Health Care Guideline:

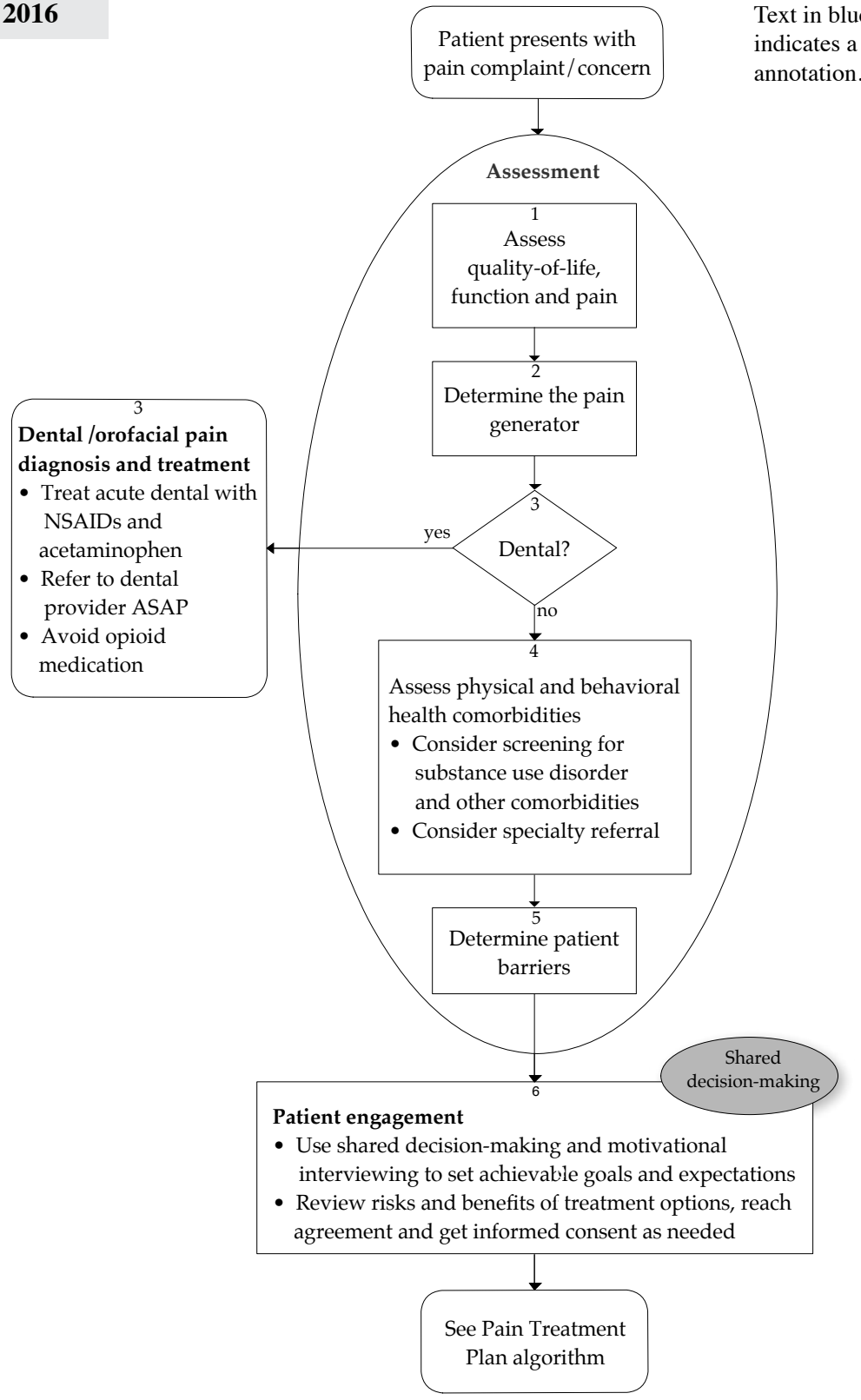
Pain: Assessment, Non-Opioid Treatment Approaches and Opioid Management

