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Addressing Opioid-Related Outcomes Among Individuals With Co-occurring Behavioral Health Conditions

DRAFT REPORT

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Executive Summary

With over 194 individuals dying each day from a drug overdose, the United States (U.S.) continues to grapple with a devastating opioid and substance use disorder (SUD) crisis.[1] The first wave of the crisis began in the late 1990s and was led by overdose deaths involving prescription opioids. Since then, the U.S. has faced two additional waves centered on opioid-involved overdose deaths involving heroin, followed by a wave increasingly driven by synthetic opioids, and is now facing a fourth wave. This fourth wave is the result of rising polysubstance use, such as the co-use of opioids and psychostimulants. Given the nature of the fourth wave of the opioid and SUD crisis, individuals with SUD/opioid use disorders (OUDs) and co-occurring behavioral health conditions are particularly vulnerable to overdose and mortality resulting from polysubstance use. CMS has generally defined *behavioral health* as encompassing a person's whole emotional and mental well-being, which includes the prevention and treatment of mental disorders, including SUD.[2] For the purposes of this report, *behavioral health condition* refers to mental disorders described in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).[3]

Recognizing the evolution of the opioid crisis, National Quality Forum (NQF), with funding from the Centers for Medicare & Medicaid Services (CMS), convened a Committee to develop a quality measurement framework to address overdose and mortality resulting from polysubstance use involving synthetic and semi-synthetic opioids (SSSOs) among individuals with co-occurring behavioral health conditions. The goal of the framework is to improve the prevention and monitoring of SUD/OUD, opioid-related overdoses, and opioid-related mortality among individuals with co-occurring behavioral health conditions who use SSSOs with other legal and/or illegal drugs, to apprise stakeholders of opportunities for coordination and partnerships across care settings, and to enable stakeholders to quickly adapt and improve their readiness in a rapidly changing landscape.

NQF identified seven measurement priority gap areas to measure polysubstance use and concurrent behavioral health conditions through various Committee discussions and prioritization exercises. These include all-payer measures, measures and measure concepts regarding care coordination, person-centeredness and recovery, harm reduction, equity, vulnerable populations, and linking individuals to evidence-based SUD/OUD treatment. These gaps helped to identify the key elements of the measurement framework.

The framework identifies essential categories (domains) and subcategories (subdomains) to ensure comprehensive measurement of opioid-related outcomes among individuals with co-occurring behavioral health conditions. The framework consists of three concentric circles. Equitable Access is the outer layer and first domain, focusing on ensuring the existence of services and the financial coverage of services with an emphasis on vulnerable populations, such as those with social determinants of health (SDOH) or with criminal justice involvement. The second domain and middle layer is Clinical Interventions, which builds on this foundation of equitable and accessible services. The Clinical Intervention domain comprises three subdomains: measurement-based care (MBC) for mental health and SUD/OUD treatment, availability of medications for opioid use disorder (MOUD), and adequate pain management care. While access to evidence-based clinical interventions may already exist, the importance of integrated and comprehensive care is essential for individuals with co-occurring SUD/OUD and behavioral health conditions. Thus, at the core of the framework is the Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions domain. This domain focuses on

coordination of the care pathway across clinical, community-based, and harm reduction services with an emphasis on person-centered care. NQF worked with the Committee to identify and develop measure concepts based on the information gathered through the environmental scan and identified the measurement gap areas within these domains and subdomains.

To support the implementation of the framework, Committee members also identified opportunities to address barriers to measurement and care, including overcoming structural barriers to coordinated care, improving integrated and continuous care for individuals in the criminal justice system, and addressing the unique challenges and opportunities in rural and frontier communities. The Committee discussed strategies to support the use of evidence-based treatment and harm reduction services, particularly for vulnerable populations and in nontraditional settings, such as justice-related and community-based services. Committee members also encouraged exploring opportunities for health plan data continuity and data sharing, including across payers. The measurement framework and the identified measure concepts provide a starting point for stakeholders to begin measuring, evaluating, and addressing overdose and mortality for individuals with polysubstance use involving SSSOs among individuals with co-occurring behavioral health conditions.

Introduction

The Fourth Wave of the Opioid and SUD Crisis

From 2009–2019, nearly 500,000 people died in the U.S. from an opioid-involved overdose, including prescription and illicit opioids.[4] These overdose deaths have been attributed to several distinct waves, beginning with expanded opioid-prescribing in the late 1990s,[5] followed by increased overdose deaths involving heroin beginning in 2010,[6] and a third wave emerging in 2013 related to synthetic opioids, specifically involving illegally produced fentanyl and related high-potency analogues. Following these prior waves, the U.S. is now facing a fourth wave of the opioid and SUD[7–9] crisis, which is the result of rising polysubstance use, such as the co-use of opioids and psychostimulants (e.g., methamphetamine, cocaine).[10]

The ongoing opioid and SUD crisis has been amplified by the coronavirus disease 2019 (COVID-19) pandemic. The convergence of these two public health emergencies has led to an acceleration in overdose deaths.[11] As information continues to emerge related to the long-term impacts of the pandemic, it has become increasingly clear that individuals with SUD have been disproportionately affected by the disruption to daily life. Not only are individuals with a recent diagnosis of SUD—particularly OUD and tobacco use disorder—at a significantly increased risk for COVID-19, but individuals with SUD and COVID-19 had significantly worse outcomes than other COVID-19 patients.[12] The mental health ramifications of social distancing and isolation also have far-reaching impacts, especially for individuals with SUD.[13] In particular, younger adults and racial/ethnic minorities experienced disproportionally worse mental health outcomes during the pandemic, including increased substance use and suicidal ideation.[13]

Final Report Goals and Objectives

The primary objective of this report is to develop a measurement framework to address overdose and mortality resulting from polysubstance use involving SSSOs among individuals with co-occurring behavioral health conditions, targeting an array of risk factors. Furthermore, this effort seeks to build

upon the results of the 2019-2020 NQF Opioid and Opioid Use Disorder Technical Expert Panel. The Opioids and Behavioral Health Committee sought to utilize currently available measures and measure concepts while taking into consideration upstream risk factors. The overall goals of this effort are to improve the prevention and monitoring of opioid-related overdoses and mortality among individuals with co-occurring behavioral health conditions who use SSSOs with other legal and/or illegal drugs, to apprise stakeholders of opportunities for coordination across care settings and partnership between clinical and other service professionals, and to create a framework that enables stakeholders to easily adapt and improve readiness given the rapidly changing landscape.

In developing the measurement framework and associated measure concepts, one of the Committee's objectives was to incorporate all-payer measures or measure concepts whenever possible to maximize usefulness of the framework. Committee objectives also included incorporating outcome measures, patient-reported outcome performance measures (PRO-PMs), electronic clinical quality measures (eCQMs), and claims-based measures to reflect all aspects of care and reduce reporting burden for healthcare organizations whenever possible. Given the population of interest, the Committee also sought to incorporate care coordination, SDOH, and disparity-sensitive measures to address the complex needs of individuals with polysubstance use and concurrent behavioral health conditions in an equitable and meaningful manner.

Recommendations From the 2019 NQF Opioids Technical Expert Panel (TEP)

Opportunities to Build Upon the 2019-2020 Opioids TEP

Prior to the efforts of this Opioids and Behavioral Health Committee, and as called for in the U.S. 2018 Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment (SUPPORT) for Patients and Communities Act, NQF previously convened an Opioid and Opioid Use Technical Expert Panel (TEP) from April 2019 to February 2020, whose work culminated in the NQF report titled Opioids and Opioid Use Disorder: Quality Measurement Priorities.[14–16]

The 2019-2020 Opioid TEP included several key components related to reviewing quality measures and identifying critical gap areas. The TEP conducted a thorough review of quality measures related to opioids and OUD, including those that were fully developed or under development. The TEP identified measurement gaps related to opioids and OUD and identified measure development priorities for the associated measure gaps. The results of the 2019-2020 Opioid TEP's work included the identification of the following top five measure gap priorities:

1. Opioid tapering and more general measures related to the treatment of acute and chronic pain
2. Measures for special populations (e.g., LGBTQI+, pregnant women, newborns, racial subgroups, and detained persons)
3. Short-term transitions between inpatient and outpatient settings and long-term follow-up of clients being treated for OUD across time and providers
4. Patient-centered pain management with proper tapering strategies for opioid analgesics
5. Physical (e.g., cardiovascular), psychiatric (i.e., mental health), and SUD comorbidities as part of OUD treatments

The 2019-2020 TEP also made recommendations to the U.S. Department of Health and Human Services (HHS) on related quality measures for improving care, prevention, diagnosis, health outcomes, and treatment. These included recommendations for measure revisions, new measure development, and

recommendations for inclusion of such measures in the Merit-Based Incentive Payment System (MIPS), alternative payment models (APMs), the Share Savings Program (SSP), the quality reporting requirements for inpatient hospitals, and the Hospital Value-Based Purchasing (VBP) program.

To build on the work of the 2019-2020 Opioid and Opioid Use TEP, the current Committee was focused on advancing the fifth measurement gap priority area, which highlights the importance of addressing physical, psychiatric, and SUD comorbidities as part of OUD treatment. This current report serves as a complimentary effort to build upon the broader focus of the previous Opioid and Opioid Use TEP, focusing more specifically upon the population that is affected by polysubstance use—using more than one drug at once—involving SSSOs among individuals with co-occurring behavioral health conditions. Furthermore, this priority area was identified by the previous Opioid and Opioid Use TEP as the fourth wave of the opioid crisis, related to polysubstance use and the intersection between behavioral health needs and SUDs. Expanding upon the previous Opioid and Opioid Use TEP, this current report seeks to identify measures and measure concepts that could be utilized by all payers and include concepts related to levers and/or collaboration between medical, clinical, and other community-based entities that care for the population of interest, such as between medical providers and criminal justice or social work. The current Committee also builds on the prior TEP's work by incorporating and addressing the role that SDOH play within this population.

Background

The Relationship Between Substance Use and Behavioral Health Conditions

Despite a decline between 2018 and 2019, drug overdose deaths continue to dramatically rise as demonstrated by provisional data, which shows overdose deaths increasing by 18 percent from June 2019 to May 2020.[17] During this time period, the U.S. experienced the largest one-month increase in drug overdose deaths ever documented since data estimates were first calculated, driven primarily by synthetic opioids.[17] The U.S. has also observed increased overdose death rates involving co-involvement of synthetic opioids with prescription opioids, heroin, cocaine, and psychostimulants.[18] Notably, the largest increase of drug overdose deaths ever recorded occurred from May 2019 to May 2020, with a substantial increase from March to May 2020.[19] This increase was very likely driven by the overwhelming economic impact and disruptions of the COVID-19 pandemic in combination with the spread of SSSOs through the illicit psychostimulant market, especially in Western states.[19] Additional factors related to the pandemic, including social isolation, anxiety and depression, and disrupted access to SUD/OUD support services and medications requiring in-person visits, likely contributed to these record overdose deaths driven by opioids and other substance use. Approximately 75 percent of all overdose deaths during the early months of the COVID-19 pandemic were attributed to opioids, with approximately 80 percent of those involving synthetic opioids.[20]

Another challenge within the current wave of increased polysubstance use is that many individuals who develop an SUD are also diagnosed with mental disorders and vice versa.[21] Approximately 7.7 million adults have co-occurring mental disorders and SUDs, with over 37 percent of individuals with SUD having a co-occurring mental health condition.[22] Mental disorders commonly associated with SUD include depression and bipolar disorder, psychotic illness, antisocial personality disorder, borderline personality disorder, and attention deficit hyperactivity disorder (ADHD), as well as anxiety disorders, such as generalized anxiety disorder, panic disorder, and post-traumatic stress disorder (PTSD).[23–34] As

shown by multiple national surveys, approximately half of those with mental illness will also experience an SUD, and research indicates similarly high rates with adolescent populations.[35] Approximately 25 percent of those with a serious mental illness (SMI), which is defined as a diagnosable mental, behavioral, or emotional disorder that causes serious functional impairment that substantially interferes with or limits one or more major life activities, also have an SUD. [36,37]

Some data suggests an increased risk for nonmedical use of prescription opioids by persons with mental health conditions and SUDs,[38] with 43 percent of individuals in SUD treatment for nonmedical use of prescription opioids demonstrating symptoms or a diagnosis of a mental health disorder.[39] Of the nearly 8 million adults living with co-occurring mental health and SUD, more than half do not get treatment for either diagnosis, and less than 10 percent receive treatment for both.[22] Although individuals engaging in SUD treatment may be prescribed MOUD quickly, substantial barriers exist when patients seek mental healthcare for bipolar disorder, psychosis, ADHD, and depression.[22] A lapse in treatment for mental health concerns can last from weeks to months, which often affects opioid and/or substance use as people may not be stable enough to endure this waiting period.[22]

The Role of Mental Health Conditions in Worsening Health Outcomes

When individuals have concurrent mental health disorders and SUD, they experience worse clinical outcomes. The prevalence of opioid-related mortality is shown to be higher in individuals who are middle aged and have substance misuse along with psychiatric comorbidities.[40] Specific risk factors for overdose mortality related to medical and nonmedical opioid use include age, comorbid medical and mental disorders, a history of SUD, and sources of social and psychological stress.[41–48] Growing rates of chronic illness have been exacerbated by the rising levels of individuals with comorbidities, with approximately 30 percent experiencing both mental and physical disorders.[49] SUD and social difficulties can further worsen and intensify the effects of comorbidities.[50] Overdose risk is increased among persons with an SUD diagnosis within the previous six months, bipolar disorder or schizophrenia, and concurrent prescriptions for benzodiazepines or antidepressants.[46] When considering opioid-related mortality, common correlates of pain (e.g., stress, depression, substance misuse, and social issues, such as poverty and homelessness) increase the risk for deliberate overdose or suicide. [51–53]

Concurrent SUD and mental illness, including SMI, also affect/ inpatient hospital utilization.[54] Individuals with SUD and mental health disorders have significantly higher rates of inpatient utilization compared with individuals with only SUD after adjusting for predictors such as older age, marital status, homelessness, suicide risk, pain diagnosis, other SUDs, and prior-year emergency department (ED)/inpatient utilization.[54]

Overview of Impacted Populations

High-Risk and Vulnerable Populations With Elevated Rates of Mental Illness and Substance Use

The Committee identified several high-risk populations with elevated rates of mental health disorders who face increased morbidity and mortality related to drug use. These subpopulations include individuals with SUD, individuals who recreationally use substances but may not meet the criteria for SUD, and individuals who are prescribed opioids for pain management. These three subpopulations overlap, and individuals may move into different subpopulations as their activities and diagnoses change over time.

There are numerous vulnerable populations to consider more closely that are also reflected within the high-risk subpopulations, including justice-involved individuals, rural populations, veterans, adolescents and young adults, and individuals who inject drugs.[55] For instance, over half of incarcerated adults meet the criteria for SUD, and approximately a quarter of incarcerated adults meet the threshold for serious psychological distress (SPD), demonstrating mental health problems severe enough to cause moderate-to-serious impairment of their daily lives, thus placing them at greater risk.[56,57] These trends are heightened for youth and young people, as approximately 50-75 percent of justice-involved youth meet the criteria for a mental health disorder.[58] Furthermore, the risk of death from overdose for adults in the two weeks following release from correctional settings is roughly 129 times that of the general population.[47] Racial/ethnic, gender, and sexual minorities also often experience poor mental health outcomes due to numerous factors, including lack of access to high quality and culturally competent behavioral health services, cultural stigma encompassing mental healthcare and treatment, discrimination, and overall unfamiliarity concerning mental health interventions.[59] Additional SDOH affecting these populations include poverty, racism, social isolation, trauma, and adverse childhood experiences (ACEs).[60]

Individuals With SUD

SUDs are complex conditions in which individuals have uncontrolled use of a substance despite negative or harmful consequences.[61] As defined in the DSM-5, SUD involves a number of diagnostic criteria, which are related to impaired control, social impairment, risky use, and physiological indicators (i.e., tolerance and withdrawal).[62] Per the DSM-5, the diagnostic criteria for an SUD include 11 criteria: (1) using substances in larger amounts or for longer durations of time than intended; (2) wanting to reduce or stop use of a substance but being unable to; (3) increasingly spending more time getting, using, or recovering from use of a substance (4) having cravings or urges to use a substance; (5) continuing to use substances despite not managing work, school, and/or home responsibilities because of substance use; (6) continuing to use substances even in the face of relationship or interpersonal issues; (7) giving up important social, occupational, and/or recreational activities because of substance use; (8) using substances despite a substance putting the person at-risk or in danger; (9) continuing to use substances despite an awareness that the use is causing or worsening physical and psychological problems; (10) developing a tolerance to a substance; (11) and experiencing withdrawal symptoms.[62] Per the DSM-5, SUD can be classified as mild, moderate, or severe based on the number of diagnostic criteria met by a person. Individuals can develop an SUD related to alcohol, cannabis (marijuana), hallucinogens, inhalants, opioids, sedatives, stimulants, and tobacco/nicotine.[61]

Individuals who have a problematic pattern of opioid use are, by definition, at a high risk of adverse events related to their opioid use.[54] Adverse events include, but are not limited to, overdose, infection, injury, hospitalization, and suicide. Individuals with SUD and/or OUD may face challenges across multiple facets of their lives, such as unemployment or underemployment, fractured family structures, and involvement with the criminal justice system. If individuals with OUD progress through increasingly severe phases (e.g., mild to severe), the risk of adverse events increases.[63]

It is common for individuals with an SUD, such as OUD, to also use other substances. In particular, anxiety, depression, prior trauma, and other conditions may lead individuals to use varying combinations of drugs, irrespective of overdose risk. Among people who use drugs, individuals typically gravitate toward substances that provide reinforcing effects—whether to produce pleasure or escape

physical or emotional pain. Some combinations of drugs are especially high-risk for causing overdose events, such as the use of opioids with sedative-hypnotics and/or alcohol.

