Transforming the Future of Pain Management

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Supported by independent educational grants from Pfizer and Purdue Pharma L.P.

Disclosures
- Dr. Grauer has served as a consultant for Johnson & Johnson within the past 12 months
- Dr. Herndon has served as a consultant to Incline Therapeutics within the past 12 months

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Learning Objectives
- Discuss the findings and recommendations of the Institute of Medicine’s report, Relieving pain in America: A blueprint for transforming prevention, care, education and research.
- Describe opportunities for pharmacists to support improved pain management for their patients.
- Explain the components of the REMS for long-acting and extended-release opioids, and its impact on pharmacists.
- Describe the characteristics of medications recently approved for the management of pain.
- Discuss the clinical impact of recent published data describing the risks and benefits of analgesics.

The Prevalence of Pain is Staggering

<table>
<thead>
<tr>
<th>Age-adjusted rates (%)</th>
<th>Low Back</th>
<th>Neck</th>
<th>Knee</th>
<th>Headache</th>
<th>Shoulders</th>
<th>Finger</th>
<th>Hip</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td>22%</td>
<td>24%</td>
<td>26%</td>
<td>28%</td>
<td>30%</td>
<td>32%</td>
<td>34%</td>
</tr>
</tbody>
</table>


The Disability of Pain is Crippling

<table>
<thead>
<tr>
<th>Extent of pain-related disability (%)</th>
<th>Low Back</th>
<th>Neck</th>
<th>Knee</th>
<th>Headache</th>
<th>Shoulders</th>
<th>Finger</th>
<th>Hip</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
<td>27%</td>
<td>29%</td>
<td>31%</td>
<td>33%</td>
<td>35%</td>
<td>37%</td>
<td>39%</td>
</tr>
</tbody>
</table>

CDC and NCHS. 2010. Morbidity and Mortality Weekly Report, Special features on death and dying, Hyattsville, MD: CDC and NCHS.

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The Prevalence of Pain is Increasing

![Graph showing prevalence of pain](image)

Pain is a Chronic Problem

![Graph showing prevalence of chronic pain](image)

Self Assessment – “Elements to Assure Safe Use” or ETASU is a component of REMS programs for most opioids.

1. True
2. False

Self Assessment - Which of the following best describes the trend in prescription drug overdose deaths in the US over the past decade?

1. They are increasing
2. They are decreasing
3. They are unchanged

Self-Assessment Questions

• An elderly female comes in for her monthly medication refills and you notice that she has not been routinely refilling her gabapentin 600mg TID for her postherpetic neuralgia. She tells you that although she is still experiencing pain, she has fallen several times so she only takes it at bedtime. What action should the pharmacist take?

Self Assessment - Remember, gabapentin 600mg TID for postherpetic neuralgia

1. Refer to physician regarding falls
2. Educate on fall prevention and counsel med adherence
3. Discontinue gabapentin and offer OTC ibuprofen
4. Call prescriber with recommendation for slower titration
A patient comes in with a new prescription for transdermal buprenorphine (Butrans) 10mg. He has previously been taking hydrocodone/acetaminophen 10mg/325mg, 2 tablets every 6 hours around the clock. Which of the following is the most important action.

1. Dispense Rx  
2. Recommend laxative  
3. Call prescriber  
4. Counsel on addiction

1. Dispense Rx  
2. Recommend laxative  
3. Call prescriber  
4. Counsel on addiction

25% 25% 25% 25%

A 37 year old male reporting back pain is routinely bringing in new prescriptions for CR oxycodone (OxyContin) five to six days before his previous prescription should be out. What is the best method for initially addressing this situation?

1. Refill the Rx  
2. Call prescriber  
3. Call police  
4. Assess pain

25% 25% 25% 25%

Epidemiology and a Call to Action

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Southern Illinois University Edwardsville  
Clinical Assistant Professor, School of Medicine  
St. Louis University

Health, United States, 2006

Table 6. Page 1 of 1, Serious headache or migrainer, low back pain, and neck pain among adults 18 years or older who take nonprescription medications for pain, United States, 1990–2003