ICSI
Institute for Clinical Systems Improvement

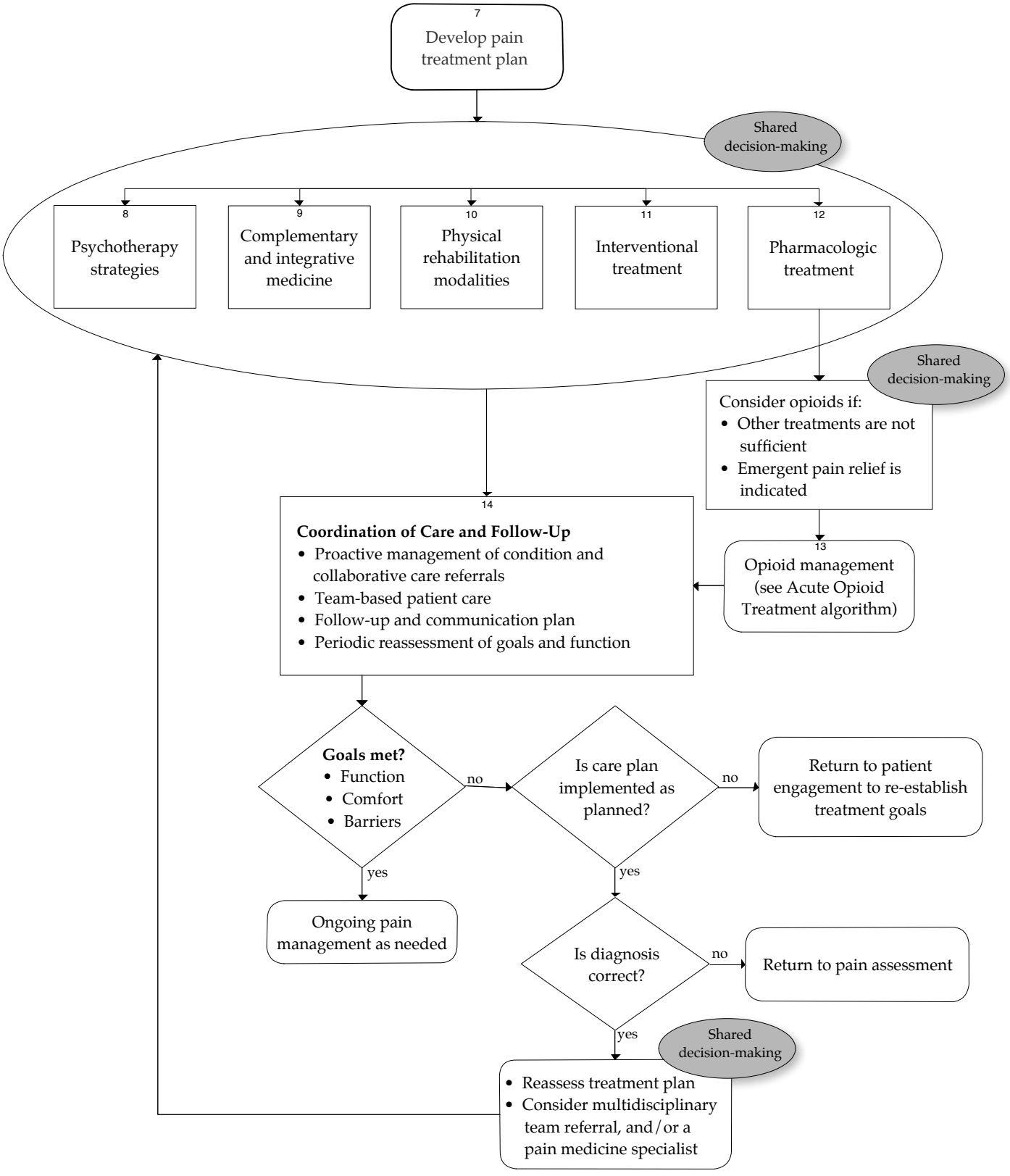
Seventh Edition
October 2016