Unfortunately, risky drug use, mental health disorders, and trauma reinforce one another. Worsening mental health status and increasingly risky drug use can spiral into especially dangerous territory without effective clinical and psychosocial interventions. Individuals with OUD sometimes have interactions with healthcare and social service providers for reasons that may or may not have a direct relationship to their opioid use. However, traditional healthcare systems are often ill-prepared to effectively engage these high-risk individuals, as services for mental health and SUD treatment are often artificially separated and uncoordinated (e.g., located at different physical locations, unaligned care plans, and lack of medication management coordination or processes for communicating between sites). In further exacerbating problems from this siloed approach to care, these settings may screen out individuals with polysubstance use and behavioral health conditions who require multiple services at once to comprehensively treat their concurrent conditions. Until treatment efforts acknowledge that both mental health disorders and SUDs/OUDs need to be simultaneously addressed by providers and individuals, the cycle between behavioral health and SUD will persist.[22]

Individuals Who Use Drugs Recreationally

While some individuals who use controlled substances (e.g., prescription drugs or illegal drugs) may be at increased risk for eventually developing an SUD, many individuals who regularly use drugs never develop an SUD. People who use illegal drugs are always at increased risk of overdose and/or other adverse events, given the greater lethality of the nation's illicit drug supply. While it is well known that drugs marketed as heroin may be adulterated with fentanyl and fentanyl-related analogues, this is also true of other powder-based drugs, such as methamphetamine and cocaine, as well as nonprescription pills, such as forged benzodiazepines and counterfeit painkillers. In addition to high-potency opioids, drugs are often contaminated with other substances including, but not limited to, industrial compounds, veterinary medications, fungicides, antipsychotics, antidepressants, anxiolytics, antihistamines, anthelmintics, decongestants, anti-inflammatories, antipyretics, analgesics, antispasmodics, bronchodilators, and other impurities .[64] This tremendous array of substances can increase an individual's risk of overdose and other unintended effects, especially among people with compromised respiratory or neurologic functioning due to medical conditions or infection.

Due to the inherent risks and illegal nature of illicit drug use, individuals who use drugs recreationally have an increased likelihood of presenting to acute care settings, being hospitalized, and becoming involved with the criminal justice system.[65–68] Injuries related to intoxication and impairment, decreased impulse control and disinhibition, panic and anxiety from excessive drug use, and self-harming and suicidal behaviors all occur at higher rates with drug use.[65–68] These risks are magnified among individuals with psychiatric comorbidities, such as mood, anxiety, and psychotic disorders.[65–68] Additionally, there are elevated rates of drug use among chronically homeless and shelter-bound populations—groups known to have high rates of mental illness. Notably, patients across these settings are often incentivized to conceal the extent of their drug use and may face prejudice and discrimination if they reveal illegal behavior (e.g., not allowed in the shelter overnight or unable to use vouchers for public housing). Rather than use these clinical, social service, and justice-related encounters as opportunities to engage individuals who use drugs, such windows of opportunity may be missed.

Individuals Prescribed Opioids for Pain Management

In the early stages of the opioid and SUD crisis, much of the emphasis regarding overdose risk was placed on patients who were prescribed opioids by healthcare providers. While overdose death rates from prescription opioids have been greatly overshadowed over the past decade by overdose deaths involving heroin, fentanyl, and psychostimulants, tens of millions of Americans continue to be prescribed opioids each year. Pain treatment itself is a large public health challenge, as Centers for Disease Control and Prevention (CDC) data indicate more than 50 million adults in the U.S. experience chronic pain (i.e., pain for more than three months duration). Common conditions that include pain are fibromyalgia, low back pain, osteoarthritis, neck pain, and sickle cell anemia, amongst others. Unfortunately, widespread prescribing of opioids for pain can result in the storage of unused medications or diversion to others. Screening for mental illness, SUDs, and risky drug use before initiating opioid use and over the course of treatment could help to identify individuals at risk for opioid dose escalations and adverse events.[69]

Risk Factors, Including Social Risk Factors, That Increase the Risk of Polysubstance Use Involving SSSOs Among Individuals With Co-occurring Behavioral Health Conditions

Poverty

Numerous risk factors increase the likelihood of polysubstance use involving SSSOs among individuals with co-occurring behavioral health conditions.[70] The pervasiveness of drug overdose-related deaths has risen and is highly correlated with structural and nongenetic causes and risk factors, such as poverty, low socioeconomic status (SES), limited access to upward mobility, and high rates of unemployment.[70] On average, geographical areas with worse economic expectations are more likely to have higher rates of opioid-related hospitalizations and drug overdose deaths.[70] Financial instability affects individuals in many ways that can contribute to unhealthy coping mechanisms, and stress brought on by worry of how to pay for food, rent, and other basic needs can be overwhelming.[71] In 2016, individuals who lived below the federal poverty line were over twice as likely to have an OUD compared with individuals who were living 200 percent above the federal poverty line.[70] Socioeconomic marginalization is an important but underexplored determinant of opioid overdose and SUD with important implications for health equity.[72]

Unstable Housing and Homelessness

Lack of safe and stable housing has been shown to negatively affect both physical and behavioral health.[73] Although substance use can cause and prolong homelessness, individuals experiencing homelessness rarely have SUDs alone.[73] Research has demonstrated that homeless individuals often have SUDs as well as mental health conditions.[74] A national sample of the homeless population indicated that 75 percent of individuals experiencing homelessness and SUD within the past year also had a comorbid mental illness.[73]

Chronic pain is common among the homeless population.[75] Homeless individuals often sleep outdoors and spend much of their day walking, and the transient and chaotic nature of life often contributes to their experience.[75] Chronic pain in the homeless population is often compounded by injuries, poorly treated medical conditions, insufficient shelter, and repeated exposure to extreme weather elements.[75] While substance use may be a cause of homelessness, some homeless individuals use drugs and/or alcohol as a coping mechanism.[74] A lack of access to health insurance and specialty care also decreases the ability of homeless individuals to manage and cope with pain, which often results in increased

risks.[75] The combination of these factors translates into homeless individuals having higher rates of SUDs, poorer health, and a great risk of mortality. [75–77]

Criminal Justice Involvement

There are high rates of substance use within the criminal justice system, with 65 percent of the prison population having an SUD.[78] Inmates with OUD are also at a higher risk for overdose following release from incarceration.[78] Based on the 2015-2016 National Survey on Drug Use and Health (NSDUH), the odds of being involved in the criminal justice system increase greatly for persons using opioids.[79] Approximately 35 percent of individuals with a heroin use disorder pass through American prisons annually, and an estimated 17 percent of state inmates and 19 percent of jail inmates report regularly using opioids.[79] Approximately 30-45 percent of these individuals report having withdrawal symptoms or an inability to control their use, which is indicative of OUD.[79] An untreated SUD or OUD during incarceration can result in a fatal relapse post-release due to loss of tolerance that would have occurred during incarceration.[78] To prevent relapse and continued misuse of opioids and other drugs, treatment must begin during incarceration and be sustained upon release. Nevertheless, only a small percentage of inmates receive treatment.[78]

A substantial and growing number of individuals in the justice system have co-occurring mental disorders and SUDs.[80] When mental illness is combined with SUD or OUD, the likelihood of recidivism and failure in correctional rehabilitation is greatly increased.[80] Roughly 20 percent of incarcerated individuals and individuals on probation and/or parole suffer from a serious or persistent mental health disorder.[79] When SUD and mental health disorders co-occur, the continued symptoms of one disorder are likely to precipitate relapse in the other.[79] For example, a person recovering from an SUD who continues to experience depression has an elevated risk for relapsing. Conversely, a person recovering from depression who continues to use substances is likely to experience a resurgence of depression.[79]

Despite demonstrated evidence-based benefits of OUD treatment, individuals in the criminal justice system often do not get the care they need as a result of limited funding, resources, and stigma.[81] Rather than affording opportunities for screening, diagnosis, and referral to treatment, justice involvement often impedes rather than promotes improved clinical outcomes. Despite the effectiveness of MOUD, in 2018, only 14 states offered methadone or buprenorphine maintenance in any of their jail or prison facilities, 39 offered injectable naltrexone as a preventative measure prior to release, and only Rhode Island offered all three FDA-approved medications for OUD.[79] Individuals transitioning from jail back to the community are also negatively affected by opioid use and lack of evidence-based treatment, with approximately 75 percent of individuals relapsing during their first ninety days.[79] Efforts are rarely made to ensure that incarcerated individuals being integrated into society have access to evidence-based treatment plans, which ultimately only increases the vulnerability of this population.[82]

Intimate Partner Violence

Intimate Partner Violence (IPV) plays a critical role in the development and the exacerbation of mental health and SUDs; thus, the connection between IPV, substance abuse, and mental health is an essential area to address.[83] Research indicates that survivors of IPV are at a greater risk for depression, post-traumatic stress disorder (PTSD), and suicide, and they often seek help for SUD and mental health at a high rate.[83] Survivors of IPV often use substances to cope with emotional trauma, and they may also be coerced into using substances by an abusive partner, who might sabotage their recovery and use their substance use as a means of control.[83] According to a 2012 survey conducted by the National Domestic

Violence Hotline, 15 percent of women reported that they tried to get help for SUD, and of those individuals, 60 percent reported that their current or previous partner tried to prevent or discourage them from getting that help.[83]

Together, OUD and IPV create a synergistic effect that leads to poor health and psychosocial outcomes in women in rural communities.[84] Women in rural areas often experience difficulties when trying to access safety and recovery programs, which complicates removing women from abusive situations.[84] A 2020 study that examined IPV and OUD in rural Vermont found that there were substantial barriers to accessing needed services.[84] Geographic isolation, transportation difficulties, inaccessibility of existing services, lack of integrated SUD treatment and domestic violence services, social isolation, and amplification of stigma in small rural communities prevented women from receiving much-needed care for IPV and OUD.[84] To better support rural populations experiencing IPV and OUD concurrently, researchers recommend increasing access to care that encourages collaboration between IPV and substance use service providers.[85]

Measurement Priorities in Polysubstance Use Involving Opioids and Behavioral Health Conditions

Identifying Measurement Gaps and Priorities

To identify current measurement priorities for addressing overdose and mortality resulting from polysubstance use involving SSSOs among individuals with co-occurring behavioral health conditions, the Committee reviewed the existing measurement landscape, which is summarized in the NQF Environmental Scan Report. Committee members then identified care and measurement gaps to inform the measurement framework. To identify the gaps, Committee members categorized the key engagement points—both within and outside of health—for these individuals. Through a series of web meetings, Committee members identified these critical engagement points by identifying the population and key subpopulations most impacted by substance use and behavioral health conditions. The three subpopulations identified by the Committee included individuals with SUD, individuals who use drugs for recreational use, and individuals who are prescribed opioids for pain management. Committee members had robust discussions about how each of these subgroups interact with the healthcare system, what the critical engagement points are at the point of care, and what measure concepts could best capture these aspects. Committee members also discussed notable structural changes needed to allow for successful measurement across the subgroups.

Building on the Committee discussion, Committee members completed a measurement gap prioritization survey to prioritize a list of measure gap areas and potential concepts based on five criteria:

- Anticipated impact on morbidity and mortality
- Feasibility to implement
- Contemporary gaps in performance, suggesting room for improvement
- Person-centeredness, considering the values and motivations of the persons, families, and/or caregivers most impacted)
- Fairness and equity (e.g., broadly available, nondiscriminatory, and sensitive to vulnerabilities)

The results of the prioritization survey, which are included in Appendix D, are intended to inform decisions on measures and measure concepts that should be developed to address challenges with co-occurring opioid use, polysubstance use, and behavioral health conditions.

Measurement Priority Gap Areas for the Measurement of Polysubstance Use and Concurrent Behavioral Health Conditions

NQF identified the key priority gap areas to address polysubstance use and concurrent behavioral health conditions through the results of the measurement prioritization survey and Committee web meeting discussions. Key gap areas included all-payer measures, measure concepts about coordination across settings and providers, harm reduction strategies, person-centeredness and recovery, and linkages to appropriate, evidence-based treatment for OUD/SUD. Committee members also highlighted gap areas relating to equity, SDOH, and vulnerable populations, including youth and individuals involved in the criminal justice system.

All-Payer Measures That Address Opioid Use, Misuse, and Behavioral Health Conditions

While quality measures independently exist related to opioid use, misuse, and behavioral health, there is a dearth of all-payer quality measures related to the intersection between substance use, including SSSOs, and behavioral health conditions. Quality measures are needed to benefit individuals with co-occurring SUD/OUD and behavioral health conditions, considering that comorbidity is the rule rather than the exception in behavioral healthcare. While patients with SUDs, comorbid mental illness, and an overdose history are disproportionately covered by Medicaid, rates of these conditions are increasingly prevalent among individuals with commercial and Medicare plans.[86–90] A coordinated measurement framework is needed to address gaps in all-payer measures that address the overlap between substance use and behavioral health conditions.

Measures and Measure Concepts That Encourage Care Coordination and Collaboration Across Settings, Providers, and/or Nonmedical Professionals

Committee members highlighted the lack of measures and measure concepts that encourage care coordination and collaboration across settings, providers, and/or nonmedical professionals as a critical gap area. Individuals with polysubstance use involving SSSOs who have co-occurring behavioral health conditions may engage multiple medical and nonmedical professionals to support their care, and coordination across these groups is critical. Individuals who use drugs and/or have SUDs also utilize social, health, and community services in nonmedical settings. The ED is both an entry point for high-intensity medical care and a source of referrals for community-based programs. However, many people with SUDs are quickly discharged from the ED without comprehensive evaluations by behavioral health specialists and without being successfully linked to care in the community. Strengthening affiliations and referral networks between traditional healthcare settings and community-based services could improve identification and engagement of high-risk persons through comprehensive care.

Recognizing that nonmedical professionals and nontraditional settings play key roles, the Committee emphasized that quality measurement must go beyond the traditional scope of healthcare entities to support optimal care. For example, measurement must support coordination with community-based organizations, outreach programs, and the criminal justice system.

Measures and Measure Concepts That Support Harm Reduction Strategies

The Committee also prioritized measures and measure concepts that support harm reduction strategies. Current quality measures do not include harm reduction strategies, such as the distribution of naloxone and the use of fentanyl test strips. Committee members identified the co-prescription of naloxone as a critical gap area, especially for high-risk individuals. While harm reduction strategies (e.g., the use of fentanyl test strips and syringe service programs) have gained attention and momentum in recent years, some states or localities may have regulations that limit the use of these programs. Committee members discussed how these regulations present a challenge to the access, use, and measurement of these programs.

Measure and Measure Concepts That Link Individuals to Evidence-Based SUD/OUD Treatment

The current quality measure landscape does not incorporate measures that assess linking individuals with polysubstance use and behavioral health conditions to evidence-based SUD/OUD treatment and care. While some measures may exist that focus on a subset of this population, measures that address the specific population of interest are lacking. The Committee highlighted how quality measures do not focus exclusively on linking individuals to evidence-based treatment (e.g., MOUD), and measurement focused on follow-up after an overdose to link individuals with behavioral health conditions to MOUD is a notable gap area. This gap is further magnified when looking at vulnerable populations, such as those involved in the criminal justice system.

Measures and Measure Concepts Recognizing High-Risk Populations

In identifying measurement priorities for individuals with polysubstance use and co-occurring behavioral health conditions, the Committee prioritized measures that encompass high-risk populations. Current quality measures do not explicitly address specific high-risk populations, including youth, individuals with SDOH factors (e.g., unstable housing, low income, unsafe neighborhoods, and substandard education), and individuals involved in the criminal justice system.[91] Committee members identified specific gap areas for these populations, such as measuring youth access to naloxone and referrals to specialized treatment. Multiple measurement priorities arose related to incarcerated individuals, particularly regarding timely access to MOUD, successful linkages to community providers post-release, and continuous insurance coverage.

Measures and Measure Concepts Focused on Person-Centeredness

Individuals with co-occurring SUD/OUD and behavioral health conditions do not follow one central path to recovery, as each individual is on their own journey towards recovery and well-being. Committee members identified measures focused on person-centeredness and recovery as a critical gap area for this population. Developing measures that assess whether a patient is achieving recovery, improving their quality of life, and attaining their personal, functional, and other goals is a current gap area that, if addressed, would help stakeholders identify whether improvements are being made through the current plans of care. This is a challenging task for individuals with behavioral health conditions, as recovery can look very different for each individual and often requires several years—if not an indefinite time period—of treatment. Opportunities exist for stakeholders to build on current initiatives focused on indicators for person-centered care plans.[92]

Monitoring for Potential Unintended Consequences, Impacts on Quality, and Outcomes

When discussing measurement priorities, Committee members highlighted the need to monitor for potential unintended consequences, impacts on quality, and health outcomes. As measurement efforts evolve, stakeholders analyzing measures must pay special attention to any unintended consequences that arise. This is important for measurement regardless of its use, as measures that monitor for unintended consequences can be used for either quality improvement or accountability.

Stigma—related to both substance use and behavioral health conditions—is a barrier to improving care and outcomes and can significantly impede access to care for individuals with co-occurring SUD/OUD and behavioral health conditions. This is particularly important for harm reduction strategies and MOUD, as sometimes individuals engaged in abstinence-only treatment programs face stigma when exploring other evidence-based treatment strategies (e.g., MOUD). As more quality measures are developed and deployed specifically relating to harm reduction strategies and the use of MOUD, stakeholders should monitor for any unintended consequences related to access and engagement that arise.

Committee members also discussed how addressing polypharmacy is critical for individuals with polysubstance use involving SSSOs but that there are risks for unintended consequences and outcomes related to measuring polypharmacy. Measurement for polypharmacy should focus on linkages to care, shared data, and data integration rather than the reduction of co-prescribing rates. If measurement takes a narrow lens to solely focus on reducing polypharmacy, individuals who require multiple medications for the management of complex medical and behavioral health conditions may experience stigma, decreased quality of care, and even harm from abrupt tapers or treatment abandonment if using prescription medications.[93] While some patients require the co-prescription of several classes of medications, poorly monitored medication regimens, especially across multiple treatment settings without unified electronic health record (EHR) systems or with poor communication, can introduce increased risk of patient harm, particularly in situations in which medication dosing escalates over time. Efforts are needed to improve care coordination and communication across disparate treatment settings.

Given the lack of existing quality measures related to individuals with co-occurring SUD/OUD and behavioral health conditions, the Committee prioritized focusing on measures and measure concepts related to equitable access and care rather than identifying specific measure concepts that measure unintended consequences. Stakeholders can use measure concepts included in this framework report to identify baseline rates and improvement. The information gathered from the measure concepts proposed in this report can be used to understand the impacts on outcomes and quality and can serve as a precursor to the development of specific measures focused on monitoring for unintended consequences.