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Headache or migraines</td>
<td>15.6</td>
<td>15.1</td>
<td>15.0</td>
<td>15.3</td>
<td>15.6</td>
<td>15.7</td>
<td>16.0</td>
<td>16.6</td>
<td>16.8</td>
<td>16.3</td>
<td>15.8</td>
<td>16.2</td>
<td>16.5</td>
<td>16.0</td>
</tr>
<tr>
<td>Low back pain</td>
<td>15.4</td>
<td>15.1</td>
<td>15.5</td>
<td>15.8</td>
<td>15.9</td>
<td>15.9</td>
<td>16.2</td>
<td>16.2</td>
<td>16.0</td>
<td>15.9</td>
<td>15.9</td>
<td>15.7</td>
<td>15.8</td>
<td>16.0</td>
</tr>
<tr>
<td>Neck pain</td>
<td>15.0</td>
<td>15.4</td>
<td>15.3</td>
<td>15.1</td>
<td>15.1</td>
<td>15.2</td>
<td>15.5</td>
<td>15.3</td>
<td>15.1</td>
<td>15.3</td>
<td>15.3</td>
<td>15.2</td>
<td>15.1</td>
<td>15.2</td>
</tr>
</tbody>
</table>

Pain in Previous 30 Days

Data from: 1. U.S. Department of Health and Human Services, National Center for Health Statistics; Health, United States, 2007

Disparities in Care

Data from: 2. U.S. Department of Health and Human Services, National Center for Health Statistics; Health, United States, 2007
Institute of Medicine Blueprint

• Commissioned by NIH as a result of 2010 Patient Protection and Affordable Care Act
  – Pain as a public health problem
  – Care of people with pain
  – Education challenges
  – Research challenges

Pain Affects Quality of Life

<table>
<thead>
<tr>
<th>Type of Pain</th>
<th>Difficulty Basic Actions</th>
<th>Difficulty Complex Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headache or migraine</td>
<td>31.0%</td>
<td>33.5%</td>
</tr>
<tr>
<td>Low back pain</td>
<td>51.6%</td>
<td>55.0%</td>
</tr>
<tr>
<td>Neck pain</td>
<td>30.2%</td>
<td>34.4%</td>
</tr>
<tr>
<td>Knee pain</td>
<td>37.3%</td>
<td>38.6%</td>
</tr>
<tr>
<td>Shoulder pain</td>
<td>17.7%</td>
<td>21.4%</td>
</tr>
<tr>
<td>Finger pain</td>
<td>14.3%</td>
<td>16.3%</td>
</tr>
<tr>
<td>Hip pain</td>
<td>15.0%</td>
<td>18.4%</td>
</tr>
</tbody>
</table>

Pharmacists are Called to Action

• Recommendation 4-3. Increase the number of health professionals with advanced expertise in pain care. Educational programs for medical, dental, nursing, mental health, physical therapy, pharmacy, and other health professionals who will participate in the delivery of pain care should have increased capacity to train providers who can offer advanced pain care.

IOM Final Recommendations

• Create a population-health level strategy for pain prevention, treatment, management, and research
• Develop strategies for reducing barriers to pain care
• Support collaboration between specialists and primary care
• Institute designation at the NIH
• Improve collecting and reporting of data
• Promote and enable self-management of pain
• Provide educational opportunities in pain assessment & treatment in primary care
• Revise reimbursement policies
• Provide complete and consistent pain assessments
• Improve curriculum for HCPs
• Increase number of HCPs with advanced expertise in pain

Opportunities for YOU!

• Create a population-health level strategy for pain prevention, treatment, management, and research
• Develop strategies for reducing barriers to pain care
• Support collaboration between specialists and primary care
• Institute designation at the NIH
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• Promote and enable self-management of pain
• Provide educational opportunities in pain assessment & treatment in primary care
• Revise reimbursement policies
• Provide complete and consistent pain assessments
• Improve curriculum for HCPs
• Increase number of HCPs with advanced expertise in pain

What the Patients Want

Key Points

- Pain is a public health problem
- The disparate care of pain is a human rights problem
- Access to pain care is diminishing
- Pharmacists are uniquely poised to get involved

Approximately what percentage of adults over 65 years of age experience chronic pain?

1. <10%
2. 10-25%
3. ~50%
4. >80%

Opportunities for Pharmacists to Support Improved Pain Management for their Patients

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Clinical Assistant Professor, College of Pharmacy
The Ohio State University
Columbus, OH

Who Can Help?

- Training
  - Generalists
  - Specialists
  - Pain Management and Palliative Care
- Settings
  - Community
  - Ambulatory
  - Long term care
  - Inpatient
  - Managed care
  - Academia

The Challenge

- Provide Appropriate Pain Management
- Reduce Prescription Abuse, Addiction and Diversion
When filling and dispensing pain medication, particularly opioid analgesics, which is NOT a responsibility of the pharmacist?

