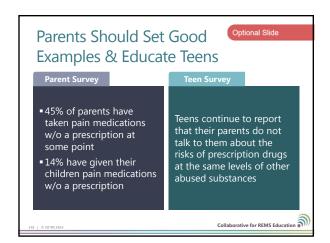


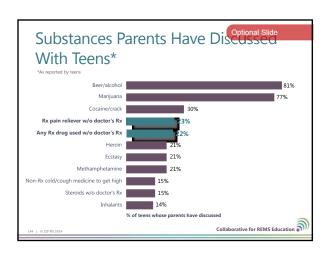




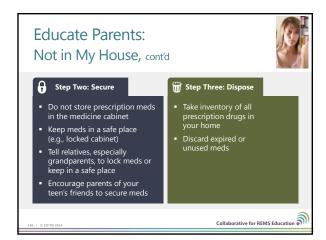








Educate Parents: Not in My House Q Step 1: Monitor Note how many pills in each prescription bottle or pill packet Keep track of refills for all household members If your teen has been prescribed a drug, coordinate & monitor dosages & refills Make sure friends & relatives—especially grandparents—are aware of the risks If your teen visits other households, talk to the families about safeguarding their medications





Other Methods of Opioid Disposal

If collection receptacle, mail-back program, or take-back event unavailable, throw out in household trash

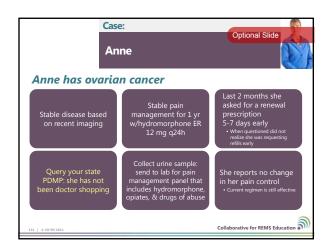
- Take drugs out of original containers
- Mix w/ undesirable substance, e.g., used coffee grounds or kitty litter
- Less appealing to children/pets, & unrecognizable to people who intentionally go through your trash
- Place in sealable bag, can, or other container
- Prevent leaking or breaking out of garbage bag
- Before throwing out a medicine container
- Scratch out identifying info on label

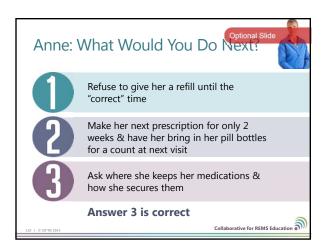




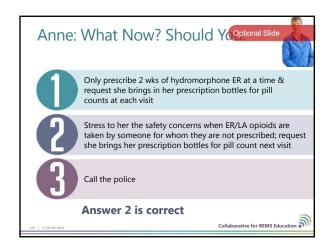


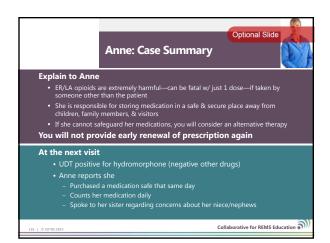
Case: Anne 47-Year-Old Female Anne presents to ED at 5pm on Friday before a Holiday weekend because she is out of her medication, and can't see her regular doctor until "at least Tuesday or Wednesday".

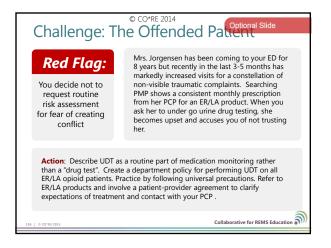




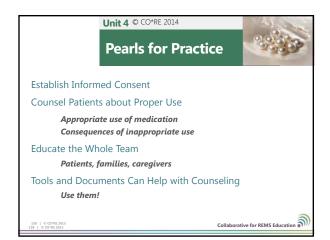


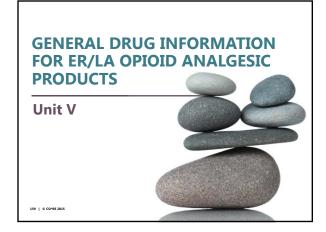


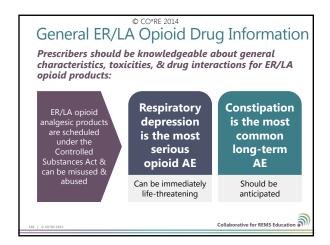


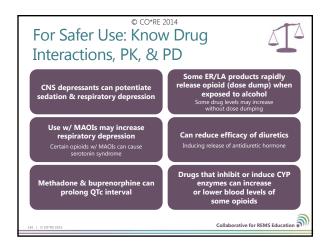


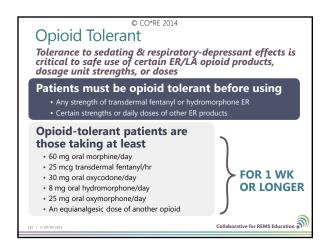
Challenge: The Daughter's Party Red Flag: Patients do not safeguard their opioid medications correctly Action: Always counsel patients about safe drug storage; warn patients about the serious consequences of theft, misuse, and overdose. Tell your patients that taking another person's medication, even once, is against the law.