Mortality Resulting From Polysubstance Use (e.g., psychostimulants laced with fentanyl)

One of the fundamental drivers of the fourth wave of the opioid crisis is that overdose events and fatalities involving opioids are now occurring among individuals who do not identify as opioid users. Specifically, these opioid-related overdoses are increasingly occurring among psychostimulant users who acquire drugs, such as crystal methamphetamine and cocaine, on the illicit market that are adulterated

with SSSOs or other compounds.[94] This often occurs without the end user's awareness. Because individuals who use stimulants do not otherwise have a tolerance to opioids, they are especially vulnerable to respiratory suppression from exposure to SSSOs, even with a single episode of use. Thus, the final measurement priority is to continue measuring mortality resulting from polysubstance use to understand implications of the current, and any future, waves of the opioid.

Measurement Framework for Opioids, Polysubstance Use, and Mental Health

Building on the work of the 2019 NQF Opioid TEP and the current Committee's environmental scan and measurement gap prioritization exercise, NQF and the Committee developed a measurement framework to address overdose and mortality resulting from polysubstance use among individuals with co-occurring behavioral health conditions. The development of a measurement framework for opioids, polysubstance use, and mental health is a critical step to organize existing measures, measure concepts, gaps, and opportunities to improve care for individuals with polysubstance use and co-occurring behavioral health conditions. Current measurement efforts tend to focus on portions of this population, such as those with OUD or behavioral health diagnoses, and notably, the environmental scan found no conclusive evidence of any quality measures that directly address polysubstance use involving SSSOs among individuals with co-occurring behavioral health conditions.[95] However, given the relationship between behavioral health conditions and substance use, it is essential to move to a comprehensive measurement approach that holistically looks at the intersection of behavioral health and substance use.

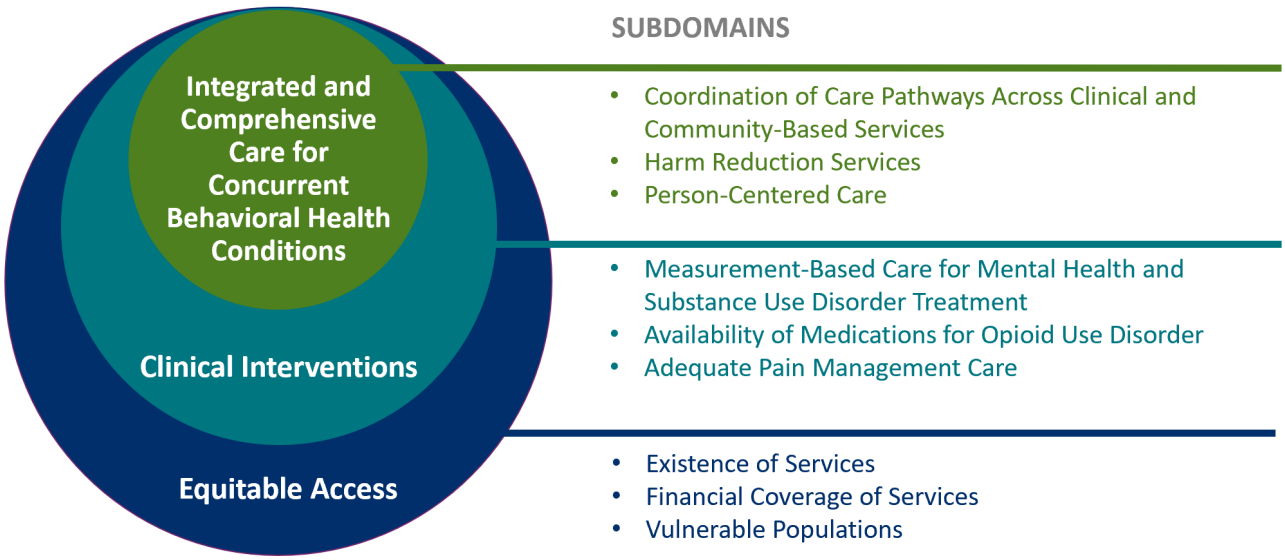
The measurement framework, as shown in Figure 1, includes three domains and nine subdomains. NQF and the Committee identified the three domains of Equitable Access, Clinical Interventions, and Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions by categorizing existing measures, measure concepts, and the results of the measurement gap prioritization exercise into key themes. The framework both references and links to applicable NQF-endorsed measures using NQF's measure numbering convention and system. Once the three domains were identified, Committee members discussed critical subdomains and areas for measurement within each domain area. Each subdomain represents the key components to measure within the overarching domain area to ensure comprehensive performance measurement for this population.

When discussing the measurement framework, the Committee emphasized the relationship between the three domains and decided upon a concentric circle approach. Equitable Access is a foundational and essential component to improving outcomes and addressing mortality, and it is critical to support people in having access to evidence-based clinical interventions and harm reduction services. Equitable Access is the broadest part of the measurement framework since access alone is insufficient for connecting individuals to evidence-based clinical interventions and comprehensive care with high quality services. Once people have access to evidence-based care, it is essential for providers to offer clinical and community-based interventions, as well as other types of interventions that improve health, address overdose, and reduce mortality resulting from polysubstance use in individuals with co-occurring behavioral health conditions. High quality care often exists in silos, and for an individual to receive optimal care and clinical interventions, individuals must receive person-centered, integrated, and comprehensive care across clinical and community-based services. The Committee felt that a

measurement framework must convey the connected relationship between the three domains to demonstrate that it is essential for stakeholders to build on a foundation of equitable access and evidence-based interventions to support integrated and comprehensive care and achieve optimal outcomes.

For each of the domains and subdomains within the measurement framework, the Committee identified multiple measure concepts. As measurement for individuals with co-occurring SUD/OUD and behavioral health conditions remains an evolving area, measure concepts and approaches included within the framework range in their level of evidence, research, and science. Measure developers can use the suggested concepts to inform the development and testing of new clinical quality measures. Any measure concepts included in the framework should be fully specified, developed, and tested before full implementation. Notably, many of the measure concepts identified by the Committee are structural or process measures. Despite the growing movement towards outcome measures, the lack of existing quality measures for the population of interest makes it challenging to begin with outcome measures. While some of the subdomains naturally focus more on outcomes and patient-reported outcome measure (PROM) concepts, such as the person-centered care subdomain of the Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions domain, other subdomains naturally include more process-oriented measure concepts to ensure a solid foundation of measurement is in place. A natural measurement progression begins with process measures, with the ultimate goal of evolving to a quality measurement landscape that focuses on outcomes measures, including PROMs.

Figure 1. Measurement Framework to Address Overdose and Mortality Resulting From Polysubstance Use Among Individuals With Co-occurring Behavioral Health Conditions



Equitable Access

The Committee agreed that equity and access to care are foundational components of addressing overdose and mortality resulting from polysubstance use among individuals with co-occurring behavioral health conditions. Equity is a critical area of focus, given that mortality associated with

polysubstance use with SSSOs in individuals with behavioral health conditions is increased when SDOH-related factors are present.[95,96] Disparities exist across racial and ethnic groups, as well as by geographic location, in access to evidence-based SUD/OUD treatment, and especially for access to buprenorphine-waivered providers.[97,98] NQF defines *equitable access* as the ability for individuals with social risk factors to easily get care that is affordable, convenient, and able to meet their social risk factor needs.[99] For individuals with polysubstance use and co-occurring behavioral health conditions, equitable access refers to affordable and convenient prevention, treatment, and recovery services, including clinical interventions, community-based services, and harm reduction services, that advance equity and quality for all, especially vulnerable populations. Without equitable access to evidence-based services, individuals cannot obtain the services that exist to support better health outcomes and a reduction in overdoses. Equitable access also extends past the clinical setting, ensuring that individuals with SUD/OUD have access to community-based services that can help them begin and maintain recovery.[100] In their discussions about access to care, the Committee identified three key subdomains to measuring access to services: existence of services, financial coverage of services, and vulnerable populations. Potential measure concepts related to each subdomain are included in Table 1.

Existence of Services

When discussing how to measure the existence of services, the Committee identified that measuring both the availability of services and the accessibility of services is critical to improving outcomes for individuals with co-occurring behavioral health conditions. This subdomain measures whether services that support individuals with polysubstance use and behavioral health conditions exist and are accessible. To measure the existence of services, measures concepts could assess whether a given service exists in a particular region. Measure concepts may include measuring individuals' access to and quality of a range of pain management treatments or the ability of individuals to receive nontraditional care services that are particularly important for individuals with co-occurring behavioral health conditions, such as peer supports, care coordination, and/or transportation. Accessibility of services builds on the existence of services, and measure concepts could expand further to assess whether the service that exists is truly accessible from a resource and/or feasibility perspective. Measurement considerations should incorporate access challenges that rural populations may face, such as limited internet services and extended driving distances. Over 40 percent of U.S. counties do not have a single buprenorphine-waivered physician, and these counties are disproportionately rural and frontier counties.[101,102] The existence of care services alone will remain inadequate for rural populations whether people lack transportation, access to internet, or phone service, and/or have other barriers to care.

Financial Coverage of Services

While the existence of services is an essential component to improving access, Committee members discussed the financial coverage of services as a notable measurement area. This subdomain measures whether affordability is a barrier for individuals accessing needed services. Reimbursement structures and benefit design may unintentionally limit the ability of individuals to access needed services, and measurement opportunities exist to ensure parity between physical healthcare, mental healthcare, and SUD/OUD treatment services. Measure concepts for measuring the affordability of services include measuring insurance reimbursement for social work services to address SUD/OUD and behavioral health treatment. Opportunities also exist to measure whether health plan coverage—including both referrals and access to SUD/OUD and mental health services—is in place immediately after an individual is released from incarceration.

Vulnerable Populations

Health outcomes are often the result of a combination of clinical, demographic, and social risk factors; thus, it is essential to include and understand SDOH and vulnerable populations when identifying quality measures for individuals with polysubstance use, including SSSOs, and concurrent behavioral health conditions. This subdomain measures whether populations are equitably able to access needed services, including treatment for SUD/OUD. As identified earlier, vulnerable populations include youth, individuals experiencing homelessness, those involved in the criminal justice system, and veterans, among others. [55]

This subdomain recognizes that disparities in access and treatment exist across racial and ethnic groups and that certain groups of individuals are at a higher risk of not receiving adequate care. [97,98] Research shows that Black, non-Hispanics received MOUD treatment at about half the rate of Whites, further magnifying health inequities.[76] Poverty and substance use, combined with untreated mental health conditions and unstable housing, are correlated with increased OUD in underserved communities.[103] Despite the importance of SDOH for individuals with polysubstance use and concurrent behavioral health conditions, there is a lack of existing quality measures that address SDOH and vulnerable populations.

The Committee discussed critical measure gap areas related to equity, especially for individuals involved in the criminal justice system and those with poor SDOH, including poverty, unsafe housing, and homelessness. Committee members emphasized the need for quality measures focused on healthcare organizations and providers screening for homelessness and SUDs and measuring the ability to connect individuals experiencing homelessness to appropriate social and community-based programs. Individuals involved in the criminal justice system represent an additional population in which SDOH play a critical role, and Committee members noted how individuals are at a critical transition point when being released from jail or prison. Quality measures that identify whether these individuals have support for other core needs, such as housing and food, when released from incarceration will help to promote health equity. Committee members also discussed stigma as an access issue, especially for access to harm reduction services and MOUD.

Lastly, Committee members identified the youth as a vulnerable population for the development of co-occurring SUD/OUD and mental health disorders. To effectively prevent drug use and/or SUD/OUD in youth, young people should be screened for anxiety, depression, trauma, and other mental health concerns so that care providers can effectively intervene to support children and adolescents in their development of coping skills to preempt reliance on substances. As a prevention opportunity for this vulnerable population, quality measures could assess annual mental health screening for young people and/or youth access to naloxone.

Table 1. Examples of Measure Concepts for Access

Measure Concept Description	Subdomain
Percentage of individuals with SUD/OUD and mental health conditions who receive home and community-based services (e.g., peer support, care coordination, and nonmedical transportation)	Existence of Services
Percentage of individuals with access to holistic pain management (e.g., physical therapy, integrated care, and complementary care)	Existence of Services

Percentage of individuals released from incarceration with insurance coverage in place that includes SUD/OUD and behavioral health services immediately post-incarceration	Financial Coverage of Services
Percentage of individuals with SUD/OUD and mental health conditions who receive case management services that are covered	Financial Coverage of Services
Percentage of adult individuals leaving incarceration with fully reinstated insurance coverage (i.e., Medicaid)	Vulnerable Populations
Percentage of adult individuals leaving incarceration and seeking support for health-related social needs (e.g., housing, food) who received access to services	Vulnerable Populations
Percentage of individuals with SUD/OUD and a concurrent mental health condition identified as having poor SDOH (e.g., food insecurity, transportation insecurity, and homelessness) who have demonstrated improvement in clinical status within a given time frame	Vulnerable Populations
Percentage of individuals experiencing homelessness who are connected to social and community-based programs related to their specific social risk needs	Vulnerable Populations
Percentage of adult individuals leaving incarceration with fully reinstated insurance coverage (i.e., Medicaid)	Vulnerable Populations
Percentage of youth screened annually for mental health concerns (e.g., anxiety, stress, and trauma)	Vulnerable Populations

Clinical Interventions

Building on a foundation of accessible and equitable care, stakeholders can address overdose and mortality resulting from polysubstance use among individuals with co-occurring behavioral health conditions through appropriate, evidence-based clinical interventions. The Committee discussed the close relationship between the subdomains in the Clinical Interventions domain and the other domains, seeing as having access to equitable care is critical to address overdose and mortality for this population. The Committee identified three key subdomains to measuring clinical interventions for individuals with concurrent behavioral health conditions: (1) measurement-based care (MBC) for mental health and SUD/OUD treatment, (2) availability of MOUD, and (3) adequate pain management care. Potential measure concepts related to each subdomain are included in Table 2.

Measurement-Based Care for Mental Health and SUD/OUD Treatment

This subdomain focuses on measuring whether individuals with polysubstance use and co-occurring behavioral health conditions are receiving MBC for mental health and SUD/OUD treatment services. MBC is an approach to care in which clinical care is based on data collected through patient- or clinician-administered structured assessments of treatment response. Current quality measures related to MBC focus on individuals with either SUD/OUD or behavioral health conditions; however, quality measures related to MBC for individuals with concurrent SUD/OUD and behavioral health conditions are lacking.

More specifically, providers can measure behavioral health outcomes using scales such as the Montgomery-Asberg Depression Rating Scale (MADRS) or the Patient Health Questionnaire-9 (PHQ-9) to assess depression or anxiety symptom burden with a demonstrated response to treatment within a given time frame. Providers can measure alcohol drug use disorder outcome response with a standardized screening tool during treatment, such as the 17-item Brief Addiction Monitor (BAM) pioneered by the Veterans Health Administration (VHA). Measurement opportunities exist for

assessments that focus on the convergence of these conditions to evaluate whether individuals are moving towards recovery.

MBC has become a high-profile topic in the behavioral healthcare field as stakeholders are interested in moving to MBC; however, skepticism exists in the SUD treatment field related to the feasibility and reliability of scales that can reflect disparate patient outcomes, given the wide range of individual experiences with SUDs. Notably, The Joint Commission's outcome measure standards for behavioral healthcare and human services include the use of MBC to assess patient outcomes.[104] This tension reflects the need for and growing interest in MBC for patient outcomes for individuals with behavioral health conditions. While there are widely accepted scales to measure response to treatment for mental health conditions in clinical and research settings, the field has struggled to develop scales that reflect recovery from SUDs. The measurement tools that currently exist (e.g., BAM, Brief Assessment of Recovery Capital [BARC-10]) assess responses to SUD treatment and focus on improvement in positive benefits (e.g., treatment team alliance, coping skills), as well as assessing reductions in distress (e.g., depression symptoms, feelings of hopelessness).[105,106]

Opportunities exist for MBC to assess patient progress over time. While the long-standing Addiction Severity Index (ASI) is widely used in specialty addiction treatment settings, it can be cumbersome and time-consuming to administer, and it was not intended for serial administration to reflect response to treatment as MBC requires. Notably, the VHA is now undergoing efforts to create a shorter version of the BAM to facilitate frequent serial administrations to track patient progress in the outpatient addiction treatment setting. While efforts persist for unifying the field around MBC for SUD treatment, the challenges are even greater for populations that have high levels of psychiatric comorbidities alongside of SUDs.

Availability of MOUD

This subdomain focuses on the availability of MOUD, including injectable forms of MOUD. MOUD encompasses three classes of pharmacotherapy: (1) methadone, (2) buprenorphine, and (3) naltrexone (i.e., oral naltrexone and long-acting injectable naltrexone) products. Despite being a highly effective, evidence-based treatment, MOUD are greatly underused in the U.S. compared with other nations.[107,108,109] Additionally, disparities in access to MOUD have an impact on the SUD treatment landscape at the population level. For instance, while low-income urban communities of color are disproportionately likely to attend daily methadone programs, buprenorphine is primarily used by White individuals with employer-based insurance or in Medicaid in Affordable Care Act (ACA) expansion states.[110, 97,98] Measurement approaches highlighting initiation and retention with MOUD should include disparity-sensitive measures to further highlight quality gaps across populations focusing on demographics and regionality. Including disparity-sensitive measures is an important way for stakeholders to identify and address disparities. Additionally, the lessons learned from improving MOUD equity can inform structural changes that support making future pharmacotherapies available in an equitable manner to vulnerable populations. As one example, access to injectable, extended-release forms of MOUD remains challenging for many populations, and opportunities exist for stakeholders to leverage measurement related to MOUD to identify mechanisms for scaling access to these injectable forms (both of buprenorphine and naltrexone).

