# Opioids and Opioid Use Disorder:
## An Environmental Scan of Quality Measures

FINAL REPORT

SEPTEMBER 12, 2019

NATIONAL QUALITY FORUM

This report is funded by the Department of Health and Human Services under contract HHSM-500-2017-00060I 75FCMC19F0002.

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# INTRODUCTION AND BACKGROUND

Data from the U.S. Centers for Disease Control and Prevention (CDC) show that overdose deaths involving prescription or illegal opioids have persistently and sharply increased since 1999.[1] The CDC considers these increases in opioid-related mortality to be an epidemic, and President Trump and many state governors have declared public health emergencies in response.[2,3]

Since 1999 approximately 800,000 U.S. persons have died prematurely from drug or alcohol overdoses, and more than half of these deaths have involved opioids. This makes annual overdose deaths more lethal than U.S. fatalities related to guns, the Vietnam War, the HIV/AIDS epidemic, and automobile fatalities, underscoring the deadly impact of this epidemic.[4–7] Opioid Use Disorder (OUD) is one of several substance use disorders (SUDs) included in the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) including alcohol, tobacco, and cannabis disorders. Over 2.1 million persons have OUD, a condition connected to frequent misuse of substances that include common pain medications and illegal drugs like heroin. Additionally, many people, including those with OUD, have more than one SUD.[8] If left untreated, OUD may yield substantial and premature disability and death.[9,10]

OUD affects brain biology and typically produces serious social problems at home and work, memory and motivation issues, intensive and increasing drug cravings, poor self-control, and severe emotional problems.[4,9,11–15] OUD is further correlated with an array of side-effects and comorbidities including persistent nausea and constipation, tremors, seizures, increasing pain, and infectious diseases like hepatitis C and HIV/AIDS (both correlated to unsafe drug injection and sexual practices).[16]

Prescription opioids are well-established analgesic agents and are widely used to address acute and chronic pain. Accordingly, comprehensive plans to treat OUD such as complementary therapies and integrative approaches to pain management, are examples of strategies that optimize the treatment of pain as well as the treatment and prevention of OUD,[4,17] The opioid epidemic is now considered largely iatrogenic in its origins—stemming in part from the American Pain Society's 1996 call for pain as the "fifth vital sign," and from a 2011 National Academy of Medicine (NAM) report which labeled pain as "a public health crisis." [4,18]

While use of opioids to treat acute, intense, and intractable pain remains a standard of care, use for chronic noncancer pain has become controversial because of its connection to morbidity and mortality related to OUD. Additionally, there remain questions about the efficacy and safety of opioids to treat long-lasting pain for nonterminal conditions.[19–22] Maintaining the balance between effective pain management and appropriate use of opioids is especially complex and consequential because more than 100 million Americans are estimated to have chronic pain, and 10 percent of those individuals take opioids as a part of what is presumed to be a multidisciplinary and person-centered approach to care.[23] Accordingly, one response to the opioid epidemic has been to advocate for better pain management practices that help curtail unnecessary opioid use via increased use of nonopioid therapies—without forcing people who benefit from opioids away from regimens that spare them substantial and needless suffering.[18] The U.S. Department of Health and Human Services (HHS) has developed a National Pain Strategy, and in

2019, its Pain Management Best Practices Inter-Agency Task Force issued a comprehensive final report on updates, gaps, inconsistencies, and recommendations for the treatment of pain in America, as required by the Comprehensive Addiction and Recovery Act of 2016.[24] The report notes that:

> ...classes of medications, including non-opioids and opioids, should be considered for use. The choice of medication should be based on the pain diagnosis, the mechanisms of pain, and related co-morbidities following a thorough history, physical exam, other relevant diagnostic procedures and a risk-benefit assessment that demonstrates that the benefits of a medication outweigh the risks. The goal is to limit adverse outcomes while ensuring that patients have access to medication-based treatment that can enable a better QOL and function.[18]

Although some, including U.S. Senator Ron Wyden (D-OR), have expressed concern that this task force was unduly influenced by pharmaceutical financial ties, the quote above reveals that this expert multistakeholder HHS task force[a] concluded that analgesic prescribing represents a complex therapeutic endeavor, and opioid use is just one of several treatment options.[18,25]

Solutions to the opioid epidemic must thus remain mindful of pain as an important treatment target, and also focus on prevention, treatment, harm reduction, and social determinants that influence a person's risk for OUD and overdose.[17,26–28] Harm reduction principles and addressing social determinants of health are especially important but often overlooked responses to the opioid crisis. Harm reduction approaches typically refer to acute pharmaceutical remedies (e.g., naloxone) to treat overdose but may also include strategies such as heroin contamination test kits, syringe service programs (also referred to as needle exchange programs), and overdose prevention sites.[26,29,30] These latter three approaches are sometimes controversial. Although they have been shown to mitigate the dire risks of near-term morbidity and mortality from overdose or infection and they also provide gateways into treatment and recovery, some believe that such strategies also encourage illicit drug use, although little to no evidence suggests that this is the case. By comparison, naloxone use and distribution by medical professionals, first-responders, and lay persons have become common. As of late 2017 nearly all states had laws or specific policies in place expanding the use of naloxone as a safeguard against opioid overdose.[31]

Social determinants also are important to consider when addressing the opioid epidemic. These include economic and cultural factors that influence one's risk for OUD or alter one's access and response to evidence-based OUD treatments such as medication-assisted treatment.[32] Recent reviews have found that opioid-related mortality is linked to specific race, age, geographic, and financial stress factors. For example, analyses of data from 1990-2013 revealed that non-Hispanic white, middle-age, and noncollege-educated males with low socioeconomic status have increased risk for opioid-related deaths. This is even as rates for women increased more rapidly, and black urban dwelling Americans were at greater relative risk for such deaths in the early part of this period.[33] Variability in opioid-related deaths by some of these social factors is further summarized in Table 1 below using the latest annual data fully compiled by the CDC. These data summarize variability that is evident across different demographic subgroups. For example, the tabulations demonstrate that rural populations currently face nearly equivalent risks relative to those living in cities.

a The task force included representation from the following organizations: HHS, Departments of Veterans Affairs and Defense, Office of National Drug Control Policy (Executive Branch); Hospital, Patient Advocacy, Professional Medical, State Medical Board, and Veteran Service Organizations; and individuals with the following areas of expertise: pain management, SUD, mental health, minority health, patient advocacy, primary care, pharmacy, surgery, dentistry, toxicology, and emergency medicine (Figure 2 from the task force report, reference 25 in this document).

**TABLE 1. OPIOID OVERDOSE DEATH RATES,* BY SELECT** DEMOGRAPHIC SUBGROUPS**

| Subgroup | 2016 (Number \| Rate) | 2017 (Number \| Rate) |
|---|---|---|
| **White (non-Hispanic)** | 33,450 \| 17.5 | 37,113 \| 19.4 |
| **Native Americans** | 369 \| 13.9 | 408 \| 15.7 |
| **Black (non-Hispanic)** | 4,374 \| 10.3 | 5,513 \| 12.9 |
| **Hispanic** | 3,440 \| 6.1 | 3,932 \| 6.8 |
| **Age 15-24 years** | 4,027 \| 9.3 | 4,094 \| 9.5 |
| **Age 25-34 years** | 11,552 \| 25.9 | 13,181 \| 28.5 |
| **Age ≥ 65 years** | 1,441 \| 2.9 | 1,724 \| 3.4 |
| **Male** | 28,498 \| 18.1 | 32,337 \| 20.4 |
| **Female** | 13,751 \| 8.5 | 15,263 \| 9.4 |
| **Large Metro** | 12,903 \| 12.5 | 14,518 \| 13.9 |
| **Non-metro (rural)** | 1,797 \| 10.5 | 1,905 \| 11.2 |
| **West Virginia** | 733 \| 43.4 | 833 \| 49.6 |
| **Ohio** | 3,613 \| 32.9 | 4,293 \| 39.2 |
| **Maryland** | 1,821 \| 29.7 | 1,985 \| 32.2 |
| **Kentucky** | 989 \| 23.6 | 1,160 \| 27.9 |
| **Connecticut** | 855 \| 24.5 | 955 \| 27.7 |
| **New York** | 3,009 \| 15.1 | 3,224 \| 16.1 |
| **Minnesota** | 396 \| 7.4 | 422 \| 7.8 |
| **California** | 2,012 \| 4.9 | 2,199 \| 5.3 |
| **Texas** | 1,375 \| 4.9 | 1,458 \| 5.1 |
| **Overall** | **42,249 \| 13.3** | **47,600 \| 14.9** |

* U.S. rate per 100,000 of the population, age-adjusted except for age-specific rates

** The MMRW source (see below) presents additional states and other demographic strata. Data presented in this table were selected by NQF staff to demonstrate variability. Related rows (e.g., states) are sorted from high to low 2017 rates (except for the age cluster, which is sorted by age).

Source: Scholl et al. Drug and opioid-involved overdose deaths — United States, 2013-2017. MMWR. 2019;67(5152);1419-1427.

Though recent public health and economic trend analyses have concluded that supplies of prescription opioids and illicit substances have contributed substantially to the opioid crisis, it has further been "...fueled by economic and social upheaval..." which can push individuals toward "...opioids as a refuge from physical and psychological trauma, concentrated disadvantage, isolation, and hopelessness."[34,35] With regard to cultural factors, stigmatizing forces—stereotypes that create social distance between those highly impacted and others—are especially strong for OUD versus other conditions including psychiatric disorders, and thus stigma is arguably of unique relevance to OUD treatment and prevention.[36,37] These U.S. economic and social pressures are not cited to condone the iatrogenic origins of the opioid overdose crisis, but instead are a reminder that an effective response will likely require more than reductions in prescribing or illicit drug trafficking.

Federal and regional responses have been cast widely in recent years to address the opioid overdose epidemic. Physicians have altered their pain management approaches; state governors and other leaders have instituted surveillance, public health, and healthcare financing remedies; and the public at large has attempted to diminish its overall use of opioids. Rates of overdose deaths may, in some regions, be slowly receding although they remain at high levels.[38] At the federal level, recent laws that directly target the opioid epidemic include the Substance Use Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities (SUPPORT) Act signed by President Trump in October of 2018.

The SUPPORT Act contains provisions to expand treatment options, the largest being permission for state Medicaid programs to receive federal reimbursement for substance use disorder (SUD) treatments delivered in institutions for mental diseases (e.g., state mental hospitals)—this is a special exception for Medicaid reimbursement that could infuse $1 billion federal dollars into state SUD treatment efforts over two years.[39,40] Other federal proposals currently under consideration include treatment system expansions of $100 billion over the next 10 years. Such expenditures are justified by analyses that show the opioid crisis costs the U.S. economy hundreds of billions of dollars per year in treatment, incarceration, and lost productivity and life-years.[41-43] Additionally, the SUPPORT Act includes two provisions, section 6032 and 6086 (the Dr. Todd Graham Pain Management Study) that require examination of coverage, payment, and treatment in Medicare and Medicaid for substance use disorders including OUD, and for acute and chronic pain.[44]

The SUPPORT Act also calls for the establishment of a "technical expert panel for the purpose of reviewing quality measures relating to opioids and

opioid use disorders including care, prevention, diagnosis, health outcomes and treatment furnished to individuals with opioid use disorders." Under the authority of this law, HHS contracted with the National Quality Forum (NQF) to establish a multistakeholder technical expert panel (TEP) (**Appendix A**) to consider opioid and OUD-related quality measures, including an inventory of existing measures, measure concepts (i.e., measures that have not been fully specified and tested), and apparent gaps. The National Quality Forum (NQF) is an experienced convener of multistakeholder groups for developing consensus around diverse and challenging healthcare quality topics. This report summarizes the findings of the environmental scan which is based on a review of existing quality measure databases, recent literature including technical reports, state laws and policies, peer-reviewed publications, and key informant interviews.

The TEP will use this scan of opioid and OUD-related quality measures to summarize and prioritize gaps in healthcare quality measurement which should be filled as soon as possible to address the current crisis. The TEP will then provide for revision of existing measures and possible development of new measures to address existing gaps. In addition, the TEP will develop guidance for inclusion of measures in various federal healthcare accountability programs such as the Merit-Based Incentive Payment System (MIPS), alternative payment models (APMs), the Medicare Shared Savings Program (SSP), the Hospital Inpatient Quality Reporting Program (IQR), and the Hospital Value-Based Purchasing Program (VBP).

# METHODOLOGY AND APPROACH

To inform the TEP's work, NQF conducted an environmental scan to assess the current state of opioid-related healthcare quality measures, using a search strategy with inclusion and exclusion criteria. The primary goal of the environmental scan was to assess the current landscape of quality and performance measures and measure concepts that could be used to assess opioid use, OUD, and overdose. For the purposes of the scan, the following questions guided research efforts and ensured that the information sources collected are relevant to the project objectives:

- What current or emerging quality of care measurements (i.e., metrics, indicators) exist regarding the use of opioids for pain management or the treatment and prevention of opioid-related abuse, dependence, and death?
- What are the major current and emerging concepts (i.e., facts and science-based theories) regarding opioid use and misuse which can be used to evolve associated quality measurement?
- What directions should quality measurement science take to advance the battle against the U.S. opioid overdose epidemic, i.e., where are the apparent and important gaps?

Information was synthesized from peer-reviewed scientific literature, grey scientific literature, quality measurement databases, state laws responding to the opioid crisis, and informant interviews including experts and other stakeholders in this field of quality measurement, health services research, and addiction. **Appendix B** offers more information on the methodology of the environmental scan, and **Appendix C** lists the key informants and provides the interview questions used to engage their participation. Note that the key informants selected were from outside of the TEP membership, deliberately chosen to complement and expand upon the Panel's knowledge-base. Before this document was finalized, TEP members, guiding CMS staff (see appendix A), and the general public were given multiple opportunities to provide factual and subjective feedback. Accordingly, this document is an NQF-synthesis of multiple sources from within and outside of the TEP.

# ENVIRONMENTAL SCAN SUMMARY

The environmental scan focused on measures where specifications were available. The scan resulted in a total of 207 measures (**Appendix D**) and 71 measure concepts (**Appendix E**). In addition, the TEP and key informants identified multiple screening tools, scales, and other instruments for measuring pain, OUD, depression, psychiatric disorders, tobacco, alcohol use, and other conditions associated with opioids and OUD, but these resources were not specified as quality measures or concepts. Some items were excluded from the scan if a comparable performance measure or measure concept was already identified. The environmental scan with guiding input from the TEP and key informants yielded four main categories (hereafter referred to as domains) of measures:

- Pain management
- Treatment of opioid use disorders (OUD)
- Harm reduction
- Social issues

Measures and measure concepts were then further divided into smaller groupings within each domain (subdomains) as described below. These domains and subdomains are meant to organize the measures in a way that facilitates the identification of measure gap areas. Measure ideas—measures that do not yet have a numerator and denominator—identified in the search either directly or as a gap are also discussed.

## Domain 1: Pain Management

Within the pain management domain, there were a total of 132 measures found, complemented by an additional 42 measure concepts as noted in Table 2. The measures selected for this domain were designed to assess how effectively providers address pain. The emphasis is on physical pain (nociceptive, neuropathic) related to conditions such as postsurgical care, inflammatory conditions, and physical trauma. The high frequency with which opioids are prescribed to address pain underscores the relevance of this issue. Approximately 100 million Americans per year receive at least one opioid prescription to address acute or chronic pain.[16,23] These measures and measure concepts were divided into the following subdomains: pain assessment, pain score change, time to pain management, quality of life (QoL) and function, pain care plan, nonopioid pain management, and appropriate opioid analgesic prescribing.

**TABLE 2. MEASURES AND MEASURE CONCEPTS FOR THE PAIN MANAGEMENT DOMAIN**

| Subdomains | Measures | Measure Concepts |
|---|---|---|
| **Pain Assessment** | 21 | 4 |
| **Pain Score Change** | 21 | 0 |
| **Time to Pain Management** | 4 | 1 |
| **Quality of Life and Function** | 13 | 1 |
| **Pain Care Plan** | 10 | 1 |
| **Nonopioid Pain Management** | 5 | 1 |
| **Appropriate Opioid Analgesic Prescribing** | 54 | 34 |
| **Total** | **132** | **42** |

### Overarching Themes

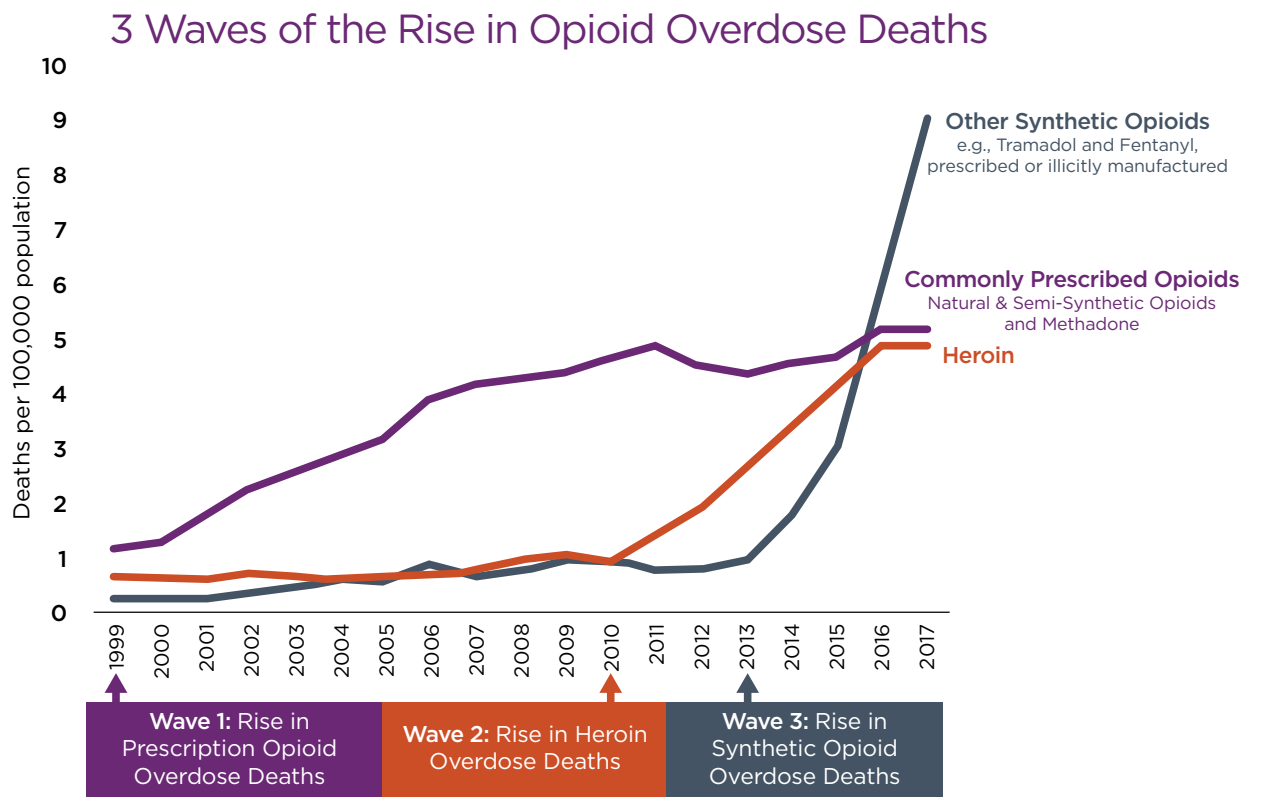
Pain management has been at the heart of the opioid crisis. Figure 1 depicts how the first wave of overdose deaths (from 1999-2010) coincided with the use of prescription opioids. Scholarship has shown the opioid epidemic to have largely resulted from well-intended medical efforts to address pain more aggressively.[4,45] A recent report by the National Academy of Medicine (NAM) noted that about half of opioid overdose deaths are related to medications obtained legally by prescription—including deaths from medications diverted to recreational or other illegal purposes. Moreover, the NAM report noted that in a recent year one in three (about 83.3 million) U.S. adults

received a prescription opioid and the total number of written prescriptions exceeded 225 million.[17] In recent years prescription opioids have even become the subject of numerous lawsuits predicated on the claim that drug makers knowingly understated the addiction potential of their products to extract excessive profits from vulnerable consumers seeking efficacious and safe pain relief.[46,47] Separate analyses specifically reported that exposure to prescription opioids is a substantial risk factor for later heroin use with one study showing that those with nonmedical prescription opioid use history are 19 times more likely to eventually use heroin, and another study showing that such a history of illicit prescription use is evident in 86 percent of heroin users. [48,49]

Quality measures in this domain are relevant to addressing the opioid crisis because they guide prevention through more careful prescribing practices. Accordingly, measures were identified in this domain which can be said to generally assess the quality of pain management. Studies and key informants emphasized that inappropriate reductions in opioid prescribing (e.g., abrupt tapering or discontinuation) for chronic pain have led to illicit drug use or even suicidal ideation as individuals struggle to cope with unremitting pain.[32–34]

Despite the connection between legal supply channels and the opioid crisis, recent modeling studies caution that strategies which only reduce opioid prescribing will likely have limited impact on reducing overdoses, especially in the near term.[28] This somewhat counterintuitive effect is plausible because—absent appropriate tapering or access to nonopioid pain management—limitations on opioids can "push patients to fulfill their needs via illicitly obtained substances."[27] Patient-centered tapering approaches and pain management strategies that reduce, eliminate, or complement the use of opioids are available, and these first-line therapies and discontinuation protocols are logically the targets of quality measures.[50]

**FIGURE 1. TIME-SERIES OF U.S. OPIOID-RELATED DEATHS BY OPIOID TYPE**




SOURCE: National Vital Statistics Mortality File.