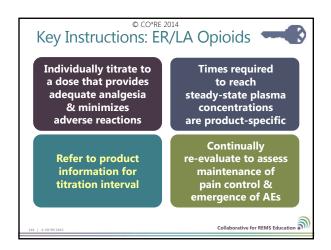


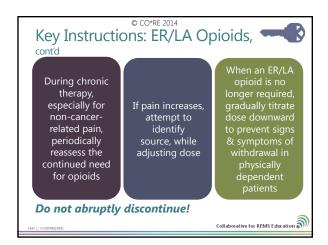


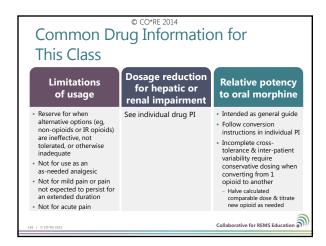


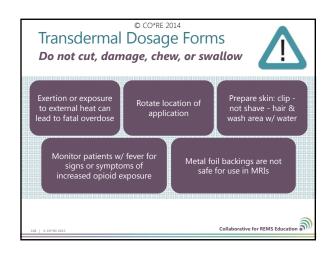


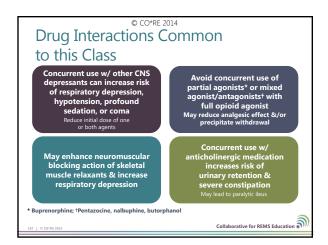


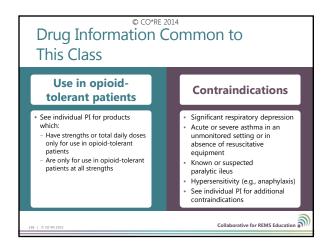












Patients MUST be opioid-tolerant in order to safely take most ER/LA opioid products

Be familiar with drug-drug interactions, pharmacokinetics and pharmacodynamics of ER/LA opioids

Central nervous system depressants (alcohol, sedatives, hypnotics, tranquilizers, tricyclic antidepressants) can have a potentiating effect on the sedation and respiratory depression

Challenge: The Patient in the Optional Slide

Red Flag:

caused by opioids.

As a PCP you are woken by a telephone call at 2 am reporting that your patient, Mr. Diallo, is in the ER with apparent respiratory depression.

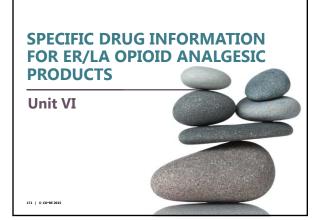
Action:

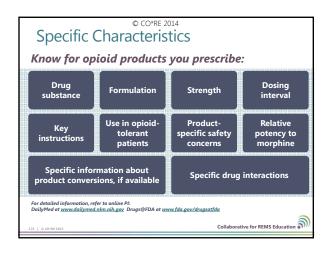
As the ED physician treating this patient, Did you make that call?

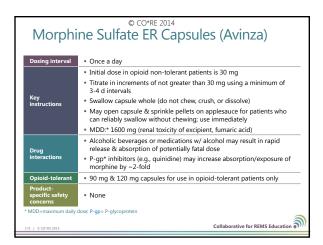
- Be familiar with risk factors for respiratory depression and know when opioids are contra-indicated. Anticipate possible risks and develop contingency plans. Teach patients, family, and caregivers about respiratory depression and its symptoms.
- Know that HIPPA excludes the gathering of information during the medical screening exam, if necessary to treat patient.