The Committee discussed critical junctures in which populations interact with the healthcare or social supports system that could initiate MOUD. Existing measures related to MOUD include NQF #3400 (*Use*

of Pharmacotherapy for OUD), NQF #0004 (*Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment*), and NQF #3175 (*Continuity of Pharmacotherapy for OUD*). While these measures do assess initiation, engagement, and/or retention of SUD/OUD treatment with pharmacotherapy, they do not address comorbidity. The Committee discussed measure concepts that incorporate MOUD for individuals with co-occurring behavioral health conditions, and measure concepts arising from this Committee discussion included the percentage of individuals with behavioral health conditions screened for SUD/OUD with MOUD initiated in the ED and/or inpatient hospital setting. The Committee discussed the need for stakeholders to follow up with a patient with a behavioral health condition after an ED or inpatient visit for SUD/OUD and identified measure concepts related to following up with MOUD within seven days after an SUD/OUD visit.

Due to the recognition of the disparities in access to MOUD, opportunities exist to initiate MOUD, and in some circumstances, to stabilize a patient on a therapeutic maintenance dose prior to discharge from a healthcare or criminal justice setting. Measure concepts could include the percentage of individuals screened for SUD/OUD with MOUD initiated during incarceration, percentage of individuals inducted and stabilized on a therapeutic dose of MOUD for a minimum of 30 days before release from incarceration, and MOUD follow-up within seven days after an individual with SUD/OUD is released from incarceration.

Adequate Pain Management Care

This subdomain focuses on measuring appropriate pain management practices to minimize risks of overdose and mortality resulting from polysubstance use involving SSSOs among individuals with behavioral health conditions, whether or not these individuals are actively being prescribed opioid analgesics. Opioids are often prescribed to treat acute and chronic pain. Opioid use risks are magnified for individuals with a history of SUDs and for those with other risk factors, such as recreational drug use and/or mental illness. Current quality measures do not take into account the unique treatment needs of individuals with SUD/OUD and concurrent behavioral health conditions.

The Committee identified that prescribing guidelines for opioids are insufficient for addressing the needs of individuals with concurrent SUD and behavioral health conditions. Examples of existing measures related to prescribing practices include NQF #3558 (*Initial Opioid Prescribing for Long Duration*) and NQF #2940 (*Use of Opioids at High Dosage in Persons Without Cancer*). The Committee discussed the need to measure evidence-based care related to pain management and described potential measure concepts for individuals with SUD/OUD and behavioral health conditions to build on the 2016 CDC Guideline for Prescribing Opioids for Chronic Pain to reduce risks of polysubstance use. Possible measure concepts included the percentage of individuals with a documented holistic care plan, the percentage of providers implementing and documenting a risk-benefit analysis as part of treatment plan management, and the percentage of patients with an appropriate tapering plan for the careful discontinuation of opioids when warranted.

Table 2. Examples of Measure Concepts for Clinical Interventions

Measure Concept Description	Subdomain
Improvement or maintenance of functioning for all patients seen for mental health and substance use care	Measurement-Based Care for Mental Health and SUD/OUD Treatment

Improvement or maintenance of functioning for dual-diagnosis populations (e.g., through use of BAM, Patient-Reported Outcomes Measurement Information System [PROMIS])	Measurement-Based Care for Mental Health and SUD/OUD Treatment
Percentage of individuals with identified SUD/OUD (e.g., through screening) and with MOUD initiated during incarceration	Availability of MOUD
Percentage of individuals inducted and stabilized on a therapeutic dose of MOUD before release from incarceration	Availability of MOUD
Percentage of patients with chronic pain who received holistic care from a primary care or other provider before being referred to a specialty pain provider	Adequate Pain Management Care

Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions

The Committee agreed that integrated and comprehensive care is a critical domain for measuring care and outcomes of individuals with polysubstance use and co-occurring behavioral health conditions. Coordination across care settings and collaboration across providers—both those in the medical system and those outside of the medical system—are essential to improving outcomes; yet current measurement approaches do not always reflect the importance of integrated care, especially for individuals with polysubstance use and behavioral health conditions. Furthermore, with recognizing the intricate relationship between SDOH, SUD/OUD, and behavioral health conditions, measures of integrated and comprehensive care should also acknowledge and incorporate stakeholders outside of traditional healthcare settings, such as those in housing and employee assistance programs, health literacy efforts, educational settings, and the criminal justice system. Harm reduction service providers are also an especially important piece of comprehensive care for individuals. It is essential to include harm reduction services as part of efforts to increase access to services for individuals with polysubstance use and co-occurring behavioral health conditions.

When discussing the population of interest, Committee members identified different engagement points at which individuals may interact with the healthcare system. Given that different subpopulations (e.g., individuals with SUD, individual who use drugs for recreational use, and individuals who are prescribed opioids for pain management) interact with the health system in different ways and at different times, the Committee underscored the importance of measuring integrated, comprehensive, and coordinated care that includes nonmedical stakeholders and nontraditional settings. Individuals with polysubstance use including SSSOs and co-occurring behavioral health conditions often interact with several medical professionals, including pharmacists, emergency medical technicians, psychiatrists, social workers, physicians, nurses, and others. It is important for quality measures to encompass this wide range of healthcare professionals and include the various settings that these individuals may present, such as EDs, inpatient hospitals, inpatient psychiatric facilities, primary care, Institution for Mental Disease (IMD) facilities, and others. In their discussions, the Committee identified three key subdomains to measuring integrated and comprehensive care: (1) coordination of care pathways across clinical and community-based services, (2) harm reduction services, and (3) person-centered care. Potential measure concepts related to each subdomain are included in Table 3.

Coordination of Care Pathways Across Clinical and Community-Based Services

This subdomain highlights coordination across the care pathway, including prevention, screening, diagnosis, and treatment, focusing on the extent to which care is coordinated and integrated to holistically care for an individual with polysubstance use and a co-occurring behavioral health condition(s). Committee members acknowledged that the measure concepts regarding these care pathway aspects—prevention, screening, diagnosis, and treatment—can and should go beyond traditional healthcare settings. Community-based services and care are important mechanisms for improving and maintaining health for individuals with co-occurring SUD/OUD and behavioral health conditions outside of the traditional healthcare setting. Community-based services, including but not limited to peer support services, supportive housing and employment services, and case management, are especially important for individuals who return home from residential care, inpatient care, or incarceration.[100]

Given that individuals who misuse or abuse opioids are more likely to suffer from behavioral health conditions than those who do not, measurement opportunities exist to improve screening processes to ensure at-risk individuals are identified and treated properly. Gaps in screening exist in primary care and mental health settings, and measure concepts could include measuring the percentage of individuals with known SUD/OUD who are screened for psychiatric disorders. The Inpatient Psychiatric Facility Quality Reporting (IPFQR) Program include measures that assess patients with alcohol abuse who received or refused a brief intervention during their inpatient stay and patients who screened positive for an alcohol or drug use disorder during their inpatient stay who received or refused a prescription for medications to treat their alcohol or drug use disorder or who received or refused a referral for addiction treatment. The IPFQR Program also includes similar measures for individuals who use tobacco. Many of these measures, including TOB-1 Tobacco Use Screening, TOB-2 Tobacco Use Treatment Provided or Offered & TOB-2a Tobacco Use Treatment, TOB-3 Tobacco Use Treatment Provided or Offered at Discharge and TOB-3a Tobacco Use Treatment at Discharge, SUB-1 Alcohol Use Screening, SUB-2 Alcohol Use Brief Intervention Provided or Offered & SUB-2a Alcohol Use Brief Intervention, and SUB-3 Alcohol and Other Drug Use Disorder Treatment Provided or Offered at Discharge & SUB-3a Alcohol and Other Drug Use Disorder Treatment at Discharge, are no longer endorsed by NQF because the developer is retooling these measures to be eCQMs and did not resubmit them for maintenance of endorsement. eCQMs are preferred because they involve lower burden data sources. Once these measures are developed into eCQMs, they can be used as a model for quality measures for this population in settings outside of an inpatient psychiatric facility.

Measure concepts should also focus on care coordination and linkages between specialists, consultants, and community-based services, and in some instances, they can further focus on the role of telemedicine in supporting coordinated care. While continuity of care measures exist for individuals with SUD/OUD, such as NQF #3453 (*Continuity of Care after Inpatient or Residential Treatment for SUD*), there are no existing measures focused on continuity of care for individuals with co-occurring behavioral health conditions. As stakeholders improve screening and coordinated care, there are measurement opportunities to focus on coordination of care for individuals with concurrent behavioral health conditions and to focus on polypharmacy and polysubstance use. Existing measures, such as NQF #3389 (*Concurrent Use of Opioids and Benzodiazepines*), provide an example of measuring polypharmacy and can be leveraged as a model to measure other instances of polypharmacy that are particularly relevant for individuals with co-occurring behavioral health conditions, such as concurrent use of opioids and

gabapentinoids.[111] Measuring the number of providers screening for other substances can help to promote data sharing, integration, and awareness of potential risks for overdose and/or mortality for patients with polysubstance use. Of note, efforts to address polysubstance use should not compromise or stigmatize care for complex patients who require multiple medications; rather, they should focus on improving communication and data sharing to identify and mitigate potential harm and overdose risks.

Opportunities also exist for measure concepts to assess the appropriate follow-up and treatment transitions after an individual overdoses, and to assess that referrals to appropriate, clinical, and evidence-based treatment programs occur. Existing measures, such as NQF #2605 (*Follow-Up After Emergency Department Visit for Mental Illness or Alcohol and Other Drug Abuse or Dependence*), NQF #3488 (*Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence*), NQF #3489 (*Follow-Up After Emergency Department Visit for Mental Illness*), and NQF #0576 (*Follow-Up After Hospitalization for Mental Illness*), focus on subsets of the population of interest; however, measuring appropriate follow-up for individuals with SUD/OUD and concurrent behavioral health conditions is a gap area. Additionally, many mental health and SUD treatment settings do not thoroughly screen, diagnose, and treat tobacco use disorder over the course of care episodes. The Committee discussed how appropriate follow-up looks different in different communities and described how successful models have engaged social workers and certified peer recovery specialists in conducting outreach and follow-up after an overdose or inpatient admission.

This subdomain also includes concepts about the processes in place to promote coordination between clinical and community-based providers and systems, such as the co-location of mental health and SUD/OUD treatment services. Individuals who leave the criminal justice system are particularly vulnerable to lapses in care, and opportunities exist to ensure previously incarcerated individuals have a primary care relationship established upon leaving incarceration. Community-based services also offer an important opportunity to support individuals with SUD/OUD and behavioral health conditions who transition out of the criminal justice system.

Harm Reduction Services

This subdomain highlights opportunities to measure the use and implementation of harm reduction services to reduce overdose and mortality resulting from polysubstance among individuals with co-occurring behavioral health conditions. Harm reduction activities include practical strategies focused on reducing negative consequences associated with drug use.[112] Over the past several years, stakeholders have begun distributing naloxone to reverse an opioid overdose. While not specific to individuals with SUD/OUD and co-occurring behavioral health conditions, there is one existing quality measure that assesses the percentage of individuals discharged with naloxone after opioid poisoning or overdose. The Committee identified several potential measure concepts focused on naloxone, such as the percentage of high-risk patients who are co-prescribed naloxone with an opioid prescription, especially with higher-risk prescribing or when opioids are co-prescribed with sedative-hypnotics. The Committee also discussed the need to promote youth access to naloxone, which could be accomplished through a school nurse.

Other harm reduction strategies that the Committee discussed included measuring use of syringe services programs and the distribution of fentanyl test strips to injection drug users. Of note, harm reduction strategies are often limited by state or local laws, and the ability of harm reduction strategies to be implemented—and thus measured—may vary based on geographic location and regulations.

Person-Centered Care

Individuals should be at the center of their care, and the Committee identified person-centered care as a subdomain in the integrated and comprehensive care for individuals with polysubstance use and concurrent behavioral health conditions. Providers and patients should use shared decision making to make informed, person-centered decisions about the most appropriate treatment plan and path to recovery for each individual.[113] Current quality measures related to person-centered care, including NQF #0166 (*Hospital Consumer Assessment of Healthcare Providers and Systems* [HCAHPS] *Survey*) and NQF #2483 (*Gains in Patient Activation Scores at 12 Months*), are not explicitly focused on individuals with SUD/OUD and concurrent behavioral health conditions, and there are opportunities to further assess and improve person-centered care for this population. While the path to recovery may look different for each individual, the Committee identified measures of recovery and quality of life as important measurement opportunities for individuals with polysubstance use and co-occurring behavioral health conditions. Patient-reported outcomes (PROs), such as the ability to achieve functional goals and patient-reported recovery, play an important role in understanding whether treatment is effective for a given individual based on their own unique circumstances and goals. Measuring patient and family engagement and satisfaction also provides an opportunity to assess care approaches for person-centeredness. Opportunities also exist to measure the inclusion of the voices of individuals, families, and/or caregivers with lived experience in assessing care for people affected by co-occurring pain, behavioral health, and/or SUD/OUD to ensure a person-centered perspective is encompassed throughout care approaches.

Table 3. Examples of Measure Concepts for Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions

Measure Concept Description	Subdomain
Percentage of mental health providers who screen for SUD/OUD in behavioral health settings	Coordination of Care Pathways Across Clinical and Community-Based Services
Percentage of individuals with diagnosed SUD/OUD who are screened for mental disorders in SUD treatment settings	Coordination of Care Pathways Across Clinical and Community-Based Services
Percentage of providers screening for polysubstance use and polypharmacy (e.g., through a prescription drug monitoring program (PDMP), collateral information from outside providers, or another identified mechanism)	Coordination of Care Pathways Across Clinical and Community-Based Services
Percentage of individuals with SUD/OUD who are referred to an evidence-based treatment program (e.g., from the ED)	Coordination of Care Pathways Across Clinical and Community-Based Services
Percentage of SUD/OUD treatment providers with co-located mental health services	Coordination of Care Pathways Across Clinical and Community-Based Services
Percentage of high-risk patients who are co-prescribed naloxone with an opioid prescription at least once annually	Harm Reduction Services
Percentage of patients with OUD discharged from care episodes (e.g., residential treatment) with naloxone	Harm Reduction Services

Patient-reported recovery (e.g., measurement-based care with the BAM or World Health Organization Quality of Life [WHOQOL])	Person-Centered Care
Percentage of behavioral health care teams that include individuals with lived experience (e.g., lived experience with a behavioral health condition) on the care team	Person-Centered Care
Percentage of patients who reported that their mental health and SUD/OUD treatment was coordinated	Person-Centered Care
Patient experience of care for all patients seen for mental health and substance use care	Person-Centered Care

Discussion

Leveraging the Measurement Framework in a Coordinated Approach

The measurement framework—and its domains and subdomains—are intended to support a comprehensive measurement approach for individuals with polysubstance use involving SSSOs who have concurrent behavioral health conditions. While specific measures and measure concepts can be used for either accountability or quality improvement, quality measures related to SUD/OUD are a critical mechanism to holding care providers, payers, and policymakers accountable for providing optimal care for individuals with SUD/OUD, behavioral health, and pain conditions. The three domains within the measurement framework—equitable access, clinical interventions, and integrated and comprehensive care for concurrent behavioral health conditions—are interwoven. Each one depends on the foundation of the preceding domain. For instance, if individuals do not first have access to affordable care, the quality and coordination of care are irrelevant.

As organizations begin to implement a coordinated measurement framework for populations with co-occurring SUD/OUD and mental health disorders, leaders should ensure selected measures encompass equity and person-centeredness, with specific attention to vulnerable populations. This is especially true for justice-involved individuals, as Black males were imprisoned in state and federal facilities at nearly six times the rate of White males in 2017.[58] Given the disparities that exist for individuals with SUD/OUD and behavioral health conditions, equity should be a foundational element in ensuring high-risk individuals and vulnerable populations are obtaining services needed to promote better patient outcomes and reduce mortality in an effective way.

To further understand and target disparities that exist for individuals with SUD/OUD and behavioral health conditions, the Committee identified that quality measurement for the population of interest should explore the use of risk adjustment. Risk adjustment is a statistical approach that allows patient-related factors to be factored in when computing performance measure scores.[114] Given the complexity of individuals with SUD/OUD and co-occurring behavioral health conditions, failure to consider risk adjustment or stratification (e.g., by age or SES) could potentially penalize providers and health systems that care for higher-risk patient groups and populations. Furthermore, risk adjustment can allow for a clearer pathway to understanding the needs of people with SUD/OUD and concurrent behavioral health conditions. Potential social risk factors that are often adjusted for in measurement include race and ethnicity, insurance, relationship status, SES, income, disadvantaged areas, and housing instability.

Given the correlation between deaths from polysubstance use and high levels of poverty, accurate benchmarks of economic and social challenges at the community level should be developed as a risk factor for SUDs in a given community. [115]

While an overall focus on measurement of behavioral health services is appropriate, organizations may also consider risk stratification by type of provider to understand where disparities exist. It may be helpful to stratify by a mental health provider or an SUD provider to understand where to focus improvement efforts.

Opportunities to Overcome Barriers to Measurement and Care

To support implementation of the measurement framework, opportunities exist for stakeholders to assess how to best overcome barriers to care for individuals with polysubstance use involving SSSOs who have co-occurring behavioral health conditions. Common barriers to care, including insurance coverage disruptions, burdensome regulations, and financial disincentives, often limit the availability and/or provision of evidence-based services for individuals with SUD/OUD and co-occurring behavioral health conditions, especially in under-resourced areas. Opportunities exist for states to submit proposals for Medicaid Section 1115 demonstration waivers to test comprehensive approaches to care for beneficiaries with SUDs and concurrent behavioral health conditions.[116] Many states currently have demonstration projects underway, with the goal of improving care for individuals with SUD and/or behavioral health conditions without increasing overall costs. Examples of current demonstration projects include reimbursing for care coordinators, transportation services, and expanding coverage for SUD treatment-related inpatient admissions in settings previously subjected to Medicaid's IMD exclusion.[117] Opportunities exist to ensure that all states with Medicaid Section 1115 demonstrations are making meaningful progress, especially related to access and the coordination of clinical and community-based services.[100]

To support integrated and comprehensive care for individuals with SUD/OUD and concurrent behavioral health conditions, diverse stakeholders must act on opportunities that exist to overcome structural barriers to coordinated care. More specifically, stakeholders can leverage the need for coordinated care for this population to support further co-location of SUD and behavioral health services, reimbursement for nonmedical services (e.g., peer navigation, care coordination, transportation, and internet services), and bundled payment plans that pay capitated rates rather than fee-for-service schedules that disallow reimbursement for adjunctive services that may enhance treatment adherence and retention. In addition to payment structures, payers have an opportunity to address overdose and mortality by supporting data continuity and sharing across health plans. Payers have a wealth of patient data that they use to identify whether patients are at risk for overdose or mortality from SUD and/or behavioral health conditions. However, as individuals move through different stages of life and change health plans, this data and information do not move with the individual. For example, this data continuity would be particularly beneficial for young adults who might need care at the same time that they are no longer able to remain on a parent's commercial health plan. Stakeholders should identify opportunities to support data continuity across plans to leverage existing data in a manner that supports individuals who may be at risk of overdose or mortality.