Pain Assessment Algorithm

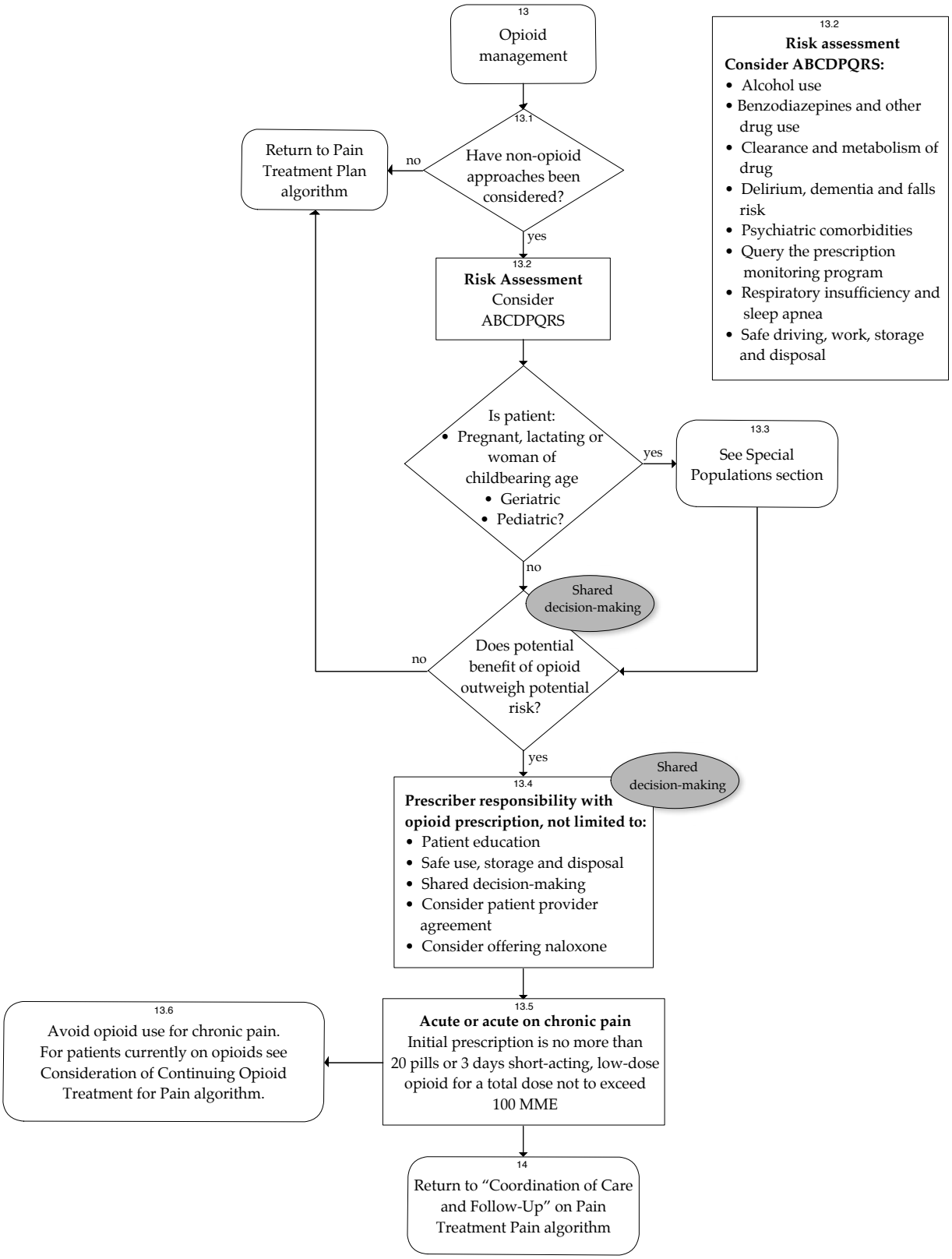
Text in blue in this algorithm indicates a linked corresponding annotation.