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Buprenorphine Transdermal System		
(Butrans)		
Dosing interval	One transdermal system every 7 d	
Key instructions	Initial dose in opioid non-tolerant patients on <30 mg morphine equivalents & in mild-moderate hepatic impairment: 5 mcg/h When converting from 30 mg-80 mg morphine equivalents, first taper to 30 mg morphine equivalent, then initiate w/10 mcg/h Titrate in 5 or 10 mcg/h increments by using no more than 2 patches of the 5 or 10 mcg/h system(s) w/ minimum of 72 h prior between dose adjustments. Total dose from all patches should be <20 mcg/h Maximum dose: 20 mcg/h due to risk of QTc prolongation Application Apply only to sites indicated in PI	
174 © CO*RE2015	Apply to intact/non-irritated skin Prep skin by clipping hair; wash site w/ water only Rotate application site (min 3 wks before reapply to same site) Do not cut Avoid exposure to heat Dispose of patches: fold adhesive side together & flush down toilet Collaborative for REMS Education	

Buprenorphine Transdermal System (Butrans) cont'd	
Drug interactions	CYP3A4 inhibitors may increase buprenorphine levels CYP3A4 inducers may decrease buprenorphine levels Benzodiazepines may increase respiratory depression Class IA & III antiarrythmics, other potentially arrhythmogenic agents, may increase risk of QTc prolongation & torsade de pointe
Opioid- tolerant	7.5 mcg/h, 10 mcg/h, 15 mcg/h, & 20 mcg/h for use in opioid-tolerant patients only
Drug-specific safety concerns	QTc prolongation & torsade de pointe Hepatotoxicity Application site skin reactions
Relative potency: oral morphine	Equipotency to oral morphine not established
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Methadone Hydrochloride Tablets (Dolophine) Dosing interval • Every 8 to 12 h • Initial dose in opioid non-tolerant patients: 2.5 to 10 mg • Conversion of opioid-tolerant patients using equianalgesic tables can result in overdose & death. Use low doses according to table in full PI • Dosage adjustments using a minimum of 1-2 d intervals • High inter-patient variability in absorption, metabolism, & relative analgesic potency • Opioid detoxification or maintenance treatment only provided in a federally certified opioid (addiction) treatment program (CFR. Title 42, Sec 8) • Pharmacokinetic drug-drug interactions w/ methadone levels • CYP 450 inhibitors may increase methadone levels • CYP 450 inhibitors may increase methadone levels • Potentially arrhythmogenic agents may increase risk for QTc prolongation & torsade de pointe • Benzodiazepines may increase respiratory depression

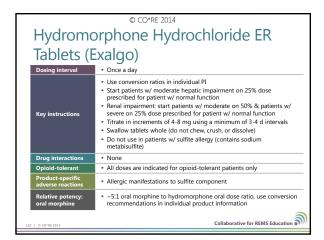


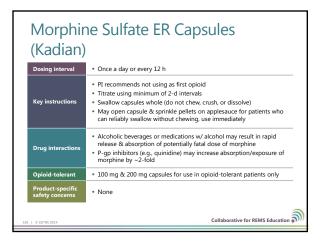
Methadone Hydrochloride Tablets (Dolophine) cont'd Opioidtolerant Prugspecific safety concerns - QTc prolongation & torsade de pointe - Peak respiratory depression occurs later & persists longer than analgesic effect - Clearance may increase during pregnancy - False-positive UDT possible Relative potency: oral morphine - Varies depending on patient's prior opioid experience