Source: CDC: *Understanding the Epidemic*, 2019.

## SUBDOMAIN: Pain Assessment

NQF found 21 measures in the pain assessment subdomain, consisting of measures related to the quantitation and description of pain in general, or related to a specific condition or treatment setting. Examples of specific conditions as assessed by pain measures include back pain, cancer, headache, heel pain, dementia, muscular dystrophy, osteoarthritis, and surgery. Measures were evaluated in various care settings including outpatient, hospitals, hospice, and nursing homes. It is notable that pain is sometimes fairly straightforward to assess via direct patient report, but other times is uncertain because of cognitive and communication difficulties related to illness characteristics, language proficiency, and patient age. It is further important to note here once again that treating pain as an isolated symptom has been connected to opioid prescribing that is oftentimes more harmful than good.

The scan yielded limited healthcare performance measures that address the pain associated with many prevalent conditions. For example, one expert interviewed for this report noted that bone pain, especially arthritis, was a common source of discomfort for patients, but did not receive sufficient attention in the broad field of pain measurement. Another interviewed expert underscored the need for more education around safe opioid prescribing habits in all disciplines managing pain, including dentistry. The key informant indicated that dentistry, even oral surgery, can be practiced with far fewer opioids, a goal supported by recently issued American Dental Association guidelines.[51]

The TEP stated that another common area of pain that is often overlooked is chronic fibromyalgia pain and other centralized pain syndromes where the etiology is uncertain.[52,53] For fibromyalgia, specifically, potentially effective treatments (other than opioids which are not advised per at least one TEP member and the Mayo Clinic) include rest, stress reduction, exercise, and nonopioid pain medications such as ibuprofen or acetominophen.[54] In 2019 the Department of Health and Human Services Pain Management Best Practices Inter-Agency Task Force made recommendations for best practices for managing acute and chronic pain, emphasizing outcomes focused on improvements such as quality of life, function, and activities of daily living. The task force detailed many multidisciplinary, multimodal approaches to pain care that can be tailored to each person. This detailing included a description of more than 30 distinctive nonopioid or complementary pain management approaches.[18]

## SUBDOMAIN: Pain Score Change

Twenty-one measures were found related to pain score change. The pain score change subdomain differs from pain assessment in that clinicians document changes in pain over time. This change over time is arguably of particular utility to assessing the efficacy of pain management because it partially adjusts each personal observation for subjective sensations of pain. No measure concepts were identified. Though such measures exist, two points about pain assessment must be acknowledged. First, the experience of pain is highly subjective, absent definitive and reliable biomarkers, and therefore challenging to standardize between and within persons.[22] Second, pain has recently been "abandoned" in the U.S. as a singular diagnostic indicator because focus on the "fifth vital sign" inadvertently encouraged overuse of opioids.[21] As such, isolated measurement of individual pain scores aggregated to assess a provider's quality of care should be avoided, because these narrow metrics neglect more essential indicators of patient recovery, quality of life, and function.

## SUBDOMAIN: Time to Pain Management

There are four measures and one measure concept in this subdomain looking at total time elapsed until pain is addressed or brought under control. As is the case with pain score change, reducing time to pain control is not only an indicator of a

desirable outcome, it also partially adjusts each personal observation for subjective sensations of pain, and it marks the time-efficiency of an intervention.

### SUBDOMAIN: Quality of Life and Function

A total of 13 measures and one measure concept were identified which assess quality of life (QoL) and functional status (e.g., ability relative to expectations/history). QoL measures assess the impact of pain by considering patient-reported overall life quality, a construct that is measured by assessing how debilitating pain is regarding one's ability to enjoy life and function productively. Functional assessment measures with an additional pain component were grouped here as well. These measures include condition-specific assessments of levels of pain, function, and overall QoL for headache, inner ear disorders, and spine disorders, among others.

As is the case with most pain assessment measures, functional pain measures are challenging because they are somewhat subjective, though arguably less so than pain ratings that lack information regarding pain-associated changes in abilities and mood. Accordingly, functional measures transcend more simple pain scale metrics by tracking both practical physical and mental health sequelae including pain, fatigue, sadness, anxiety, and diminished cognitive and physical performance. QoL measures thus represent a more holistic assessment approach for persons being treated for pain. That holistic approach has recently revealed that opioid treatment response in patients with chronic pain is generally limited and mixed.[20] Specifically, a meta-analysis of existing randomized trials (n=19) demonstrates that opioid treatment versus placebo yields slight and significant reductions in physical pain components of standardized quality of life scales, but no similar reductions in mental health symptoms that plausibly are related to pain.[20] Under the reasonable assumption that mental health status is a relevant pain management outcome, such research suggests that opioids for chronic pain have efficacy shortcomings which may make them inferior to other treatments. Cognitive behavioral therapies promoting coping with pain strategies, for example, have demonstrated pain reductions *and* functional gains among persons with chronic pain, including among pain patients who are primarily being treated for alcohol use disorders.[55]

### SUBDOMAIN: Pain Care Plan

Within this subdomain, there are 10 measures and one measure concept. A pain care plan is a written document developed by the clinician in collaboration with the patient to address pain that may or may not include the use of opioids. The Pain Task Force stressed the importance of "integrative pain treatment plans that balance a focus on optimizing function, quality of life, and productivity while minimizing risks for opioid misuse and harm."[18] Pain care plan measures target conditions such as cancer and chronic headache, and settings including home health and surgical sites. These metrics include expectations and goals for pain control and provisions for monitoring pain and function with time, adapting or altering therapies as necessary, and safely and appropriately tapering persons off opioids as their pain is managed. Accordingly, this subdomain overlaps with others, though it uniquely encourages a detailed agreement of action between provider and patient.

### SUBDOMAIN: Nonopioid Pain Management

This subdomain contains five measures and one measure concept focused on finding the right medications and other treatments for conditions where opioids are not the first line of therapy, or where opioids are used concurrently with other treatments. It also includes measures documenting the exploration of options such as occupational and physical therapy and other nonpharmacologic interventions. Studies from the CDC and NAM published in 2016 and 2017 have indicated that

opioids are often neither the safest nor the most effective method for managing chronic noncancer pain, and that other therapies for pain should first or alternatively be considered when developing a pain management care plan including nonopioid pharmaceuticals, physical therapy, acupuncture, cognitive therapies, and other modalities.[56,57] Supporting the expanded consideration of such alternatives or complements to opioids, the 2019 HHS Pain Management Task Force noted that there has been a "surge of interest in nonopioid pharmacotherapies for chronic pain."[18]

### SUBDOMAIN: Appropriate Opioid Analgesic Prescribing

NQF found 54 measures and 34 measure concepts within this subdomain; 24 of these measures and measure concepts were specific to chronic pain management, 22 were specific to acute pain, and the remainder pertained to post-acute situations or were nonspecific with regard to opioid use duration. Measures of appropriate prescribing encapsulate a variety of prescriptive behaviors including suitable dose, formulation, and duration, as well as the avoidance of opioids for certain indications or co-prescribed medications. Measures in this subdomain include those that hold prescribers accountable for monitoring not only heightened risk opioid exposure, but also side effects, adverse drug events, and therapeutic outcomes associated with opioid prescriptions. Also included are related concepts such as controlled substance agreements used to establish an understanding between the patient and clinician of what the goals of treatment are as well as baseline behavioral expectations for the patient related to the use of medication for the duration of therapy.

Several TEP members and key informants highlighted the need for measures focused on tapering off opioids. Existing measures that focus on therapeutic agreements or follow-up well-visits may refer to a tapering regimen, but this concept should be brought to the forefront of measurement around opioids. In April of 2019 the Food and Drug Administration highlighted harms associated with the sudden discontinuance of prescription opioids, and the importance of individualized tapering.[58] One key informant separately remarked that it should now be self-evident to prescribers that opioid-based pain management must be coupled with a verified "exit or least harmful maintenance plan" related to that pharmacologic therapy. Additionally, no measures were found regarding safe storage and disposal of opioid containing medications—measures that might reduce the likelihood of opioids being obtained by individuals who were not prescribed the medication and may be likely to misuse them.

## Domain 2: Treatment of Opioid Use Disorders (OUD)

Within the treatment of opioid use disorders domain, there were a total of 65 measures found and an additional 21 measure concepts as noted in Table 3. Measures and measure concepts were classified according to four subdomains: OUD screening, OUD treatment initiation, OUD treatment continuity, and psychiatric and/or other illness comorbidity. Notably, there were no measures connecting OUD to physical comorbidities, and thus integration or holistic care measures may be a gap area, even as such integration of services has long been a goal of the behavioral health field.[59]

The metrics identified focus on prevention and treatment from detection through recovery, of diseases directly or commonly comorbid to OUD. Interventions in this domain are central to addressing the opioid crisis since effective, evidence-based treatment could significantly improve quality of life and reduce overdose risk for the millions of Americans who have OUD. Moreover, such disease-spectrum approaches are consistent with "cascade" strategies being developed to realistically and fully address the complex morbidity/comorbidity and chronic relapsing time-course profiles that characterize OUD.[60]

**TABLE 3. MEASURES AND MEASURE CONCEPTS FOR THE TREATMENT OF OPIOID USE DISORDERS DOMAIN**

| Subdomains | Measures | Measure Concepts |
|---|---|---|
| **OUD Screening** | 12 | 4 |
| **OUD Treatment Initiation** | 15 | 4 |
| **OUD Treatment Continuity** | 9 | 9 |
| **Psychiatric and/or Other Illness Comorbidity** | 29 | 4 |
| **Total** | **65** | **21** |

## Overarching Themes

The connection between the pain management and the treatment of OUD domains is well-established given the strong connection between opioid prescribing and subsequent opioid misuse and OUD. Recent studies suggest that up to 26 percent of persons initiating opioids for pain will misuse these agents, and up to 8 percent may develop a diagnosable OUD.[61] These rates are markedly above the less than 1 percent prevalence of OUD in the general population.[62,63] Accordingly, measures of OUD screening and monitoring are of high importance in responding to the current opioid crisis. Early screening followed by efficient, brief intervention or referral to treatment has become one of the touchstones of high-quality, holistic care for SUD and psychiatric illnesses, especially.[64,65]

Measures related to the screening and monitoring for OUD and OUD risk in the provision of care both for pain management and other behavioral health issues were prominent in the environmental scan. The need for such screening and ongoing surveillance is predicated on current evidence that a substantial treatment gap exists among persons with OUD. Only 1 of 10 persons with OUD receive the treatment they need, and 80 percent of those seeking help report an inability to access care.[26] Measures of initiation of treatment for OUD have a natural sequential association with screening metrics. Once OUD is identified, it is critical to ensure accountability that care is recommended, and access is provided. A review of national survey data found that less than 20 percent of persons with OUD have used any SUD service in a given year.[66] A separate analysis found that OUD medication treatment capacity only has the potential to cover about 61 percent of those in need.[67]

When OUD care is initiated, continuity of care becomes a central measurement issue. Guidelines for defining an approach encourage safer prescribing that integrate OUD treatment with pain management when indicated, an issue that was not well addressed by measures found in the environmental scan.[17] Certain measures do capture best practices in OUD care continuity, such as the use of team-based approaches to SUD care, and systematic follow-up in care over time, including referrals to SUD specialists and other direct and ongoing treatments.[17] This includes measures associated with medication-assisted treatment (e.g., initiation and continuity of buprenorphine or methadone therapy)—the most evidence-based therapy for OUD, supported by major national and international organizations (e.g., National Institutes of Health, CDC, and the World Health Organization), and by numerous randomized trials demonstrating its efficacy to facilitate recovery and reduce overdoses.[4,17]

While the scan yielded measures directly connected to larger behavioral health issues associated with OUD, both as precursors and corollaries, the TEP and key informants noted that there were few measures that address the complexity of issues surrounding recovery, remission, and relapse for OUD and people with behavioral health issues more generally. Addressing behavioral healthcare integration and coordination by connecting mental health, SUD, and physical care together with full consideration of transitions between different levels of care from prevention to recovery is presently of great interest to NQF's Behavioral Health and Substance Use Disorder Standing Committee—a collection

of experts convened by NQF to adjudicate endorsement of existing and emerging measures regarding that constellation of disorders.

### SUBDOMAIN: OUD Screening

There are 12 identified measures and four measure concepts related to OUD screening, i.e., detection of the disorder in its early stages, or when a patient's OUD status may otherwise be unknown to the clinician. The measures include direct questioning of patients related to their use of opioids, as well as indirect measures of potential opioid misuse drawing on patient records of prescriptions found in claims and through prescription drug monitoring programs. Measures in this category include screening for SUD risk at inpatient intake, periodic urine and medical records reviews for evidence of SUD, and "risky behavior" assessments in adolescents and adults.

TEP members and key informants emphasized the need for screening especially in primary care, including dental care and pregnancy and perinatal treatment settings, and ensuring appropriate continued engagement upon identification of an OUD. The TEP identified the absence of measures related to neonatal abstinence (withdrawal) syndrome (NAS) as a measure gap within the environmental scan.[68] Potential measurement areas for NAS include appropriate maternal treatment for OUD, as well as appropriate addressing of short-term withdrawal symptoms that babies with NAS experience after birth with nonpharmacologic therapy and very small doses of opioids, such as morphine, buprenorphine or methadone.[4]

### SUBDOMAIN: OUD Treatment Initiation

This subdomain includes 15 measures and 4 measure concepts looking at both pharmacologic and nonpharmacologic therapies related to OUD. These measures and concepts focus on the appropriate response once OUD has been diagnosed. Measures in this subdomain include several pertaining to initiation and early engagement after diagnosing an alcohol or other substance use disorder and simple screening for early or fully manifested SUD coupled with treatment appropriate for the diagnoses.

### SUBDOMAIN: OUD Treatment Continuity

The nine measures and nine measure concepts found for treatment continuity pertain to areas of care for OUD including follow-up to hospitalization, medication-supported withdrawal, treatment responsiveness, and continual assessment through recovery, remission, and relapses that interrupt those trajectories and goals. Although there is one deployed measure that considers medication therapy for 180 days after initiation, no other measures were found for long-term follow-up, e.g., review of opioid misuse that emerges or persists months or years after a treatment course has concluded. This is the case even as OUD treatments, for example methadone or buprenorphine regimens, typically last for at least 12 months and are also known to be chronic and cycling.[29,69] One key informant noted that recovery should thus not be measured as a binary "all-or-none" phenomenon, but instead should be tracked with more incremental expectations because reductions in misuse represent important and favorable indicators. This aligns with established definitions of recovery which characterize it as "a process of change through which people improve their health and wellness, live self-directed lives, and strive to reach their full potential."[70] Similar ideas come from the "cascade of care" literature which states that remission should not be taken to mean complete cessation of opioid misuse, but instead should acknowledge marked reductions in use as a worthy goal. Moreover, this "cascade of care" literature has explicitly called for more direct measures of recovery from OUD.[60]

TEP members identified the need for treatment retention, and specifically medication retention, to be addressed more intentionally through quality measurement. The TEP expressed concern that

opioid medications (prescribed for either pain or OUD) are often tapered or otherwise discontinued too soon, as are behavioral treatments, often due to reimbursement and insurer determinations.

### SUBDOMAIN: Psychiatric and Other Illness Comorbidity

There are 29 measures in this subdomain as well as four measure concepts. Psychiatric conditions, such as depression and anxiety, and misuse of other harmful substances, such as alcohol or tobacco, have been linked to an increased risk of misuse or abuse of opioids. Additionally, SUDs correlate with increased risks for physical (somatic) illnesses including infectious diseases, cancer, and heart disease.[71–74]

While the measures and measure concepts in this subdomain are not always specific to, or inclusive of, opioid use (e.g., depression measures, per se), it is important to consider comorbidities. Many people with OUD also have concomitant psychiatric conditions such as depression or anxiety, or such conditions may serve as antecedents to OUD.[71] In addition, people with OUD also typically have chemical dependencies with other harmful substances such as alcohol or tobacco.[75] One key informant pointed out that tobacco use among those with OUD is approximately 80 percent, and thus holistic quality care of such persons warrants consideration of both conditions.

Focusing on the impact of treatment on the individual's mental and physical well-being may be essential to sparing individuals from future misuse and OUD.[59] The standard of care for chronic illnesses such as OUD increasingly includes integrated approaches such as chronic condition-specific health homes. These approaches are designed to manage OUD together with other behavioral and physical challenges that commonly impact the health of persons with OUD.[76] Despite these moves towards more integrated care, this environmental scan identified only two measure concepts that targeted such interconnections, one focused generally on behavioral health integration, and the other considering HIV-related care for those with OUD. Finally, it should be noted that the scan identified pain management measures, which at least screened for psychiatric and physical comorbidities that might influence the treatment of the pain. Though these pain measurement measures do not address OUD, they might inspire OUD measures that similarly address physical comorbidities as traceable components of the overall treatment endeavor.

## Domain 3: Harm Reduction

This domain contains measures that mitigated the dangerous effects of mostly illicit drug use which are hallmarks of OUD (acutely fatal overdoses and serious viral infections). There were few measures identified in this domain, with measures falling within one of two subdomains related to overdose and use of opioid reversal medication. The scan identified six measures and seven measure concepts in this domain as shown in Table 4.

Harm reduction strategies related to OUD include overdose prevention sites (e.g., supervised consumption facilities), syringe service programs, respiratory antidotes to acute overdose (e.g., naloxone provision), and distribution of methods to detect the composition or purity of illicit drugs.[5] Harm reduction aims to prevent the potential and extreme outcomes of mortality (related to overdose or serious infection), contrasting it with strategies that look to the origins rather the endpoints of the problem by considering OUD or opioid prescribing as common precursors to overdoses. Of course, overdoses are not the only "harms" tied to the opioid crisis, but they are essential outcomes which need to be tracked to verify quality improvement.

**TABLE 4. MEASURES AND MEASURE CONCEPTS FOR THE HARM REDUCTION DOMAIN**

| Subdomains | Measures | Measure Concepts |
|---|---|---|
| **Overdose** | 5 | 4 |
| **Opioid Reversal Drug Prescription** | 1 | 3 |
| **Total** | **6** | **7** |

## Overarching Themes

The well-known propensity for opioids to produce tolerance, dependence, and abuse is an overarching theme in this and other domains of the scan.[77] This is complicated by the narrow therapeutic index (i.e., safety use window for treatment) and potential for deadly toxicity found in this drug class.[78] Calls for the co-prescribing of naloxone (an emergency antidote to opioid overdose) have likely led to some of the measures found in this environmental scan. Across the U.S., naloxone dispensing increased more than 12-fold between 2010 and 2016,[79] providing a lifesaving antidote for an estimated 26,123 overdoses in 2014 alone.[80] Moreover, well over half of all states in the U.S. have passed laws which expand access to naloxone, and otherwise limit liability to those who use it to revive someone they suspect may have overdosed on an opioid.[81]

The opioid epidemic is in large part iatrogenic, and links to prescription drugs remain high; however, the escalating incidence of overdose deaths has distinctly shifted to illicit supply chains that rely on high and hidden potency of synthetic opioids (e.g., fentanyl) commonly used to lace heroin (see Figure 1).[26] This shift implies that metrics of naloxone co-prescription with opioids are necessary, but they are insufficient to prevent the large number of deaths associated with fentanyl-adulterated heroin, a phenomenon beyond the influence of most opioid prescribers. The scan did not produce measures that address solutions to this critical issue of fentanyl-associated overdose specifically, such as access to, or education regarding, the use of fentanyl test strips.[82]

The environmental scan did not return measures of access to and capacity for harm reduction-related interventions. This measure gap is a concern as regions of the U.S. experience limited capacity of their respective harm reduction systems. Some have even cynically advocated that emergency departments and first-responders adopt a "three strikes" rule. This would deny treatment to those needing repeated lifesaving interventions.[17]

There was also a dearth of measures associated with other harm reduction interventions including for the more well-established processes such as syringe service programs. This is the case even as data from a 2016 CDC analysis indicates that only 54 percent of persons using injection drugs also use syringe services.[56]

### SUBDOMAIN: Overdose

Measures in this subdomain are focused on issues related to the direct assessment of opioid overdose frequency. Five measures and four measure concepts were found. These include fatal and nonfatal hospital-based overdoses and emergency department visits because of other adverse reactions to opioids. The four measure concepts were related to the percentage of opioid overdoses treated in emergency departments, hospital rates of opioid respiratory depression, overdose deaths from synthetic opioids, and overdose deaths from any opioid.

### SUBDOMAIN: Opioid Reversal Drug Prescription

The environmental scan yielded a single measure related to naloxone prescription post-discharge from opioid overdose at an acute care facility. In addition, three measure concepts were found related to naloxone prescriptions for OUD patients upon discharge, for patients on long-term opioid therapy, and for patients on high-dose opioid therapy.