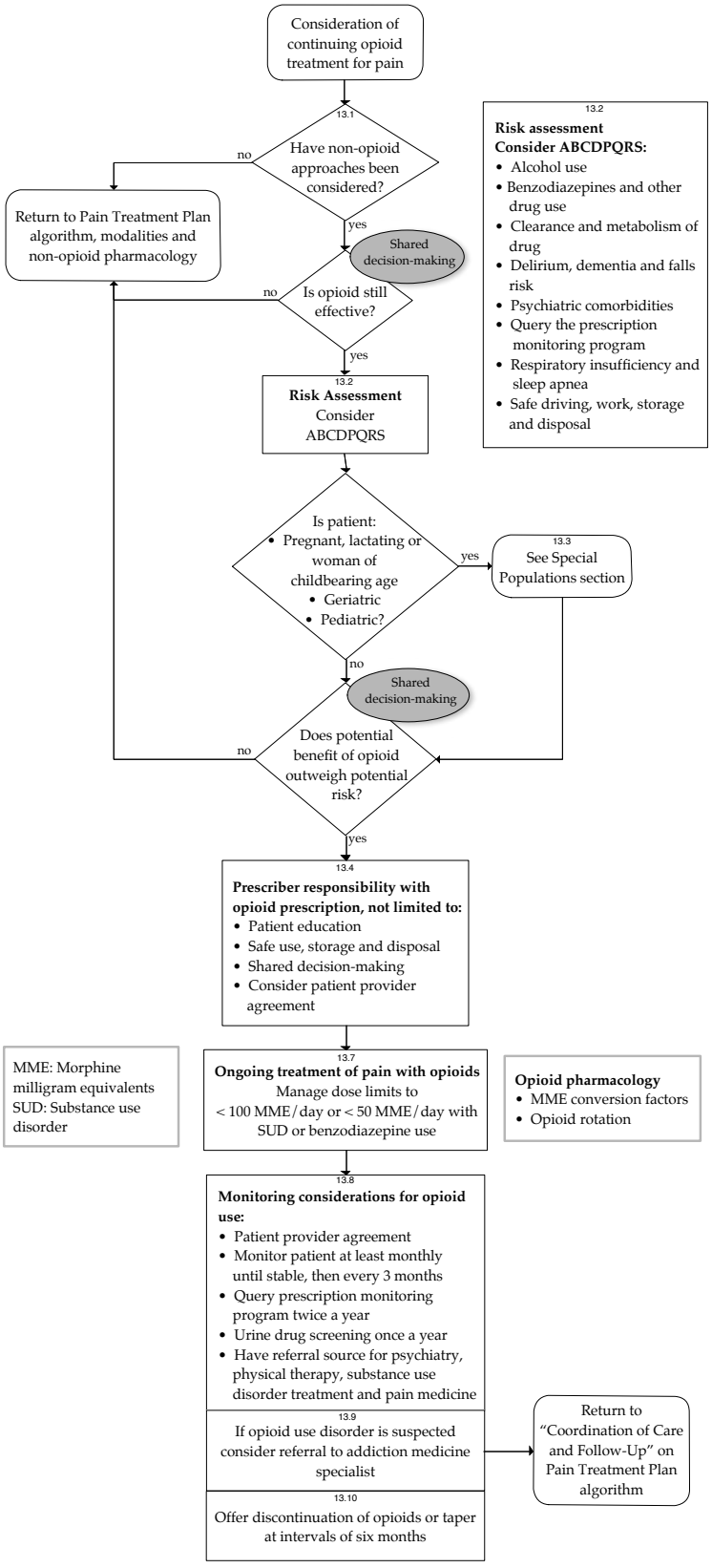
Pain Treatment Plan Algorithm



Acute Opioid Treatment Algorithm



Consideration for Continuing Opioid Treatment Algorithm



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Recommendations Table

The work group recommendations are a consensus of our expert work group based on the best evidence available. For each recommendation, the relevant resource used to support that recommendation is noted.

Pain Management Recommendations			
Annotation Number	**Topic**	**Recommendation**	**Relevant References**
1	Assessment	Use validated tools to assess and document the patient's functional status, quality of life and pain intensity.	*Keller, 2004 (Observational Study)*
2	Pain generator: opioid-induced pain	• Patients presenting with an indeterminate pain generator should be assessed for exposure to opioids in the past and current opioid use. • Providers should consider checking the Prescription Monitoring Program for patients presenting with pain if his or her opioid exposure is uncertain.	*Nuckols, 2014 (Systematic Review of Guidelines); Cicero, 2014 (Observational Study); Chu, 2006 (Observational Study)*
3	Pain generator: acute dental	• Prescribe ibuprofen and acetaminophen combination as first-line treatment for dental pain. • The referring medical clinician for acute dental pain should not routinely prescribe opioid medications.	*Moore, 2013 (Systematic Review)*
4	Comorbidities: behavioral assessment	Assess for behavioral health comorbidities in patients with chronic pain.	*Hooten, 2016 (Summary Article); Janssens, 2015 (Observational Study); Asmundson, 2009 (Report)*
4	Comorbidities: screen for substance use disorders	Consider screening patients for substance use disorders when there is an unclear etiology of pain.	*Han, 2015 (Observational Study); Hooten, 2015 (Observational Study); Jones, 2013a (Observational Study); Juurlink, 2012 (Review); Sehgal, 2012 (Review); Bohnert, 2011 (Observational Study); Liebschutz, 2010 (Observational Study); Chou, 2009c (Evidence Review); Martell, 2007 (Systematic Review)*