Fentanyl Transdermäl⁴System		
(Duragesic) 12, 25, 37.5*, 50, 62.5*, 75, 87.5*, and 100 mcg/hr (*These strengths are available only in generic form)		
Dosing interval	• Every 72 h (3 d)	
	Use product-specific information for dose conversion from prior opioid	
	 Hepatic or renal impairment: use 50% of dose if mild/moderate, avoid use if severe 	
	Application Apply to intact/non-irritated/non-irradiated skin on a flat surface	
Key instructions	Prep skin by clipping hair, washing site w/ water only Rotate site of application	
instructions	- Titrate using a minimum of 72 h intervals between dose adjustments - Do not cut	
	Avoid exposure to heat	
	Avoid accidental contact when holding or caring for children	
	 Dispose of used/unused patches: fold adhesive side together & flush down toilet 	
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Fentanyl Transdermal System		
(Duragesic), cont'd		
	Specific contraindications:	
	Patients who are not opioid-tolerant	
Key instructions	 Management of Acute or intermittent pain, or patients who require opioid analgesia for a short time Post-operative pain, out-patient, or day surgery Mild pain 	
	CYP3A4 inhibitors may increase fentanyl exposure	
Drug interactions	CYP3A4 inducers may decrease fentanyl exposure	
	Discontinuation of concomitant CYP P450 3A4 inducer may increase fentanyl plasma concentration	
Opioid-tolerant	All doses indicated for opioid-tolerant patients only	
	 Accidental exposure due to secondary exposure to unwashed/unclothed application site 	
Drug-specific safety concerns	Increased drug exposure w/ increased core body temp or fever	
concerns	Bradycardia	
	Application site skin reactions	
Relative potency: oral morphine	See individual PI for conversion recommendations from prior opioid	
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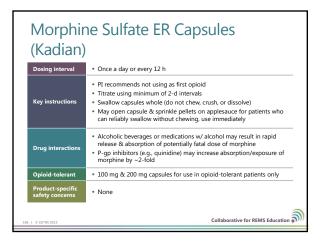
Morphine Sulfate ER-Naltrexone Tablets (Embeda) Dosing interval Once a day or every 12 h Initial dose as first opioid: 20 mg/0.8 mg Titrate using a minimum of 1-2 d intervals Swallow capsules whole (do not chew, crush, or dissolve) Crushing or chewing will release morphine, possibly resulting in fatal overdose, & naltrexone, possibly resulting in withdrawal symptoms May open capsule & sprinkle pellets on applesauce for patients who can reliably swallow without chewing, use immediately Alcoholic beverages or medications w/ alcohol may result in rapid release & absorption of potentially fatal dose P-gp inhibitors (e.g., quinidine) may increase absorption/exposure of morphine by -2-fold Opioid-tolerant Product-specific safety concerns None

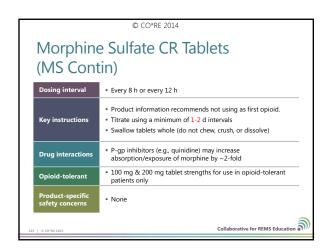


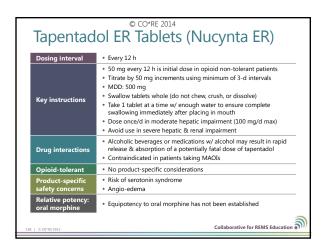


Extended-Release Tablets, 20 mg, 30 mg, 40 mg, 60 mg, 80 mg, 100 mg, and 120 Dosing interval • Once a day • Opioid-naïve patients: initiate treatment with 20 mg orally once daily. • During tirtation, adjust the dose in increments of 10 mg to 20 mg every 3 to 5 days until adequate analgesis is achieved. • Swallow tablets whole (do not chew, crush, or dissolve). • Consider use of an alternative analgesis in patients who have difficulty swallowing or have underlying gastrointestinal disorders that may predispose them to obstruction. • Take one tablet at a time, with enough water to ensure complete swallowing immediately after placing in the mouth. • Use 1/2 of the initial dose and monitor dosely for adverse events, such as respiratory depression and sedation, when administering Hysingla ER to patients with severe hepatic impairment or patients with moderate to severe renal impairment.

Prug interactions - CYP3A4 inhibitors may increase hydrocodone exposure. - CYP3A4 inhibitors may increase hydrocodone exposure. - CYP3A4 inducers may decrease hydrocodone exposure. - CYP3A4 inducers may decrease hydrocodone exposure. - Concomitant use of Hysingla ER with strong laxatives (e.g., Lactulose) that rapidly increase GI motifity may decrease hydrocodone absorption and result in decreased hydrocodone plasma levels. - The use of MAO inhibitors or tricyclic antidepressants with Hysingla ER may increase the effect of either the antidepressant with Hysingla ER may increase the effect of either the antidepressant with Hysingla ER may increase the effect of either the antidepressant or Hysingla ER. - Som ja only for use in opioid tolerant patients. - Use with caution in patients with difficulty swallowing the tablet or underlying gastrointestinal disorders that may predispose patients to obstruction. - Esophageal obstruction, dysphagia, and choking have been reported with Hysingla ER. - In nursing mothers, discontinue unursing or discontinue drug. QTc prolongation has been observed with Hysingla ER following daily doses of 160 mg. - Navid use in patients with congenital long QTc syndrome. This observation should be considered in making clinical decisions regarding patient monitoring when prescribly Hysingla ER in patients with congestive heart failure, bradyarrhythmias, electrolyte abnormalities, or who are taking medications that are known to prolong the QTc interval. - In patients who develop QTc prolongation, consider reducing the dose. - Relative potency: - oral morphine - See individual PI for conversion recommendations from prior opioid