## Domain 4: Social Issues

The four measures and one measure concept found in this domain pertained to a small subset of social issues connected to opioids and OUD as shown in Table 5. Specifically, these subdomains include violence, health literacy, opioid burden, and criminal justice. Social issues including those related to overall mental health, education, economic status, stigma, and criminal justice issues were sparse in the measures identified. Moreover, aside from a limited number of measures noted here, other forms of psychologic trauma and stress (e.g., legal problems, sexual abuse, poor social supports) place one at heightened risk for OUD, and these factors thus represent potential measurement targets.[83]

**TABLE 5. MEASURES AND MEASURE CONCEPTS FOR THE SOCIAL ISSUES DOMAIN**

| Subdomains | Measures | Measure Concepts |
|---|---|---|
| **Violence** | 2 | 0 |
| **Health Literacy** | 1 | 0 |
| **Opioid Burden** | 0 | 1 |
| **Criminal Justice** | 1 | 0 |
| **Total** | **4** | **1** |

### Overarching Themes

Many of the measure concepts and ideas that would fall within this domain are inherently challenging to operationalize or otherwise assess for accountability purposes. For example, reports on approaches to the opioid crisis have called for reduction in stigma via public relations strategies that encourage the mass media, government, and medical practitioners to diminish mainstream society's tendency to dismiss people with OUDs as "lost causes" or "morally corrupt" or to reject evidence-based treatments like buprenorphine and methadone.[26,36,37] Measuring changes in such abstract attitudes and actions is difficult but possible through patient reports regarding their clinical experiences, including assessments of whether or not a provider adopted nonprejudicial language (e.g., "a person with an OUD" rather than "an addict").[4] Additionally, stigma and related constructs might be measured via knowledge tests of providers and accountable policymakers to reduce stereotypes about OUD.

Related to stigma and risk are measurement ideas connected to criminal justice reform as a key priority to address the opioid epidemic. Such reform, for example, could expand treatment options in lieu of jail time, provide treatment in jails and prisons as necessary, and train police officers and other first-responders to better cope with the acute challenges of opioid misuse. Another important indicator identified in the environmental scan included the provision of OUD treatment on admission and discharge from criminal justice settings.[26,84] Several states have recently introduced laws to provide medication treatment in jails and prisons with favorable results. In Rhode Island, rates of overdose among released inmates were 60 percent lower after all three FDA-approved OUD treatments (i.e., methadone, buprenorphine, naloxone) were made available prior to release.[85]

A measure gap for neonatal abstinence syndrome (NAS) (also known as neonatal withdrawal syndrome) is noted above in the OUD treatment section pursuant to getting pregnant women care for the health of their babies and themselves.[86] Additionally, with regard to NAS and other dependent populations, therapeutic strategies should involve counseling to help persons function as parents (e.g., breast-feeding support, child-rearing advice) during SUD treatment—and to promote their offspring's healthy development. A newborn who is successfully weaned from fetal opioid exposure may otherwise face greater challenges related to the OUD of their caregivers.[87–90]

The TEP members also generally recognized measure gaps related to social determinants of health, specifically potential measures for factors such as employment, income, housing,

and criminal justice involvement. One recent study found that homeless persons with SUD who entered a housing intervention had greatly reduced (by 53 percent) financial needs (for temporary housing, jail, and treatment services) compared to those who were wait-listed controls for the same housing program.[91] While social determinants were mostly absent from the environmental scan, they are well known to be important antecedents and consequences of OUDs and overdoses.[4,26,27,35] Several key informants emphasized the need to track social determinants of health and to incorporate them into the measurement of opioid use and misuse.

### SUBDOMAIN: Violence

The environmental scan included two measures related to violence: general healthcare screening for intimate partner violence and violence risk screening at inpatient psychiatric facility (IPF) admission. Neither of these measures are specific to OUD but were selected for this scan because they explicitly assess interpersonal violence. Such exposure to violence represents both a complicating comorbidity, and a risk factor for developing or exacerbating SUD.[92,93]

### SUBDOMAIN: Health Literacy

The environmental scan also identified the social issue of health literacy. A single metric associated with this measurement area was identified. As with the violence measures above, this measure is not specific to OUD or pain management directly; however, it represents a patient-centered assessment of health communication competency that has potential to inspire measures related to pain or OUD treatments. While this general health literacy measure is important, also needed is evaluation of the extent to which patients initiating pain or OUD treatments are well-educated about the risks of opioids, including the potential physical and behavioral health impacts and realistic expectations about future drug use and recovery. This includes proper patient education and counseling for persons with pain and OUD as co-occurring chief complaints.[94]

### SUBDOMAIN: Opioid Burden

One measure concept was found related to the total economic burden associated with the opioid crisis. This measure concept considers healthcare, productivity, and criminal justice costs in an effort to assess the full costs associated with opioid misuse and OUD. It is estimated that OUD costs the U.S. economy nearly $100 billion each year based on the three cost concepts noted above, and well over twice that amount if one considers the direct "monetary value" of a human life.[41,42]

### SUBDOMAIN: Criminal Justice

The environmental scan yielded a single state-specific measure related to criminal justice involvement. Several TEP members and key informants emphasized the need to ensure that persons in jail receive evidence-based medication for OUD (e.g., methadone, buprenorphine) and further receive transition care support when they are released. Moreover, the environmental scan found that OUD and recidivism risk are jointly and separately linked to use of the following types of services which thus constitute important factors to measure: stable housing, employment, meaningful daily activities, and supportive peers.[95,96]

# NEXT STEPS

Measurement is an essential tool to address the opioid overdose crisis nationwide in relation to both better management of pain and the reduction of the severe consequences associated with opioid misuse and abuse. Performance measurement offers an opportunity to assess, support, and incentivize the reduction of the adverse impact of opioids in U.S. healthcare that have contributed to the opioid crisis. This environmental scan was conducted to identify impactful measures and potential measure gaps associated with opioids and opioid use disorder.

The scan identified over 200 measures and measure concepts that directly or indirectly relate to the opioid overdose epidemic presently challenging the U.S. Both opioid use for pain management and OUD treatment issues were considered. Though many measures were found across four organizing domains of pain management, treatment of OUD, harm reduction, and social issues, many gaps were also identified, including a dearth of measures that are available to assess quality of life and function, long-term recovery, comorbidities to OUD, harm reduction strategies, and economic and cultural issues including housing supports and stigma.

Over the coming weeks the convened NQF TEP will use this environmental scan as a tool moving forward in their deliberations about opioid and opioid use disorder measurement. This document will also be available for broader public use. Additional gaps will be identified and then prioritized for inclusion in the TEP's final report for the public. The final report will include guidance to CMS on opioid and OUD metrics for use in five federal quality and performance programs: the Merit-Based Incentive Payment System (MIPS), alternative payment models (APM), the Medicare Share Savings Program (SSP), the Hospital Inpatient Quality Reporting Program (IQR), and the Hospital Value-Based Purchasing Program (VBP). The overall goal of this measurement endeavor is to reduce mortality and morbidity related to opioid use in the United States.

## REFERENCES


**1** Centers for Disease Control and Prevention (CDC). Understanding the Epidemic. https://www.cdc.gov/drugoverdose/epidemic/index.html. Published December 2018. Last accessed June 2019.

**2** Allen G, Kelly A. Trump Administration Declares Opioid Crisis A Public Health Emergency. *The National Public Radio*. https://www.npr.org/2017/10/26/560083795/president-trump-may-declare-opioid-epidemic-national-emergency. Published October 26, 2017. Accessed June 17, 2019.

**3** Mershon E. How states have used emergency declarations to fight the opioid epidemic.https://www.statnews.com/2017/08/09/opioids-state-of-emergency-states/. Accessed June 17, 2019.

**4** Olsen Y, Sharfstein JM. *The Opioid Epidemic: What Everyone Needs to Know*. Oxford, New York: Oxford University Press; 2019.

**5** Jiang Y, Mcdonald J, Wilson MEL, et al. Rhode Island unintentional drug overdose death trends and ranking – Office of the State Medical Examiners Database. *RI Med J*. 2013;101(1):33-36.

**6** Saloner B, Barry CL. Ending the opioid epidemic requires a historic investment in medication-assisted treatment. *J Policy Anal Manag*. 2018;37(2):431-438.

**7** Katz J, Sanger-Katz, Margot. 'The Numbers Are So Staggering.' Overdose Deaths Set a Record Last Year. *The New York Times*. https://www.nytimes.com/interactive/2018/11/29/upshot/fentanyl-drug-overdose-deaths.html. Accessed June 17, 2019.

**8** McCabe SE, West BT, Jutkiewicz EM, et al. Multiple DSM-5 substance use disorders: A national study of US adults. *Hum Psychopharmacol*. 2017;32(5).

**9** Substance Abuse and Mental Health Services Administration (SAMHSA). *Key Substance Use and Mental Health Indicators in the United States: Results from the 2017 National Survey on Drug Use and Health*. Rockville, MD: SAMHSA; 2017. https://www.samhsa.gov/data/report/2017-nsduh-annual-national-report. Last accessed June 2019.

**10** National Institute on Drug Abuse (NIDA). The Science of Drug Use and Addiction: The Basics. https://www.drugabuse.gov/publications/media-guide/science-drug-use-addiction-basics. Published July 2018. Last accessed July 2019.

**11** American Society of Addiction Medicine (ASAM). *Definition of Addiction*. Chevy Chase, MD: ASAM; 2011. https://www.asam.org/quality-practice/definition-of-addiction. Last accessed June 2019.

**12** National Institute on Drug Abuse (NIDA). *How Science Has Revolutionized the Understanding of Drug Addiction*. https://www.drugabuse.gov/publications/drugs-brains-behavior-science-addiction/preface. Last accessed June 2019.

**13** American Psychiatric Association (APA). *Diagnostic and Statistical Manual of Mental Disorders*. Fifth Edition. Washington, DC: American Psychiatric Association; 2013.

**14** Substance Abuse and Mental Health Services Administration. Mental Health and Substance Use Disorders. https://www.samhsa.gov/find-help/disorders. Published January 14, 2019. Last accessed April 2019.

**15** HHS, Office of the Surgeon General. *Facing Addiction in America: The Surgeon General's Spotlight on Opioids.* Washington, DC: HHS; 2018. https://addiction.surgeongeneral.gov/sites/default/files/surgeon-generals-report.pdf.

**16** Puntillo K, Naidu RK. Measurement of chronic pain and opioid use evaluation in community-based persons with serious illnesses. *J Palliat Med*. 2018;21(S2):S43-S51.

**17** National Academy of Medicine (NAM), ed. *First, Do No Harm: Marshaling Clinician Leadership to Counter the Opioid Epidemic*. Washington, DC: National Academy of Medicine; 2017.

**18** HHS. *Pain Management Best Practices Inter-Agency Task Force Report*. U.S. Department of Health and Human Services; 2019. https://www.hhs.gov/ash/advisory-committees/pain/reports/index.html. Last accessed August 2019.

**19** Stewart G, Owen M. Opioids in the management of persistent non-cancer pain. *Anaesth Intensive Care Med*. 2013;14(12):533-535.

**20** Thornton J, Goyat R, Dwibedi N, et al. Health-related quality of life in patients receiving long-term opioid therapy: a systematic review with meta-analysis. *Qual Life Res*. 2017;26(8):1955-1967.

**21** Levy N, Sturgess J, Mills P. "Pain as the fifth vital sign" and dependence on the "numerical pain scale" is being abandoned in the US: Why? *Br J Anaesth*. 2018;120(3):435-438.

**22** Aldington D, Eccleston C. Evidence-Based Pain Management: Building on the Foundations of Cochrane Systematic Reviews. *Am J Public Health*. 2019;109(1):46-49.

**23** Morris C, Green KE, Chimuma, MAT LL. A Rasch analysis of the Current Opioid Misuse Measure for patients with chronic pain. *J Opioid Manag*. 2018;14(1):9.

**24** Interagency Pain Research Coordinating Committee. National Pain Strategy Overview. https://www.iprcc.nih.gov/National-Pain-Strategy/Overview. Published May 2017. Last accessed July 2019.

**25** Bloom J. Sen. Ron Wyden Smears Opioid Task Force. Why? *American Council on Science and Health*. https://www.acsh.org/news/2018/12/28/sen-ron-wyden-smears-opioid-task-force-why-13686. Published December 28, 2018. Accessed August 21, 2019.

**26** Saloner B, McGinty EE, Beletsky L, et al. A Public Health Strategy for the Opioid Crisis. *Public Health Rep*. 2018;133(1_suppl):24S-34S.

**27** Dasgupta N, Beletsky L, Ciccarone D. Opioid crisis: no easy fix to its social and economic determinants. *Am J Public Health*. 2018;108(2):182-186.

**28** Pitt AL, Humphreys K, Brandeau ML. Modeling Health Benefits and Harms of Public Policy Responses to the US Opioid Epidemic. *Am J Public Health*. 2018;108(10):1394-1400.

**29** Sharfstein JM, Olsen Y. Making amends for the opioid epidemic. *JAMA*. 2019;321(15):1446-1447.

**30** Barry C, Sherman S, Stone E, et al. Arguments supporting and opposing legalization of safe consumption sites in the U.S. *Int J Drug Policy*. 2019;63:18-22.

**31** The National Center on Addiction and Substance Abuse. *Ending the Opioid Crisis: A Practical Guide for State Policymakers*. New York: The National Center on Addiction and Substance Abuse; 2017. https://www.centeronaddiction.org/addiction-research/reports/ending-opioid-crisis-practical-guide-state-policymakers. Last accessed July 2019.

**32** Substance Abuse and Mental Health Services Administration (SAMHSA). Medication-Assisted Treatment (MAT). https://www.samhsa.gov/medication-assisted-treatment. Published July 21, 2015. Last accessed September 2019.

**33** King NB, Fraser V, Boikos C, et al. Determinants of increased opioid-related mortality in the United States and Canada, 1990-2013: a systematic review. *Am J Public Health*. 2014;104(8):e32-42.

**34** Dasgupta N, Beletsky L, Ciccarone D. Opioid crisis: no easy fix to its social and economic determinants. *Am J Public Health*. 2018;108(2):182-186.

**35** Case A, Deaton A. Mortality and morbidity in the 21st century. *Brook Pap Econ Act*. 2017;2017(1):397-476.

**36** Kennedy-Hendricks A, Barry CL, Gollust SE, et al. Social stigma toward persons with prescription opioid use disorder: associations with public support for punitive and public health-oriented policies. *Psychiatr Serv*. 2017;68(5):462-469.

**37** Yang LH, Wong LY, Grivel MM, et al. Stigma and substance use disorders: an international phenomenon. *Curr Opin Psychiatry*. 2017;30(5):378-388.

**38** Cohn M. Fatal overdoses decline in Maryland for first time in years as fentanyl-related deaths dip in first quarter. *The Baltimore Sun*. https://www.baltimoresun.com/health/bs-hs-opioid-deaths-dip-20190611-story.html. Published June 11, 2019. Accessed June 18, 2019.

**39** Musumeci M, Tolbert J. Federal Legislation to Address the Opioid Crisis: Medicaid Provisions in the SUPPORT Act. *Henry J Kais Fam Found*. October 2018. https://www.kff.org/medicaid/issue-brief/federal-legislation-to-address-the-opioid-crisis-medicaid-provisions-in-the-support-act/. Last accessed April 2019.

**40** Medicaid and CHIP Payment and Access Comission. Payment for services in institutions for mental diseases (IMDs). https://www.macpac.gov/subtopic/payment-for-services-in-institutions-for-mental-diseases-imds/. Last accessed July 2019.

**41** Florence CS, Zhou C, Luo F, et al. The economic burden of prescription opioid overdose, abuse, and dependence in the United States, 2013. *Med Care*. 2016;54(10):901.

**42** Council of Economic Advisors. *The Underestimated Cost of the Opioid Crisis*. Washington, DC: Council of Economic Advisors; 2017. https://www.whitehouse.gov/briefings-statements/cea-report-underestimated-cost-opioid-crisis/. Last accessed June 2019.

**43** Roubein R. Warren, Cummings seek $100B to fight opioid epidemic. https://thehill.com/business-a-lobbying/383787-warren-cummings-seek-100b-to-fight-opioid-epidemic. Published April 18, 2018. Last accessed June 2019.

**44** Walden G. *H.R.6 - 115th Congress (2017-2018): SUPPORT for Patients and Communities Act*.; 2018. https://www.congress.gov/bill/115th-congress/house-bill/6. Last accessed September 2019.

**45** National Academies of Science, Engineering and Medicine. *Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research*.; 2011. http://www.nationalacademies.org/hmd/Reports/2011/Relieving-Pain-in-America-A-Blueprint-for-Transforming-Prevention-Care-Education-Research.aspx. Last accessed June 2019.

**46** Hoffman J. Groundwork Is Laid for Opioids Settlement That Would Touch Every Corner of U.S. *The New York Times*. https://www.nytimes.com/2019/06/14/health/opioids-lawsuit-settlement.html. Published June 14, 2019. Accessed June 18, 2019.

**47** Sackler family sued again over toll of prescription opioids [news release]. Associated Press; May 30, 2019. https://www.usnews.com/news/best-states/new-jersey/articles/2019-05-30/nj-sues-sackler-family-over-toll-of-prescription-opioids. Accessed September 12, 2019.

**48** Compton WM, Jones CM, Baldwin G. Relationship between nonmedical prescription-opioid use and heroin use. *N Engl J Med*. 2016;374:154-163.

**49** Cerdá M, Santaella J, Marshall BDL, et al. Nonmedical prescription opioid use in childhood and early adolescence predicts transitions to heroin use in young adulthood: a national study. *J Pediatr*. 2015;167(3):605-612.e1-2.

**50** Darnall B, Ziadni M, Stieg R, et al. Patient-centered prescription opioid tapering in community outpatients with chronic pain. *JAMA Intern Med*. 2018;178(5):707-708.

**51** American Dental Association (ADA). American Dental Association Announces New Policy to Combat Opioid Epidemic. https://www.ada.org/en/press-room/news-releases/2018-archives/march/american-dental-association-announces-new-policy-to-combat-opioid-epidemic. Published March 2018. Last accessed June 2019.

**52** Spiegel DR, Chatterjee A, McCroskey AL, et al. A review of select centralized pain syndromes. *Health Serv Res Manag Epidemiol*. 2015;2. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5266436/. Last accessed September 2019.

**53** National Institute of Neurological Disorders and Stroke. Central Pain Syndrome Information Page. https://www.ninds.nih.gov/Disorders/All-Disorders/Central-Pain-Syndrome-Information-Page. Last accessed September 2019.

**54** Mayo Clinic. Fibromyalgia - Symptoms and causes. https://www.mayoclinic.org/diseases-conditions/fibromyalgia/symptoms-causes/syc-20354780. Last accessed June 2019.

**55** Ilgen MA, Bohnert ASB, Chermack S, et al. A randomized trial of a pain management intervention for adults receiving substance use disorder treatment. *Addiction*. 2016;111(8):1385-1393.

**56** Dowell D, Haegerich TM, Chou R. CDC guideline for prescribing opioids for chronic pain — United States, 2016. *MMWR Recomm Rep*. 2016;65. https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm. Last accessed June 2019.

**57** National Academies of Science, Engineering and Medicine. *Pain Management and the Opioid Epidemic: Balancing Societal and Individual Benefits and Risks of Prescription Opioid Use*. Washington, DC: The National Academies Press; 2017. https://www.nap.edu/read/24781/chapter/1. Last accessed June 2019.

**58** FDA Center for Drug Evaluation and Research. FDA identifies harm reported from sudden discontinuation of opioid pain medicines and requires label changes to guide prescribers on gradual, individualized tapering. April 2019. http://www.fda.gov/drugs/drug-safety-and-availability/fda-identifies-harm-reported-sudden-discontinuation-opioid-pain-medicines-and-requires-label-changes. Last accessed September 2019.

**59** Pincus HA, Scholle SH, Spaeth-Rublee B, et al. Quality measures for mental health and substance use: gaps, opportunities, and challenges. *Health Aff Millwood*. 2016;35(6):1000-1008.

**60** Williams AR, Nunes EV, Bisaga A, et al. Development of a cascade of care for responding to the opioid epidemic. *Am J Drug Alcohol Abuse*. 2019;45(1):1-10.

**61** Volkow ND, McLellan AT. Opioid abuse in chronic pain — misconceptions and mitigation strategies. *N Engl J Med*. 2016;374(13):1253-1263.

**62** Substance Abuse and Mental Health Services Administration (SAMHSA). Key Substance Use and Mental Health Indicators in the United States: Results from the 2016 National Survey on Drug Use and Health. https://www.samhsa.gov/data/sites/default/files/NSDUH-FFR1-2016/NSDUH-FFR1-2016.htm. Published 2017. Last accessed July 2019.

**63** National Institute on Alcohol Abuse and Alcoholism (NIAAA). Rates of nonmedical prescription opioid use and opioid use disorder double in 10 years. National Institute on Alcohol Abuse and Alcoholism (NIAAA). https://www.niaaa.nih.gov/news-events/news-releases/rates-nonmedical-prescription-opioid-use-and-opioid-use-disorder-double-10. Published June 2016. Last accessed July 2019.

**64** Substance Abuse and Mental Health Services Administration (SAMHSA). Resources for SBIRT. https://www.samhsa.gov/sbirt/resources. Published April 3, 2014. Last accessed June 2019.

**65** Centers for Disease Control and Prevention (CDC). CDC's Alcohol Screening and Brief Intervention Efforts. https://www.cdc.gov/ncbddd/fasd/alcohol-screening.html. Published December 2018. Last accessed July 2019.

**66** Saloner B, Karthikeyan S. Changes in substance abuse treatment use among individuals with opioid use disorders in the United States, 2004-2013. *JAMA*. 2015;314(14):1515-1517.

**67** Jones CM, Campopiano M, Baldwin G, et al. National and state treatment need and capacity for opioid agonist medication-assisted treatment. *Am J Public Health*. 2015;105(8):e55-e63.

**68** Ho J. Preventing neonatal abstinence syndrome within the opioid epidemic: a uniform facilitative policy. *Fac Publ*. September 2016. https://scholarship.law.umassd.edu/fac_pubs/193.

**69** Substance Abuse and Mental Health Services Administration (SAMHSA). Methadone. https://www.samhsa.gov/medication-assisted-treatment/treatment/methadone. Published June 16, 2015. Last accessed July 2019.