Annotation Number	Topic	Recommendation	Relevant References
7	Treatment plan	When feasible, a multidisciplinary approach is recommended for treating the patient with pain, especially chronic pain.	*International Association for the Study of Pain, 2014 (Guideline); Gatchel, 2006 (Review)*
8	Treatment: psychotherapy strategies	Psychotherapy such as cognitive-behavioral therapy or mindfulness-based stress reduction is recommended for patients with a chronic pain diagnosis.	*International Association for the Study of Pain, 2014 (Guideline); Kamper, 2014 (Systematic Review); Castro, 2012; (Randomized Control Trial); Grossman, 2007 (Textbook); Gillis, 2006 (Randomized Control Trial); Turner, 2006 (Randomized Control Trial); Broderick, 2005 (Randomized Control Trial); Smyth, 2003 (Review)*
10	Treatment: physical rehabilitation modalities	Exercise should be a component of the treatment for a patient with chronic pain.	*Falla, 2013 (Randomized Control Trial); Cuesta-Vargas, 2011 (Randomized Control Trial); Standaert, 2011 (Systematic Review); Dufour, 2010 (Randomized Control Trial); Hall, 2008 Systematic Review/Meta-analysis); Hurwitz, 2008 Evidence Synthesis); Hayden, 2005 (Systematic Review)*
10	Treatment: passive physical modalities	Passive modalities should only be performed as an adjunct to a concomitant active physical therapy or exercise program.	*Vincent, 2013 (Systematic Review); Standaert, 2011 (Systematic Review)*
10	Treatment: active physical modalities	Extending physical therapy beyond 12 weeks for chronic pain patients should be based on objective clinical improvement.	*Cuesta-Vargas, 2015 (Randomized Control Trial); Cramer, 2013 (Randomized Control Trial); Falla, 2013 (Randomized Control Trial); Standaert, 2011 (Systematic Review); Dundar, 2009 (Randomized Control Trial); Koumantakis, 2005 (Randomized Control Trial); Rainville, 2002 (Observational Study)*

Opioid Recommendations			
Annotation Number	**Topic**	**Recommendation**	**Relevant References**
11	Treatment: Non-opioid pharmacology: Non-sedative and sedative hypnotics and muscle relaxants	• Sedative hypnotics including benzodiazepines and carisoprodol should be rarely used and if so for short-term (< 1 week) treatment of muscle spasms related to acute pain. • Use of non-sedative hypnotic muscle relaxants are of low benefit, but if used, limit to less than four weeks. Do not use carisoprodol for pain.	*American Geriatric Society 2015 Beers Criteria Update Expert Panel, 2015 (Guideline); Gray, 2015 (Observational Study); Petrov, 2014 (Observational Study); Chou, 2007 (Guideline); Richards, 2012 (Systematic Review); Liu, 2010 (Observational Study); van Tulder, 2003 (Systematic Review)*
13.2	Opioid risk assessment tools	Opioid risk assessment tools and knowledge of opioid-related risks should be used in combination with the overall clinical picture to guide care, including the decision to prescribe as well as how closely to monitor.	*Volkow, 2016b (Summary Article); Wasan, 2015 (Observational Study); Argoff, 2014 (systematic review); Jones, 2014 (Observational Study); Atluri, 2012 (Review); Jones, 2012 (Observational Study); Moore, 2009 (Observational Study)*
13.3	Special populations: opioids in pregnancy/women of child-bearing age	Prior to prescribing opioids, women of childbearing age should be counseled on the risks of opioids in pregnancy, including risks to the fetus, counseled on contraception and offered pregnancy testing.	*Desai, 2015 (Observational Study); Han, 2015 (Observational Study); Desai, 2014 (Observational Study); Maeda, 2014 (Observational Study); Whiteman, 2014 (Observational Study); Yazdy, 2013 (Observational Study); Broussard, 2011 (Observational Study)*
13.3	Special populations: opioids in geriatrics	• Geriatric patients should be assessed for risk of falls, cognitive decline, respiratory malfunction and renal malfunction before receiving opioids. • If impairment or risk is detected in a geriatric patient, initiation of opioids should be at half the usual dose.	*Han, 2015 (Observational Study); Makris, 2014 (Review); Rubin, 2014 (Report); Rolita, 2013 (Observational Study); Saunders, 2010 (Observational Study); Solomon, 2010 (Observational Study); Spector, 2007 (Observational Study); Vestergaard, 2006 (Observational Study)*