Opportunities exist to improve integrated and continuous care for individuals involved in the criminal justice system. MOUD is greatly underutilized in corrections programs, such as probation, parole, and treatment courts. Although a proliferation of drug courts and other alternative sentencing models has

occurred in recent years, the great majority of individuals with OUD in the justice system do not receive evidence-based care with MOUD while incarcerated or following release.[82] Moreover, criminal justice involvement is a missed opportunity to ensure continuous insurance coverage and engage high-risk individuals in comprehensive care.[58] While Medicaid expansion has been associated with improving rates of MOUD post-incarceration,[118] enrollment assistance programs are likely necessary to increase rates of effective insurance coverage at release.[90]

Unique challenges and opportunities also exist for rural and frontier communities. Notably, rural and frontier counties often lack buprenorphine-waivered physicians, which limits access to evidence-based SUD/OUD treatment. However, 95 percent of Americans live within five miles of a community pharmacy. Current regulations do not allow for pharmacy-based care, such as MOUD with methadone maintenance or injectable medications in remote areas. Opportunities exist to identify how care for remote individuals, especially those with concurrent SUD and behavioral health conditions, can be optimized and accessible. The temporary changes supporting telehealth during the COVID-19 pandemic provide a successful model of increased access and decreased no-show rates and should be leveraged as fundamental pieces of the care infrastructure moving forward.

Lastly, opportunities exist to further explore the use of evidence-based treatment and harm reduction services. Education and training programs provide an opportunity to support the use of evidence-based treatment for individuals with SUD/OUD. While some training programs require providers to obtain a buprenorphine waiver, research shows that many prescribers with the buprenorphine waiver do not actively prescribe or only treat a limited number of patients.[119] Opportunities exist for training programs and medical professional societies to encourage, or even require, trainees to treat patients with MOUD during their training. If clinicians obtain supervised experience with MOUD before graduating from training programs, they will likely be more comfortable using MOUD during their clinical practice.

Many barriers counterproductively limit the existence and widespread use of harm reduction services. Barriers include legal barriers (e.g., harm reduction services, such as syringe exchanges being illegal), reimbursement barriers (e.g., harm reduction services considered out-of-network and not reimbursable), as well as geographic and transportation-based barriers (e.g., lack of existence of harm reduction services in rural communities). Because of these barriers, traditional healthcare, criminal justice, and addiction treatment settings do not have clear linkages and referral networks to accessible harm reduction services.

Conclusion and Next Steps

The U.S. continues to face new challenges related to combatting the evolving opioid and SUD crisis. The crisis, which has entered a fourth wave that is driven by an increase in polysubstance use, has been further magnified by the impacts of the COVID-19 pandemic. Individuals with SUD/OUD and co-occurring behavioral health conditions are particularly vulnerable to overdoses and/or mortality resulting from substance use.

A coordinated care and measurement approach is essential to support the nearly 8 million adults with co-occurring mental health disorders and SUDs.[22] Recognizing this, the Committee identified a series of measurement gaps and priorities relevant to this population to incorporate in an equitable, person-centered measurement approach. Building on the identified measurement gaps and priority areas, the

Committee developed a measurement framework to address overdose and mortality resulting from polysubstance use involving SSSOs among individuals with co-occurring behavioral health conditions. The measurement framework reflects the intricate and connected relationship between many aspects of care, including equitable access to care, evidence-based clinical interventions, and coordinated and integrated care for concurrent behavioral health disorders.

Access is considered a foundational domain within the measurement framework because without access, individuals cannot obtain the services that exist to support better health outcomes and a reduction in overdoses. The next domain, Clinical Interventions, builds on a foundation of accessible and equitable, evidence-based services. While access to evidence-based clinical interventions may already exist, the importance of integrated and comprehensive care is essential for individuals with co-occurring SUD/OUD and behavioral health conditions. Thus, at the heart of the framework is the Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions domain.

Recognizing the importance of equity and vulnerable populations, the Committee also identified opportunities to advance the field forward to promote access to evidence-based, integrated care for individuals with co-occurring SUD/OUD and behavioral health conditions. Opportunities include further leveraging Medicaid Section 1115 demonstrations, supporting co-location of services, reimbursing for community-based services, exploring greater use of harm reduction services, supporting economic development in communities with high poverty levels, and expanding access to MOUD within the criminal justice system.[115]

With over 194 individuals dying each day from a drug overdose—and with just over 70 percent of all drug overdose deaths involving an opioid—it is essential for stakeholders to take action to address overdose and mortality related to the ongoing SUD crisis.[1] The measurement framework and its measure concepts provide a starting point for the measure developer community, researchers, clinicians, healthcare providers, social service providers, the criminal justice system, community-based organizations, and federal agencies to come together to address overdose and mortality for individuals experiencing SUDs with co-occurring behavioral health conditions. Through the use of quality measures that align with the coordinated measurement framework, stakeholders can assess and understand opportunities for improvement in the management of patients with co-occurring SUD/OUD and behavioral health conditions. Beyond the development of quality measures themselves, further structural and regulatory reform can enhance measurement efforts and improve outcomes. Examples include removing barriers to co-located services, using bundled reimbursements, and expanding coverage for nontraditional services, including care coordination, transportation, Wi-Fi connectivity, and harm reduction services. Expanded use of Medicaid 1115 waivers and the creation of new funding streams could support these efforts. Collaboration and coordination across diverse stakeholders are critical to moving beyond this starting point and transitioning from measure concepts to quality measures that can be used in future accountability programs to improve health and outcomes.

References

1 Drug Overdose Deaths | Drug Overdose | CDC Injury Center. https://www.cdc.gov/drugoverdose/data/statedeaths.html. Published March 25, 2021. Last accessed June 2021.

2 Electronic Code of Federal Regulations (eCFR). Electronic Code of Federal Regulations (eCFR). https://www.ecfr.gov/. Last accessed June 2021.

3 Moran M. APA Advocacy Wins Coverage of *DSM* Codes in 12 States, D.C. *PN*. 2016;51(13):1-1.

4 Opioid Data Analysis and Resources | Drug Overdose | CDC Injury Center. https://www.cdc.gov/drugoverdose/data/analysis.html. Published March 19, 2021. Last accessed May 2021.

5 Vital Signs: Overdoses of Prescription Opioid Pain Relievers --- United States, 1999--2008. https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6043a4.htm. Last accessed May 2021.

6 Increases in Heroin Overdose Deaths — 28 States, 2010 to 2012. https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6339a1.htm. Last accessed May 2021.

7 Gladden RM. Fentanyl Law Enforcement Submissions and Increases in Synthetic Opioid–Involved Overdose Deaths — 27 States, 2013–2014. *MMWR Morb Mortal Wkly Rep*. 2016;65. https://www.cdc.gov/mmwr/volumes/65/wr/mm6533a2.htm. Last accessed May 2021.

8 O'Donnell JK. Trends in Deaths Involving Heroin and Synthetic Opioids Excluding Methadone, and Law Enforcement Drug Product Reports, by Census Region — United States, 2006–2015. *MMWR Morb Mortal Wkly Rep*. 2017;66. https://www.cdc.gov/mmwr/volumes/66/wr/mm6634a2.htm. Last accessed May 2021.

9 O'Donnell JK. Deaths Involving Fentanyl, Fentanyl Analogs, and U-47700 — 10 States, July–December 2016. *MMWR Morb Mortal Wkly Rep*. 2017;66. https://www.cdc.gov/mmwr/volumes/66/wr/mm6643e1.htm. Last accessed May 2021.

10 HHS Official: 'Fourth Wave' Looms in Drug Crisis. Psychiatry & Behavioral Health Learning Network. https://www.psychcongress.com/article/hhs-official-fourth-wave-looms-drug-crisis. Last accessed May 2021.

11 Coronavirus Disease 2019. Centers for Disease Control and Prevention. https://www.cdc.gov/media/releases/2020/p1218-overdose-deaths-covid-19.html. Published December 21, 2020. Last accessed June 2021.

12 Wang QQ, Kaelber DC, Xu R, et al. COVID-19 risk and outcomes in patients with substance use disorders: analyses from electronic health records in the United States. *Mol Psychiatry*. 2021;26(1):30-39.

13 Czeisler MÉ. Mental Health, Substance Use, and Suicidal Ideation During the COVID-19 Pandemic — United States, June 24–30, 2020. *MMWR Morb Mortal Wkly Rep*. 2020;69. https://www.cdc.gov/mmwr/volumes/69/wr/mm6932a1.htm. Last accessed June 2021.

14 Oct 05 JTP, 2018. Federal Legislation to Address the Opioid Crisis: Medicaid Provisions in the SUPPORT Act. *KFF*. October 2018. https://www.kff.org/medicaid/issue-brief/federal-legislation-to-address-the-opioid-crisis-medicaid-provisions-in-the-support-act/. Last accessed June 2021.

15 Payment for services in institutions for mental diseases (IMDs). *MACPAC*. https://www.macpac.gov/subtopic/payment-for-services-in-institutions-for-mental-diseases-imds/. Last accessed June 2021.

16 The SUPPORT for Patients and Communities Act (H.R. 6). https://www.asam.org/advocacy/the-support-for-patients-and-communities-act-(h.r.-6). Last accessed June 2021.

17 CDC-HAN-00438 Opioids12172020. http://publichealth.lacounty.gov/lahan/alerts/CDC-HAN-00438%20Opioids12172020.pdf.

18 Mattson CL. Trends and Geographic Patterns in Drug and Synthetic Opioid Overdose Deaths — United States, 2013–2019. *MMWR Morb Mortal Wkly Rep*. 2021;70. https://www.cdc.gov/mmwr/volumes/70/wr/mm7006a4.htm. Last accessed May 2021.

19 Feds shouldn't lose sight of drug misuse epidemic, GAO says. Modern Healthcare. https://www.modernhealthcare.com/government/feds-shouldnt-lose-sight-drug-misuse-epidemic-gao-says. Published March 2, 2021. Last accessed June 2021.

20 The Spike in Drug Overdose Deaths During the COVID-19 Pandemic and Policy Options to Move Forward. https://www.commonwealthfund.org/blog/2021/spike-drug-overdose-deaths-during-covid-19-pandemic-and-policy-options-move-forward. Last accessed May 2021.

21 Abuse NI on D. Part 1: The Connection Between Substance Use Disorders and Mental Illness. National Institute on Drug Abuse. https://www.drugabuse.gov/publications/research-reports/common-comorbidities-substance-use-disorders/part-1-connection-between-substance-use-disorders-mental-illness. Published --. Last accessed May 2021.

22 Integrated Mental Health and Substance Use Disorder Treatment | HealthCity. Boston Medical Center. https://www.bmc.org/healthcity/population-health/above-integrated-mental-health-and-opioid-use-disorder-treatment. Published June 29, 2020. Last accessed May 2021.

23 Conway KP, Compton W, Stinson FS, et al. Lifetime comorbidity of DSM-IV mood and anxiety disorders and specific drug use disorders: results from the National Epidemiologic Survey on Alcohol and Related Conditions. *J Clin Psychiatry*. 2006;67(2):247-257.

24 Torrens M, Gilchrist G, Domingo-Salvany A, et al. Psychiatric comorbidity in illicit drug users: substance-induced versus independent disorders. *Drug Alcohol Depend*. 2011;113(2-3):147-156.

25 Compton WM, Thomas YF, Stinson FS, et al. Prevalence, correlates, disability, and comorbidity of DSM-IV drug abuse and dependence in the United States: results from the national epidemiologic survey on alcohol and related conditions. *Arch Gen Psychiatry*. 2007;64(5):566-576.

26 Pettinati HM, O'Brien CP, Dundon WD. Current status of co-occurring mood and substance use disorders: a new therapeutic target. *Am J Psychiatry*. 2013;170(1):23-30.

27 Hartz SM, Pato CN, Medeiros H, et al. Comorbidity of severe psychotic disorders with measures of substance use. *JAMA Psychiatry*. 2014;71(3):248-254.

28 Flórez-Salamanca L, Secades-Villa R, Budney AJ, et al. Probability and predictors of cannabis use disorders relapse: Results of the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC). *Drug Alcohol Depend*. 2013;132(0):127-133.

29 Pennay A, Cameron J, Reichert T, et al. A systematic review of interventions for co-occurring substance use disorder and borderline personality disorder. *J Subst Abuse Treat*. 2011;41(4):363-373.

30 De Alwis D, Lynskey MT, Reiersen AM, et al. Attention-Deficit/Hyperactivity Disorder subtypes and substance use and use disorders in NESARC. *Addict Behav*. 2014;39(8):1278-1285.

31 Harstad E, Levy S, COMMITTEE ON SUBSTANCE ABUSE. Attention-Deficit/Hyperactivity Disorder and Substance Abuse. *PEDIATRICS*. 2014;134(1):e293-e301.

32 Magidson JF, Liu S-M, Lejuez CW, et al. Comparison of the Course of Substance Use Disorders among Individuals With and Without Generalized Anxiety Disorder in a Nationally Representative Sample. *J Psychiatr Res*. 2012;46(5):659-666.

33 Brady KT, Haynes LF, Hartwell KJ, et al. Substance use disorders and anxiety: a treatment challenge for social workers. *Soc Work Public Health*. 2013;28(3-4):407-423.

34 Wolitzky-Taylor K, Operskalski JT, Ries R, et al. Understanding and treating comorbid anxiety disorders in substance users: review and future directions. *J Addict Med*. 2011;5(4):233-247.

35 Hser YI, Grella CE, Hubbard RL, et al. An evaluation of drug treatments for adolescents in 4 US cities. *Arch Gen Psychiatry*. 2001;58(7):689-695.

36 Federal Register, Volume 64 Issue 121 (Thursday, June 24, 1999). https://www.govinfo.gov/content/pkg/FR-1999-06-24/html/99-15377.htm. Last accessed May 2021.

37 Mental Health and Substance Use Disorders. https://www.samhsa.gov/find-help/disorders. Last accessed May 2021.

38 Katz C, El-Gabalawy R, Keyes KM, et al. Risk factors for incident nonmedical prescription opioid use and abuse and dependence: results from a longitudinal nationally representative sample. *Drug Alcohol Depend*. 2013;132(1-2):107-113.

39 Goldner EM, Lusted A, Roerecke M, et al. Prevalence of Axis-1 psychiatric (with focus on depression and anxiety) disorder and symptomatology among non-medical prescription opioid users in substance use treatment: systematic review and meta-analyses. *Addict Behav*. 2014;39(3):520-531.

40 Risk Factors for Opioid-Use Disorder and Overdose : Anesthesia & Analgesia. https://journals.lww.com/anesthesia-analgesia/Fulltext/2017/11000/Risk_Factors_for_Opioid_Use_Disorder_and_Overdose.41.aspx. Last accessed May 2021.

41 Akbik H, Butler SF, Budman SH, et al. Validation and clinical application of the Screener and Opioid Assessment for Patients with Pain (SOAPP). *J Pain Symptom Manage*. 2006;32(3):287-293.

42 Webster LR, Cochella S, Dasgupta N, et al. An analysis of the root causes for opioid-related overdose deaths in the United States. *Pain Med*. 2011;12 Suppl 2:S26-35.

43 Porucznik CA, Johnson EM, Sauer B, et al. Studying adverse events related to prescription opioids: the Utah experience. *Pain Med*. 2011;12 Suppl 2:S16-25.

44 Opioid Overdose Prevention Toolkit | SAMHSA Publications and Digital Products. https://store.samhsa.gov/product/Opioid-Overdose-Prevention-Toolkit/SMA18-4742. Last accessed May 2021.

45 Dasgupta N, Funk MJ, Proescholdbell S, et al. Cohort Study of the Impact of High-Dose Opioid Analgesics on Overdose Mortality. *Pain Med*. 2016;17(1):85-98.

46 Zedler BK, Saunders WB, Joyce AR, et al. Validation of a Screening Risk Index for Serious Prescription Opioid-Induced Respiratory Depression or Overdose in a US Commercial Health Plan Claims Database. *Pain Med*. 2018;19(1):68-78.

47 Binswanger IA, Stern MF, Deyo RA, et al. Release from Prison — A High Risk of Death for Former Inmates. *New England Journal of Medicine*. 2007;356(2):157-165.

48 Death After Treatment for Heroin Dependence. Drug Rehab Options. https://www.rehabs.com/pro-talk/death-after-treatment-for-heroin-dependence/. Last accessed June 2021.

49 Barnett K, Mercer SW, Norbury M, et al. Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study. *Lancet*. 2012;380(9836):37-43.

50 Walker ER, Druss BG. A Public Health Perspective on Mental and Medical Comorbidity. *JAMA*. 2016;316(10):1104-1105.

51 Stenager E, Christiansen E, Handberg G, et al. Suicide attempts in chronic pain patients. A register-based study. *Scand J Pain*. 2014;5(1):4-7.

52 Hassett AL, Aquino JK, Ilgen MA. The risk of suicide mortality in chronic pain patients. *Curr Pain Headache Rep*. 2014;18(8):436.

53 Cheatle MD, Wasser T, Foster C, et al. Prevalence of suicidal ideation in patients with chronic non-cancer pain referred to a behaviorally based pain program. *Pain Physician*. 2014;17(3):E359-367.

54 Painter JM, Malte CA, Rubinsky AD, et al. High inpatient utilization among Veterans Health Administration patients with substance-use disorders and co-occurring mental health conditions. *Am J Drug Alcohol Abuse*. 2018;44(3):386-394.

55 Blanco C, Ali MM, Beswick A, et al. The American Opioid Epidemic in Special Populations: Five Examples. *NAM Perspectives*. October 2020. https://nam.edu/the-american-opioid-epidemic-in-special-populations-five-examples/. Last accessed May 2021.

