I. Introduction: Why Prescriber Education is Important

Health care professionals who prescribe extended-release (ER) and long-acting (LA) opioids are in a key position to balance the benefits of prescribing ER/LA opioids to treat pain against the risks of serious adverse outcomes including addiction, unintentional overdose, and death. Opioid misuse and abuse, resulting in injury and death, has emerged as a major public health problem.

Public health experts estimate that more than 35 million Americans age 12 and older have reported non-medical use of opioid analgesics during 2010 – up from 29 million in 2002. In 2009, nearly 342,000 emergency department visits were associated with nonmedical use of opioid analgesics. In 2007, nearly 28,000 Americans died from unintended consequences of drug use, and of these, nearly 12,000 involved prescription drug pain relievers.

Appropriate prescribing practices and patient education are important steps to help address this public health problem. Health care professionals who prescribe ER/LA opioids have a responsibility to help ensure the safe and effective use of ER/LA opioids. Prescribers should

- understand how to assess patients for treatment with ER/LA opioids.
- be familiar with how to initiate therapy, modify dose, and discontinue use of ER/LA opioids.
- be knowledgeable about how to manage ongoing therapy with ER/LA opioids.
- know how to counsel patients and caregivers about the safe use of ER/LA opioids, including proper storage and disposal.
- be familiar with general and product specific drug information concerning ER/LA opioids.

II. Assessing Patients for Treatment with ER/LA Opioid Therapy

a. Prescribers should consider risks involved with ER/LA opioids and balance these against potential benefits. Risks include:
   - Risk of overdose due to the high dosage of opioid available as an ER/LA formulation
   - Intentional abuse by patient or household contacts
   - Addiction

1 http://oas.samhsa.gov/NSDUH/2k10NSDUH/tabs/Sect7peTabs1to21.pdf
• Interactions with other medications and substances (see table below for specifics)
• Inadvertent exposure to household contacts, especially children

b. Prescribers should assess each patient’s risk of abuse, including history of substance abuse and serious mental illness. Prescribers should
• Be knowledgeable about risk factors for opioid abuse and risk-assessment methods.
• Complete a comprehensive history and physical examination, including assessment of psychosocial factors and family history of substance abuse, as well as special considerations for the elderly, women, children, and cultural/ethnic groups. Identify appropriate referrals when the condition warrants.
• Understand and appropriately utilize screening tools for addiction or abuse, such as Prescription Drug Monitoring Programs (PDMPs), to help assess potential risks associated with chronic opioid therapy and to help manage patients using opioids products.
• Adequately document all evaluations and treatment plans.

c. Prescribers should be able to determine if a patient is opioid-tolerant and should know which products are safe for use only in opioid-tolerant patients.

III. Initiating Therapy, Modifying Dosing, and Discontinuing Use of ER/LA Opioids

a. Prescribers should have awareness of federal and state regulations on opioid prescribing.
b. When initiating therapy with an ER/LA opioid, prescribers should be aware that
• Dose selection is critical, particularly when initiating therapy with an ER/LA opioid as the first opioid.
• Titration should be based on efficacy and tolerability.
c. Prescribers should be knowledgeable about converting patients from immediate-release to ER/LA products and from one ER/LA opioid product to another ER/LA opioid product.
d. Prescribers should be aware of the concept of incomplete cross-tolerance in order to safely convert patients from one opioid to another.
e. When modifying the dose of an ER/LA opioid, prescribers should understand equianalgesic dosing concepts and follow patients closely during all periods of dose adjustments.
f. Prescribers should understand that tapering the opioid dose is necessary to safely discontinue treatment with ER/LA opioids when therapy is no longer needed.

IV. Managing Therapy with ER/LA Opioids
a. Prescribers should establish goals for therapy and continuously evaluate pain as well as functioning level and quality of life.
b. Prescribers should be aware of the existence of Patient Provider Agreements (PPAs), although FDA is not requiring their use.
   • PPAs are documents signed by both prescriber and patient at the time an opioid is prescribed. PPAs can help ensure patients understand the goals of treatment, the risks, and how to use the medications safely.
   • PPAs can include commitments to return for follow-up visits, to comply with appropriate monitoring (such as random drug screens) and to safeguard the medication.
c. Prescribers should ensure that patients adhere to a treatment plan and monitor patients for misuse and abuse by
   • Recognizing aberrant behavior
   • Utilizing PDMPs to identify potential abuse where available
   • Understanding the role of drug testing and performing drug screens as indicated
   • Screening and referring for substance abuse treatment when indicated
   • Performing medication reconciliation at each visit
d. Prescribers should understand how to manage adverse events associated with ER/LA opioid products.
e. Prescribers maintaining patients on ER/LA opioids should over time reassess the efficacy of opioid therapy and monitor patients for tolerance.
f. Prescribers maintaining patients on ER/LA opioids should over time reassess whether opioids continue to be necessary for management of the patient’s pain.
g. Prescribers should understand the need for reevaluation of patients’ underlying medical condition if symptoms change over time.