Annotation Number	Topic	Recommendation	Relevant References
13.4	Patient education and shared decision-making	The first opioid prescription should include patient education, shared decision-making and assessment for related risks.	*Hooten, 2015 (Observational Study)*
13.4	Opioid safe use, public safety	• Patients newly on opioids, or having recently had their opioid dose increased, should be advised not to operate heavy machinery, including driving a car, or participate in other work or home activity that may be affected by the sedating effect of opioids. • An individualized approach that weighs the risks and benefits of driving and other activities should be taken with patients chronically on stable opioids who have tolerance and do not show evidence of sedation.	*National Highway Traffic Safety Administration, 2016 (Fact Sheet); Schisler, 2012 (Expert Opinion)*
13.4	Opioid safe storage and disposal	Clinicians should discuss storage and opioid disposal options with patients at the first opioid prescription and in follow-up visits as needed.	*Centers for Disease Control and Prevention, 2016 (Guideline); Centers for Disease Control and Prevention, 2010 (Summary Article)*
13.4	Opioid formulation	• Long-acting opioids should be reserved for patients with established opioid tolerance and in whom the prescriber is confident of medication adherence. • Long-acting tamper-proof formulation for opioids is preferred.	*Hwang, 2015 (Observational Study); Argoff, 2014 (systematic review); Cassidy, 2014 (Observational Study); Havens, 2014 (Observational Study); Sessler, 2014 (Observational Study); Butler, 2013 (Observational Study); Coplan, 2013 (Observational Study); Severtson, 2013 (Observational Study); Manchikanti, 2012a (Guideline); Severtson, 2012 (Observational Study); Dhalla, 2009 (Observational Study)*

Annotation Number	Topic	Recommendation	Relevant References
13.4	Patient provider agreement	Initiate a patient provider agreement (PPA) at the time an opioid is prescribed for: • High-risk patients • Daily use of opioids > 30 days • Patient transfers to a new clinic already on opioids • Episodic use up to 90 days over the course of a year • If none of the above, initiate a PPA after 90 days of opioids is prescribed.	*Centers for Disease Control and Prevention, 2016 (Guideline); Hooten, 2015 (Observational Study); Noble, 2010 (Systematic Review/meta-analysis); Starrels, 2010 (Systematic Review); Arnold, 2006 (Review)*
13.4	Monitoring: naloxone	Clinicians should consider offering the patient or close contacts a naloxone kit.	*Coffin, 2013 (Cost-Effectiveness Analysis); Centers for Disease Control and Prevention, 2012a (Report); Albert, 2011 (Observational Study); Yokell, 2011 (Report); Strang, 2008 (Observational Study)*
13.5	Initiating opioids for acute pain	• The first opioid prescription for acute pain should be no more than 20 low-dose, short-acting opioids or three days of medication, whichever is less. The total dose for acute pain should not exceed 100 morphine milligram equivalents (MME). • For patients presenting in acute pain, already on chronic opioids, opioid tolerant or on methadone, use the same pill and dose limits as for opioid naïve patients.	*Centers for Disease Control and Prevention, 2016 (Guideline)*
13.6	Opioids use for chronic pain	Avoid using opioids to treat patients with chronic pain.	*Chou, 2015 (Systematic Review); Chaparro, 2014 (Systematic Review/Meta-analysis); Manchikanti, 2006 (Observational Study)*