**70** Substance Abuse and Mental Health Services Administration (SAMHSA). Recovery and Recovery Support. https://www.samhsa.gov/find-help/recovery. Published January 14, 2019. Last accessed August 2019.

**71** Scherrer JF, Salas J, Copeland LA, et al. Increased risk of depression recurrence after initiation of prescription opioids in noncancer pain patients. *J Pain*. 2016;17(4):473-482.

**72** Edwards K, Vowles KE, Witkiewitz K. Co-use of alcohol and opioids. *Curr Addict Rep*. 2017;4(2):194-199.

**73** Preedy VR. *Neuropathology of Drug Addictions and Substance Misuse Volume 1: Foundations of Understanding, Tobacco, Alcohol, Cannabinoids and Opioids*. Academic Press; 2016.

**74** National Institute on Drug Abuse. Common Comorbidites and Substance Use Disorders. https://www.drugabuse.gov/publications/research-reports/common-comorbidities-substance-use-disorders/introduction. Published February 2018. Last accessed July 2019.

**75** Kessler RC, Chiu WT, Demler O, et al. Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey replication. *Arch Gen Psychiatry*. 2005;62:11.

**76** Clemans-Cope L, Wishner JB, Allen EH, et al. Experiences of three states implementing the Medicaid health home model to address opioid use disorder — case studies in Maryland, Rhode Island, and Vermont. *J Subst Abuse Treat*. 2017;83:27-35.

**77** Morgan MM, Christie MJ. Analysis of opioid efficacy, tolerance, addiction and dependence from cell culture to human. *Br J Pharmacol*. 2011;164(4):1322-1334.

**78** Opioid Pharmacokinetic Drug-Drug Interactions. https://www.ajmc.com/journals/supplement/2011/a370_11sep/a370_11sep_overholser_s276tos287. Last accessed June 2019.

**79** Jones CM, Lurie PG, Compton WM. Increase in naloxone prescriptions dispensed in US retail pharmacies since 2013. *Am J Public Health*. 2016;106(4):689-690.

**80** National Institute on Drug Abuse (NIDA). Medications to Treat Opioid Addiction. https://www.drugabuse.gov/publications/research-reports/medications-to-treat-opioid-addiction/overview. Published June 2018. Last accessed June 2019.

**81** Energy and Commerce Committee, Subcommittee on Oversight and Investigations. *Hearing on "What Is the Federal Government Doing to Combat the Opioid Abuse Epidemic?" (May 1, 2015)*.; 2015. https://energycommerce.house.gov/committee-activity/hearings/hearing-on-what-is-the-federal-government-doing-to-combat-the-opioid. Last accessed June 2019.

**82** Krieger MS, Goedel WC, Buxton JA, et al. Use of rapid fentanyl test strips among young adults who use drugs. *Int J Drug Policy*. 2018;61:52-58.

**83** Webster LR. Risk factors for opioid-use disorder and overdose. *Anesth Analg*. 2017;125(5):1741-1748.

**84** Centers for Disease Control and Prevention (CDC). Infectious Diseases, Opioids and Injection Drug Use in Persons Who Inject Drugs. https://www.cdc.gov/pwid/opioid-use.html. Published April 2019. Last accessed June 2019.

**85** Green T, Clarke J, Brinkley-Rubenstein L. Postincarceration fatal overdoses after implementing medications for addiction treatment in a statewide correctional system. *JAMA Psychiatry*. 2018;75(4):405-407.

**86** McQueen K, Murphy-Oikonen J. Neonatal abstinence syndrome. *N Engl J Med*. 2016;375(25):2468-2479.

**87** Kocherlakota P. Neonatal abstinence syndrome. *Pediatrics*. 2014;134(2):e547-561.

**88** De La Cruz D. Opioids May Interfere With Parenting Instincts, Study Finds. *The New York Times*. https://www.nytimes.com/2016/10/13/well/family/opioids-may-interfere-with-parenting-instincts-study-finds.html. Published October 13, 2016. Accessed August 21, 2019.

**89** Helton T. When Your Parents Are Heroin Addicts. The Daily Beast. https://www.thedailybeast.com/when-your-parents-are-heroin-addicts. Last accessed August 2019.

**90** Williams SC, Devooght K. 5 things to know about the opioid epidemic and its effect on children. *Child Trends*. https://www.childtrends.org/child-trends-5/5-things-know-opioid-epidemic-effect-children. Last accessed August 2019.

**91** Larimer ME, Malone DK, Garner MD, et al. Health care and public service use and costs before and after provision of housing for chronically homeless persons with severe alcohol problems. *JAMA*. 2009;301(13):1349-1357.

**92** Desmarais SL, Gray JS, Rade CB, et al. Medication-assisted treatment and violent outcomes in community-based offenders with alcohol and drug use problems. *Psychol Violence*. 2016;6(3):378-389.

**93** Hughes K, Bellis MA, Hardcastle KA, et al. The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis. *Lancet Public Health*. 2017;2(8):e356-e366.

**94** Rogers AH, Bakhshaie J, Orr MF, et al. Health literacy, opioid misuse, and pain experience among adults with chronic pain. *Pain Med*. https://academic.oup.com/painmedicine/advance-article/doi/10.1093/pm/pnz062/5425909. Last accessed June 2019.

**95** Mallik-Kane K, Jannetta J, Hatry H. Measuring progress in connecting criminal justice to health. *Urban Inst*. March 2018:62.

**96** Substance Abuse and Mental Health Services Administration (SAMHSA). Medication-Assisted Treatment (MAT) in the Criminal Justice System: Brief Guidance to the States. https://store.samhsa.gov/product/Medication-Assisted-Treatment-MAT-in-the-Criminal-Justice-System-Brief-Guidance-to-the-States/PEP19-MATBRIEFCJS. Published March 2019. Last accessed June 2019.

# APPENDIX A:
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# APPENDIX B:
## Environmental Scan Strategy

### Purpose

This appendix details the NQF team's approach to conducting the environmental scan of measures for the Opioid and Opioid Use Disorder Quality Measures project. The environmental scan addressed the current state of opioid-related healthcare quality measures to support the work of the TEP. The TEP will use the scan to identify gaps and provide recommendations on the inclusion of measures in various federal programs and on future measure development efforts regarding challenges posed by opioid use in the U.S.

### Research Questions

The following three research questions guided the environmental scan. These questions helped to focus the NQF team's research efforts and ensure the information sources collected are relevant to the project objectives.

- What current or emerging quality of care measurements (i.e., metrics, indicators) exist regarding the use of opioids for pain management or the treatment and prevention of opioid-related abuse, dependence, and death?
- What are the major current and emerging concepts (i.e., facts and science-based theories) regarding opioid use and misuse which can be used to evolve associated quality measurement?
- What directions should quality measurement science take to advance the battle against the U.S. opioid overdose epidemic, i.e., where are the apparent and important gaps?

### Scope

The environmental scan began with a broad search and gradually decreased in scope as certain settings, types of measures, or concepts were prioritized. The TEP and key informants guided the prioritization process. The NQF team only collected measures for which there is enough information to understand how the measure should be used (e.g., what is being measured, where does measurement occur, who is the target for measurement, etc.). This report synthesized information from the following five sources:

1. Peer-reviewed, scientific literature (capturing elements found in Table B1)
2. 'Grey' scientific literature (i.e., technical reports, from reputable sources) (capturing elements found in Table 1)
3. Quality measurement databases (e.g., Quality Positioning System QPS) (capturing elements found in **Appendix D** and **E**)
4. State laws responding to the opioid crisis (capturing elements found in Table B2)
5. Key informant interviews (See **Appendix C** for more information)

### Sources

The NQF team conducted various searches and reviews as specified in this appendix. Key informants were used to identify exemplary literature as well as existing and emerging measures. The search was an iterative process with constant opportunities for feedback from the project team and the Technical Expert Panel. The environmental scan included, but was not limited to a review of the peer-reviewed literature and grey literature and:

1. Academic Search
   a. Pubmed (NLM)
2. Internet searches at the following sites:
   a. HHS agencies
      » Administration for Children and Families
      » Administration for Community Living
      » Agency for Healthcare Research and Quality
      » Agency for Toxic Substance and Diseases Registry
      » Assistant Secretary for Health
      » Assistant Secretary for Planning and Evaluation
      » Assistant Secretary for Preparedness and Response
      » Center for Disease Control and Prevention
      » Centers for Medicare & Medicaid Services
      » Food and Drug Administration
      » Health Resources and Services Administration
      » Indian Health Service
      » National Institutes of Health
      » Office of the National Coordinator for Health Information Technology
      » Substance Abuse and Mental Health Services Administration
   b. National Academy of Medicine
   c. Commonwealth Fund
   d. Kaiser Family Foundation
   e. QPS
   f. Government Accountability Office

The following publications were also reviewed to compile a compendium of relevant measures and measure concepts:

1. NQF (**Quality Positioning System**, **Online Product Update System**)
2. CMS Measures Inventory Tool (CMIT)
3. Qualified Clinical Data Registries (QCDR)

## Search Parameters

The NQF team used the parameters defined in Table B1 to conduct the search. The team used specific "terms" or "strings" to search for information sources. Databases were searched using combinations and variations of the example search terms below. NQF also used relevant MeSH terms. The NQF team refined the search parameters when appropriate as additional information was gathered.

**TABLE B1. LITERATURE SEARCH PARAMETERS**

| Included | Excluded |
|---|---|
| • Published/passed on or after January 1, 2013* AND<br>• Contains the strings: "opioid" OR "opiate" OR "pain management" OR "substance use disorder" OR "addict" AND<br>• Contains the strings: "metric" OR "measure" OR "indicator" OR "survey" AND<br>• Contains the strings: "Quality" OR "Health" | • Published before 2013 and not current<br>• Not available in English<br>• Case studies<br>• Publications focusing exclusively on tobacco, pharmacology or molecular levels |

* the year when synthetic opioid deaths first started to rise markedly

## Operational Definitions

(for use in completing/categorizing the various evidentiary reviews)

- **Outcomes measure**: a measure that assesses a health state (e.g., death, lab results, illness remission)
- **Process measure**: a measure that assesses an action that is presumed to be connected to quality of care (e.g., a treatment, screening, scheduling)
- **Structural measure**: a measure that assesses resources available for care (e.g., supplies of naloxone, equipment, facilities, personnel, procedures)
- **Measure concept**: a quality measure that has not been fully specified and tested, such as one that draws on an existing or potential assessment tool or instrument that includes a planned target and population
- **Instrument**: an assessment tool such as a survey, scale, questions, etc.
- **Opioid**: this term encompasses the family of psychoactive pharmaceutical analgesics with a chemical structure similar to morphine, used primarily to treat pain and has high abuse and addiction potential.
- **Substance abuse or misuse**: the use of a pharmaceutical or alcohol in a way that is risky (i.e., contraindicated, excessive, underage, otherwise illicit)
- **Substance use disorder**: dependence on one or more legal or illegal drugs (including alcohol and tobacco) that is marked by increasing reliance on those substances, and negative behavioral change (e.g., frequent intoxication and lability).
- **Pain management**: The active treatment of acute or chronic pain under medical (surgical, dental, primary care) prescription or supervision, including the use of nonpharmaceutical interventions (e.g., occupational and/or physical therapy.) and the use of interventions in the context of palliative care.
- **Access**: the timely use of personal health services to achieve the best possible outcomes.

## State Law Reviews

State laws and policies germane to the opioid epidemic in the U.S. were studied via a perusal of LexisNexis database items obtained using the search terms “state laws opioids” and constrained to those since 2013. Grey and scientific literature items were also used to consider state laws. Table B2 summarizes the types of items and information found by this search strategy. Specific reference to such items/information are made in the environmental scan if deemed useful. Overall, each of the laws or policies identified corresponds to one of the measure domains used to guide this environmental scan (see the last column). Accordingly, these laws generally did not add any new measurement concepts or ideas to the scan. Table B2 shows how widespread state-based initiatives are with regards to the opioid crisis.

TABLE B2. SUMMARY OF STATE LAWS AND POLICIES THAT DIRECTLY ADDRESSED THE OPIOID CRISIS*

| Description | States (n**) | Examples | Domain/ Subdomain |
|---|---|---|---|
| **Education/Awareness Campaigns** | 12 | | Prevention |
| **School and Community Prevention Programs** | 6 | Maryland now requires drug prevention programs in grades 3-12. | Prevention |
| **Prescription Drug Monitoring Programs** | 49 | Five states have published evaluations of these programs. Some states have inter-state data sharing networks. | Pain management |
| **Safe prescribing initiatives** | 11 | 7 day dispensing limits; training for providers | Pain management |
| **Prescription drug take-back programs** | 7 | In 2017 MA became the first state to finance safe disposal of medications. | Pain management |
| **Professional training in SUD care** | 3 | School and child welfare professionals educated about SUDs | OUD treatment |
| **Screening and referral initiatives** | 4 | MA law from 2016 requires verbal screening in schools. | OUD treatment |
| **Naloxone access increased** | 11 | | Harm reduction |
| **Syringe exchange programs** | 6 | Vending machines in Nevada | Harm reduction |
| **Expand treatment workforce** | 6 | University training, specific to SUD | OUD treatment |
| **Support the location (finding) of SUD treatment** | 4 | RI requires health department to maintain real-time database of open inpatient and outpatient slots. | OUD treatment |
| **Expand medication for opioid use disorder treatment** | 8 | WI changed methadone clinic regulations to align with federal regulations | OUD treatment |
| **Enhance quality of care initiatives** | 12 | Several states added requirement for discharge planning | OUD treatment |
| **Improve insurance coverage for SUD care** | 10 | VA added criteria for Medicaid managed care to cover appropriate levels of care | OUD treatment |
| **Expand recovery support services** | 8 | Missouri added credentialing requirements for peer support specialists. | OUD treatment |
| **Expand role of law enforcement in SUD care** | 6 | TN adds program to train police to better cope with SUD crises. DE added program to permit treatment in lieu of arrest. | OUD treatment/ Social issues |
| **Expand jail diversion programs** | 9 | Maryland and Georgia set aside $13 million in funding to support. | OUD treatment/ Social issues |
| **Expand SUD treatment in jails and prisons** | 7 | | OUD treatment/ Social issues |
| **Initiatives to connect former inmates to treatment and recovery resources upon release from incarceration** | 7 | Maryland has program to offer post-release treatment, housing, education, and employment assistance. | OUD treatment/ Social issues |

* The National Center on Addiction and Substance Abuse (CASA), *Ending the Opioid Crisis: A Practical Guide for State Policymakers*, October 2017, available at http://www.centeronaddiction.org.

** At least this number of individual states have such laws or policies specific to the opioid crisis.

## Key Informants

The goals of the key informant interviews were to supplement the environmental scan and identify gap areas for future measures. A convenience sample was used for this data gathering exercise based on staff knowledge of the field and CMS and TEP input. Ultimately, eight informants were selected with the aim of obtaining more information in the following areas: health services research and economics, rural issues, patient and family experience, measure development, pharmaceuticals, Medicaid, and dentistry. See the table summarizing the key informants for more information (**Appendix C**).

# APPENDIX C:
## Key Informant Interview Guide

Thank you for participating in this "key informant" interview for the National Quality Forum's Opioid and Opioid Use Disorder Technical Expert Panel. The TEP is focused on identifying quality measures, measure concepts, and future directions for quality measurement development related to the opioid epidemic now faced by the U.S. You have been given a preview of the questions, so we will jump right in and have you address them as thoroughly as you can over the next hour. Our intent is to record and use your comments to inform our 30-member TEP, and to inform staff's creation of a written and public environmental scan and overall TEP report documents. In those documents we may quote you, and thus today we will be recording our conversation, so please consider your remarks as "on the record", unless you express to us otherwise. We want to give you proper attribution, but only with your full consent to do so. Does that sound OK?

Before we get into our questions, please let us know if there is anyone joining you.

Very good, let's begin:

1. What concepts (i.e., ideas, theories, principles, contexts) do you regard as contemporary and essential to advancing quality measurement related to the opioid epidemic?
    a. Concepts in the pain control domain?
    b. Concepts in the substance use disorder domain?
    c. Overriding health and healthcare concepts of particular importance?
2. What is your current knowledge of quality measurement tools germane to the opioid epidemic, and where do you think major "gaps" exist regarding that tool set as you know it?
    a. Please first characterize for us your current knowledge of opioid-related quality measures?
    b. Pick 1 to 3 major gaps you see as high priority?
    c. Any specific databases/archives that you think we must check for existing or pipeline measures?
3. What peer-reviewed and grey scholarly or technical literature must the TEP consider?
    a. Select up to three peer-reviewed pieces and suggest why you think they are of supreme importance.
    b. Selection up to three grey literature pieces similarly.
4. Any other comments, questions, or words of inspiration you wish to offer to NQF's Opioid and Opioid Use Disorder TEP?

| Key Informant | Current Background | Expertise |
|---|---|---|
| **Kyle Null, PharmD, PhD** | Senior Director, Outcomes Research and Data Science at Meridian, Mississippi Pharmaceuticals | Pharmacist and health services research using administrative claims data, healthcare payment systems, bundled and prospective payment systems, quality and performance-based payment systems |
| **Tami Mark, PhD** | Senior Director, Behavioral Health Financing and Quality Measurement | Behavioral health treatment systems through research, data analytics, and policy development |
| **Brendan Saloner, PhD** | Assistant Professor at Johns Hopkins University Bloomberg School of Public Health | Health policy management, intersection of health and social policy with respect to health insurance use in promotion of access to care, financial protection, and wellness |
| **Melissa Azur, PhD*** | Associate Director at Mathematica | Mental health services and policies, development of quality behavioral health measures, quality measurement |
| **Justin Riley, MBA** | President and CEO of Young People in Recovery (YPR) | Patient advocate, long-term recovery survivor, White House Champion of Change award recipient, member of the National Advisory Council for the Substance Abuse Mental Health Administration and the Executive Committee for the Coalition to Stop Opioid Overdose |
| **Omar Abubaker, DMD, PhD** | Professor and S. Elmer Bear Chair at VCU College of Dentistry | Patient advocate, experienced loss of family member to opioid addiction, graduate of program on addiction, clinician and educator at VCU College of Dentistry |
| **Tripp Logan, PharmD** | Vice President/Pharmacy Consultant at MedHere Today | Rural health experience, community pharmacy owner, part of the quality metrics expert panel at the Pharmacy Quality Alliance (PQA), strong background in measure development through PQA for eight years |

* Drs. Deborah Garnick and Cindy Thomas of The Heller School for Social Policy and Management at Brandeis University assisted Dr. Azur in her responses.