V. Counseling Patients and Caregivers About the Safe Use of ER/LA Opioids

a. Prescribers should give product-specific information about the prescribed opioid.
b. Prescribers should explain how to take the opioid as prescribed.
c. Prescribers should explain adherence to dosing regimen and how to handle missed doses.
d. Prescribers should warn that under no circumstances should an oral ER/LA opioid be broken, chewed or crushed, and patches should not be cut or torn prior to use, as this may lead to rapid release of the ER/LA opioid causing overdose and death.
e. Prescribers should caution that the use of other CNS depressants, alcohol, or illegal drugs with ER/LA opioids can cause overdose and death. Patients should only use other CNS depressants under the instruction of their prescriber.
f. Prescribers should discuss that withdrawal symptoms can occur if an ER/LA opioid is discontinued suddenly. Patients should discuss plans to stop the ER/LA opioid with their prescriber. Patients should discuss a tapering regimen with their prescriber.
g. Prescribers should explain that sharing ER/LA opioids with others may cause serious side effects including death, and that selling or giving away ER/LA opioids is against the law.
h. Prescribers should counsel patients to store their ER/LA opioid in a safe and secure place away from children and pets and to read the product-specific disposal information included with the ER/LA opioid product.
i. Prescribers should caution patients that ER/LA opioids can cause serious side effects that can lead to death. Patients should call their prescriber or get emergency medical help if they have symptoms of overdose or respiratory depression; symptoms of stomach or intestinal blockage; or allergic reactions. Patients should also be counseled on the most common side effects of ER/LA opioids and be cautioned about the risk of falls, working with heavy machinery, and driving.
j. Patients should call their prescriber for advice about side effects.
k. Prescribers or patients are encouraged to report side effects to the FDA at 1-800-FDA-1088.

VI. General Drug Information for ER/LA Opioid Products

Prescribers should be knowledgeable about general characteristics, toxicities, and drug interactions for ER/LA opioid products. For example,

a. Respiratory depression is the most serious adverse effect of opioids as it can be immediately life-threatening.
b. Constipation is the most common long-term side-effect but can often be managed.
c. Drug-drug interaction profiles vary among the products. Knowledge of particular opioid-drug interactions, and the underlying pharmacokinetic and pharmacodynamic mechanisms, allows for the safer administration of opioid analgesics.
   • Central nervous system depressants (sedatives, hypnotics, tranquilizers, tricyclic antidepressants) and alcohol can have a potentiating effect on the sedation and respiratory depression due to opioids. Alcohol consumption should be avoided entirely with some oral products (e.g. morphine, hydromorphone, oxymorphone) because ethanol increases the plasma concentration of the drug substance.
   • Opioids may enhance the neuromuscular blocking action of skeletal relaxants (e.g. pancuronium) and produce an increased degree of respiratory depression.
   • Using opioids with monoamine oxidase inhibitors (MAOIs) may result in possible increase in confusion, anxiety, and respiratory depression.
- Opioids can reduce the efficacy of diuretics by inducing the release of antidiuretic hormone (ADH).
- Some opioids (methadone, buprenorphine) can prolong the QTc interval.
- Some opioids interact with various cytochrome P450 enzyme inhibitors and inducers and thus may result in higher or lower than expected blood levels of the drug. See detailed drug information table.

b. Tolerance to sedating and respiratory-depressant effects is critical to safe use of certain products, certain dosage unit strengths, or certain doses of some products. Opioid tolerance must be demonstrated before using any strength of ER/LA fentanyl and ER/LA hydromorphone. For other ER/LA opioids the use of certain doses of the drug requires that the patient be opioid tolerant. See detailed drug information table.

c. Tablet and capsule dosage forms must be swallowed whole. The pellets from capsule dosage forms can be sprinkled on applesauce and swallowed without chewing.

d. For transdermal products, external heat, fever, and exertion can increase absorption, leading to fatal overdose. Transdermal products with metal foil backings are not safe for use in MRIs.

VII. Specific Drug Information for ER/LA Opioid Products

Prescribers should be knowledgeable about specific characteristics of the ER/LA opioid products they prescribe, including the drug substance, dosage form/strength, dosing interval, key instructions, major drug interactions, use in opioid-tolerant patients, drug-specific adverse events, and relative potency to oral morphine. The attached table is a reference. For detailed information, prescribers can refer to prescribing information available online via DailyMed at dailymed.nlm.nih.gov or Drugs@FDA at www.fda.gov/drugsatfda. (NOTE: Industry to provide specific information in table below for FDA review).
### Specific Drug Information for ER/LA Opioid Products

<table>
<thead>
<tr>
<th>Drug</th>
<th>Drug Substance</th>
<th>Dosage Form/ Strengths</th>
<th>Dosing Interval</th>
<th>Key instructions</th>
<th>Major Drug Interactions</th>
<th>For opioid-tolerant patients only?</th>
<th>Drug Specific AEs</th>
<th>Relative Potency to oral morphine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butrans</td>
<td>Buprenorphine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duragesic</td>
<td>Fentanyl</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exalgo</td>
<td>Hydromorphone ER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dolphine</td>
<td>Methadone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Embeda</td>
<td>Morphine ER/naltrexone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kadian</td>
<td>Morphine ER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avinza</td>
<td>Morphine ER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MS Contin</td>
<td>Morphine ER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oramorph</td>
<td>Morphine ER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OxyContin</td>
<td>Oxycodone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opana ER</td>
<td>Oxymorphone ER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nucynta ER</td>
<td>Tapentadol HCl</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>