

## ELABORATED GUIDELINES FOR THE TREATMENT OF ACUTE AND CHRONIC PAIN

### ACUTE PAIN

#### 1. Use non-opioid medications and therapies as first-line treatment for mild and moderate acute pain.

Patients should receive treatment for pain that provides the greatest benefits relative to risks. There is evidence that acute pain can be ameliorated by non-pharmacologic and non-opioid therapies, including psychological therapies, exercise treatments (aerobic exercise, physical therapy), and NSAIDs.<sup>1 2 3 4 5 6</sup> Due to their low harm, these therapies should be offered to all patients with mild or moderate pain. Opioids should only be initiated after weighing the benefits against the risks of use. Long-term opioid use can result from opioids initially intended for short-term use<sup>7 8 9</sup>, and both acute and long-term opioid use run the risk of opioid overdose.<sup>9 10</sup> Realistic expectations regarding duration and severity of expected pain should be provided to patients.

#### 2. If opioids are indicated for acute pain, initiate therapy at the lowest effective dose for no longer than a 3-5 day duration; reassess if pain persists beyond the anticipated duration.

Because there is no absolute safe dose of opioids, opioid therapy should be initiated at the lowest effective dose and for the shortest possible duration. Evidence shows that the longer duration of early opioid exposure is associated with greater risks for long-term use.<sup>11</sup> There is also a risk of opioid-related adverse events even during acute, short-term therapy.<sup>12</sup>

The recommendation for a short duration of opioid therapy for acute pain is supported by recent evidence, which suggests that each additional day of opioid use beyond 3 days increases the likelihood of an adverse event or long-term use.<sup>11</sup> Each day of unnecessary opioid use increases the likelihood of physical dependence without adding benefit.<sup>13</sup> Prescriptions with fewer days' supply will also minimize the number of pills available for nonmedical use or diversion.

Clinicians should reevaluate patients with severe acute pain that continues longer than expected before continuing opioid therapy. Patients who do not experience clinically meaningful pain relief early in treatment are unlikely to experience pain relief with long-term use,<sup>14</sup> and revisions to the initial diagnosis and management plan may be necessary. In addition, the risk of acute opioid therapy extending into long-term opioid therapy is increased in patients who refill the initial prescription.<sup>11</sup>

A note about a particular opioid, tramadol: tramadol has two known mechanisms of analgesia – it is a weak  $\mu$ -opioid receptor agonist and it inhibits the reuptake of norepinephrine and serotonin. Use of tramadol is a risk factor for continued opioid use: over 64% of patients started on tramadol for acute pain remain on tramadol after one year.<sup>11</sup> Emergency department visits associated with tramadol-related adverse effects have also increased by 145% from 2005-2011.<sup>15</sup> There are increased adverse effects when tramadol is combined with benzodiazepines, opioid pain medications and/or alcohol. Coadministration of tramadol with agents that increase serotonergic activity can precipitate serotonin syndrome and caution should be used with this combination.

A note about post-surgical indications: this guideline may apply to the treatment of postoperative pain from low-risk surgical procedures. A 2017 systematic review found that postoperative prescription opioids often go unused, unlocked and undisposed.<sup>16</sup> More than two-thirds of patients reported unused prescription opioids following surgery, consists across several studies of general, orthopedic, thoracic, and obstetric inpatient and outpatient surgeries.<sup>16</sup>

**DO IT »** Change the default duration for electronic opioid prescriptions to 3- or 5- days.

- See *Appendix F, How to manage pain and opioids in special populations* for further details on post-surgical opioid use.
- See *Appendix G, How to connect with local and national resources* for Arizona Data from Enhanced Surveillance, showing that 60% of persons with a suspected opioid overdose had a prescription written for six or more days.

#### 3. Do not use long-acting opioids for the treatment of acute pain.

Multiple national agencies, including the Veterans Administration and Centers for Disease Control and Prevention, recommend against using long-acting opioids for the treatment of acute pain. There is a higher risk for overdose among patients who initiate treatment with extended-release/long-acting opioids than among those who initiate with immediate-release opioids.<sup>17</sup> Further, long-acting opioids are associated with an increased risk of all-cause mortality.<sup>18</sup>