# APPENDIX D:
## Measure Inventory

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| 1 | | Activity counseling for back pain | Percentage of patients 18 to 65 years of age who were counseled to remain active and exercise or were referred to physical therapy | Process | Pain Management | Alternatives to Opioids |
| 2 | | Acute Medication Prescribed for Cluster Headache | Percentage of patients age 18 years old and older with a diagnosis of cluster headache (CH) who were prescribed a guideline recommended acute medication for cluster headache within the 12-month measurement period. | Process | Pain Management | Alternatives to Opioids |
| 3 | | Adult smoking cessation advice/ counseling | Heart failure patients with a history of smoking cigarettes, who are given smoking cessation advice or counseling during hospital stay. For purposes of this measure, a smoker is defined as someone who has smoked cigarettes anytime during the year prior to hospital arrival. | Process | OUD Treatment | Psychiatric or Dependence Comorbidity |
| 4 | Endorsed | Alcohol & Other Drug Use Disorder Treatment at Discharge | This rate describes only those who receive a prescription for FDA-approved medications for alcohol or drug use disorder OR a referral for addictions treatment. | Process | OUD Treatment | OUD Treatment Initiation |
| 5 | | Alcohol and Drug Use Assessing Status After Discharge | Discharged patients who received a diagnosis of alcohol or drug disorder during their inpatient stay, who are contacted between 7 and 30 days after hospital discharge and follow-up information regarding their alcohol or drug use status post discharge is collected. | Process | OUD Treatment | OUD Treatment Continuity |
| 6 | | Alcohol Problem Use Assessment & Brief Intervention for Home-Based Primary Care and Palliative Care Patients | Percentage of newly enrolled and active home-based primary care and palliative care patients who were assessed for a problem with alcohol use at enrollment AND if positive, have a brief intervention for problematic alcohol use documented on the date of the positive assessment. | Process | OUD Treatment | Psychiatric or Dependence Comorbidity |
| 7 | | Alcohol Screening and Brief Intervention (ASBI) in the ER | Percentage of patients aged 15 to 34 seen in the ER for injury who were screened for hazardous alcohol use AND provided a brief intervention within 7 days of the ER visit if screened positive. | Process | OUD Treatment | Psychiatric or Dependence Comorbidity |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **8** | Endorsed | Alcohol Use Brief Intervention Provided or Offered | The measure is reported as an overall rate which includes all hospitalized patients 18 years of age and older to whom a brief intervention was provided, or offered and refused, and a second rate, a subset of the first, which includes only those patients who received a brief intervention. The Provided or Offered rate (SUB-2), describes patients who screened positive for unhealthy alcohol use who received or refused a brief intervention during the hospital stay. The Alcohol Use Brief Intervention (SUB-2a) rate describes only those who received the brief intervention during the hospital stay. Those who refused are not included.<br>These measures are intended to be used as part of a set of 4 linked measures addressing Substance Use (SUB-1 Alcohol Use Screening ; SUB-2 Alcohol Use Brief Intervention Provided or Offered; SUB-3 Alcohol and Other Drug Use Disorder Treatment Provided or Offered at Discharge; SUB-4 Alcohol and Drug Use: Assessing Status after Discharge). | Process | OUD Treatment | Psychiatric or Dependence Comorbidity |
| **9** | | All cause inpatient, residential re-admission | This measure is used to assess the rate of all-cause unplanned readmissions, 90 days following an initial episode of residential/ inpatient SUD treatment and assesses the clinician's management of the patient's entire medical condition. | Process | OUD Treatment | OUD Treatment Continuity |
| **10** | | Ambulatory Post-Discharge Patient Follow-Up | Percentage of patients, regardless of age, who received anesthesia services in an ambulatory setting whose post-discharge status was assessed within 72 hours of discharge | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **11** | | Annual Monitoring for Individuals on Chronic Opioid Therapy | The proportion of patients age 18 years and older who are continuously enrolled in a Qualified Health Plan product and on chronic opioid therapy who have not received a drug test at least once during the measurement year. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| 12 | | Appropriate controlled substance prescribing (definitive diagnosis(es)) via adherence to Controlled Substance Agreements (CSA) or (OA's) with corrective action taken for pain and/or substance use disorder patients when violations occur. | 1. Successful Reporting:<br>a. Documentation of definitive pathology (e.g., imaging, surgical report, serology, provider referral for addiction/substance use disorder, etc.) to warrant chronic pain and/or buprenorphine/naloxone medication chronically.<br>b. Provider must document signing of a Controlled Substance (CSA) or Opiate Agreement (OA) if more than two (2) Schedule II controlled substance prescriptions are provided to a patient in a 12-month period. Understandably, prescriptions may occur in the prior reporting year as well as in the current reporting year.<br>c. For all patients violating existing CSA/OA, such violations are documented with correlative adjustments in treatment (e.g.: shorter duration prescriptions (2 week to 4 week), increased frequency of urine drug screens (quarterly to monthly), random pill counts, more frequent visits, etc.).<br>2. Numerator & Denominator. Numerator data are patients aged 18 and above with documented definitive pathology of ICD data below. Denominator data are all patients aged 18 and above with any combination of the ICD and HCPCS data defined in this section 3, below.<br>3. Measure explanation: Chronic Pain medication prescribed (prescribed for greater than one week or more than twice a year) only after a diagnosis and medical or surgical plan has been implemented. CSA or OA followed and, if actionable violation (i.e.: Urine Drug Screen inappropriate, pill counts off, multiple providers prescribing, polypharmacy, etc.) corrective action taken (i.e.: probation, escalated use of Urine Drug Screens, shorter prescriptions intervals, termination of controlled prescribing or similar actions) as result of the CSA/OA violation. | Outcome | Pain Management | Appropriate Opioid Analgesic Prescribing |
| 13 | | Appropriate Monitoring for Adverse Events of Opioid and Psychiatric Medications | This measure assesses whether established guidelines to monitor for common ADEs of opioid and psychiatric medications that are administered to patients during inpatient psychiatric facility admissions are being followed.<br>The performance period for the measure is one year. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **14** | | Appropriate Monitoring of patients receiving an Opioid via an IV Patient Controlled Analgesia Device | Patients receiving intravenous opioids via patient controlled analgesia who receive appropriate monitoring of their respiratory status (respiratory rate and pulse oximetry) and level of sedation | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **15** | | Appropriate Prescribing for First Fill of Opioids | The percentage of adults, 18 and older, who fill an initial prescription for opioid medications that does not comply with at least one of five separate measure components derived from the 2016 Centers for Disease Control (CDC) Guideline for prescribing of opioid medications that are measurable in secondary administrative claims data.<br>Lower is better on this measure. | Composite | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **16** | | Assessment and management of chronic pain: percentage of patients with chronic pain diagnosis with documentation of a pain assessment completed at initial visit using a standardized tool | This measure is used to assess the percentage of patients age 16 years and older with chronic pain diagnosis with documentation of a pain assessment completed at initial visit using a standardized tool that addresses pain intensity, location, pattern, mechanism of pain, current functional status and follow-up plan | Process | Pain Management | Pain Assessment |
| **17** | | Avoid Certain Opioid Analgesics in the Elderly © ActiveHealth | Percentage of patients 65 years or older who were prescribed certain opioid analgesics | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **18** | | Avoidance of Long-Acting (LA) or Extended-Release (ER) Opiate Prescriptions | Percentage of Adult Patients Who Were Prescribed an Opiate Who Were Not Prescribed a Long-Acting (LA) or Extended-Release (ER) Formulation | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **19** | | Avoidance of Opiate Prescriptions for Greater Than 3 Days Duration for Acute Pain | Percentage of Adult Patients Who Were Prescribed an Opiate for Whom the Prescription Duration Was Not Greater than 3 days for Acute Pain | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **20** | | Avoidance of Opiates for Low Back Pain or Migraines | Percentage of Patients with Low Back Pain and/or Migraines Who Were Not Prescribed an Opiate | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **21** | | Avoiding Use of CNS Depressants in Patients on Long-Term Opioids | The percentage of patients on long-term opioid prescriptions without a concurrent prescription for an CNS depressant | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **22** | | Back Pain: Initial Visit | Percentage of patients at least 18 years of age and younger than 80 with a diagnosis of back pain who have medical record documentation of all of the following on the date of the initial visit to the physician:<br>1. Pain assessment<br>2. Functional status<br>3. Patient history, including notation of presence or absence of "red flags"<br>4. Assessment of prior treatment and response, and<br>5. Employment status | Process | Pain Management | Pain Assessment |
| **23** | | Bipolar Disorder and Major Depression: Appraisal for Alcohol or Chemical Substance Use | Percentage of patients with depression or bipolar disorder with evidence of an initial assessment that includes an appraisal for alcohol or chemical substance use | Process | OUD Treatment | OUD Screening |
| **24** | Endorsed | CAHPS Hospice Survey: Getting Help for Symptoms | Multi-item measure P1: Did your family member get as much help with pain as he or she needed P2: How often did your family member get the help he or she needed for trouble breathing P3: How often did your family member get the help he or she needed for trouble with constipation P4: How often did your family member receive the help he or she needed from the hospice team for feelings of anxiety or sadness | Outcome: PRO-PM | Pain Management | Pain Assessment |
| **25** | | Care for Older Adults Pain Assessment | Percent of plan members who had a pain screening or pain management plan at least once during the year. (This information about pain screening or pain management is collected for Medicare Special Needs Plans only. These plans are a type of Medicare Advantage Plan designed for certain types of people with Medicare. Some Special Needs Plans are for people with certain chronic diseases and conditions, some are for people who have both Medicare and Medicaid, and some are for people who live in an institution such as a nursing home.) | Process | Pain Management | Pain Assessment |
| **26** | | Care for Older Adults: Advance Care Planning, Functional Status Assessment, Pain Screening | Care for Older Adults: The percentage of adults 65 years and older who received the following during the measurement year:<br>• Advance Care Planning<br>• Functional Status Assessment<br>• Pain Screening | Outcome | Pain Management | QoL/Function |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **27** | | Change in Patient Reported Pain and Functional Status Following Spinal Cord Stimulator Implantation | Measurement of the change in patient reported quality of life following spinal cord stimular implantation for failed back surgery syndrome. Quality of life measurement on standardized scale includes pain, mobility, analgesic medication use, psychological well-being and activities of daily living. | Outcome: PRO-PM | Pain Management | Pain Score Change |
| **28** | | Chronic Opioid Therapy Follow up Evaluation | All patients 18 and older prescribed opiates for longer than six weeks duration who had a follow-up evaluation conducted at least every three months during COT documented in the medical record. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **29** | Endorsed | Comfortable Dying: Pain Brought to a Comfortable Level Within 48 Hours of Initial Assessment | Number of patients who report being uncomfortable because of pain at the initial assessment (after admission to hospice services) who report pain was brought to a comfortable level within 48 hours. | Intermediate Outcome | Pain Management | Time to Pain Management |
| **30** | | Communication about Pain During the Hospital Stay | The following questions (or a subset of questions) would replace the current Pain Management measure in the HCAHPS Survey with a new measure(s). The following items were tested in early 2016. CMS is currently analyzing the results, as well as discussing these potential new pain management items with focus groups and hospital staff.<br>Multi-item measure (composite):<br>HP1: During this hospital stay, did you have any pain<br>HP2: During this hospital stay, how often did hospital staff talk with you about how much pain you had<br>HP3: During this hospital stay, how often did hospital staff talk with you about how to treat your pain | Outcome: PRO-PM | Pain Management | Pain Assessment |
| **31** | | Communication about Treating Pain Post-Discharge | The following questions (or a subset of questions) would replace the current Pain Management measure in the HCAHPS Survey with a new measure(s). The following items were tested in early 2016. CMS is currently analyzing the results, as well as discussing these potential new pain management items with focus groups and hospital staff. Multi-item measure (composite): DP1: Before you left the hospital, did someone talk with you about how to treat pain after you got home DP2: Before you left the hospital, did hospital staff give you a prescription for medicine to treat pain DP3: Before giving you the prescription for pain medicine, did hospital staff describe possible side effects in a way you could understand | Outcome | Pain Management | Pain Assessment |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **32** | | Concomitant Chronic Opioid Analgesic Therapy and Benzodiazepines Prescribing Rate | The number of patients prescribed an elevated dose (≥ 50 MME per day) of chronic opioid analgesic therapy (COAT) who have greater than 7 days of overlapping benzodiazepine therapy in the measurement year. The overlapping benzodiazepine therapy days must be from one prescription in order to meet the inclusion criteria. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **33** | Endorsed | Concurrent Use of Opioids and Benzodiazepines (COB) | The percentage of individuals 18 years and older with concurrent use of prescription opioids and benzodiazepines during the measurement year.<br>A lower rate indicates better performance. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **34** | | Consideration of Non Pharmacologic Interventions | All patients 18 and older prescribed opiates for longer than six weeks duration with whom the clinician discussed nonpharmacologic interventions (e.g. graded exercise, cognitive/ behavioral therapy, activity coaching at least once during COT documented in the medical record. | Process | Pain Management | Alternatives to Opioids |
| **35** | | Constipation assessment following narcotic prescription in patients diagnosed with cancer | Percentage of patients for whom constipation was assessed at the time of narcotic prescription or the following visit | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **36** | | Continuity of Care after Detox | This measure is defined as the percent of individuals who receive a detoxification service and received another substance abuse service (other than detoxification or crisis care) within 14 days of discharge from detoxification. | Access | OUD Treatment | OUD Treatment Continuity |
| **37** | Endorsed | Continuity of care after inpatient or residential treatment for substance use disorder (SUD) | Percentage of discharges from an inpatient or residential treatment for substance use disorder (SUD) for Medicaid beneficiaries, ages 18 to 64, which was followed by a treatment service for SUD. SUD treatment includes having an outpatient visit, intensive outpatient encounter or partial hospitalization, telehealth encounter, or filling a prescription or being administered or ordered a medication for SUD. (After an inpatient discharge only, residential treatment also counts as continuity of care.) Two rates are reported, continuity within 7 and 14 days after discharge. | Process | OUD Treatment | OUD Treatment Continuity |
| **38** | Endorsed | Continuity of Care for Medicaid Beneficiaries after Detoxification (Detox) From Alcohol and/or Drugs | Percentage of discharges from a detoxification episode for adult Medicaid Beneficiaries, age 18-64, that was followed by a treatment service for substance use disorder (including the prescription or receipt of a medication to treat a substance use disorder (pharmacotherapy) within 7 or 14 days after discharge. This measure is reported across all detoxification settings. | Process | OUD Treatment | OUD Treatment Continuity |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **39** | | Continuity of Pharmacotherapy for Alcohol Use Disorder | Percentage of adults 18-64 years of age with pharmacotherapy for alcohol use disorder (AUD) who have at least 180 days of treatment and a Proportion of Days Covered (PDC) of at least 0.8 | Process | OUD Treatment | Psychiatric or Dependence Comorbidity |
| **40** | Endorsed | Continuity of Pharmacotherapy for Opioid Use Disorder (OUD) | Percentage of adults aged 18 years and older with pharmacotherapy for opioid use disorder (OUD) who have at least 180 days of continuous treatment | Process | OUD Treatment | OUD Treatment Continuity |
| **41** | | Counseling on physical activity in older adults - a. Discussing Physical Activity, b. Advising Physical Activity | Discussing Physical Activity: Percentage patients 65 years of age and older who reported: discussing their level of exercise or physical activity with a doctor or other health provider in the last 12 months. Advising Physical Activity: Percentage patients 65 years of age and older who reported receiving advice to start, increase, or maintain their level of exercise or physical activity from a doctor or other health provider in the last 12 months. | Process | Pain Management | Alternatives to Opioids |
| **42** | | Counseling Regarding Pharmacological Treatment for Opioid Dependence | This measure is used to assess the percentage of patients aged 18 years and older with a diagnosis of current opioid addiction who were counseled regarding psychosocial and pharmacologic treatment options for opioid addiction within the 12 month reporting period. | Process | OUD Treatment | OUD Treatment Initiation |
| **43** | | Counseling Regarding Psychosocial and Pharmacological Treatment Options for Alcohol Dependence | This measure is used to assess the percentage of patients aged 18 years and older with a diagnosis of current alcohol dependence who were counseled regarding psychosocial AND pharmacologic treatment options for alcohol dependence within the 12 month reporting period. | Process | OUD Treatment | Psychiatric or Dependence Comorbidity |
| **44** | | Depression and Anxiety Assessment Prior to Spine-Related Therapies | Percentage of patients aged 18 years and older with documentation of depression and/or anxiety assessment through discussion with the patient including the use of a standardized assessment tool prior to index therapy(-ies) for treatment of spine-related pain symptoms. | Process | OUD Treatment | Psychiatric or Dependence Comorbidity |
| **45** | | Discharge Prescription of Naloxone after Opioid Poisoning or Overdose | Percentage of Opioid Poisoning or Overdose Patients Presenting to An Acute Care Facility Who Were Prescribed Naloxone at Discharge | Process | Harm Reduction | Opioid Reversal Drug Prescription |
| **46** | | Documentation of Signed Opioid Treatment Agreement | All patients 18 and older prescribed opiates for longer than six weeks duration who signed an opioid treatment agreement at least once during COT documented in the medical record. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **47** | | Emergency Department Use Due to Opioid Overdose | This is a claims-based measure that captures the rate of emergency department visits for opioid overdose events using ICD-9 or ICD-10 diagnosis codes. Events are measured per 1,000 person-years among Medicare beneficiaries greater than 18 years of age residing in the geography being measured. The measure is designed for use at both the county and state levels. | Outcome | Harm Reduction | Overdose |
| **48** | | Emergent care for improper medication administration, medication side effects | Percentage of home health quality episodes of care during which the patient required emergency medical treatment from a hospital emergency department related to improper medication administration or medication side effects. | Outcome | Harm Reduction | Overdose |
| **49** | | Evaluation of High Risk Pain Medications for MME | Percentage of patients aged 18 years and older prescribed and actively taking one or more high risk pain medications and evaluated for clinical appropriateness of morphine milligram equivalents (MME) | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **50** | | Failure to Progress (FTP): Proportion of patients failing to achieve a Minimal Clinically Important Difference (MCID) in improvement in pain score, measured via the Numeric Pain Rating Scale (NPRS), in rehabilitation patients with hip, leg or ankle (lower extremity except knee) injury. | The proportion of patients failing to achieve an MCID of two (2) points or more improvement in the NPRS change score for patients with hip, leg, or ankle injuries treated during the observation period will be reported.<br>Additionally, a risk-adjusted MCID proportional difference will be determined by calculating the difference between the risk model predicted and observed MCID proportion will reported for each physical therapist or physical therapy group. The risk adjustment will be calculated using a logistic regression model using: LEFS score, baseline pain score, age, sex, payer, and symptom duration (time from surgery or injury to baseline physical therapy visit).<br>These measures will serve as a physical or occupational therapy performance measure at the eligible physical or occupational therapist or physical or occupational therapy group level. | Outcome: PRO-PM | Pain Management | Pain Score Change |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **51** | | Failure to Progress (FTP): Proportion of patients failing to achieve a Minimal Clinically Important Difference (MCID) in improvement in pain score, measured via the Numeric Pain Rating Scale (NPRS), in revalidation patients with knee injury pain. | The proportion of patients failing to achieve MCID of two (2) points or more improvement in the NPRS change score for patients with knee injuries treated during the observation period will be reported.<br>Additionally, a risk-adjusted MCID proportional difference will be determined by calculating the difference between the risk model predicted and observed MCID proportion will reported for each physical therapist or physical therapy group. The risk adjustment will be calculated using a logistic regression model using: baseline KOS score, baseline pain score, age, sex, payer, and symptom duration (time from surgery or injury to baseline physical therapy visit).<br>These measures will serve as a physical or occupational therapy performance measure at the eligible physical or occupational therapist or physical or occupational therapy group level. | Outcome: PRO-PM | Pain Management | Pain Score Change |
| **52** | | Failure to Progress (FTP): Proportion of patients failing to achieve a Minimal Clinically Important Difference (MCID) in improvement in pain score, measured via the Numeric Pain Rating Scale (NPRS), in revalidation patients with low back pain. | The proportion of patients failing to achieve an MCID of two (2) points or more improvement in the NPRS change score for patients with low back pain treated during the observation period will be reported.<br>Additionally, a risk-adjusted MCID proportional difference will be determined by calculating the difference between the risk model predicted and observed MCID proportion will reported for each physical therapist or physical therapy group. The risk adjustment will be calculated using a logistic regression model using: baseline MDQ score, baseline pain score, age, sex, payer, and symptom duration (time from surgery or injury to baseline physical therapy visit).<br>These measures will serve as a physical or occupational therapy performance measure at the eligible physical or occupational therapist or physical or occupational therapy group level. | Outcome: PRO-PM | Pain Management | Pain Score Change |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **53** | | Failure to Progress (FTP): Proportion of patients failing to achieve a Minimal Clinically Important Difference (MCID) in in improvement in pain score, measured via the Numeric Pain Rating Scale (NPRS), in rehabilitation patients with arm, shoulder, or hand injury. | The proportion of patients failing to achieve an MCID of two (2) points or more improvement in the NPRS change score for patients with arm, shoulder, or hand injury treated during the observation period will be reported.<br>Additionally, a risk-adjusted MCID proportional difference will be determined by calculating the difference between the risk model predicted and observed MCID proportion will reported for each physical therapist or physical therapy group. The risk adjustment will be calculated using a logistic regression model using: baseline DASH score, baseline pain score, age, sex, payer, and symptom duration (time from surgery or injury to baseline physical therapy visit).<br>These measures will serve as a physical or occupational therapy performance measure at the eligible physical or occupational therapist or physical or occupational therapy group level. | Outcome: PRO-PM | Pain Management | Pain Score Change |
| **54** | | Failure to Progress (FTP): Proportion of patients failing to achieve a Minimal Clinically Important Difference (MCID) in in improvement in pain score, measured via the Numeric Pain Rating Scale (NPRS), in rehabilitation patients with arm, shoulder, or hand injury. | The proportion of patients failing to achieve an MCID of two (2) points or more improvement in the NPRS change score for patients with arm, shoulder, or hand injury treated during the observation period will be reported.<br>Additionally, a risk-adjusted MCID proportional difference will be determined by calculating the difference between the risk model predicted and observed MCID proportion will reported for each physical therapist or physical therapy group. The risk adjustment will be calculated using a logistic regression model using: baseline DASH score, baseline pain score, age, sex, payer, and symptom duration (time from surgery or injury to baseline physical therapy visit).<br>These measures will serve as a physical or occupational therapy performance measure at the eligible physical or occupational therapist or physical or occupational therapy group level. | Outcome: PRO-PM | Pain Management | Pain Score Change |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **55** | | Failure to Progress (FTP): Proportion of patients failing to achieve a Minimal Clinically Important Difference (MCID) in in improvement in pain score, measured via the Numeric Pain Rating Scale (NPRS), in rehabilitation patients with neck pain/injury. | The proportion of patients failing to achieve an MCID of two (2) points or more improvement in the NPRS change score for patients with neck pain/injury treated during the observation period will be reported.<br>Additionally, a risk-adjusted MCID proportional difference will be determined by calculating the difference between the risk model predicted and observed MCID proportion will reported for each physical therapist or physical therapy group. The risk adjustment will be calculated using a logistic regression model using: baseline NDI score, baseline pain score, age, sex, payer, and symptom duration (time from surgery or injury to baseline physical therapy visit).<br>These measures will serve as a physical or occupational therapy performance measure at the eligible physical or occupational therapist or physical or occupational therapy group level. | Outcome: PRO-PM | Pain Management | Pain Score Change |
| **56** | | Failure to Progress (FTP): Proportion of patients failing to achieve a Minimal Clinically Important Difference (MCID) to indicate functional improvement in knee rehabilitation of patients with knee injury measured via their validated Knee Outcome Survey (KOS) score, or equivalent instrument which has undergone peer reviewed published validation and demonstrates a peer reviewed published MCID. | The proportion of patients failing to achieve an MCID of ten (10) points or more improvement in the KOS change score for patients with knee injury patients treated during the observation period will be reported.<br>Additionally, a risk-adjusted MCID proportional difference will be determined by calculating the difference between the risk model predicted and observed MCID proportion will reported for each physical therapist or physical therapy group. The risk adjustment will be calculated using a logistic regression model using: baseline KOS score, baseline pain score, age, sex, payer, and symptom duration (time from surgery or injury to baseline physical therapy visit).<br>These measures will serve as a PT/OT performance measure at the eligible PT/OT or PT/OT group level. | Outcome: PRO-PM | Pain Management | Pain Score Change |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **57** | Endorsed | Follow-Up After Hospitalization for Mental Illness | The percentage of discharges for patients 6 years of age and older who were hospitalized for treatment of selected mental illness diagnoses and who had a follow-up visit with a mental health practitioner. Two rates are reported:<br>• The percentage of discharges for which the patient received follow-up within 30 days of discharge<br>• The percentage of discharges for which the patient received follow-up within 7 days of discharge. | Process | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |
| **58** | Endorsed | HBIPS-1 Admission Screening for Violence Risk, Substance Use, Psychological Trauma History and Patient Strengths Completed | The proportion of patients, age greater than and equal to 1 year, admitted to a hospital-based inpatient psychiatric setting who are screened within the first three days of hospitalization for all of the following: risk of violence to self or others, substance use, psychological trauma history and patient strengths. | Process | OUD Treatment | OUD Screening |
| **59** | | HBIPS-6 Post discharge continuing care plan created | The proportion of patients discharged from a hospital-based inpatient psychiatric setting with a post discharge continuing care plan created. This measure is a part of a set of seven nationally implemented measures that address hospital-based inpatient psychiatric services (HBIPS-1: Admission Screening for Violence Risk, Substance Use, Psychological Trauma History and Patient Strengths completed, HBIPS-2: Physical Restraint, HBIPS-3: Seclusion, HBIPS-4: Multiple Antipsychotic Medications at Discharge, HBIPS-5: Multiple Antipsychotic Medications at Discharge with Appropriate Justification and HBIPS-7: Post Discharge Continuing Care Plan Transmitted) that are used in The Joint Commission's accreditation process. Note that this is a paired measure with HBIPS-7 (Post Discharge Continuing Care Plan Transmitted). | Process | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **60** | | HBIPS-7 Post discharge continuing care plan transmitted to next level of care provider upon discharge | The proportion of patients discharged from a hospital-based inpatient psychiatric setting with a complete post discharge continuing care plan, all the components of which are transmitted to the next level of care provider upon discharge. This measure is a part of a set of seven nationally implemented measures that address hospital-based inpatient psychiatric services (HBIPS-1: Admission Screening for Violence Risk, Substance Use, Psychological Trauma History and Patient Strengths completed, HBIPS-2: Physical Restraint, HBIPS-3: Seclusion, HBIPS-4: Multiple Antipsychotic Medications at Discharge, HBIPS-5: Multiple Antipsychotic Medications at Discharge with Appropriate Justification and HBIPS-6: Post Discharge Continuing Care Plan Created) that are used in The Joint Commission's accreditation process. Note that this is a paired measure with HBIPS-6 (Post Discharge Continuing Care Plan Created). | Process | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |
| **61** | Endorsed | HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) Survey | HCAHPS (NQF #0166) is a 32-item survey instrument that produces 11 publicly reported measures:<br>7 multi-item measures (communication with doctors, communication with nurses, responsiveness of hospital staff, pain control, communication about medicines, discharge information and care transition); and<br>4 single-item measures (cleanliness of the hospital environment, quietness of the hospital environment, overall rating of the hospital, and recommendation of hospital).<br>Please note: Beginning with patients discharged in January 2018, the three original Pain Management items were removed from the HCAHPS Survey and replaced by three new items that will comprise the new Communication About Pain measure. The original Pain Management measure will be publicly reported on the Hospital Compare Web site until December 2018. The new Communication About Pain measure will be publicly reported beginning in October 2020. | Outcome | Pain Management | Pain Assessment |
| **62** | Endorsed | Health literacy measure derived from the health literacy domain of the C-CAT | 0-100 measure of health literacy related to patient-centered communication, derived from items on the staff and patient surveys of the Communication Climate Assessment Toolkit | Outcome | Social Issues | Health Literacy |
| **63** | | Heel Pain Treatment Outcomes for Adults | DESCRIPTION:<br>Percentage of patients aged 18 years and older with a diagnosis of heel pain who had two or more encounters in the past year. | Outcome: PRO-PM | Pain Management | Pain Score Change |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **64** | | Heel Pain Treatment Outcomes for Pediatric Patients | Percentage of patients aged 6 to 18 years with a diagnosis of heel pain who experience a decrease in heel pain. | Outcome: PRO-PM | Pain Management | Pain Score Change |
| **65** | | High-Dose Chronic Opioid Analgesic Therapy Prescribing Rate | The percentage of enrollees prescribed chronic opioid analgesic therapy (COAT) that met or exceeded the daily dose recommendation upper limit of 90 Morphine Milligram Equivalence (MME) per day in the measurement year. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **66** | | History and Physical Examination for Opioid Users | All patients 18 and older prescribed opiates for longer than six weeks duration who had a history and physical examination* conducted at least once during COT documented in the medical record. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **67** | Endorsed | Hospice and Palliative Care Composite Process Measure—Comprehensive Assessment at Admission | The Hospice Comprehensive Assessment Measure assesses the percentage of hospice stays in which patients who received a comprehensive patient assessment at hospice admission. The measure focuses on hospice patients age 18 years and older. A total of seven individual NQF endorsed component quality will provide the source data for this comprehensive assessment measure, including NQF #1634, NQF #1637, NQF #1639, NQF #1638, NQF #1617, NQF #1641, and NQF #1647. These seven measures are currently implemented in the CMS HQRP. These seven measures focus on care processes around hospice admission that are clinically recommended or required in the hospice Conditions of Participation, including patient preferences regarding life-sustaining treatments, care for spiritual and existential concerns, and management of pain, dyspnea, and bowels. | Composite | Pain Management | Pain Assessment |
| **68** | | Hospital Harm – Opioid-Related Adverse Events | This electronic clinical quality measure (eCQM) assesses the proportion of inpatient admissions for patients age 18 years and older who suffer the harm of receiving an excess of hospital-administered opioids, defined as receiving a narcotic antagonist (naloxone). In the first 24 hours of the hospitalization, a hospital-administered opioid must be documented prior to receiving naloxone to be considered part of the numerator. | Outcome | Harm Reduction | Overdose |
| **69** | | Hospital Harm Performance Measure: Opioid Related Adverse Respiratory Events | This measure will assess opioid related adverse respiratory events (ORARE) in the hospital setting. The goal for this measure is to assess the rate at which naloxone is given for opioid related adverse respiratory events that occur in the hospital setting, using a valid method that reliably allows comparison across hospitals. | Outcome | Harm Reduction | Overdose |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **70** | | Hospital-level risk-standardized Opioid extended use rate following THA and/or TKA (Opioid extended use) | This measure estimates the proportion of individuals without cancer who had any ( 1) opioid prescription filed between 90- and 180-days post TKA and/or THA. The target population is patients who are 65 years and older, are enrolled in fee-for-service (FFS) Medicare, and discharged from BWH and other PHS acute-care hospitals following THA/TKA. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **71** | | Identification of Major Co-Morbid Medical Conditions | Percentage of patients 18 years or older undergoing an elective surgical procedure who received general or spinal anesthesia AND who has documentation of a significant co-morbid condition(s) in their medical record within 30 days of operation date. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **72** | | Identification of Opioid Use Disorder among Patients Admitted to Inpatient Psychiatric Facilities | The measure assesses the percentage of patients admitted to an inpatient psychiatric facility who were screened and evaluated for opioid use disorder. The performance period for the measure is one year. | Process | OUD Treatment | OUD Screening |
| **73** | | Immediate Adult Post-Operative Pain Management | The percentage of patients 18 or older admitted to the PACU after an anesthetic with a maximum pain score <7/10 prior to anesthesia end time. | Outcome | Pain Management | Pain Score Change |
| **74** | Endorsed | Improvement in Pain Interfering with Activity | Percentage of home health episodes of care during which the patient's frequency of pain when moving around improved. | Outcome | Pain Management | Pain Score Change |
| **75** | | Improving or Maintaining Mental Health | Percent of all plan members whose mental health was the same or better than expected after two years. | Outcome | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |
| **76** | | Index Opioid Prescription Prescribing Rate | The prescribing rate of index opioid prescriptions to enrollees during the measurement year. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **77** | | Initial Opioid Prescribing at High Dosage | The percentage of individuals ≥18 years of age with ≥1 initial opioid prescriptions with an average daily morphine milligram equivalent (MME) of ≥50. (Excludes patients in hospice care and those with cancer. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **78** | | Initial Opioid Prescribing for Long Duration | The percentage of individuals ≥18 years of age with ≥1 initial opioid prescriptions for >7 cumulative days' supply.(Excludes patients in hospice care and those with cancer | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **79** | | Initial Opioid Prescribing for Long-Acting or Extended-Release High Dosage | The percentage of individuals ≥18 years of age with ≥1 initial opioid prescriptions for long-acting or extended-release opioids.(Excludes patients in hospice care and those with cancer | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **80** | | Initial opioid prescription compliant with CDC recommendations | Composite score indicating compliance with five measurable CDC opioid prescribing guidelines. The denominator includes new opioid prescriptions in the measurement year. The numerator includes new opioid prescriptions that are compliant on all 5 CDC indicators. Higher is better on this measure. | Composite | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **81** | Endorsed | Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment | This measure assesses the degree to which the organization initiates and engages members identified with a need for alcohol and other drug (AOD) abuse and dependence services and the degree to which members initiate and continue treatment once the need has been identified. Two rates are reported:<br>• Initiation of AOD Treatment. The percentage of adolescent and adult members with a new episode of AOD abuse or dependence who initiate treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter, partial hospitalization, telehealth or medication assisted treatment (MAT) within 14 days of the diagnosis.<br>• Engagement of AOD Treatment. The percentage of adolescent and adult members with a new episode of AOD abuse or dependence who initiated treatment and who had two or more additional AOD services or MAT within 34 days of the initiation visit. | Process | OUD Treatment | OUD Treatment Initiation |
| **82** | Endorsed | Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment (IET-AD) | Percentage of Medicaid beneficiaries age 18 and older with a new episode of alcohol or other drug (AOD) abuse or dependence who received the following:<br>Initiation of AOD Treatment. Percentage of beneficiaries who initiate treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter or partial hospitalization, telehealth, or medication assisted treatment (MAT) within 14 days of the diagnosis<br>Engagement of AOD Treatment. Percentage of beneficiaries who initiate treatment and who had two or more additional AOD services or MAT within 34 days of the initiation visit | Process | OUD Treatment | OUD Treatment Initiation |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **83** | Endorsed | Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment (IET-HH) | Percentage of Health Home enrollees age 13 and older with a new episode of alcohol or other drug (AOD) abuse or dependence who received the following:<br>Initiation of AOD Treatment. Percentage of beneficiaries who initiate treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter or partial hospitalization, telehealth, or medication assisted treatment (MAT) within 14 days of the diagnosis<br>Engagement of AOD Treatment. Percentage of beneficiaries who initiate treatment and who had two or more additional AOD services or MAT within 34 days of the initiation visit | Process | OUD Treatment | OUD Treatment Initiation |
| **84** | | Initiation and Engagement of Alcohol and Other Drug Dependence Treatment | The percentage of adolescent and adult members with a new episode of alcohol or other drug (AOD) dependence who received the following: a. Initiation of AOD Treatment. The percentage of members who initiate treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter or partial hospitalization within 14 days of the diagnosis. b. Engagement of AOD Treatment. The percentage of members who initiated treatment and who had two or more additional services with a diagnosis of AOD within 30 days of the initiation visit. | Process | OUD Treatment | OUD Treatment Initiation |
| **85** | Endorsed | Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (eCQM) | Percentage of patients 13 years of age and older with a new episode of alcohol and other drug (AOD) dependence who received the following.<br>Two rates are reported<br>a. Percentage of patients who initiated treatment within 14 days of the diagnosis<br>b. Percentage of patients who initiated treatment and who had two or more additional services with an AOD diagnosis within 30 days of the initiation visit | Process | OUD Treatment | OUD Treatment Initiation |
| **86** | | Inpatient Assessment of Depression Symptoms | The purpose of this measure is to improve the monitoring of the severity of depression as a part of the treatment care plan by implementing the PHQ-9 in the inpatient setting. This process measure will serve as a complementary patient-reported outcome performance measure (PRO-PM) that would evaluate risk-adjusted symptom improvement in patients admitted to inpatient facilities. | Process | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |
| **87** | | Intimate Partner (Domestic) Violence Screening | Percentage of female patients aged 15â€ 40 years old who were screened for intimate partner (domestic) violence at any time during the reporting period. | Process | Social Issues | Violence |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| 88 | | IPF Alcohol Use Screening completed within one day of admission | Alcohol Use Screening completed within one day of patient's admission to the IPF. This is a companion measure to MUC XDFGC -- IPF Drug Use Screening completed within one day of admission. | Process | OUD Treatment | OUD Screening |
| 89 | | IPF Drug Use Screening completed within one day of admission | Drug Use Screening completed within one day of patient's admission to the IPF. This is a companion measure to MUC XDFGD -- IPF Alcohol Use Screening completed within one day of admission. | Process | OUD Treatment | OUD Screening |
| 90 | | IPF Suicide Risk Screening completed within one day of admission | Percentage of admissions to an IPF for which a detailed screening for risk of suicide was completed within one day of admission. | Process | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |
| 91 | | IPF Violence Risk Screening completed within one day of admission | Percentage of admissions for which a detailed screening for risk of violent behavior was completed within one day of admission. | Process | Social Issues | Violence |
| 92 | | Kidney Stones: Opioid utilization after ureteroscopy | Percentage of patients who underwent ureteroscopy and are discharged on NSAIDS, Acetaminophen, or "Other" and who were not prescribed opioids for pain control | Process | Pain Management | Non-Opioid Pain Management |
| 93 | Endorsed | MDS 3.0 Measure (#0676): Percent of Residents Who Self-Report Moderate to Severe Pain (Short Stay) | This measure captures the percent of short stay residents, with at least one episode of moderate/severe pain or horrible/excruciating pain of any frequency, in the last 5 days. | Outcome | Pain Management | Pain Assessment |
| 94 | Endorsed | MDS 3.0 Measure (#0677): Percent of Residents Who Self-Report Moderate to Severe Pain (Long Stay) | This measure captures the percent of long-stay residents who report either (1) almost constant or frequent moderate to severe pain in the last 5 days or (2) any very severe/horrible in the last 5 days. | Outcome | Pain Management | Pain Assessment |
| 95 | | Median Time to Pain Management for Long Bone Fracture | Median time from emergency department arrival to time of initial oral or parenteral pain medication administration for emergency department patients with a principal diagnosis of long bone fracture (LBF). | Process | Pain Management | Time to Pain Management |
| 96 | | Medication Prescribed For Acute Migraine Attack | Percentage of patients age 12 years and older with a diagnosis of migraine who were prescribed a guideline recommended medication for acute migraine attacks within the 12 month measurement period. | Process | Pain Management | Non-Opioid Pain Management |