56 Bronson J. Drug Use, Dependence, and Abuse Among State Prisoners and Jail Inmates, 2007-2009. 2017:27.

57 Products - Data Briefs - Number 203 - June 2015. https://www.cdc.gov/nchs/products/databriefs/db203.htm. Published June 7, 2019. Last accessed June 2021.

58 Albertson EM, Scannell C, Ashtari N, et al. Eliminating Gaps in Medicaid Coverage During Reentry After Incarceration. *Am J Public Health*. 2020;110(3):317-321.

59 Mental Health Disparities: Diverse Populations. https://www.psychiatry.org/psychiatrists/cultural-competency/education/mental-health-facts. Last accessed May 2021.

60 Sadana R, Blas E. What Can Public Health Programs Do to Improve Health Equity? *Public Health Rep*. 2013;128(6_suppl3):12-20.

61 What Is Addiction? https://www.psychiatry.org/patients-families/addiction/what-is-addiction. Last accessed May 2021.

62 The Diagnostic Criteria for Substance Use Disorders (Addiction). https://www.mentalhelp.net/addiction/diagnostic-criteria/. Last accessed June 2021.

63 Opioid Use Disorder | psychiatry.org. https://www.psychiatry.org/patients-families/addiction/opioid-use-disorder/opioid-use-disorder. Last accessed May 2021.

64 Thom B, Mark SG, David MM. The Rapidly Changing Composition of the Global Street Drug Supply and Its Effects on High-Risk Groups for COVID-19. *Current Psychopharmacology*. 2021;10(2):152-168.

65 Woolard R, Baird J, Mello MJ, et al. Injuries, negative consequences, and risk behaviors among both injured and uninjured emergency department patients who report using alcohol and marijuana. *J Emerg Trauma Shock*. 2009;2(1):23-28.

66 Chou SP, Chun S, Smith S, et al. Episodic heavy drinking, problem drinking and injuries - results of the WHO/NIAAA collaborative emergency room study in South Korea. *Alcohol*. 2012;46(5):407-413.

67 Cherpitel CJ. Alcohol and injuries: a review of international emergency room studies since 1995. *Drug Alcohol Rev*. 2007;26(2):201-214.

68 Vitale S, van de Mheen D. Illicit drug use and injuries: A review of emergency room studies. *Drug Alcohol Depend*. 2006;82(1):1-9.

69 Opioid Abuse in Chronic Pain — Misconceptions and Mitigation Strategies | NEJM. https://www.nejm.org/doi/full/10.1056/nejmra1507771. Last accessed June 2021.

70 Ghertner R, Groves L. THE OPIOID CRISIS AND ECONOMIC OPPORTUNITY: GEOGRAPHIC AND ECONOMIC TRENDS. :22.

71 Addiction And Low-Income Americans. Addiction Center. https://www.addictioncenter.com/addiction/low-income-americans/. Last accessed May 2021.

72 van Draanen J, Tsang C, Mitra S, et al. Socioeconomic marginalization and opioid-related overdose: A systematic review. *Drug Alcohol Depend*. 2020;214:108127.

73 National Health Care for the Homeless Council. Addressing the Opioid Epidemic How the Opioid Crisis Affects Homeless Populations. August 2017. https://nhchc.org/wp-content/uploads/2019/08/nhchc-opioid-fact-sheet-august-2017.pdf.

74 Lesser B. Economic Status and Abuse | Dual Diagnosis. https://dualdiagnosis.org/drug-addiction/economic-status/. Last accessed May 2021.

75 Health Care for the Homeless Clinicians' Network. ADAPTING YOUR PRACTICE Recommendations for the Care of Homeless Adults with Chronic Non-Malignant Pain. 2011.

76 Hansen L, Penko J, Guzman D, et al. Aberrant behaviors with prescription opioids and problem drug use history in a community-based cohort of HIV-infected individuals. *J Pain Symptom Manage*. 2011;42(6):893-902.

77 Vijayaraghavan M, Penko J, Guzman D, et al. Primary care providers' judgments of opioid analgesic misuse in a community-based cohort of HIV-infected indigent adults. *J Gen Intern Med*. 2011;26(4):412-418.

78 National Institute on Drug Abuse. Drug Facts. June 2020. https://www.drugabuse.gov/sites/default/files/drugfacts-criminal-justice.pdf.

79 Use of Medication-Assisted Treatment for Opioid Use Disorder in Criminal Justice Settings | SAMHSA Publications and Digital Products. https://store.samhsa.gov/product/Use-of-Medication-Assisted-Treatment-for-Opioid-Use-Disorder-in-Criminal-Justice-Settings/PEP19-MATUSECJS. Last accessed May 2021.

80 Screening and Assessment of Co-Occurring Disorders in the Justice System | SAMHSA Publications and Digital Products. https://store.samhsa.gov/product/Screening-and-Assessment-of-Co-Occurring-Disorders-in-the-Justice-System/PEP19-SCREEN-CODJS. Last accessed May 2021.

81 Legal Action Center | Evidence Based Strategies for Abatement of…. Legal Action Center. https://www.lac.org/resource/evidence-based-strategies-for-abatement-of-harms-from-the-o. Last accessed June 2021.

82 Grella CE, Ostile E, Scott CK, et al. A Scoping Review of Barriers and Facilitators to Implementation of Medications for Treatment of Opioid Use Disorder within the Criminal Justice System. *Int J Drug Policy*. 2020;81:102768.

83 Opioids, Domestic Violence, and Mental Health. http://www.amchp.org/AboutAMCHP/Newsletters/Pulse/MayJune2017/Pages/Opioids,-Domestic-Violence-and-Mental-Health.aspx. Last accessed May 2021.

84 "He Would Take My Shoes and All the Baby's Warm Winter Gear so We Couldn't Leave": Barriers to Safety and Recovery Experienced by a Sample of Vermont Women With Partner Violence and Opioid Use Disorder Experiences. https://onlinelibrary.wiley.com/doi/10.1111/jrh.12518. Last accessed May 2021.

85 Twitter, Linkedin. Dual Services Needed for Domestic Violence and Opioid Use, Researchers Say. Verywell Health. https://www.verywellhealth.com/domestic-violence-opioid-rural-women-5082266. Last accessed May 2021.

86 Leslie DL, Ba DM, Agbese E, et al. The economic burden of the opioid epidemic on states: the case of Medicaid. *Am J Manag Care*. 2019;25(13 Suppl):S243-S249.

87 McAdam-Marx C, Roland CL, Cleveland J, et al. Costs of opioid abuse and misuse determined from a Medicaid database. *J Pain Palliat Care Pharmacother*. 2010;24(1):5-18.

88 Adelmann PK. Mental and substance use disorders among Medicaid recipients: prevalence estimates from two national surveys. *Adm Policy Ment Health*. 2003;31(2):111-129.

89 Mark TL, Lubran R, McCance-Katz EF, et al. Medicaid coverage of medications to treat alcohol and opioid dependence. *J Subst Abuse Treat*. 2015;55:1-5.

90 Burns ME, Cook ST, Brown L, et al. Increasing Medicaid enrollment among formerly incarcerated adults. *Health Services Research*. n/a(n/a). https://onlinelibrary.wiley.com/doi/abs/10.1111/1475-6773.13634. Last accessed June 2021.

91 About Social Determinants of Health (SDOH). https://www.cdc.gov/socialdeterminants/about.html. Published March 10, 2021. Last accessed June 2021.

92 NCAPPS_Indicators Scan _191202_Accessible.pdf. December 2019:33.

93 Fenton JJ, Agnoli AL, Xing G, et al. Trends and Rapidity of Dose Tapering Among Patients Prescribed Long-term Opioid Therapy, 2008-2017. *JAMA Netw Open*. 2019;2(11):e1916271.

94 Ciccarone D. The rise of illicit fentanyls, stimulants and the fourth wave of the opioid overdose crisis. *Current Opinion in Psychiatry*. 2021;34(4):344-350.

95 National Quality Forum. Addressing Opioid-Related Outcomes Among Individuals With Co-Occurring Behavioral Health Conditions - An Environmental Scan of Quality Measures. April 2021.

96 Compton MT, Shim RS. The Social Determinants of Mental Health. *FOC*. 2015;13(4):419-425.

97 Hansen H, Roberts SK. Two tiers of biomedicalization: METHADONE buprenorphine and the racial politics of addiction treatment. *Critical Perspectives on Addiction*. 2012:79-102.

98 Hansen HB, Siegel CE, Case BG, et al. Variation in use of buprenorphine and methadone treatment by racial, ethnic, and income characteristics of residential social areas in New York City. *J Behav Health Serv Res*. 2013;40(3):367-377.

99 NQF: A Roadmap for Promoting Health Equity and Eliminating Disparities: The Four I's for Health Equity. https://www.qualityforum.org/Publications/2017/09/A_Roadmap_for_Promoting_Health_Equity_and_Eliminating_Disparities__The_Four_I_s_for_Health_Equity.aspx. Last accessed June 2021.

100 Medicaid Is Key to Building a System of Comprehensive Substance Use Care for Low-Income People. Center on Budget and Policy Priorities. https://www.cbpp.org/research/health/medicaid-is-key-to-building-a-system-of-comprehensive-substance-use-care-for-low. Last accessed June 2021.

101 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.

102 Haffajee RL, Lin LA, Bohnert ASB, et al. Characteristics of US Counties With High Opioid Overdose Mortality and Low Capacity to Deliver Medications for Opioid Use Disorder. *JAMA Netw Open*. 2019;2(6). https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6604101/. Last accessed June 2021.

103 Opioid Response Network. The Opioid Epidemic and COVID-19: How Social Determinants of Health Create Differential Impacts.

104 Outcome Measures Standard. https://www.jointcommission.org/accreditation-and-certification/health-care-settings/behavioral-health-care/outcome-measures-standard. Last accessed May 2021.

105 Vilsaint CL, Kelly JF, Bergman BG, et al. Development and validation of a Brief Assessment of Recovery Capital (BARC-10) for alcohol and drug use disorder. *Drug Alcohol Depend*. 2017;177:71-76.

106 Cacciola JS, Alterman AI, Dephilippis D, et al. Development and initial evaluation of the Brief Addiction Monitor (BAM). *J Subst Abuse Treat*. 2013;44(3):256-263.

107 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.

108 To Battle The Opioid Overdose Epidemic, Deploy The 'Cascade of Care' Model | Health Affairs. https://www.healthaffairs.org/do/10.1377/hblog20170313.059163/full/. Last accessed June 2021.

109 Blanco C, Volkow ND. Management of opioid use disorder in the USA: present status and future directions. *Lancet*. 2019;393(10182):1760-1772.

110 Nguemeni Tiako MJ. Addressing racial & socioeconomic disparities in access to medications for opioid use disorder amid COVID-19. *J Subst Abuse Treat*. 2021;122:108214.

111 Office of the Commissioner. FDA In Brief: FDA requires new warnings for gabapentinoids about risk of respiratory depression. *FDA*. December 2019. https://www.fda.gov/news-events/fda-brief/fda-brief-fda-requires-new-warnings-gabapentinoids-about-risk-respiratory-depression. Last accessed May 2021.

112 Harm Reduction Principles. *National Harm Reduction Coalition*. https://harmreduction.org/about-us/principles-of-harm-reduction/. Last accessed May 2021.

113 National Quality Forum. Enhancing Access to Medication Assisted Treatment. 2019.

114 NQF: Risk Adjustment for Socioeconomic Status or Other Sociodemographic Factors. https://www.qualityforum.org/Publications/2014/08/Risk_Adjustment_for_Socioeconomic_Status_or_Other_Sociodemographic_Factors.aspx. Last accessed June 2021.

115 Economic Insecurity and Deaths of Despair in US Counties | American Journal of Epidemiology | Oxford Academic. https://academic.oup.com/aje/article/188/12/2131/5479232?login=true. Last accessed June 2021.

116 Section 1115 Demonstrations: Substance Use Disorders, Serious Mental Illness, and Serious Emotional Disturbance | Medicaid. https://www.medicaid.gov/medicaid/section-1115-demonstrations/1115-substance-use-disorder-demonstrations/section-1115-demonstrations-

substance-use-disorders-serious-mental-illness-and-serious-emotional-disturbance/index.html. Last accessed May 2021.

117 New Hampshire Department of Health and Human Services. Substance Use Disorder Treatment and Recovery Access Section 1115(a). August 2020.

118 Khatri UG, Howell BA, Winkelman TNA. Medicaid Expansion Increased Medications For Opioid Use Disorder Among Adults Referred By Criminal Justice Agencies. *Health Affairs*. 2021;40(4):562-570.

119 Stein BD, Saloner B, Schuler MS, et al. Concentration of Patient Care Among Buprenorphine-Prescribing Clinicians in the US. *JAMA*. 2021;325(21):2206-2208.

Appendices

Appendix A: Committee Members, CMS Liaisons, Federal Liaisons, and NQF Staff

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Appendix B: Measure Inventory

*This appendix includes measures that were also previously identified in the 2019 NQF Opioids and Opioid Use Disorder Final Environmental Scan, drawn from measure repositories such as the CMS Measures Inventory Tool, NQF's Quality Positioning System (QPS), Qualified Clinical Data Registries, as well as measures identified by Committee members and NQF staff through review of articles, grey literature, and measure developer websites.

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
*(SUB)-3 Alcohol & Other Drug Use Disorder Treatment Provided or Offered at Discharge and SUB-3a Alcohol & Other Drug Use Disorder Treatment at Discharge	1664	Endorsement Removed	This facility-level measure estimates an unplanned, 30-day, risk-standardized readmission rate for adult Medicare fee-for-service (FFS) patients with a principal discharge diagnosis of a psychiatric disorder or dementia/Alzheimer's disease. The measurement period used to identify cases in the measure population is 24 months. Data from the start of the measurement period through 30 days after the close of the measurement period are used to identify readmissions. Data from 12 months prior to the start of the measurement period through the measurement period are used to identify risk factors.	Process

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
Adherence to Antipsychotic Medications for Individuals With Schizophrenia (SAA-AD)	1879	Endorsed	Percentage of individuals at least 18 years of age as of the beginning of the measurement period with schizophrenia or schizoaffective disorder who had at least two prescriptions filled for any antipsychotic medication and who had a Proportion of Days Covered (PDC) of at least 0.8 for antipsychotic medications during the measurement period (12 consecutive months).	Intermediate Outcome
Adult Major Depressive Disorder (MDD): Suicide Risk Assessment (eCQM)	0104e	Endorsed	Percentage of patients aged 18 years and older with a diagnosis of major depressive disorder (MDD) with a suicide risk assessment completed during the visit in which a new diagnosis or recurrent episode was identified.	Process
Adolescent Mental Health and/or Depression Screening	N/A	Not Endorsed	The percentage of patients ages 12-17 who were screened for mental health and/or depression at a well-child visit using a specified tool. Note: Adolescents diagnosed with depression are excluded from this measure.	Process
Adult PHQ-9 Utilization	N/A	Not Endorsed	The percentage of patients with a diagnosis of Major Depression or Dysthymia who also have a completed PHQ-9 tool during the measurement period.	Process
Adult Depression: PHQ-9 Follow-Up at Six Months	N/A	Not Endorsed	The percentage of patients with depression who have a completed PHQ-9 tool within six months after the index event (+/- 30 days)	Process

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
Adult Depression: Six-Month Response	N/A	Not Endorsed	The percentage of patients with depression who demonstrated a response to treatment (at least 50 percent improvement) six months after the index event (+/- 30 days)	Outcome
Adult Depression: Six-Month Remission	N/A	Not Endorsed	The percentage of patients with depression who reached remission (PHQ-9 score less than five) six months after the index event (+/- 30 days)	Outcome
Adult Depression: PHQ-9 Follow-Up at 12 Months	N/A	Not Endorsed	The percentage of patients with depression who have a completed PHQ-9 tool within 12 months after the index event (+/- 30 days)	Process
Adult Depression: 12-Month Response	N/A	Not Endorsed	The percentage of patients with depression who demonstrated a response to treatment (at least 50 percent improvement) 12 months after the index event (+/- 30 days)	Outcome
Adult Depression: 12-Month Remission	N/A	Not Endorsed	The percentage of patients with depression who reached remission (PHQ-9 score less than five) 12 months after the index event (+/- 30 days)	Outcome
*Alcohol Problem Use Assessment & Brief Intervention for Home-Based Primary Care and Palliative Care Patients	N/A	Not Endorsed	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

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
ALC: Alcohol Use Disorder: Alcohol Pharmacotherapy Use Not Including Topiramate	N/A	Not Endorsed	VHA patients with an alcohol use disorder receiving alcohol use disorder pharmacotherapy	Process
ALC_top: Alcohol Use Disorder: Alcohol Pharmacotherapy Use	N/A	Not Endorsed	VHA patients with an alcohol use disorder receiving alcohol use disorder pharmacotherapy	Process
SUB 2 - Alcohol Use Brief Intervention Provided or Offered	1663	Endorsement Removed	Hospitalized patients 18 years of age and older who are screened within the first three days of admission using a validated screening questionnaire for unhealthy alcohol use. 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 [temporarily suspended]).	Process
Alcohol Use Disorder Outcome Response	N/A	Not Endorsed	The percentage of adult patients (18 years of age or older) who report problems with drinking alcohol AND with documentation of a standardized screening tool (e.g., AUDIT, AUDIT-C, DAST, TAPS) AND demonstrated a response to treatment at three months (+/- 60 days) after the index visit.	Patient Reported Outcome (PRO)

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
Annual Monitoring for Persons on Long-Term Opioid Therapy (AMO)	0354	Endorsed	The percentage of individuals 18 years of age and older who are on long-term opioid therapy and have not received a drug test at least once during the measurement year.	Process
Antidepressant Medication Management (AMM)	0105	Endorsed	The percentage of members 18 years of age and older who were treated antidepressant medication, had a diagnosis of major depression, and who remained on an antidepressant medication treatment. Two rates are reported. a) Effective Acute Phase Treatment. The percentage of patients who remained on an antidepressant medication for at least 84 days (12 weeks). b) Effective Continuation Phase Treatment. The percentage of patients who remained on an antidepressant medication for at least 180 days (6 months). a) Effective Acute Phase Treatment. The percentage of patients who remained on an antidepressant medication for at least 84 days (12 weeks). b) Effective Continuation Phase Treatment. The percentage of patients who remained on an antidepressant medication for at least 180 days (6 months).	Process
Anxiety Response at Six Months	N/A	Not Endorsed	The percentage of adult patients (18 years of age or older) with an anxiety disorder (generalized anxiety disorder, social anxiety disorder, post-traumatic stress disorder, or	Patient Reported Outcome (PRO)