1. Screening for misuse
2. Understanding analgesic pharmacotherapy
3. Confirming legitimate use
4. Educating on use, storage, & disposal

The Pharmacist: Advocate or Barrier

• The Case of Pain and the Pharmacist
  January 2003

1. Screening for misuse
2. Understanding analgesic pharmacotherapy
3. Confirming legitimate use
4. Educating on use, storage, & disposal

Pharmacist Responsibilities

• Active interdisciplinary participation
  – Share drug therapy knowledge
  – Provide medication therapy management support
• Patient education
  – Assessment
  – Education
  – Monitoring

Pharmacist Interventions in Pain Management

<table>
<thead>
<tr>
<th>Intervention</th>
<th>No. (%) Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change as-needed analgesic to ATC analgesic</td>
<td>25 (45)</td>
</tr>
<tr>
<td>Add or change non-analgesic</td>
<td>11 (20)</td>
</tr>
<tr>
<td>Discontinue analgesic</td>
<td>9 (16)</td>
</tr>
<tr>
<td>Increase dosage of analgesic</td>
<td>4 (7)</td>
</tr>
<tr>
<td>Change route of administration</td>
<td>3 (5)</td>
</tr>
<tr>
<td>Add ATC analgesic</td>
<td>2 (4)</td>
</tr>
<tr>
<td>Decrease dose</td>
<td>1 (2)</td>
</tr>
<tr>
<td>Add as-needed analgesic</td>
<td>1 (2)</td>
</tr>
</tbody>
</table>

ATC = Around-the-clock


Assessment Questions

• How well are you doing with pain medicines?
• Are you having any problems with constipation or sleepiness?
• How comfortable are you?
• How is your pain right now?
• Where do you hurt?
• What makes the pain better? What makes the pain worse?
• If you were to rate your pain on a scale from 0 to 10, where 0 is no pain, 5 is moderate pain, and 10 is the worst pain, what number would you give to the pain you are having right now?
• What drugs have worked in the past?
• How often do you think you need pain medicine?
• Would you prefer to receive pain medicines regularly and not have to ask for them each time you are in pain?

Pharmacy Continuing Education

• Organization Programs and Traineeships
  – Pharmacy Organizations
    • APhA, ASHP, ASCP, ACCP
  – Pain Management Organizations
    • ASPE, APS, AAPM, AHAHP, APF, NHPCO, Mayday Pain Project
  – Commercial CE providers
    • RX School
    • Power-Pak CE
    • US Pharmacist
    • Medscape
    • Pharmacy Times

• Caveats – presenter bias and knowledge/experience
An elderly female comes in for her monthly medication refills and you notice that she has not been routinely refilling her gabapentin 600mg TID for her postherpetic neuralgia. She tells you that although she is still experiencing pain, she has fallen several times so she only takes it at bedtime. What action should the pharmacist take?

1. Tell the patient to talk to her physician about the falls
2. Educate the patient on fall prevention and encourage her to take the medication as prescribed
3. Tell the patient to discontinue the medication and recommend OTC ibuprofen for pain
4. Call the physician and suggest a decreased starting dose and slow titration of the gabapentin to allow for tolerance to develop to the side effects.

Unintentional Overdose Deaths involving Opioid Analgesics, Cocaine and Heroin, Limited States, 1999–2007

Risk Evaluation and Mitigation Strategies for Opioids (REMS)

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Clinical Assistant Professor, School of Medicine
St. Louis University

REMS History and Significance

- Enacted September 2007
- FDA Amendments Act (FDAAA)
- Expanded authority of FDA over drug life cycle
- Previously “gentleman’s agreement” between FDA and Pharma
  - Risk minimization action plans

Why REMS?

What is REMS?