| 97 | | Medication Reconciliation at Admission | This measure assesses the percentage of inpatient psychiatric facility (IPF) hospitalizations with medication reconciliation completed within 24 hours of admission. The performance period for the measure is one year. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **98** | Endorsed | Medication Reconciliation Post-Discharge | The percentage of discharges from any inpatient facility (e.g. hospital, skilled nursing facility, or rehabilitation facility) for patients 18 years and older of age seen within 30 days following discharge in the office by the physician, prescribing practitioner, registered nurse, or clinical pharmacist providing on-going care for whom the discharge medication list was reconciled with the current medication list in the outpatient medical record. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **99** | | Mental Health Response at Twelve Months - Progress Toward Recovery | Patients age 18 and older with an initial score equivalent to ten or higher on the Patient Health Questionnaire (PHQ-9) OR equivalent to ten or higher on the Generalized Anxiety Disorder 7-Item (GAD-7), who demonstrate progress toward social goals at twelve months (+/- 60 days after an index visit) defined as an increase in score equivalent to 4 or higher on the PROMIS Satisfaction with Social Roles and Activities. | Outcome: PRO-PM | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |
| **100** | | Multimodal Pain Management | Percentage of patients, regardless of age, undergoing selected elective surgical procedures that were managed with multimodal pain medicine. | Process | Pain Management | Non-Opioid Pain Management |
| **101** | | Narcotic Pain Medicine Management Following Elective Spine Procedure | Percentage of patients aged 18 years and older with documentation of narcotic use/ requirements at baseline (initial encounter) and at 3 months following initial assessment and interventions for treatment of spine-related pain symptoms and documentation of follow-up plan. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **102** | | No or Reduced Criminal Justice Involvement | The percentage of Community Mental Health (CMH) assessed members with no or reduced criminal justice involvement | Outcome | Social Issues | Criminal Justice |
| **103** | Endorsed | Oncology: Plan of Care for Pain – Medical Oncology and Radiation Oncology (paired with 0384) | Percentage of patients, regardless of age, with a diagnosis of cancer who are currently receiving chemotherapy or radiation therapy that have moderate or severe pain in the first two visits and for which there is a documented plan of care to address pain. | Process | Pain Management | Pain Care Plan |
| **104** | Endorsed | Oncology: Medical and Radiation - Plan of Care for Moderate to Severe Pain | Percentage of patients, regardless of age, with a diagnosis of cancer currently receiving chemotherapy or radiation therapy who report having moderate to severe pain with a plan of care to address pain documented on or before the date of the second visit with a clinician | Process | Pain Management | Pain Care Plan |
| **105** | Endorsed | Oncology: Medical and Radiation Pain Intensity Quantified (eCQM) | Percentage of patient visits, regardless of patient age, with a diagnosis of cancer currently receiving chemotherapy or radiation therapy in which pain intensity is quantified | Process | Pain Management | Pain Assessment |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **106** | | Opioid Monitoring | The purpose of this measure is to improve the monitoring, based on evidence-based guidelines, of IPF patients prescribed opioids for increased risk of opioid use disorder (OUD) and substance use by conducting urine drug testing (UDT) and prescription drug monitoring program (PDMP) review. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **107** | | Opioid Screening | The purpose of this measure is to improve the universal screening of patients admitted to the IPF to identify opioid use by conducting a urine drug screen (UDS) and prescription drug monitoring program (PDMP) review. | Process | OUD Treatment | OUD Screening |
| **108** | | Opioid Therapy Follow-up Evaluation | All patients 18 and older prescribed opiates for longer than 6 weeks duration who had a follow-up evaluation conducted at least every 3 months during Opioid Therapy documented in the medical record | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **109** | | Opioid-Related Symptom Distress Scale | The Opioid-Related Symptom Distress Scale (ORSDS) is a 4-point scale that evaluates 3 symptom distress dimensions (frequency, severity, bothersomeness) for 12 symptoms. | Outcome | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **110** | | Opioids: Hospital-level risk-standardized medication side effect rate following THA and/or TKA (Opioid-induced respiratory depression) | This measure estimates a risk-standardized opioid-related respiratory depression rate associated with elective primary total hip arthroplasty (THA) and/or total knee arthroplasty (TKA). The outcome is defined as any incidence of opioid-induced respiratory depression occurring from the date of index admission to discharge from the hospital. The target population is patients who are 65 years and older, are enrolled in fee-for-service (FFS) Medicare, and hospitalized in nonfederal acute-care hospitals. | Outcome | Harm Reduction | Overdose |
| **111** | | Osteoarthritis (OA): Function and Pain Assessment | Percentage of patient visits for patients aged 21 years and older with a diagnosis of osteoarthritis (OA) with assessment for function and pain | Process | Pain Management | QoL/Function |
| **112** | | Outcome of High Risk Pain Medications Prescribed in Last 6 Months | Percentage of patients aged 18 years and older prescribed and actively taking one or more high risk medications in the last 6 months meeting the following criteria:<br>o Evaluation of polypharmacy AND<br>o Reduction to the high risk medication where clinically appropriate (e.g., change pain medication, number of medications, dosage and/or frequency prescribed) | Outcome | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **113** | | Overuse of barbiturate and opioid containing medications for primary headache disorders | Percentage of patients age 12 years and older with a diagnosis of primary headache who were prescribed opioid or barbiturate containing medications assessed for medication overuse headache within the 12-month measurement period, and if identified as overusing opioid or barbiturate containing medication, treated or referred for treatment. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **114** | | Overuse Of Opioid Containing Medications For Primary Headache Disorders | Percentage of patients aged 12 years and older diagnosed with primary headache disorder and taking opioid containing medication who were assessed for opioid containing medication overuse within the 12â€ month measurement period and treated or referred for treatment if identified as overusing opioid containing medication. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **115** | Endorsed | Pain Assessment | The percentage of hospice patients who screened positive for pain and who received a comprehensive assessment of pain within 1 day of screening. | Process | Pain Management | Pain Assessment |
| **116** | | Pain Assessment and Follow-Up | Percentage of patients aged 18 years and older with documentation of a pain assessment through discussion with the patient including the use of a standardized tool(s) on each visit AND documentation of a follow-up plan when pain is present. | Process | Pain Management | Pain Assessment |
| **117** | | Pain Assessment and Follow-Up for Patients with Dementia | Percentage of patients with dementia who underwent documented screening * for pain symptoms at every visit and if screening was positive also had documentation of a follow-up plan. | Process | Pain Management | Pain Assessment |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **118** | | Pain Assessment and Follow-up Reporting Measure | Facility reports in CROWNWeb one of the six conditions below for each qualifying patient once before August 1, 2017 and once before February 1, 2018.<br>Based on NQF #0420.<br>1. Facilities must report one of the following conditions for each eligible patient:<br>a. Pain assessment using a standardized tool is documented as positive and a follow-up plan is documented<br>b. Pain assessment documented as positive, a follow-up plan is not documented, and the facility possesses documentation that the patient is not eligible<br>c. Pain assessment documented as positive using a standardized tool, a follow-up plan is not documented, and no reason is given<br>d. Pain assessment using a standardized tool is documented as negative, and no follow-up plan required<br>e. No documentation of pain assessment, and the facility possesses documentation the patient is not eligible for a pain assessment using a standardized tool<br>f. No documentation of pain assessment, and no reason is given<br>2. Conditions covering the first six months of the performance period must be reported in CROWNWeb before August 1, 2017, and the conditions covering the second six months of the performance period must be reported in CROWNWeb before February 1, 2018. | Process | Pain Management | Pain Assessment |
| **119** | | Pain Assessment Conducted | Percentage of home health episodes of care in which the patient was assessed for pain, using a standardized pain assessment tool, at start/resumption of care. | Process | Pain Management | Pain Assessment |
| **120** | | Pain Assessments and Target Setting for Patients with Osteoarthritis | Percentage of patients 18 years of age and older with a diagnosis of osteoarthritis (OA) for whom a score from one of a select list of validated pain interference or global health assessment tools was recorded at least twice during the measurement period and for whom a target was documented and linked to the initial assessment. | Process | Pain Management | Pain Care Plan |
| **121** | Endorsed | Pain Brought Under Control Within 48 Hours | Patients aged 18 and older who report being uncomfortable because of pain at the initial assessment (after admission to palliative care services) who report pain was brought to a comfortable level within 48 hours | Outcome | Pain Management | Time to Pain Management |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **122** | | Pain Brought Under Control within the first three visits | Percent of patients 18 and older who report being uncomfortable because of pain at the initial palliative care assessment who report pain was brought to a comfortable level (e.g. "Comfortable? Yes/No", "mild" or pain score < 4) within the first three visits | Outcome | Pain Management | Time to Pain Management |
| **123** | | Pain Interference Response utilizing PROMIS | The percentage of adult patients (18 years of age or older) who report pain issues and demonstrated a response to treatment at one month from the index score | Outcome: PRO-PM | Pain Management | Pain Score Change |
| **124** | | Pain Interventions Implemented during All Episodes of Care | Percentage of all home health episodes of care during which pain interventions were included in the physician-ordered plan of care and implemented (since the previous OASIS assessment). | Process | Pain Management | Pain Care Plan |
| **125** | | Pain Interventions Implemented During Long Term Episodes Of Care | Percentage of long term home health episodes of care during which pain interventions were included in the physician-ordered plan of care and implemented (since the previous OASIS assessment). | Process | Pain Management | Pain Care Plan |
| **126** | | Pain Interventions Implemented During Short Term Episodes Of Care | Percentage of short term home health episodes of care during which pain interventions were included in the physician-ordered plan of care and implemented (since the previous OASIS assessment). | Process | Pain Management | Pain Care Plan |
| **127** | | Pain Interventions In Plan Of Care | Percentage of home health episodes of care in which the physician-ordered plan of care includes intervention(s) to monitor and mitigate pain. | Process | Pain Management | Pain Care Plan |
| **128** | Endorsed | Pain Screening | The percentage of hospice patients who were screened for pain during the initial nursing assessment. | Process | Pain Management | Pain Assessment |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
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| **129** | | Pain, Function and General Health Postoperative Improvement | Performance Measure #1 - Change in the calculated score of a validated general health, function, and/or pain score using a standard patient reported outcome survey from before to after surgery.<br>Performance Measure #2 - The overall percentage of patients that improve their general health, function, and/or pain scores beyond a minimum threshold for each postoperative interval.<br>Instructions: Patients who undergo a surgical procedure are asked to complete an outcomes survey both preoperatively and following surgery.<br>Rationale: Understanding a patient's mental and general physical improvement, functional improvement, and improvement in pain levels as a result of surgery is an important aspect of clinical care. The general health scores, functional scores, and pain scores that are calculated can be used to improve a specific patient's care plan or can be analyzed retrospectively to modify overall treatment methodologies. Doctors have the option of collecting a postoperative outcomes survey at different intervals following surgery to account for different surgery types and physician follow-up patterns. | Outcome: PRO-PM | Pain Management | Pain Score Change |
| **130** | | Patient Acceptable Symptom State Outcomes | Percentage of patients 18 years or older who completed a baseline and, within the CY(calendar year) reporting period of Jan. 1, 20xx - Dec.31, 20xx, a follow-up Patient Acceptable Symptoms State (PASS) assessment that showed a statistically significant improvement in comparison to initial assessment or who had already reported a score in which there is no room for statistical improvement. The use of Patient Reported Outcomes (PROs) in clinical research is well documented. | Outcome | Pain Management | Pain Score Change |
| **131** | | Patient Queried about Pain and Pain Interference with Function | All visits for patients diagnosed with a muscular dystrophy (MD) where the patient was queried about pain and pain interference with function using a validated and reliable instrument*. | Process | Pain Management | QoL/Function |
| **132** | | Patient Reported Pain in Cancer Following Chemotherapy | The PRO-PM will assess clinically meaningful change in pain following completion of chemotherapy administered with curative intent to adult patients with breast cancer, colon cancer, and non-small cell lung cancer (NSCLC). | Outcome: PRO-PM | Pain Management | Pain Score Change |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **133** | | Patient Satisfaction With Spine Care | Percentage of patients aged 18 years and older undergoing spine intervention(s) who completed 3-month follow-up (patient-reported) satisfaction with care assessment. Satisfaction will be reported as % of patients reporting satisfaction with procedure. This measure will be calculated with 2 performance rates:<br>1. Rate 1: Patient population with Follow-up/ Patient population with baseline<br>2. Rate 2: Patient population with improvement in satisfaction with care status after Follow-up/Patient population with Follow-up.<br>Overall Rate = Rate 2 | Outcome | Pain Management | Pain Score Change |
| **134** | | Patient-Reported Experience with Anesthesia | Percentage of patients, aged 18 and older, who were surveyed on their patient experience and satisfaction with anesthesia care and who reported a positive experience.<br>This measure will consist of two performance rates:<br>AQI48a: Percentage of patients, aged 18 and older, who were surveyed on their patient experience and satisfaction with anesthesia care<br>AQI48b: Percentage of patients, aged 18 and older, who completed a survey on their patient experience and satisfaction with anesthesia care who report a positive experience with anesthesia care<br>NOTE: The measure requires that a valid survey, as defined in the numerator, be sent to patients between discharge from the facility and within 30 days of facility discharge. To report AQI 48b, a minimum number of 20 surveys with the mandatory question completed must be reported. | Outcome: PRO-PM | Pain Management | Pain Assessment |
| **135** | | Patient-Reported Pain and/ or Function Improvement after ACLR Surgery | Percentage of patients 13 years of age and older who obtained at least a 10% improvement in knee pain and/or function as measured by validated patient-reported outcome measures (PROMs) completed up to 90 days prior to and 9 to 15 months after undergoing primary anterior cruciate ligament reconstruction (ALCR) surgery. PROMs include any validated measures of knee-related measures of pain and/or function, such as KOOS-Pain, KOOS-ADL, KOOS-PS, and KOOS-JR. | Outcome: PRO-PM | Pain Management | QoL/Function |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **136** | | Patient-Reported Pain and/or Function Improvement after APM Surgery | Percentage of patients 13 years of age and older who obtained at least a 10% improvement in knee pain and/or function as measured by validated patient-reported outcome measures (PROMs) completed up to 90 days prior to and 9 to 15 months after undergoing primary arthroscopic partial meniscectomy (APM) surgery. PROMs include any validated measures of knee-related pain and/or function, such as KOOS-Pain, KOOS-ADL, KOOS-PS, and KOOS-JR. | Outcome: PRO-PM | Pain Management | QoL/Function |
| **137** | | Patient-Reported Pain and/or Function Improvement after Total Hip Arthroplasty | Percentage of patients 18 years of age and older who obtained at least a 10% improvement in hip pain and/or function as measured by validated patient-reported outcome measures (PROMs) completed up to 90 days prior to and 9 to 15 months after undergoing primary total hip arthroplasty (THA) surgery. PROMs include any validated measures of hip-related pain and/or function, such as HOOS-Pain, HOOS-ADL, HOOS-PS, and HOOS-JR. | Outcome: PRO-PM | Pain Management | QoL/Function |
| **138** | | Patient-Reported Pain and/or Function Improvement after Total Knee Arthroplasty | Percentage of patients 18 years of age and older who obtained at least a 10% improvement in knee pain and/or function as measured by validated patient-reported outcome measures (PROMs) completed up to 90 days prior to and 9 to 15 months after undergoing primary total knee arthroplasty (TKA) surgery. PROMs include any validated measures of knee-related measures of pain and/or function, such as KOOS-Pain, KOOS-ADL, KOOS-PS, and KOOS-JR. | Outcome: PRO-PM | Pain Management | QoL/Function |
| **139** | | Patient-Reported Pain and/or Function Improvement after Total Shoulder Arthroplasty | Percentage of patients 18 years of age and older who obtained at least a 10% improvement in shoulder pain and/or function as measured by validated patient-reported outcome measures (PROMs) completed up to 90 days prior to and 9 to 15 months after undergoing primary total shoulder arthroplasty (TSA) surgery. PROMs include any validated measures of shoulder-related pain and/or function, such as PSS-Pain and PSS-Function. | Outcome: PRO-PM | Pain Management | QoL/Function |
| **140** | Endorsed | Patients Treated with an Opioid who are Given a Bowel Regimen | Percentage of vulnerable adults treated with an opioid that are offered/prescribed a bowel regimen or documentation of why this was not needed | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
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| **141** | | Percent days abstinent from alcohol | This measure was developed by staff of the Butler Center for Research (BCR), the research and clinical data analytic arm of the Hazelden Betty Ford Foundation, a national nonprofit alcohol/drug treatment provider. The BCR has been and is currently responsible for collection, analysis and reporting of post-treatment outcomes data for patients attending HBFF treatment programs. This outcomes measurement and reporting takes place on a rolling basis as part of routine healthcare operations.<br>The BCR has designed our own outcomes surveys, which are administered by phone by BCR callers roughly 1, 6 and 12 months after patients discharge. Many of the questions on these surveys ask patients to self-report on substance use since leaving treatment. One of these questions asks patients to indicate the total number of days since treatment that they have drank at least 1 drink containing alcohol. The answer to this question is used to determine PDA from alcohol: among individuals who have recently attended alcohol addiction treatment at a HBFF program, the average percentage of days since treatment discharge that they have abstained from drinking alcohol. The measure we submit here pertains to the 6 month follow up survey; administered roughly 6 months after discharge. Hence, the measure is percent days abstinent (PDA) from alcohol at 6 months post-treatment (the mean or average for the sample of patients). | Outcome: PRO-PM | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |
| **142** | | Percent of Chronic Opioid Analgesic Therapy Enrollees Receiving Opioids from Multiple Providers | The percent of patients receiving chronic opioid analgesic therapy (COAT) from a chronic opioid prescriber who received opioid prescriptions from 2 or more additional prescribers during the time span in which they received COAT. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **143** | | Percent of Medicaid beneficiaries receiving buprenorphine who have a documented diagnosis of opioid use disorder (OUD). | The purpose of this measure is to assess the percentage of Medicaid beneficiaries receiving buprenorphine (alone or in combination with naloxone) who have a DSM-5 diagnosis of opioid use disorder. | Process | OUD Treatment | OUD Treatment Initiation |
| **144** | | Percent of patients meeting SCB thresholds for back or neck pain | Calculation of the percent of patients who meet the substantial clinical benefit (SCB) thresholds for improvement in back or neck pain following a spine surgical intervention (cervical or lumbar) | Outcome | Pain Management | Pain Score Change |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **145** | | Percent of patients meeting SCB thresholds for leg or arm pain | Calculation of the percent of patients who meet the substantial clinical benefit (SCB) thresholds for improvement in leg or arm pain following a spine surgical intervention (cervical or lumbar) | Outcome | Pain Management | Pain Score Change |
| **146** | | Percent of patients meeting SCB thresholds for pain-related disability (ODI/NDI) | Calculation of the percent of patients who meet the substantial clinical benefit (SCB) thresholds for improvement in pain-related disability following a spine surgical intervention (cervical or lumbar) | Outcome | Pain Management | Pain Score Change |
| **147** | | Percent of patients prescribed a medication for alcohol use disorder (AUD) | This measure will be used to assess the extent to which clinicians prescribe medications to treat AUD to their patients. | Process | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |
| **148** | | Percent of patients prescribed a medication for opioid use disorder (OUD) | This measure will be used to assess the extent to which clinicians make medications available to their patients with an OUD. | Process | OUD Treatment | OUD Treatment Initiation |
| **149** | | Percent of Patients with Chronic Opioid Analgesic Therapy | The percent of patients receiving chronic opioid analgesic therapy (COAT) prescribed at least one opioid by the health care provider. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **150** | Endorsed | Percent of Residents Who Self-Report Moderate to Severe Pain (Short Stay) | This measure reports the percentage of short-stay residents or patients with a 14-day PPS assessment during a selected quarter (3 months) who have reported almost constant or frequent pain and at least one episode of moderate to severe pain, or any severe or horrible pain, in the 5 days prior to the 14-day PPS assessment. | Outcome | Pain Management | Pain Assessment |
| **151** | | Percent of Skilled Nursing Facility Residents Who Self-Report Moderate to Severe Pain | This measure reports the percentage of skilled nursing facility residents who have reported daily pain with at least one episode of moderate to severe pain, or severe or horrible pain of any frequency in the 5 days prior to the assessment. | Outcome | Pain Management | Pain Assessment |
| **152** | | Perioperative Pain Plan | Percentage of patients with signed documentation that a perioperative pain plan using a multimodal, narcotic sparing technique was discussed | Process | Pain Management | Pain Care Plan |
| **153** | | Pharmacologic Management of Migraine Headaches | Percent of members ages 19-65 diagnosed with migraine who received first-line migraine specific therapy prior to receiving opiate or butalbital containing rescue medications. | Process | Pain Management | Non-Opioid Pain Management |
| **154** | | Plan Of Care Or Referral For Possible Medication Overuse Headache | Percentage of patients diagnosed with medication overuse headache (MOH) within the past 3 months or who screened positive for possible MOH (measure 6a) who had a medication overuse plan of care created or who were referred for this purpose. | Process | Pain Management | Pain Care Plan |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **155** | | Post-operative opioid management following oculoplastic surgery | Percentage of patients aged 18 years and older who underwent oculoplastic surgical procedures who were assessed for opioid use/requirements post-operatively, defined by either not receiving opioids post-operatively, receiving opioids for pain for 7 days or less post-operatively, or if expected to require opioids for more than 7 days after the surgical procedure, having an opioid use management plan documented. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **156** | | Potential Opioid Overuse | Percentage of patients aged 18 years or older who receive opioid therapy for 90 days or longer and are prescribed a 90 milligram or larger morphine equivalent daily dose | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **157** | | Pregnancy test in women with a suspected toxicologic exposure | Percentage of women of childbearing age (12-60 years) who are seen by a medical toxicologist in the emergency department or inpatient setting with a suspected toxicologic exposure, who receive a pregnancy test prior to emergency department discharge or within 24 hours of hospital admission. | Process | OUD Treatment | OUD Screening |
| **158** | | Preoperative Assessment for Opioid Dependence Risk | Percentage of patients, aged 18 years and older, who undergo preoperative assessment of opioid dependence risk prior to elective surgery and care team is notified. | Process | OUD Treatment | OUD Screening |
| **159** | | Preoperative Screening for Anesthetic Risk Factors | Percentage of Percentage of patients, regardless of age, undergoing a surgical, therapeutic or diagnostic procedures under anesthesia in an operating/procedure room during the performance period and who have a documented use of a pre-operative assessment of two or more anesthetic risk factors prior to the start of anesthesia and the procedure did not result in an impairment of anesthesia or the patient did not experience a decrease in the effectiveness of anesthesia. Risk factor assessment must include at least two of the following:<br>• Symptoms of Gastroesophageal Reflux Disease<br>• History of Glaucoma or elevated eye pressures<br>• Post-operative Nausea and Vomiting risk factors<br>• Alcohol and recreational drug use<br>• Herbal supplements and antibiotic impairment of anesthesia | Process | OUD Treatment | OUD Screening |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **160** | | Prescribing Rate of 700 Cumulative MME or Greater During an Initial Opioid Prescribing Episode | The percentage of opioid prescriptions prescribed during the initial index opioid prescribing episode which expose a patient to 700 cumulative Morphine Milligram Equivalence (MME) or more.<br>The prescriber of the prescription that meets or exceeds the 700 cumulative MME threshold does not need to be the prescriber of previous prescriptions in the initial opioid prescribing episode. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **161** | | Prescribing Rate of an Index Opioid Prescription Greater than the Recommended Dose | The percentage of index opioid prescriptions prescribed in the measurement year that exceed the recommended 100 or 200 Morphine Milligram Equivalence (MME) dose limit.<br>• The 100 MME dose limits applies to prescribers identified as a primary care or non-surgical medical specialists.<br>• The 200 MME dose limit applies to prescribers identified as surgical specialists, including Obstetricians and Gynecologists. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **162** | | Presence of screening for psychiatric disorder | This measure assesses the extent to which patients with an SUD diagnosis, receiving addiction treatment, are formally assessed for a psychiatric diagnosis. | Process | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |
| **163** | | Presence of screening for tobacco use disorder | This measure assesses the extent to which patients with an SUD diagnosis, receiving addiction treatment, are screened for a tobacco use disorder diagnosis. | Process | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |
| **164** | | Pre-surgical screening for depression | Percentage of patients, regardless of age, undergoing surgical, therapeutic or diagnostic procedures under anesthesia where the patient a received a formal pre-surgical screening for depression using an age appropriate standardized depression screening tool AND if positive, a follow-up plan is documented on the date of the positive screen | Process | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |
| **165** | | Preventative Care and Screening: Tobacco Screening and Cessation Intervention | Percentage of patients age 18 or older who are active tobacco users who receive tobacco screening AND are offered cessation counseling at least 2 months prior to elective surgical procedure in order to delay the procedure until smoking cessation is possibly achieved. | Process | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |
| **166** | Endorsed | Preventive Care and Screening: Screening for Depression and Follow-Up Plan (eCQM) | Percentage of patients aged 12 years and older screened for depression on the date of the encounter using an age appropriate standardized depression screening tool AND if positive, a follow-up plan is documented on the date of the positive screen | Process | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |
| **167** | Endorsed | Preventive Care and Screening: Unhealthy Alcohol Use: Screening & Brief Counseling | Percentage of patients aged 18 years and older who were screened for unhealthy alcohol use using a systematic screening method at least once within the last 24 months AND who received brief counseling if identified as an unhealthy alcohol user | Process | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **168** | | Primary care visit follow-up | This measure identifies the proportion of individuals who have a primary care visit after an SUD treatment encounter, and assesses the extent to which clinicians assure comprehensive patient care. | Process | OUD Treatment | OUD Treatment Continuity |
| **169** | | Psychiatric disorder diagnosis presence | This measure will assess the extent to which patients with an SUD diagnosis, receiving addiction treatment, have a documented psychiatric diagnosis or an explicit entry of "no mental disorder diagnosis" or "mental disorder diagnosis deferred." | Process | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |
| **170** | | Quality Of Life Assessment For Patients With Primary Headache Disorders | Percentage of patients with a diagnosis of primary headache disorder whose health related quality of life (HRQoL) was assessed with a tool(s) during at least two visits during the 12 month measurement period AND whose health related quality of life score stayed the same or improved | Outcome: PRO-PM | Pain Management | QoL/Function |
| **171** | | Quality of Life for Patients with Neurotology Disorders | Percentage of neurotology patients whose most recent Quality of Life scores were maintained or improved during the measurement period. | Outcome: PRO-PM | Pain Management | QoL/Function |
| **172** | | Quality of Life-Mental Health Outcomes | Percentage of patients 18 years of age and older who completed a baseline and, within the CY(calendar year) reporting period of Jan. 1, 20xx - Dec.31, 20xx, follow-up quality of life (QoL) patient-reported outcomes assessment (VR-12, SF-12, SF-36, PROMIS Global 10 or equivalent Computer Adaptive Test (CAT) assessment if available) which yielded a mental component score that showed a statistically significant improvement in comparison to initial assessment or who had already reported a score in which there is no room for statistical improvement. The use of Patient Reported Outcomes (PROs) in clinical research is well documented. In addition, the AAOS Quality Outcomes Work Group recommends that QoL PROs in the clinical setting can lead to improved care. | Outcome: PRO-PM | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |
| **173** | | Quality-of-Life Assessment for Spine Intervention | Percentage of patients aged 18 years and older undergoing index spine intervention(s) who completed baseline and 3-month follow-up (patient-reported) quality-of-life assessment, with an improvement in the quality of life status from baseline. This measure will be calculated with 2 performance rates:<br>1. Rate 1: Patient population with Follow-up/ Patient population with baseline<br>2. Rate 2: Patient population with improvement in quality of life status after Follow-up/Patient population with Follow-up.<br>Overall Rate = Rate 2 | Outcome: PRO-PM | Pain Management | QoL/Function |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **174** | | Query of Prescription Drug Monitoring Program (PDMP) | For at least one Schedule II opioid electronically prescribed using CEHRT during the performance period, the MIPS eligible clinician uses data from CEHRT to conduct a query of a PDMP for prescription drug history, except where prohibited and in accordance with applicable law. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **175** | | Querying about Pain and Pain Interference with Function | Percentage of patient visits for patient age 18 years and older with a diagnosis of distal symmetric polyneuropathy who was queried about pain and pain interference with function using a valid and reliable instrument. | Process | Pain Management | QoL/Function |
| **176** | | Reduction in Patient Reported Pain Following Medial Branch Radiofrequency Ablation | Measurement of reduction in pain as reported by patients aged 18 years and older following medial branch radiofrequency ablation | Outcome: PRO-PM | Pain Management | Pain Score Change |
| **177** | | Risky Behavior Assessment or Counseling by Age 13 Years | The percentage of children with documentation of a risk assessment or counseling for risky behaviors by 13 years of age. Four rates are reported: Risk Assessment or Counseling for Alcohol Use, Risk Assessment or Counseling for Tobacco Use, Risk Assessment or Counseling for Other Substance Use, Risk Assessment or Counseling for Sexual Activity. | Process | OUD Treatment | OUD Screening |
| **178** | | Risky Behavior Assessment or Counseling by Age 18 Years | The percentage of children with documentation of a risk assessment or counseling for risky behaviors by 18 years of age. Four rates are reported: Risk Assessment or Counseling for Alcohol Use, Risk Assessment or Counseling for Tobacco Use, Risk Assessment or Counseling for Other Substance Use, Risk Assessment or Counseling for Sexual Activity. | Process | OUD Treatment | OUD Screening |
| **179** | | Safe Opioid Prescribing Practices | Percentage of patients, aged 18 years and older, prescribed opioid medications for longer than six weeks' duration for whom ALL of the following opioid prescribing best practices are followed:<br>1. Chemical dependency screening (includes laboratory testing and/or questionnaire) within the immediate 6 months prior to the encounter<br>2. Co-prescription of naloxone or documented discussion regarding offer of Naloxone co-prescription, if prescription is ≥50 MME/day<br>3. Non co-prescription of benzodiazepine medications by prescribing pain physician and documentation of a discussion with patient regarding risks of concomitant use of benzodiazepine and opioid medications. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **180** | Endorsed | Safe Use of Opioids – Concurrent Prescribing | Patients age 18 years and older prescribed two or more opioids or an opioid and benzodiazepine concurrently at discharge from a hospital-based encounter (inpatient or emergency department [ED], including observation stays) | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **181** | | Safe Use of Opioids at Time of Care Transitions | Proportion of patients ages 18 years and older who are treated in a hospital care setting who depart with a new opioid prescription not present on arrival and whose level of risk for opioid-related adverse drug events (ADEs) has been assessed and documented. NOTE: This is the draft description of the measure. The final description is dependent on questions we will consider through development and with the expert workgroup (EWG). See Stratification, Risk Adjustment, Clinical Recommendation Statement, Definition, Initial Population, and Denominator Exclusions. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **182** | | Screening and monitoring for psychosocial problems among children and youth | Percentage of children from 3.00 to 17.99 years of age who are administered a parent-report, standardized and validated screening tool to assess broad-band psychosocial problems during an intake visit AND who demonstrated a reliable change in parent-reported problem behaviors 2 to 6 months after initial positive screen for externalizing and internalizing behavior problems. | Outcome: PRO-PM | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |
| **183** | | Screening for Clinical Depression | Percentage of patients aged 18 years and older screened for clinical depression using a standardized tool and follow-up plan documented. | Process | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |
| **184** | | Screening for risk of opioid misuse/ overuse | Percentage of patients aged 12 years or older who were screened for the potential risk of opioid misuse/overuse | Process | OUD Treatment | OUD Screening |
| **185** | | Spine/Extremity Pain Assessment | Percentage of patients aged 18 years and older with documentation of a pain assessment through discussion with the patient including the use of a standardized back or neck pain tool(s) AND/OR leg or arm pain tool(s) at baseline and 3 months following initial assessment and intervention(s) for treatment of spine-related pain symptoms with at least 10% improvement in the pain status from the baseline and documentation of follow-up plan. This measure will be calculated with 2 performance rates:<br>1. Rate 1: Patient population with Follow-up/ Patient population with baseline<br>2. Rate 2: Patient population with improvement in pain status after Follow-up/ Patient population with Follow-up.<br>Overall Rate = Rate 2 | Outcome | Pain Management | Pain Assessment |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **186** | | Stabilization in Anxiety Level | Percentage of home health episodes of care during which the patient's anxiety became less frequent or stayed the same as at admission. | Outcome | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |
| **187** | | Standardized functional assessment | Percentage of individuals who have documentation of assessment of function (physical, mental, and social functioning) using a standardized assessment instrument at two points in time. | Process | OUD Treatment | OUD Screening |
| **188** | | SUB-2 Alcohol Use Brief Intervention Provided or Offered and SUB-2a Alcohol Use Brief Intervention | The measure is reported as an overall rate which includes all hospitalized patients 18 years of age and older to whom a brief intervention was provided, or offered and refused, and a second rate, a subset of the first, which includes only those patients who received a brief intervention. The Provided or Offered rate (SUB-2), describes patients who screened positive for unhealthy alcohol use who received or refused a brief intervention during the hospital stay. The Alcohol Use Brief Intervention (SUB-2a) rate describes only those who received the brief intervention during the hospital stay. Those who refused are not included. | Process | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |
| **189** | | SUB-3 Alcohol & Other Drug Use Disorder Treatment Provided or Offered at Discharge and SUB-3a Alcohol & Other Drug Use Disorder Treatment at Discharge | The measure is reported as an overall rate which includes all hospitalized patients 18 years of age and older to whom alcohol or drug use disorder treatment was provided, or offered and refused, at the time of hospital discharge, and a second rate, a subset of the first, which includes only those patients who received alcohol or drug use disorder treatment at discharge. The Provided or Offered rate (SUB-3) describes patients who are identified with alcohol or drug use disorder who receive or refuse at discharge a prescription for FDA-approved medications for alcohol or drug use disorder, OR who receive or refuse a referral for addictions treatment. The Alcohol and Other Drug Disorder Treatment at Discharge (SUB-3a) rate describes only those who receive a prescription for FDA-approved medications for alcohol or drug use disorder OR a referral for addictions treatment. Those who refused are not included. | Process | OUD Treatment | OUD Treatment Initiation |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **190** | | SUB-4 Alcohol & Drug Use: Assessing Status After Discharge | Hospitalized patients age 18 years and older who screened positive for unhealthy alcohol use or who received a diagnosis of alcohol or drug disorder during their inpatient stay, who are contacted between 7 and 30 days after hospital discharge and follow-up information regarding their alcohol or drug use status post discharge is collected.<br>This measure is intended to be used as part of a set of 4 linked measures addressing Substance Use (SUB-1) Alcohol Use Screening; SUB-2 Alcohol Use Brief Intervention Provided or Offered; SUB-3 Alcohol and Other Drug Use Disorder Treatment Provided or Offered at Discharge; SUB-4 Alcohol and Drug Use: Assessing Status after Discharge). | Process | OUD Treatment | OUD Treatment Continuity |
| **191** | | Substance use disorders: percentage of patients aged 18 years and older with a diagnosis of current opioid addiction who were counseled regarding psychosocial AND pharmacologic treatment options for opioid addiction within the 12 month reporting period | This measure is used to assess the percentage of patients aged 18 years and older with a diagnosis of current opioid addiction who were counseled regarding psychosocial and pharmacologic treatment options for opioid addiction within the 12 month reporting period. | Process | OUD Treatment | OUD Treatment Initiation |
| **192** | | Substance Use Disorders: Screening for Depression Among Patients with Substance Abuse or Dependence | Percentage of patients aged 18 years and older with a diagnosis of current substance abuse or dependence who were screened for depression within the 12-month reporting period | Process | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |
| **193** | endorsed | Substance Use Screening and Intervention Composite | Percentage of patients aged 18 years and older who were screened at least once within the last 24 months for tobacco use, unhealthy alcohol use, nonmedical prescription drug use, and illicit drug use AND who received an intervention for all positive screening results | Composite | OUD Treatment | OUD Treatment Initiation |
| **194** | | SUD diagnosis documentation in addiction treatment | This measure will assess the extent to which clinicians document an SUD diagnosis for the patients they are treating, regardless of treatment setting. | Process | OUD Treatment | OUD Treatment Continuity |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **195** | | Surgical Phases of Care Patient-Reported Outcome Composite Measure | Composite measure consisting of 12 items intended to measure the constructs of Surgeon Communication Before Surgery, Surgical Goals of Care, Satisfaction with Information, and Postoperative Care Coordination from the patient's perspective. Of these 12 items, 9 originate from the CAHPS Surgical Care Survey (S-CAHPS). Specifically, these 9 items are questions 3, 9, 11, 17, 26, 27, 31, 33, and 34 from the original S-CAHPS survey. Three (3) additional items are included to appropriately measure Goals of Care; these questions ask whether the surgeon discussed what the patient hoped to gain from surgery, whether the surgeon discussed how surgery would affect their daily activities, and what life might look like for the patient in the long-term. Please see the attachment for all 12 items in full. | Outcome: PRO-PM | Pain Management | Pain Care Plan |
| **196** | | Time from first face-to-face treatment encounter to buprenorphine dosing | Number of hours opioid dependent, non-pregnant adults aged 18 or older have to wait between their first face-to-face treatment encounter and receiving their first dose of buprenorphine medication (i.e. medication induction). | Process | OUD Treatment | OUD Treatment Initiation |
| **197** | Endorsed | Use of High-Risk Medications in the Elderly | Percentage of patients 65 years of age and older who were ordered high-risk medications. Two rates are submitted.<br>1. Percentage of patients who were ordered at least one high-risk medication.<br>2. Percentage of patients who were ordered at least two of the same high-risk medication | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **198** | | Use of Neuraxial Techniques and/or Peripheral Nerve Blocks for Total Knee Arthroplasty (TKA) | Percentage of patients, regardless of age, that undergo primary total knee arthroplasty for whom neuraxial anesthesia and/or a peripheral nerve block is performed | Process | Pain Management | Non-Opioid Pain Management |
| **199** | Endorsed | Use of Opioids at High Dosage in Persons Without Cancer | The proportion (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids with a daily dosage greater than 120mg morphine equivalent dose (MED) for 90 consecutive days or longer. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **200** | | Use of Opioids at High Dosage in Persons Without Cancer Following Elective Primary THA and/or TKA | This measure estimates the proportion of individuals without cancer receiving prescriptions for opioids with a daily dosage greater than 120mg morphine equivalent dose (MED) for 90 consecutive days or longer following elective primary total hip arthroplasty (THA) and/or total knee arthroplasty (TKA). The target population is patients who are 65 years and older, are enrolled in fee-for-service (FFS) Medicare, and hospitalized in Partners HealthCare (PHS) hospitals. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **201** | Endorsed | Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer | The rate (XX of 1,000) of individuals without cancer receiving prescriptions for opioids with a daily dosage greater than 120 mg morphine equivalent dose (MED) for 90 consecutive days or longer, AND who received opioid prescriptions from four (4) or more prescribers AND four (4) or more pharmacies. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **202** | Endorsed | Use of Opioids from Multiple Providers in Persons Without Cancer | The rate (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids from four (4) or more prescribers AND four (4) or more pharmacies. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **203** | Endorsed | Use of pharmacotherapy for opioid use disorder (OUD) | The percentage of Medicaid beneficiaries ages 18 to 64 with an OUD who filled a prescription for or were administered or ordered an FDA-approved medication for the disorder during the measure year. The measure will report any medications used in medication-assisted treatment of opioid dependence and addiction and four separate rates representing the following types of FDA-approved drug products: buprenorphine; oral naltrexone; long-acting, injectable naltrexone; and methadone. | Process | OUD Treatment | OUD Treatment Initiation |
| **204** | | Ventral Hernia Repair: Pain and Functional Status Assessment | Percentage of patients aged 18 years and older who have undergone ventral hernia repair and who completed baseline and 30 day follow-up patient-reported functional status assessments, and achieved at least a 10% improvement in functional status score from baseline. | Outcome: PRO-PM | Pain Management | QoL/Function |
| **205** | | Verify Opioid Treatment Agreement | For at least one unique patient for whom a Schedule II opioid was electronically prescribed by the MIPS eligible clinician using CEHRT during the performance period, if the total duration of the patient s Schedule II opioid prescriptions is at least 30 cumulative days within a 6-month look-back period, the MIPS eligible clinician seeks to identify the existence of a signed opioid treatment agreement and incorporates it into the patient s electronic health record using CEHRT. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |