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
			panic disorder) who demonstrated a response to treatment at six months (+/- 60 days) after an index visit.	
Anxiety Screening	N/A	Not Endorsed	The percentage of adult patients (18 years and older) with an anxiety disorder diagnosis (generalized anxiety disorder, social anxiety disorder, post-traumatic stress disorder, or panic disorder) who have completed a standardized tool (e.g., GAD-7, GAD-2, BAI) during measurement period.	Process
Avoidance of Co-Prescribing of Opioid Analgesic and Benzodiazepine	N/A	Not Endorsed	Percentage of Patients Who Were Not Concurrently Prescribed Opioid Analgesic and Benzodiazepine Medications.	Process
*Avoidance of Long-Acting (LA) or Extended-Release (ER) Opiate Prescriptions and Opiate Prescriptions for Greater Than Three Days Duration for Acute Pain	N/A	Not Endorsed	Percentage of Adult Patients Who Were Prescribed an Opiate Who Were Not Prescribed a Long-Acting (LA) or Extended-Release (ER) Formulation.	Process
*Avoidance of Opiates for Low Back Pain or Migraines	N/A	Not Endorsed	Percentage of Patients with Low Back Pain and/or Migraines Who Were Not Prescribed an Opiate.	Process
Avoidance of Opioid Prescriptions for Reconstruction After Skin Cancer Resection	N/A	Not Endorsed	Percentage of patients aged 18 and older who underwent reconstruction after skin cancer resection who were prescribed opioid/narcotic therapy* as first line therapy (as defined by a prescription in anticipation of or at time of surgery) by the reconstructing surgeon for post-operative	Process

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
			pain management. (Inverse measure).	
BENZO_noMHnoMED_new: Benzodiazepine (Active): No Recent Encounter for a Psychiatric Dx or Medical Indication	N/A	Not Endorsed	VHA patients who had at least one outpatient prescription of a benzodiazepine and did not have a psychiatric diagnosis in the same time period or at least one medical indication within specified ICD codes	Process
BENZO_Opioid_OP: Opioid and Benzodiazepine: Concurrent Active Prescriptions	N/A	Not Endorsed	VHA patients with active benzodiazepine and opioid prescriptions	Process
BENZO_PTSD_OP: PTSD: Benzodiazepine Use	N/A	Not Endorsed	VHA patients diagnosed with PTSD with an active benzodiazepine prescription	Process
BENZO_SUD_OP: SUD: Benzodiazepine Use	N/A	Not Endorsed	VHA patients with AUD, OUD, or sedative-hypnotic use disorder and an active outpatient benzodiazepine prescription	Process
*Bipolar Disorder and Major Depression: Appraisal for Alcohol or Chemical Substance Use	0110	Endorsement Removed	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
Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)	1933	Endorsed	The percentage of patients 18 – 64 years of age with schizophrenia and cardiovascular disease, who had an LDL-C test during the measurement year.	Process

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment (eCQM)	1365e	Endorsed	Percentage of patient visits for those patients aged 6 through 17 years with a diagnosis of major depressive disorder with an assessment for suicide risk.	Process
Clinical Depression Screening and Follow-Up	N/A	Not Endorsed	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
CLO: Schizophrenia: Clozapine Use	N/A	Not Endorsed	VHA patients with schizophrenia with one or more fills for an antipsychotic receiving one or more fills of Clozapine	Process
*Concurrent Use of Opioids and Benzodiazepines (COB)	3389	Endorsed	"The percentage of individuals 18 years and older with concurrent use of prescription opioids and benzodiazepines during the measurement year. A lower rate indicates better performance."	Process
*Continuity of Care After Inpatient or Residential Treatment for Substance Use Disorder (SUD)	3453	Endorsed	Percentage of discharges from inpatient or residential treatment for substance use disorder (SUD) for Medicaid beneficiaries, ages 18–64, which were followed by a treatment service for SUD. SUD treatment services include having an outpatient visit, intensive outpatient encounter or partial hospitalization, telehealth encounter, or filling a prescription or being administered or dispensed a medication for SUD. (After an inpatient discharge only, residential treatment also	Process

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
			counts as continuity of care.) Two rates are reported, continuity within 7 and 14 days after discharge.	
Continuity of Care After Medically Managed Withdrawal From Alcohol and/or Drugs	3312	Endorsed	Percentage of discharges from a medically managed withdrawal episode for adult Medicaid beneficiaries, ages 18–64, that were followed by a treatment service for SUD (including the prescription or receipt of a medication to treat a SUD [pharmacotherapy]) within 7 or 14 days after discharge.	Process
Continuity of Care After Receiving Hospital or Residential Substance Use Disorder (SUD) Treatment	3590	Under Consideration	Percentage of Medicaid discharges, ages 18 to 64, being treated for a substance use disorder (SUD) from an inpatient or residential provider that received SUD follow-up treatment within 7 or 30 days after discharge. SUD follow-up treatment includes outpatient, intensive outpatient, or partial hospitalization visits; telehealth encounters; SUD medication fills or administrations; or residential treatment (after an inpatient discharge). Two rates are reported: continuity within 7 and 30 days after discharge.	Process
*Continuity of Pharmacotherapy for	3175	Endorsed	Percentage of adults 18-64 years of age with pharmacotherapy for opioid use disorder (OUD) who have	Process

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
Opioid Use Disorder (OUD)			at least 180 days of continuous treatment.	
DEPOT_new: Schizophrenia: Antipsychotic Depot Use in Outpatient Setting	N/A	Not Endorsed	VHA patients with a confirmed diagnoses of schizophrenia, at least 1 outpatient encounter and received one or more outpatient fill, clinic order or CPT code for an antipsychotic who received one or more fill for a depot antipsychotic	Process
Depression Remission at 12 Months (eCQM)	0710e	Endorsed	The percentage of patients 18 years of age or older with major depression or dysthymia who reached remission 12 months (+/- 30 days) after an index visit.	Outcome
Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)	1934	Endorsed	The percentage of patients 18 – 64 years of age with schizophrenia and diabetes who had both an LDL-C test and an HbA1c test during the measurement year.	Process
Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)	1932	Endorsed	The percentage of patients 18 – 64 years of age with schizophrenia or bipolar disorder, who were dispensed an antipsychotic medication and had a diabetes screening test during the measurement year.	Process
*Discharge Prescription of Naloxone After Opioid Poisoning or Overdose	N/A	Not Endorsed	Percentage of Opioid Poisoning or Overdose Patients Presenting to An Acute Care Facility Who Were Prescribed Naloxone at Discharge.	Process
Discharged to the Community With Behavioral Problems	N/A	Not Endorsed	Percentage of home health quality episodes of care at the end of which the patient was discharged, with no assistance	Outcome

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
			available, demonstrating behavior problems.	
*Documentation of Signed Opioid Treatment Agreement	N/A	Not Endorsed	All patients 18 and older prescribed opiates for longer than six weeks duration who signed an opioid treatment agreement at least once during Opioid Therapy documented in the medical record.	Process
Elimination of Narcotic Medication Use Following Spinal Fusion Surgery	N/A	Not Endorsed	Calculation of the percent of patients who report a reduction in narcotic medication intake from 'Daily use' or 'Occasional use' to "No use' following a spine surgical intervention (cervical or lumbar).	Patient Reported Outcome (PRO)
Evaluation or Interview for Risk of Opioid Misuse	N/A	Not Endorsed	All patients 18 and older prescribed opiates for longer than six weeks duration evaluated for risk of opioid misuse using a brief validated instrument (e.g., Opioid Risk Tool, SOAAP-R) or patient interview documented at least once during COT in the medical record.	Process
Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence (FUA)	3488	Endorsed	The percentage of emergency department (ED) visits for members 13 years of age and older with a principal diagnosis of alcohol or other drug (AOD) abuse or dependence, who had a follow up visit for AOD. Two rates are reported: - The percentage of ED visits for which the member received follow-up within 30 days of the ED visit (31 total days). - The percentage of ED visits for which the member	Process

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
			received follow-up within 7 days of the ED visit (8 total days).	
Follow-Up After Emergency Department Visit for Mental Illness (FUM)	3489	Endorsed	The percentage of emergency department (ED) visits for members 6 years of age and older with a principal diagnosis of mental illness or intentional self-harm, who had a follow-up visit for mental illness. Two rates are reported: - The percentage of ED visits for which the member received follow-up within 30 days of the ED visit (31 total days). - The percentage of ED visits for which the member received follow-up within 7 days of the ED visit (8 total days).	Process
Follow-Up After High Intensity Care for Substance Use Disorder (FUI)	N/A	Endorsed	Percentage of discharges from inpatient or residential treatment for substance use disorder (SUD) for Medicaid beneficiaries, ages 18–64, which were followed by a treatment service for SUD. SUD treatment services include having an outpatient visit, intensive outpatient encounter or partial hospitalization, telehealth encounter, or filling a prescription or being administered or dispensed a medication for SUD. (After an inpatient discharge only, residential treatment also counts as continuity of care.) Two rates are reported,	Process

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
			continuity within 7 and 14 days after discharge.	
Follow-Up After Hospitalization for Mental Illness (FUH)	0576	Endorsed	The percentage of discharges for patients 6 years of age and older who were hospitalized for treatment of selected mental illness or intentional self-harm diagnoses and who had a follow-up visit with a mental health practitioner. Two rates are reported: - The percentage of discharges for which the patient received follow-up within 30 days of discharge - The percentage of discharges for which the patient received follow-up within 7 days of discharge	Process
Follow-Up Care for Adult Medicaid Beneficiaries Who Are Newly Prescribed an Antipsychotic Medication	3313	Endorsed	Percentage of new antipsychotic prescriptions for Medicaid beneficiaries age 18 years and older who have completed a follow-up visit with a provider with prescribing authority within four weeks (28 days) of prescription of an antipsychotic medication.	Process

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
Gains in Patient Activation (PAM) Scores at 12 Months	2483	Endorsed	"The Patient Activation Measure® (PAM®) is a 10 or 13 item questionnaire that assesses an individual´s knowledge, skill and confidence for managing their health and health care. The measure assesses individuals on a 0-100 scale. There are 4 levels of activation, from low (1) to high (4). The measure is not disease specific, but has been successfully used with a wide variety of chronic conditions, as well as with people with no conditions. The performance score would be the change in score from the baseline measurement to follow-up measurement, or the change in activation score over time for the eligible patients associated with the accountable unit. The outcome of interest is the patient's ability to self-manage. High quality care should result in gains in ability to self-manage for most chronic disease patients. The outcome measured is a change in activation over time. The change score would indicate a change in the patient´s knowledge, skills, and confidence for self-management. A positive change would mean the patient is gaining in their ability to manage their health. A "passing" score for eligible patients would be to show an average net 3-point PAM score increase in a 6-12 month period. An "excellent" score for eligible patients would be	Outcome: PRO-PM

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
			to show an average net 6-point PAM score increase in a 6-12 month period."	
GE3CLASS_dep: Depression: 60+ Day Overlap of 3+ Classes of Psychotropics	N/A	Not Endorsed	VHA patients with depression receiving medication from 3 or more of 4 psychotropic classes concurrently for 60 or more continuous days.	Process

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
GE3CLASS_PTSD: PTSD: 60+ Day Overlap 3+ Classes Psychotropics	N/A	Not Endorsed	VHA patients with PTSD receiving medication from 3 or more of 4 psychotropic classes concurrently for 60 or more continuous days.	Process
*HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) Survey	0166	Endorsed	"HCAHPS (NQF #0166) is a 29-item survey instrument that produces 10 publicly reported measures: 6 multi-item measures (communication with doctors, communication with nurses, responsiveness of hospital staff, communication about medicines, discharge information and care transition); and 4 single-item measures (cleanliness of the hospital environment, quietness of the hospital environment, overall rating of the hospital, and recommendation of hospital).	Outcome

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
*Hospice and Palliative Care Composite Process Measure Comprehensive Assessment at Admission (hereafter referred to as the HIS Comprehensive Assessment Measure)	3235	Endorsed	For patients 18 years and older, percentage of patient stays during which the patient received all care processes captured by quality measures NQF #1641 Hospice and Palliative Care Treatment Preferences; NQF #1647 (modified) Beliefs/Values Addressed (if desired by the patient); NQF #1634 Hospice and Palliative Care Pain Screening; NQF #1637 Hospice and Palliative Care Pain Assessment; NQF #1639 Hospice and Palliative Care Dyspnea Screening; NQF #1638 Hospice and Palliative Care Dyspnea Treatment; NQF #1617 Patients Treated with an Opioid Who Are Given a Bowel Regimen, as applicable.	Composite
Hours of Physical Restraint Use	0640	Endorsed	The total number of hours that all patients admitted to a hospital-based inpatient psychiatric setting were maintained in physical restraint.	Process
Hours of Seclusion Use	0641	Endorsed	The total number of hours that all patients admitted to a hospital-based inpatient psychiatric setting were held in seclusion.	Process
*Improvement in Pain Interfering With Activity	0177	Endorsed	Percentage of home health episodes of care during which the patient's frequency of pain when moving around improved.	Outcome
*Improving or Maintaining Mental Health	N/A	Not Endorsed	Percent of all plan members whose mental health was the same or better than expected after two years.	Outcome

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
Initial Opioid Prescribing at High Dosage (IOP-HD)	N/A	Not Endorsed	The percentage of individuals ≥18 years of age with ≥1 initial opioid prescriptions with an average daily morphine milligram equivalent (MME) of ≥50. A lower rate indicates better performance.	Process
Initial Opioid Prescribing for Long-Acting or Extended-Release Opioids (IOP-LA)	N/A	Not Endorsed	The percentage of individuals ≥18 years of age with ≥1 initial opioid prescriptions for long-acting or extended-release opioids. A lower rate indicates better performance.	Process
Initial Opioid Prescribing for Long Duration (IOP-LD)	3558	Endorsed	The percentage of individuals ≥18 years of age with ≥1 initial opioid prescriptions for >7 cumulative days' supply. A lower rate indicates better performance.	Process
*Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment (IET)	0004	Endorsed	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: • 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.	Process

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
			• 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.	
loMPR: Antipsychotic (Active): Medication Possession Ratio <0.8	N/A	Not Endorsed	VHA outpatients with schizophrenia or schizoaffective disorder who have a low antipsychotic medication possession ratio (less than .8)	Outcome
MED_Bipolar: Bipolar: Mood Stabilizers or Atypical Antipsychotic Use	N/A	Not Endorsed	VHA patients with a confirmed diagnosis of bipolar disorder who received either mood stabilizers or atypical antipsychotic medications	Process
*Kidney Stones: Opioid Utilization After Ureteroscopy and Shockwave Lithotripsy	N/A	Not Endorsed	Percentage of patients who underwent ureteroscopy or shockwave lithotripsy and are discharged on NSAIDS, Acetaminophen, or "Other" and who were not prescribed opioids for pain control.	Process
*Multimodal Pain Management	N/A	Not Endorsed	Percentage of patients, aged 18 years and older, undergoing selected surgical procedures that were managed with multimodal pain medicine.	Process

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
Non-Opioid Pain Management Following Mohs Micrographic Surgery	N/A	Not Endorsed	Percentage of cases of Mohs surgery who received a prescription for opioid / narcotic pain medication (prescription prior to or at the time of surgical discharge from the Mohs surgeon) following Mohs micrographic surgery.	Process
OAT: Opioid Use Disorder (OUD): Opioid Agonist Treatment	N/A	Not Endorsed	Opioid dependent patients receiving Opioid Agonist Treatment in either a clinic (including fee-basis) or office-based setting	Process
*Oncology: Medical and Radiation - Plan of Care for Pain	0383	Endorsed	Percentage of visits for patients, regardless of age, with a diagnosis of cancer currently receiving chemotherapy or radiation therapy who report having pain with a documented plan of care to address pain.	Process
*Opioid Therapy Follow-Up Evaluation	N/A	Not Endorsed	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 Opioid Therapy documented in the medical record.	Process
*Pain Interference Response Utilizing PROMIS	N/A	Not Endorsed	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.	Patient Reported Outcome (PRO)

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
Patients Discharged on Multiple Antipsychotic Medications With Appropriate Justification	0560	Endorsed	The proportion of patients discharged from a hospital-based inpatient psychiatric setting on two or more antipsychotic medications with appropriate justification. 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, HBIPS3: Seclusion, HBIPS-4: Multiple Antipsychotic Medications at Discharge, HBIPS-6: Post Discharge Continuing Care Plan 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-4 (Patients discharged on multiple antipsychotic medications).	Process
*Patients Treated With an Opioid Who Are Given a Bowel Regimen	1617	Endorsed	Percentage of vulnerable adults treated with an opioid that are offered/prescribed a bowel regimen or documentation of why this was not needed.	Process
PDMP_Benzo: Benzodiazepine: Prescription Drug Monitoring Program (PDMP) Checks	N/A	Not Endorsed	VHA patients prescribed a benzodiazepine with a PDMP check documented in the past year	Process

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
Post-Operative Opioid Management Following Ocular Surgery	N/A	Not Endorsed	Percentage of patients aged 18 years and older who underwent ocular 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
Posttraumatic Stress Disorder (PTSD) Screening and Outcome Assessment	N/A	Not Endorsed	The percentage of patients with a history of a traumatic event (i.e., an experience that was unusually or especially frightening, horrible, or traumatic) who report symptoms consistent with PTSD for at least one month following the traumatic event AND with documentation of a standardized symptom monitor (PCL-5 for adults, CATS for child/adolescent) AND demonstrated a response to treatment at three months (+/- 60 days) after the index visit. This measure is a multi-strata measure, which addresses symptom monitoring for both child and adult patients being treated for post-traumatic stress symptoms. Assessment instruments monitoring severity of symptoms for PTSD are validated either for adult or child populations. Thus, while the measurement structure will be similar for	Patient Reported Outcome (PRO)