- Medication guide
- Patient package insert
- Communication plan for health care providers
- Implementation system
- Elements to assure safe use (ETASU)
  - Certification and specialized training of prescribers, pharmacists, and other dispensers
  - Restricted distribution of a drug to limited settings
  - Dispensing to a patient based on evidence or other documentation of safe use conditions, such as labs
  - Patient monitoring and/or patient registry
  - Prescriber and/or pharmacist registry
Current REMS

Elements to Assure Safe Use (ETASU)

<table>
<thead>
<tr>
<th>Prescriber certification training</th>
<th>Pharmacy/Pharmacist certification</th>
<th>Agreement submitted</th>
<th>Limited distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstral</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Actiq</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Buprenex</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Embeda</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Exalgo</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Fentanyl</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Lazanda</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Morphine</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OxyContin</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxycodone (soln)</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OxyContin (soln)</td>
<td>x</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Example of Current REMS
Long Acting Opioid

- Long acting hydromorphone
- Prescriber login
- Pharmacist login
  - Inpatient pharmacist
  - Outpatient pharmacist representing pharmacy dispensing
  - Outpatient pharmacist not representing dispensing pharmacy
- Ten question quiz with immediate self-assessment following
  - Questionable assessment of safe use knowledge
  - Psychometric evaluation unknown

Example of Current REMS
Fast Acting Fentanyl Products

- Fentanyl nasal spray REMS
- Prescriber login
  - Take knowledge assessment
  - Provide DEA, NPI, and state license number
  - Must personally educate patient on risk/benefit and use
  - Must personally execute a signed prescriber-patient agreement
  - Re-register every 2 years
- Pharmacist login
  - Knowledge assessment
  - State license number

What does REMS mean for Pharmacists?

- Inpatient pharmacists different than outpatient
- Responsible for:
  - Registering with REMS programs
  - Training staff
  - Confirming compatible software for registration of patient
  - Confirming physician is enrolled
  - Providing medication safety guide?
- Does added time equal added safety or just avoidance?

Which of the following opioids has a limited distribution plan as part of its REMS

1. Lazanda
2. Onsolis
3. Abstral
4. OTFC
Which of the following best describes the trend in prescription drug overdose deaths in the US over the past decade?

1. They are increasing
2. They are decreasing
3. They are unchanged

Recently Approved Medications for the Management of Pain

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Clinical Assistant Professor, College of Pharmacy
The Ohio State University
Columbus, OH

Recently Approved Medications

• Non-opioids
• Opioids

Non-Opioids

Nonsteroidal Anti-Inflammatory Drugs (NSAIDs)

• SPRIX: ketorolac tromethamine nasal spray
  Indications: short-term for moderate to moderately severe pain +/- IV/IM ketorolac up to 5 days in adults
  Dosage: 31.5 mg SPRIX (one 15.75 mg spray in each nostril) every 6 to 8 hours.
  • maximum daily dose is 126 mg (four doses)
  • T_max ≈ 0.75 hrs
  • T_1/2 ≈ 5 hrs

• Pennsaid: diclofenac sodium 1.5% topical solution (16.05 mg/ml)
  Indication: treatment of signs and symptoms of osteoarthritis of the knee(s)
  Dosage: 40 drops (1.2ml) per knee four times a day
  • T_max ≈ 4 hrs (multiple dose)
  • T_1/2 ≈ 80 hrs
  • Bioavailability ≈ 1/3 of Solaraze 3% Gel (diclofenac sodium for actinic keratoses)

• Penepoine: diclofenac sodium 1.5% topical emulsion (16.05 mg/ml)
  Indication: treatment of signs and symptoms of osteoarthritis of the knee(s)
  Dosage: 40 drops (1.2ml) per knee four times a day
  • T_max ≈ 4 hrs (multiple dose)
  • T_1/2 ≈ 80 hrs
  • Bioavailability ≈ 1/3 of Solaraze 3% Gel (diclofenac sodium for actinic keratoses)

Non-Opioids

GaBapentinoids

• Horizant: gabapentin enacarbil 600mg ER tablets
  Indication: restless leg syndrome
  Dosage: 600-1200mg daily
  • T_max ≈ 8 hrs 7.3 hrs with food, 5 hrs fasting
  • T_1/2 ≈ 5-6 hrs
  • Bioavailability ≈ 75% with food, 42-65% fasting

• Gralise: gabapentin ER tablets
  Indication: postherpetic neuralgia
  • Dosage: 300-600mg tablets
  • T_max ≈ 8 hrs

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**Opioids**

**Tapentadol Extended Release**
- **Nucynta ER**
  - Dosage: 50 mg, 100 mg, 150 mg, 200 mg, 250 mg
  - $T_{max}$ ≈ 3-6 hrs
  - $T_{1/2}$ ≈ 5-6 hrs
  - Dosage frequency: twice daily