| # | NQF-Endorsed? | Measure Title | Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|---|---|
| **206** | | 7-day follow-up after withdrawal management | This measure assesses the extent to which patients initiate treatment within 7 days after receiving withdrawal management services. Because this measure focuses solely on how patients are engaged in addiction treatment post-withdrawal management, this measure will exclude patients engaged in methadone maintenance treatment, patients engaged in office-based opioid treatment that utilizes partial agonist maintenance pharmacotherapy, and patients who enter treatment via intensive outpatient placement with no inpatient/ residential or outpatient withdrawal management services. Thus, a patient who never received withdrawal management services, e.g., because they were not clinically indicated, or because the patient underwent induction onto agonist maintenance pharmacotherapy without undergoing any phase of "withdrawal management," would not be identified via this measure. The purpose of the continuity measure is to assess treatment system contact and engagement beyond the initial follow-up contact within 7 days. Continuity refers to the provision of timely and complementary services within a shared management plan. Disease-specific literature emphasizes the need for care plans to ensure consistency across these treatment locations and providers. Nursing and mental health literature goes further, emphasizing the importance of consistent implementation, especially when patients cross organizational boundaries. However, flexibility in adapting to changes in an individual's needs is equally important, especially in mental health and addiction care. | Process | OUD Treatment | OUD Treatment Initiation |
| **207** | | Risk of Chronic Opioid Use. | The percentage of members 18 years and older who have a new episode of opioid use that puts them at risk for continued use. Two rates are reported:<br>1. The percentage of members whose new episode of opioid use lasts at least 15 days in a 30-day period.<br>2. The percentage of members whose new episode of opioid use lasts at least 31 days in a 62-day period. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |

