Evaluating Risk Factors for Opioid-Related Harms

According to the newly published “CDC Guideline for Prescribing Opioids for Chronic Pain - United States, 2016,” clinicians should evaluate risk factors for opioid-related harms before starting and periodically during continuation of opioid therapy. CDC recommends considering strategies to mitigate risk of opioid use among vulnerable populations, such as those patients with a history of overdose, a history of substance use disorder, those with higher dosages of opioids (defined as ≥ 50 MME/day), and those patients with concurrent use of benzodiazepines. The following are those vulnerable populations that CDC outlines for special focus to assess risk and address potential harms of opiate use:

- **Patients with Sleep-Disordered Breathing, including Sleep Apnea** – careful monitoring and cautious dose titration should be used if opioids are prescribed for patients with mild sleep-disordered breathing. According to CDC, clinicians should avoid prescribing opioids to patients with moderate or severe sleep-disordered breathing whenever possible.

- **Pregnant Women** – opioids used in pregnancy might be associated with additional risks to mother and fetus. According to CDC, some studies have shown an association of opioid use in pregnancy with stillbirth, poor fetal growth, preterm delivery, and birth defects. Opioid use during pregnancy may lead to neonatal opioid withdrawal syndrome. Careful weighing of the risks and benefits should be made when making decisions about opioid treatment during pregnancy.

- **Patients with Renal or Hepatic Insufficiency** – CDC recommends additional caution and increased monitoring of these patients, given their decreased ability to process and excrete drugs, susceptibility to accumulation of opioids, and reduced therapeutic window between safe dosages and dosages associated with respiratory depression and overdose.

- **Patients Aged > 65 Years** – several risks factors make pain management for older patients a challenge for clinicians. Reduced renal function and medication clearance even in the absence of renal disease, aged-related cognitive impairment that can lead to
increased risk for medication errors and make opioid-related confusion more dangerous, and co-morbid medical conditions and multiple medications are all cause for clinicians to use additional caution and increase monitoring.

- **Patients with Mental Health Conditions** – CDC asks clinicians to use additional caution and increased monitoring to lessen the increased risk for opioid use disorder among patients with mental health conditions, including depression, anxiety disorders, and PTSD. Previous guidelines have noted that opioid therapy should not be initiated during acute psychiatric instability or uncontrolled suicide risk, and that clinicians should consider behavioral health specialist consultation for any patient with a history of suicide attempt or psychiatric disorder.

- **Patients with Substance Use Disorder** – CDC notes that illicit drugs and alcohol are listed as contributory factors on a substantial proportion of death certificates for opioid-related overdose deaths. Recommendations include single screening questions such as “How many times in the past year have you used an illegal drug or used a prescription medication for nonmedical reasons?” Additional recommendations include use of PDMP data and drug testing to assess for concurrent substance use that might place patients at higher for opioid use disorder and overdose. Because pain management in patients with substance use disorder can be complex, CDC recommends that clinicians should consider consulting substance use disorder specialists and pain specialists regarding pain management for persons with active or recent past history of substance abuse.

- **Patients with Prior Nonfatal Overdose** – according to CDC, experts agree that prior nonfatal overdose can substantially increase risk for future nonfatal or fatal opioid overdose. If patients experience nonfatal opioid overdose, clinicians should work with them to reduce opioid dosage and to discontinue opioids when possible. If clinicians continue opioid therapy in patients with prior opioid overdose, CDC recommends incorporation of strategies to mitigate risk into the management plan, such as considering offering naloxone and increasing frequency of monitoring.

CDC reports that clinicians do not consistently use practices intended to decrease the risk for misuse among vulnerable populations, such as PDMPs, urine drug testing, and
opioid treatment agreements. This is likely due to challenges related to registering for PDMP access and logging in to the PDMP, which can interrupt normal clinical workflow if data are not integrated electronic health record systems.

For further information on assessing and mitigating risks when prescribing opioids to vulnerable populations, CDC has provided a checklist for prescribing opioids for chronic pain (http://stacks.cdc.gov/view/cdc/38025), additional resources such as fact sheets (http://www.cdc.gov/drugoverdose/prescribing/resources.html) and will provide a mobile application to guide clinicians in implementing the recommendations.

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