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**Morphine**
- Embeda - voluntary withdrawal for stability issues
  - Extended release morphine pellets surrounding natrexone HCl core
    - Natrexone released if product crushed, chewed or dissolved
  - 20mg/0.8mg, 30mg/1.2mg, 50mg/2mg, 60mg/2.4mg, 80mg/3.2mg, 100mg/4mg

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**Opioids**

**Fentanyl Products**

<table>
<thead>
<tr>
<th>Fentanyl Products</th>
<th>Route of Administration</th>
<th>Dosage</th>
<th>BA (%)</th>
<th>Time to Peak (median)</th>
<th>$T_{1/2}$ hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actiq Transmucosal</td>
<td>200, 400, 600, 800, 1000 mcg</td>
<td>47</td>
<td>30-45 min</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>
| Fentora Buccal tablet | 100, 200, 400, 600, 800 mcg | 65     | 47 min | 100-200 = 3-4
400-600 = 5-11 |
| Onasle Buccal film | 200, 400, 600, 800, 1200 mcg | 71     | 1 hr | 14                   |
| Abstral Sublingual tablet | 100, 200, 300, 400, 600, 800 mcg | 54     | 30-60 min | 100-300 = 5-7
400-800 = 10-14 |
| Lazanda Intranasal | 100, 400 mcg/spray | 60     | 30-45 min | 15-25 hrs               |

BA = Bioavailability

**Hydromorphone**

- **Hydromorphone**
  - Exalgo : 8, 12, 16mg tablets
  - $T_{max}$: 12-16 hrs (4-30)
  - Duration: 24 hrs
  - $T_{1/2}$: 10-11 hrs

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**Opioids**

**Oxycodone**
- Oxycodone Extended Release
  - OxyContin (reformulated)
- Oxycodone Immediate Release
  - Oxceta
    - 5mg + 7.5mg tablets
- Both are formulated to reduce misuse when crushed by forming a gel instead of powder

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Opioids

Buprenorphine Transdermal Patch

- Butrans: 5, 10, and 20 mcg
  - Schedule III Controlled Substance
- Partial mu agonist, weak kappa antagonist and agonist at delta opioid receptors, and a partial agonist at ORL-1 (nociceptin) receptors
  - May have an antihyperalgesic effect and may be of benefit in neuropathic pain.
- Dosing interval: 7 days
- Steady state: 3 days
- Bioavailability: 15%
- T_{1/2}: 26 hrs
- Increased risk of QTc prolongation ≥ 20 mcg/hr
- Must titrate previous opioid down to ≤ 30 mg OME to prevent withdrawal symptoms

Buprenorphine patch dosing

<table>
<thead>
<tr>
<th>Daily morphine equivalents</th>
<th>Starting dose of buprenorphine patch</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 30 mg / 24 hours</td>
<td>5 mcg/hr buprenorphine patch</td>
</tr>
<tr>
<td>30-80 mg / 24 hours</td>
<td>10 mcg/hr buprenorphine patch</td>
</tr>
</tbody>
</table>

Morphine equivalents > 80 mg / 24 hours may not be suitable candidates

Patients should be weaned to < 30 mg morphine equiv. / 24 hours for 7 days

Dose titration may occur every 72 hours

You are counseling a 70 year old female regarding her diabetes. Today the patient tells you that in addition to her CR hydromorphone (Exalgo) 16 mg, two tablets daily, she is taking approximately 12 ibuprofen 200 mg tablets to help ease her burning foot pain and to help with her arthritic pain. What are your first thoughts concerning her pain regimen?

1. Change ibuprofen to celecoxib
2. Start IR hydromorphone for breakthrough pain
3. Current regimen is inappropriate due to diabetes diagnosis
4. CR hydromorphone dose should be increased

Risks and Benefits of Analgesics

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Chris Herndon, PharmD, BCPS, CPE

Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)

- Gastrointestinal risk
  - American Gastroenterology Assoc. Guidelines
  - NSAID induced upper GI bleed prevention
- Cardiovascular risk
  - Proposed pathophysiology of risk
  - American Heart Association Guidelines
  - Stepwise recommendations

NSAID induced GI bleed

- Risk Factors
  - Prior peptic ulcer disease
  - Prior NSAID GI complication
  - Advanced age
  - Concurrent corticosteroid or anticoagulant use
  - High doses of NSAIDs
  - Combinations of NSAIDs
- Prevention
  - Eradication of H. Pylori
  - Proton Pump Inhibitors or Misoprostol