# APPENDIX E:
## Measure Concept Inventory

| # | Measure Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|
| 1 | Average inpatient daily MMEs administered during hospitalization | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| 2 | Behavioral health integration in medical care instrument | Process | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |
| 3 | Clinical Opiate Withdrawal Scale | Process | OUD Treatment | OUD Treatment Continuity |
| 4 | Continuity of Pharmacotherapy for Opioid Use | Process | OUD Treatment | OUD Treatment Continuity |
| 5 | Current Opioid Misuse Measure is a 17-item survey useful in assessing prescription opioid use in SUD treatment settings | Process | OUD Treatment | OUD Screening |
| 6 | Daily MMEs prescribed at discharge | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| 7 | Days' supply of initial opioid prescription for acute pain. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| 8 | Discharges from opioid use | Process | OUD Treatment | OUD Treatment Continuity |
| 9 | Extended-release opioid prescriptions as a proportion of all initial opioid prescriptions for acute pain. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| 10 | Extended-release opioid prescriptions as a proportion of all initial opioid prescriptions for chronic pain. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| 11 | Hospital-level risk standardized opioid extended use following elective THA and/or TKA | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| 12 | Hospital-level risk standardized opioid respiratory depression following elective THA and/or TKA | Outcome | Harm Reduction | Overdose |
| 13 | Improvement or maintenance of functioning for all patients seen for mental health and substance use care | Outcome | OUD Treatment | OUD Treatment Continuity |
| 14 | Improvement or maintenance of symptoms for patients with opioid misuse | Outcome | OUD Treatment | OUD Treatment Continuity |
| 15 | Morphine milligram equivalent (MME) of initial opioid prescription for chronic pain. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| 16 | Neonatal Infant Pain Scale | Process | Pain Management | Pain Assessment |
| 17 | Neonatal Pain Agitation and sedation Scale | Process | Pain Management | Pain Assessment |
| 18 | Number of opioid prescribers for single patient | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| 19 | Number of opioid prescriptions per 1,000 office visits | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |

| # | Measure Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|
| **20** | Number of pills prescribed at discharge | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **21** | OD death synthetic opioids | Outcome | Harm Reduction | Overdose |
| **22** | Opioid administration among the headache/ migraine patients who visited ED | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **23** | Opioid burden | Outcome | Social Issues | Opioid Burden |
| **24** | Opioid covered-days prescribed to the patients who were discharged from ED | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **25** | Overdose deaths any opioid | Outcome | Harm Reduction | Overdose |
| **26** | Pain measure for children in inpatient; pain reduction by 30% within 120 minutes of complaint | Outcome: PRO-PM | Pain Management | Time to Pain Management |
| **27** | Patient experience of care for all patients seen with mental health and substance use care | Outcome: PRO-PM | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |
| **28** | Percentage of hospitalized patients with OUD on medication management | Process | OUD Treatment | OUD Treatment Initiation |
| **29** | Percentage of opioid prescriptions for acute pain with less than 7 day supply | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **30** | Percentage of opioid prescriptions with partial fill instructions | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **31** | Percentage of opioid-naïve patients prescribed C-II & C-III opioid on emergency department discharge | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **32** | Percentage of patients administered long-acting opioid during hospital stay | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **33** | Percentage of Patients Prescribed Chronic Opioid with Risk and Plan Documented | Process | Pain Management | Pain Care Plan |
| **34** | Percentage of patients prescribed long-acting opioid at hospital discharge | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **35** | Percentage of patients prescribed opioid | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **36** | Percentage of patients prescribed opioid at discharge | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **37** | Percentage of patients prescribed opioid more than 3 month after surgery | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **38** | Percentage of patients prescribed opioid with daily MME > 90 among those who were prescribed | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **39** | Percentage of patients that received more than 50 MME during at least one day of their hospitalization | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **40** | Percentage of patients treated for opioid overdose in emergency department | Process | Harm Reduction | Overdose |

| # | Measure Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|
| **41** | Percentage of patients with documented Opioid Risk Tool assessment among those on chronic opioids | Process | OUD Treatment | OUD Screening |
| **42** | Percentage of patients with Naloxone on medication list while they received opioid with daily MME > 90 | Process | Harm Reduction | Opioid Reversal Drug Prescription |
| **43** | Percentage of patients with office visits within prior 3 months among chronic opioid users | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **44** | Percentage of patients with OUD discharged with naloxone | Process | Harm Reduction | Opioid Reversal Drug Prescription |
| **45** | Percentage of patients with urine drug toxicology among chronic opioid users | Process | OUD Treatment | OUD Screening |
| **46** | Percentage of prescribers who have written for 1+ prescription of buprenorphine/nlx | Process | OUD Treatment | OUD Treatment Initiation |
| **47** | Percentage of prescribers with a suboxone waiver | Process | OUD Treatment | OUD Treatment Initiation |
| **48** | Proportion of patients who received a urine drug test within 30 days before initial opioid prescription (initial screening) and within 365 days after initial opioid prescription (annual screening) for chronic pain. | Process | OUD Treatment | OUD Screening |
| **49** | Proportion of patients with a follow-up visit (based on E&M CPT codes) within 30 days after the initial opioid prescription for chronic pain. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **50** | Quantity of opioid prescribed to the patients who were discharged from ED | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **51** | Rapid Recovery Progression Measure: 6-item | Intermediate Outcome | OUD Treatment | OUD Treatment Continuity |
| **52** | Rate of NY Office of Alcoholism and Substance Abuse Services (OUD treatment program) use | Process | OUD Treatment | OUD Treatment Initiation |
| **53** | Recovery Progression Measure: 36-item | Intermediate Outcome | OUD Treatment | OUD Treatment Continuity |
| **54** | Subjective Opiate Withdrawal Scale | Process | OUD Treatment | OUD Treatment Continuity |
| **55** | The percentage of patients on long-term opioid therapy the clinician counseled on the risks and benefits of opioids at least annually. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **56** | The percentage of patients on long-term opioid therapy who had a follow-up visit at least quarterly. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **57** | The percentage of patients on long-term opioid therapy who had at least quarterly pain and functional assessments. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **58** | The percentage of patients on long-term opioid therapy who had documentation that a PDMP was checked at least quarterly. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |

| # | Measure Description | Measure Type | Domain | Subdomain |
|---|---|---|---|---|
| **59** | The percentage of patients on long-term opioid therapy who were counseled on the purpose and use of naloxone, and either prescribed or referred to obtain naloxone | Process | Harm Reduction | Opioid Reversal Drug Prescription |
| **60** | The percentage of patients on long-term opioid therapy with documentation that a urine drug test was performed at least annually. | Process | OUD Treatment | OUD Treatment Continuity |
| **61** | The percentage of patients with a follow-up visit within 4 weeks of starting an opioid for chronic pain. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **62** | The percentage of patients with a new opioid prescription for acute pain for a three days' supply or less | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **63** | The percentage of patients with a new opioid prescription for an immediate-release opioid. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **64** | The percentage of patients with a new opioid prescription for chronic pain with documentation that a PDMP was checked prior to prescribing. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **65** | The percentage of patients with a new opioid prescription for chronic pain with documentation that a urine drug test was performed prior to prescribing. | Process | Pain Management | Appropriate Opioid Analgesic Prescribing |
| **66** | The percentage of patients with chronic pain who had at least one referral or visit to nonpharmacologic therapy as a treatment for pain. | Process | Pain Management | Non-Opioid Pain Management |
| **67** | PROMIS Pain Interference instruments | Outcome: PRO-PM | Pain Management | Pain Assessment |
| **68** | PROMIS Physical Function - Short Form | Outcome: PRO-PM | Pain Management | QoL/Function |
| **69** | PROMIS Pain Intensity Scale | Outcome: PRO-PM | Pain Management | Pain Assessment |
| **70** | PROMIS Emotional Distress-Depression Short Form | Outcome: PRO-PM | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |
| **71** | PROMIS Emotional Distress-Anxiety Short Form | Outcome: PRO-PM | OUD Treatment | Psychiatric and/or Other Illness Comorbidity |

ISBN 978-1-68248-134-9

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