Annotation Number	Topic	Recommendation	Relevant References
13.7	Ongoing treatment of pain with opioids: morphine milligram equivalents dose limits	• Every effort should be made to keep chronic opioid using patients under 100 morphine milligram equivalents (MME)/day. Prescribers should consider seeking pain medicine consultation if greater than 100 MME is reached.	*Han, 2015 (Observational Study); Turner, 2015 (Observational Study); Franklin, 2012 (Observational Study); Gomes, 2011 (Observational Study); Dunn, 2010 (Observational Study)*
13.7	Ongoing treatment of pain with opioids and benzodiazepines or substance use disorder.	• Opioids should be avoided for patients with substance use disorder or concomitant benzodiazepines use. • If a patient with substance use disorder is prescribed opioids, the opioid dose should be less than 50 MME/day. • If patient requires both opioids and benzodiazepines, opioids should be less than 50 MME/day, taking into careful consideration the benzodiazepine dose. There should be good communication among providers regarding dosing.	*Han, 2015 (Observational Study); Turner, 2015 (Observational Study)*
13.7	Opioid rotation and conversion	• Opioid conversion tables should be used only as guidance when changing opioids. • Doses of the new opioid should be reduced by 50% of the previous daily MME dose and titrated to achieve analgesia.	*Pasternak, 2014 (Summary Article); Vissers, 2010 (Review); Fine, 2009 (Consensus); Pasternak, 2005 (Report)*
13.7	Methadone	• Initiating an opioid-tolerant patient on methadone for chronic pain should be reserved for experienced clinicians who are familiar with its use because its long half-life is associated with overdose and death.	*Wong, 2013 (Summary Article);* *Chou, 2009b (Guideline)*

Annotation Number	Topic	Recommendation	Relevant References
13.7	Medication management: fentanyl for pain	• Initiating transdermal fentanyl should be done only for patients with chronic opioid use greater than 60 MME daily, adequate subcutaneous adipose tissue and the cognitive ability to apply, remove and dispose of the patches safely. • Patches should be removed after 72 hours, folded upon themselves sticky side inward and promptly flushed down the toilet. • Sublingual fentanyl should be reserved for only those in need of palliative care for extreme pain and unable to take any alternatives.	*U.S. Food and Drug Administration, 2013 (Report);* *U.S. Food and Drug Administration, 2012 (Report)*
13.8	Opioid monitoring: prescription monitoring program	The prescription monitoring program (PMP) should be queried in the following situations: • If opioids are prescribed in dental, emergency department and urgent care settings, and when doses are changed. • In every instance where there are concerns of substance use disorder, overdose, diversion, indeterminate pain disorder, or polypharmacy. • For those patients with an established stable dose of opioids for a chronically painful condition and a history of compliance with the prescriber, PMP checks should be at least twice per year. • Consider querying the PMP when initiating opioid therapy.	*Han, 2015 (Observational Study); Rutkow, 2015 (Observational Study); Johnson, 2014 (Report); Albert, 2011 (Observational Study)*
13.8	Opioid monitoring: urine drug screen	• Routine random urine drug screens (UDS) for all patients on chronic opioid therapy for pain should be at least once per year. • UDS should be done if there is concern of aberrant behavior based on a prescriber's assessments and clinical judgment.	*Centers for Disease Control and Prevention, 2016 (Guideline); Starrels, 2012 (Observational Study); Reisfield, 2009 (Review); Michna, 2007 (Observational Study); Heit, 2004 (Review)*

Annotation Number	Topic	Recommendation	Relevant References
13.8	Opioid monitoring: visit frequency	• When initiating an opioid prescription, patients should be monitored within a month to evaluate harms and benefits and assess treatment goals. • Patients on stable opioid doses should be seen every three months.	*Centers for Disease Control and Prevention, 2016 (Guideline)*
13.8	Opioid monitoring: referral for high-risk patients	Opioid prescribers should have a referral source for psychiatric treatment, substance use disorder treatment, physical therapy and pain medicine available if needed.	*Gaither, 2016 (Observational Study); Reuben, 2015 (Report)*
13.9	Opioid use disorder	• Opioid prescribers should recognize the symptoms of opioid use disorder. • Opioid prescribers should understand the treatment options for opioid use disorder and have a referral source available.	*Cousins, 2016 (Observational Study); Gaither, 2016 (Observational Study); Fullerton, 2014 (Review); Thomas, 2014 (Review); Carrieri, 2006 (Report)*
13.10	Discontinuing opioids: tapering	• Once the patient and clinician agree to taper opioids, it should be individualized to the patient circumstances, and a referral source should be available. • While tapering opioids, patients should be offered additional treatment options and frequent follow-up. • Opioid tapering should be discussed and offered at intervals of six months for all patients on chronic opioids.	*Accurso, 2016 (Observational Study); Centers for Disease Control and Prevention, 2016 (Guideline); Berna, 2015 (Review)*