NSAID associated CV risks

- Pathogenesis
  - Appears to be COX-selective associated
  - Blood pressure and edema assoc?
  - Thromboxane vs. prostacyclin (PGI2)
  - Cardiac collateralization
  - “Stress priming”

- American Heart Association Recommendations
  - Specifically for those with musculoskeletal pain
  - Recommendations for those with known cardiovascular disease or significant risk factors

Opioids

- Efficacy – do they work long term?
- Side Effects – does the benefit outweigh the risk
  - Respiratory depression and hypoventilation risk
  - Hypogonadism
  - Hyperalgesia
- Abuse liability – use in noncancer pain?
  - CDC data
  - DAWN database
- Managing risk – strategies and opportunities
  - REMS
  - Screening for risk
  - Drug screening, treatment agreements, pill counts, POMP
  - Legislation

Opioid Risk Tool

<table>
<thead>
<tr>
<th>Family history of substance abuse</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>1 point</td>
<td>3 points</td>
</tr>
<tr>
<td>Illegal drugs</td>
<td>2 points</td>
<td>3 points</td>
</tr>
<tr>
<td>Prescription drugs</td>
<td>4 points</td>
<td>4 points</td>
</tr>
<tr>
<td>Personal History of Substance abuse</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Alcohol</td>
<td>1 point</td>
<td>3 points</td>
</tr>
<tr>
<td>Illegal Drugs</td>
<td>4 points</td>
<td>4 points</td>
</tr>
<tr>
<td>Prescription Drugs</td>
<td>5 points</td>
<td>5 points</td>
</tr>
<tr>
<td>Age (16 yrs to 45 yrs)</td>
<td>1 point</td>
<td>1 point</td>
</tr>
<tr>
<td>Preadolescent sexual abuse</td>
<td>3 points</td>
<td>0 points</td>
</tr>
<tr>
<td>Depression</td>
<td>1 point</td>
<td>1 point</td>
</tr>
<tr>
<td>ADD, OCD, Bipolar, or Schizophrenia</td>
<td>2 points</td>
<td>2 points</td>
</tr>
</tbody>
</table>

Low Risk 0 – 3 points, Moderate Risk 4 – 7 points, High Risk > 8 points

Monitoring outcomes

- The 4 “A”s of pain management monitoring
  - Analgesia
  - Adverse effects (of opioids)
  - Aberrant drug taking behavior
  - Activity
- Help patient set REALISTIC treatment goals
- Trust, but verify
- Treat to activity, not the pain score

“A Elements to Assure Safe Use” or ETASU is a component of REMS programs for most opioids.

1. True
2. False
Which of the following best describes the trend in prescription drug overdose deaths in the US over the past decade?

1. They are increasing
2. They are decreasing
3. They are unchanged

Self-Assessment Questions

- An elderly female comes in for her monthly medication refills and you notice that she has not been routinely refilling her gabapentin 600mg TID for her postherpetic neuralgia. She tells you that although she is still experiencing pain, she has fallen several times so she only takes it at bedtime. What action should the pharmacist take?

- A patient comes in with a new prescription for transdermal buprenorphine (Butrans) 10mg. He has previously been taking hydrocodone/acetaminophen 10mg/325mg, 2 tablets every 6 hours around the clock. Which of the following is the most important action.

- A 37 year old male reporting back pain is routinely bringing in new prescriptions for CR oxycodone (OxyContin) five to six days before his previous prescription should be out. What is the best method for initially addressing this situation?

- Approximately what percentage of adults over 65 years of age experience chronic pain?
You are counseling a 70 year old female regarding her diabetes. Today the patient tells you that in addition to her CR hydromorphone (Exalgo) 16mg, two tablets daily, she is taking approximately 12 ibuprofen 200mg tablets to help ease her burning foot pain and to help with her arthritic pain. What are your first thoughts concerning her pain regimen?

1. Change ibuprofen to celecoxib
2. Start IR hydromorphone for breakthrough pain
3. Current regimen is inappropriate due to diabetes diagnosis
4. CR hydromorphone dose should be increased

Pain agreements have been shown to greatly decrease risk of misuse and diversion of opioids.

Take home….

1. True
2. False

• Pain is a significant public health problem
• New opportunities and treatments continue to emerge
• New legislated barriers continue to emerge
• Access to treatment and risk of misuse and diversion is a balancing act
• Pharmacists are an integral component of the pain management health care team