Oxymorphone Hydrochloride ER Tablets	
(Opana ER)	
Dosing interval	Every 12 h dosing, some may benefit from asymmetric (different dose given in AM than in PM) dosing
	Use 5 mg every 12 h as initial dose in opioid non-tolerant patients & patients w/ mild hepatic impairment & renal impairment (creatinine clearance <50 mL/min) & patients >65 yrs
	Swallow tablets whole (do not chew, crush, or dissolve)
Key instructions	 Take 1 tablet at a time, w/ enough water to ensure complete swallowing immediately after placing in mouth
	Titrate in increments of 5-10 mg using a minimum of 3-7 d intervals
	Contraindicated in moderate & severe hepatic impairment
Drug interactions	 Alcoholic beverages or medications w/ alcohol may result in absorption of a potentially fatal dose of oxymorphone
Opioid-tolerant	No product-specific considerations
Product-specific safety concerns	Use with caution in patients who have difficulty swallowing or underlying GI disorders that may predispose to obstruction (e.g. small gastrointestinal lumen)
Relative potency: oral morphine	Approximately 3:1 oral morphine to oxymorphone oral dose ratio
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© CO*RE 2014 Oxycodone Hydrochloride CR Tablets		
(OxyCon	tin)	
Dosing interval	Every 12 h	
Key instructions	Initial dose in opioid non-tolerant patients; / 10 mg every 12 h Itrate using a minimum of 1-2 d intervals Hepatic impairment: start wy 14-14, usual dosage Renal impairment (creatinine clearance < 60 mL/min): start w/ ½ usual dosage	
,	 Consider other analgesics in patients w/ difficulty swallowing or underlying GI disorders that predispose to obstruction. Swallow tablets whole (do not chew, crush, or dissolve) Take 1 tablet at a time, w/ enough water to ensure complete swallowing immediately after placing in mouth 	
Drug interactions	CYP3A4 inhibitors may increase oxycodone exposure CYP3A4 inducers may decrease oxycodone exposure	
Opioid-tolerant	Single dose >40 mg or total daily dose >80 mg for use in opioid-tolerant patients only	
Product-specific safety concerns	Choking, gagging, regurgitation, tablets stuck in throat, difficulty swallowing tablet Contraindicated in patients w/ GI obstruction	
Relative potency: oral morphine	Approximately 2:1 oral morphine to oxycodone oral dose ratio	
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Oxycodone Hydrochloride/Naloxone Hydrochloride ER Tablets (Targiniq ER) Dosing interval • Every 12 h • Opioid-naïve patients: initiate treatment w/ 10mg/5mg every 12 h • Titrate using min of 1-2 d intervals • Do not exceed 80 mg/40 mg total daily dose (40 mg/20 mg q12h) • May be taken w/ or without food • Swallow whole. Do not chew, crush, split, or dissolve: this will release oxycodone (possible fatal overdose) & naloxone (possible withdrawal) • Hepatic impairment: contraindicated in moderate-severe impairment. In patients w/ mild impairment, start w/ ½-½ usual dosage • Renal impairment (creatinine clearance <60 mL/min): start w/ ½ usual dosage • Renal impairment (creatinine clearance <60 mL/min): start w/ ½ usual dosage • CYP3A4 inhibitors may increase oxycodone exposure • CYP3A4 inhibitors may increase oxycodone exposure • Single dose >40 mg/20 mg or total daily dose of 80 mg/40 mg for opioid-tolerant • Contraindicated in patients w/ moderate-severe hepatic impairment • Contraindicated in patients w/ moderate-severe hepatic impairment • See individual PI for conversion recommendations from prior opioids

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	Hydrocodone Bitartrate ER Capsules	
	(Zohydro ER)	
	Dosing interval	Every 12 h
	Key instructions	Initial dose in opioid non-tolerant patient is 10 mg Titrate in increments of 10 mg using a min of 3-7 d intervals Swallow capsules whole (do not chew, crush, or dissolve)
	Drug interactions	Alcoholic beverages or medications containing alcohol may result in rapid release & absorption of a potentially fatal dose of hydrocodone CYP3A4 inhibitors may increase hydrocodone exposure YP3A4 inducers may decrease hydrocodone exposure
	Opioid-tolerant	Single dose > 40 mg or total daily dose > 80 mg for use in opioid-tolerant patients only
	Product-specific safety concerns	• None
	Relative potency: oral morphine	Approximately 1.5:1 oral morphine to hydrocodone oral dose ratio
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