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
			both populations, the specified instruments for symptom monitoring will be different.	
Prescription or Administration of Pharmacotherapy to Treat Opioid Use Disorder (OUD)	3589	Under Consideration	This measure reports the percentage of a provider's patients who were Medicaid beneficiaries ages 18 to 64 with an OUD diagnosis who filled a prescription for, or were administered or ordered, a FDA-approved medication to treat OUD within 30 days of the first attributable OUD treatment encounter with that provider.	Process
*Preventive Care and Screening: Screening for Depression and Follow-Up Plan (eCQM)	0418e	Endorsed	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
*Preventive Care and Screening: Unhealthy Alcohol Use: Screening & Brief Counseling	2152	Endorsed	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	Process

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
			AND who received brief counseling if identified as an unhealthy alcohol user.	
Prostate Cancer: Opioid Utilization After Radical Prostatectomy	N/A	Not Endorsed	Percentage of patients who underwent radical prostatectomy and are discharged with ≤ 6 opioid pain pills (5mg oxycodone or equivalent) and do not get a prescription for opioids within 30 days of surgery.	Process
*Query of Prescription Drug Monitoring Program (PDMP)	N/A	Not Endorsed	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
Risk of Continued Opioid Use (COU)	N/A	Endorsed	The percentage of individuals 18 years of age and older who are on long-term opioid therapy and have not received a drug test at least once during the measurement year.	Process

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
*Safe Opioid-Prescribing Practices	N/A	Not Endorsed	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: 1. Chemical dependency screening (includes laboratory testing and/or questionnaire) within the immediate 6 months prior to the encounter 2. Co-prescription of naloxone or documented discussion regarding offer of Naloxone co-prescription, if prescription is ≥50 MME/day 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
*Safe Use of Opioids – Concurrent Prescribing	3316e	Endorsed	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
*Screening and Monitoring for Psychosocial Problems Among Children and Youth	N/A	Not Endorsed	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	Patient Reported Outcome (PRO)

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
			months after initial positive screen for externalizing and internalizing behavior problems.	
SUD16: Opioid Use Disorder (OUD): Medication-Assisted Therapy	N/A	Not Endorsed	Opioid dependent patients receiving Medication Assisted Therapy in either a clinic (including fee-basis) or office-based setting	Process
Shared Decision Making for Post-Operative Management of Discomfort Following Rhinoplasty	N/A	Not Endorsed	Percentage of patients aged 15 years and older who had a rhinoplasty procedure who had documentation of a pre-operative shared-decision making strategy for multi-modal post-operative management of discomfort. Definitions: Documentation of discussion of at least two mechanisms of pain management from the following terms or phrases (one term or phrase from each list) will meet the measure: List 1) Non-opioid analgesics: Non-narcotic/Non-opioid, Acetaminophen/Tylenol, Cox-II inhibitor (Celecoxib), Local/Marcaine/Block, Anxiolytic, Tramadol, NSAID/ibuprofen List 2) Non-systemic: Ice/Cooling, Elevation, Rest, Mindfulness, Meditation	Process
Sleep Quality Screening and Sleep Response at Three Months	N/A	Not Endorsed	Percentage of patients 18 years and older who reported sleep quality concerns (e.g., insomnia) with documentation of a standardized tool AND demonstrated a response to	Patient Reported Outcome (PRO)

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
			treatment at three months (+/- 60 days) after index visit.	
Social Role Functioning Outcome Utilizing PROMIS	N/A	Not Endorsed	The percentage of adult patients (18 years of age or older) with a mood or anxiety disorder who report concerns related to their psychosocial function and demonstrated a response to treatment two months (+/- 30 days) after the index visit.	Patient Reported Outcome (PRO)
Symptom Improvement in Adults With ADHD	N/A	Not Endorsed	The percentage of adult patients (18 years of age or older) with a diagnosis of ADHD who show a reduction in symptoms of .25 (25%) on the Adult ADHD Self-Report Scale (ASRS-v1.1 - referred to as ASRS) 18 item self-report scale of ADHD symptoms within 2 to 6 months after initially reporting significant symptoms.	Patient Reported Outcome (PRO)
30-Day All-Cause Unplanned Readmission Following Psychiatric Hospitalization in an Inpatient Psychiatric Facility (IPF)	2860	Endorsed	"This facility-level measure estimates an all-cause, unplanned, 30-day, risk-standardized readmission rate for adult Medicare fee-for-service (FFS) patients with a principal discharge diagnosis of a psychiatric disorder or dementia/Alzheimer's disease. The performance period for the measure is 24 months."	Outcome
Use of a "PEG Test" to Manage Patients Receiving Opioids	N/A	Not Endorsed	Percentage of patients in an outpatient setting, aged 18 and older, in whom a stable dose of opioids are prescribed for greater than 6 weeks for pain control, and the results of a "PEG Test" are correctly	Process

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
			interpreted and applied to the management of their opioid prescriptions.	
*Use of Opioids at High Dosage in Persons Without Cancer	2940	Endorsed	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
*Use of Opioids From Multiple Providers and at High Dosage in Persons Without Cancer	2951	Endorsed	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, AND who received opioid prescriptions from four (4) or more prescribers AND four (4) or more pharmacies.	Process
*Use of Opioids From Multiple Providers in Persons Without Cancer	2950	Endorsed	The proportion (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
*Use of Pharmacotherapy for Opioid Use Disorder (OUD)	3400	Endorsed	The percentage of Medicaid beneficiaries ages 18–64 with an OUD who filled a prescription for or were administered or dispensed 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	Process

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
			types of FDA-approved drug products: buprenorphine; oral naltrexone; long-acting, injectable naltrexone; and methadone.	
*Verify Opioid Treatment Agreement	N/A	Not Endorsed	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
Assessed for SUD Treatment Needs Using a Standardized Screening Tool	N/A	Not Endorsed	Number of beneficiaries screened for SUD treatment needs using a standardized screening tool during the measurement period.	Process
Medicaid Beneficiaries With Newly Initiated SUD Treatment/Diagnosis	N/A	Not Endorsed	Number of beneficiaries with a SUD diagnosis and a SUD-related service during the measurement period but not in the three months before the measurement period.	Process
Medicaid Beneficiaries With SUD Diagnosis (monthly)	N/A	Not Endorsed	Number of beneficiaries with a SUD diagnosis and a SUD-related service during the measurement period and/or in the 11 months before the measurement period.	Process

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
Medicaid Beneficiaries With SUD Diagnosis (annually)	N/A	Not Endorsed	Number of beneficiaries with a SUD diagnosis and a SUD-related service during the measurement period and/or in the 12 months before the measurement period.	Process
Medicaid Beneficiaries Treated in an IMD for SUD	N/A	Not Endorsed	Number of beneficiaries with a claim for residential treatment for SUD in an IMD during the reporting year.	Process
Any SUD Treatment	N/A	Not Endorsed	Number of beneficiaries enrolled in the measurement period receiving any SUD treatment service, facility claim, or pharmacy claim during the measurement period.	Process
Early Intervention	N/A	Not Endorsed	Number of beneficiaries who used early intervention services (such as procedure codes associated with SBIRT) during the measurement period.	Process
Outpatient Services	N/A	Not Endorsed	Number of beneficiaries who used outpatient services for SUD (such as outpatient recovery or motivational enhancement therapies, step down care, and monitoring for stable patients) during the measurement period.	Process
Intensive Outpatient and Partial Hospitalization Services	N/A	Not Endorsed	Number of unique beneficiaries who used intensive outpatient and/or partial hospitalization services for SUD (such as specialized outpatient SUD therapy or other clinical services) during the measurement period.	Process

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
Residential and Inpatient Services	N/A	Not Endorsed	Number of beneficiaries who use residential and/or inpatient services for SUD during the measurement period.	Process
Withdrawal Management	N/A	Not Endorsed	Number of beneficiaries who use withdrawal management services (such as inpatient, outpatient, or residential) during the measurement period.	Process
Medication-Assisted Treatment (MAT)	N/A	Not Endorsed	Number of beneficiaries who have a claim for MAT for SUD during the measurement period.	Process
Average Length of Stay in IMDs	N/A	Not Endorsed	The average length of stay for beneficiaries discharged from IMD residential treatment for SUD.	Process
SUD Provider Availability	N/A	Not Endorsed	The number of providers who were enrolled in Medicaid and qualified to deliver SUD services during the measurement period.	Process
SUD Provider Availability - MAT	N/A	Not Endorsed	The number of providers who were enrolled in Medicaid and qualified to deliver SUD services during the measurement period and who meet the standards to provide buprenorphine or methadone as part of MAT.	Process
Use and Adherence to Antipsychotics Among Members With Schizophrenia	0544	Endorsement Removed	Assess the use of and the adherence of antipsychotics among members with schizophrenia during the measurement year.	Outcome

Measure Title	NQF #	NQF Endorsement Status	Measure Description	Measure Type
Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics	2801	Endorsed	Percentage of children and adolescents 1-17 years of age who had a new prescription for an antipsychotic medication, but no U.S. Food and Drug Administration primary indication for antipsychotics, and had documentation of psychosocial care as first-line treatment.	Process

Appendix C: Measure Concept Inventory Scan

These measure concepts are a combination of those identified by the Opioids and Behavioral Health Committee and those previously published in the 2019 NQF Opioids and Opioid Use Disorder Final Environmental Scan.

#	Description	Measure Type
1	Average inpatient daily MMEs administered during hospitalization	Process
2	Behavioral health integration in medical care instrument	Process
3	Clinical Opiate Withdrawal Scale	Process
4	Continuity of Pharmacotherapy for Opioid Use	Process
5	Current Opioid Misuse Measure is a 17-item survey useful in assessing prescription opioid use in SUD treatment settings	Process
6	Daily MMEs prescribed at discharge	Process
7	Days' supply of initial opioid prescription for acute pain.	Process
8	Discharges from opioid use	Process
9	Extended-release opioid prescriptions as a proportion of all initial opioid prescriptions for acute pain.	Process
10	Extended-release opioid prescriptions as a proportion of all initial opioid prescriptions for chronic pain.	Process
11	Hospital-level risk-standardized opioid extended use following elective THA and/or TKA	Process

#	Description	Measure Type
12	Hospital-level risk-standardized opioid respiratory depression following elective THA and/or TKA	Outcome
13	Improvement or maintenance of functioning for all patients seen for mental health and substance use care	Outcome
14	Improvement or maintenance of symptoms for patients with opioid misuse	Outcome
15	Morphine milligram equivalent (MME) of initial opioid prescription for chronic pain.	Process
16	Neonatal Infant Pain Scale	Process
17	Neonatal Pain Agitation and sedation Scale	Process
18	Number of opioid prescribers for single patient	Process
19	Number of opioid prescriptions per 1,000 office visits	Process
20	Number of pills prescribed at discharge	Process
21	OD death synthetic opioids	Outcome
22	Opioid administration among the headache/migraine patients who visited ED	Process
23	Opioid burden	Outcome
24	Opioid covered-days prescribed to the patients who were discharged from ED	Process
25	Overdose deaths any opioid	Outcome
26	Pain measure for children in inpatient; pain reduction by 30% within 120 minutes of complaint	Outcome: PRO-PM
27	Patient experience of care for all patients seen with mental health and substance use care	Outcome: PRO-PM
28	Percentage of hospitalized patients with OUD on medication management	Process
29	Percentage of opioid prescriptions for acute pain with less than 7-day supply	Process
30	Percentage of opioid prescriptions with partial fill instructions	Process

#	Description	Measure Type
31	Percentage of opioid-naïve patients prescribed C-II & C-III opioid on emergency department discharge	Process
32	Percentage of patients administered long-acting opioid during hospital stay	Process
33	Percentage of Patients Prescribed Chronic Opioid with Risk and Plan Documented	Process
34	Percentage of patients prescribed long-acting opioid at hospital discharge	Process
35	Percentage of patients prescribed opioid	Process
36	Percentage of patients prescribed opioid at discharge	Process
37	Percentage of patients prescribed opioid more than 3 months after surgery	Process
38	Percentage of patients prescribed opioid with daily MME > 90 among those who were prescribed	Process
39	Percentage of patients that received more than 50 MME during at least one day of their hospitalization	Process
40	Percentage of patients treated for opioid overdose in emergency department	Process
41	Percentage of patients with documented Opioid Risk Tool assessment among those on chronic opioids	Process
42	Percentage of patients with Naloxone on medication list while they received opioid with daily MME > 90	Process
43	Percentage of patients with office visits within prior 3 months among chronic opioid users	Process
44	Percentage of patients with OUD discharged with naloxone	Process
45	Percentage of patients with urine drug toxicology among chronic opioid users	Process
46	Percentage of prescribers who have written for 1+ prescription of buprenorphine/nlx	Process
47	Percentage of prescribers with a suboxone waiver	Process

#	Description	Measure Type
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
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
50	Quantity of opioid prescribed to the patients who were discharged from ED	Process
51	Rapid Recovery Progression Measure: 6-item	Intermediate Outcome
52	Rate of NY Office of Alcoholism and Substance Abuse Services (OUD treatment program) use	Process
53	Recovery Progression Measure: 36-item	Intermediate Outcome
54	Subjective Opiate Withdrawal Scale	Process
55	The percentage of patients on long-term opioid therapy (the clinician counseled on the risks and benefits of opioids at least annually.)	Process
56	The percentage of patients on long-term opioid therapy who had a follow-up visit at least quarterly.	Process
57	The percentage of patients on long-term opioid therapy who had at least quarterly pain and functional assessments.	Process
58	The percentage of patients on long-term opioid therapy who had documentation that a PDMP was checked at least quarterly.	Process
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
60	The percentage of patients on long-term opioid therapy with documentation that a urine drug test was performed at least annually.	Process
61	The percentage of patients with a follow-up visit within 4 weeks of starting an opioid for chronic pain.	Process
62	The percentage of patients with a new opioid prescription for acute pain for a three days' supply or less	Process

#	Description	Measure Type
63	The percentage of patients with a new opioid prescription for an immediate-release opioid.	Process
64	The percentage of patients with a new opioid prescription for chronic pain with documentation that a PDMP was checked prior to prescribing.	Process
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
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
67	PROMIS Pain Interference Instruments	Outcome: PRO-PM
68	PROMIS Physical Function - Short Form	Outcome: PRO-PM
69	PROMIS Pain Intensity Scale	Outcome: PRO-PM
70	PROMIS Emotional Distress-Depression Short Form	Outcome: PRO-PM
71	PROMIS Emotional Distress-Anxiety Short Form	Outcome: PRO-PM

Appendix D: List of Identified Measurement Gaps

These measurement gaps and concepts represent those identified by the Opioids and Behavioral Health Committee through a prioritization survey. They are organized by the domain and subdomains of the Measurement Framework.

Measurement Gap	Domain	Subdomain
State level access to appropriate MOUD	Equitable Access	Existence of Services
Access to and quality of nonmedication pain management (e.g., physical therapy)	Equitable Access	Existence of Services
Receipt of nontraditional care services (e.g., peer navigation, care coordination, transportation, and internet)	Equitable Access	Existence of Services
ED utilization rates for SUD/OUD/mental health needs (and not just for overdoses)	Equitable Access	Existence of Services
Health plan level measures, including opioid-associated ED visits, hospitalization, and mortality	Equitable Access	Existence of Services
Global availability of treatment for patients with unaddressed behavioral health problems	Equitable Access	Existence of Services

Measurement Gap	Domain	Subdomain
Ensuring health plan coverage in place immediately post-incarceration with access and referral to SUD/OUD/mental health services	Equitable Access	Financial Coverage of Services
Health plan level access to SUD/OUD/mental health treatment	Equitable Access	Financial Coverage of Services
Insurance reimbursement for social work related to opioid and behavioral health treatment	Equitable Access	Financial Coverage of Services
Inappropriate discontinuity of pain management treatment at the health plan level (e.g., providers abruptly dropping patients)	Equitable Access	Financial Coverage of Services
Insurance coverage lapses during and after incarceration	Equitable Access	Financial Coverage of Services
Post-incarceration support for other core needs (e.g., housing, food)	Equitable Access	Vulnerable Populations
Appropriate screening and prevention for housing insecurity and homelessness	Equitable Access	Vulnerable Populations
Health equity for OUD/SUD/mental health	Equitable Access	Vulnerable Populations
MOUD follow-up for OUD after ED or inpatient visit (e.g., at 7 and 30 days)	Clinical Interventions	Availability of Medications for Opioid Use Disorder (MOUD)
Screening and initiation of MOUD in the ED and/or inpatient for OUD	Clinical Interventions	Availability of MOUD
MOUD follow-up for OUD after incarceration (e.g., at 7 and 30 days)	Clinical Interventions	Availability of MOUD
Screening and initiation of MOUD during incarceration	Clinical Interventions	Availability of MOUD
Management of suicidality due to pain catastrophizing	Clinical Interventions	Measurement-Based Care for Mental Health and SUD Treatment
Documentation of non-opioid pain management treatment plan before prescribing opioid analgesics	Clinical Interventions	Adequate Pain Management Care
Implementation of risk-benefit analysis during opioid treatment considerations	Clinical Interventions	Adequate Pain Management Care
Appropriate tapering and discontinuation of opioids	Clinical Interventions	Adequate Pain Management Care
Pain care plan for at-risk youth after a sports injury	Clinical Interventions	Adequate Pain Management Care

Measurement Gap	Domain	Subdomain
Documentation of offering opioid tapering for patients on long-term, high-dose opioid therapy for non-cancer pain	Clinical Interventions	Adequate Pain Management Care
Appropriate follow-up and treatment post-overdose	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Coordination of Care Pathways Across Clinical and Community-Based Services
Referral to appropriate, evidence-based clinical recovery program after an SUD-related sentinel event	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Coordination of Care Pathways Across Clinical and Community-Based Services
Role of telemedicine for consultations, coordinated care, and linkages to specialists	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Coordination of Care Pathways Across Clinical and Community-Based Services
Establishment of a primary care relationship for patients previously incarcerated	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Coordination of Care Pathways Across Clinical and Community-Based Services
Screening for psychiatric disorders for SUD patients	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Coordination of Care Pathways Across Clinical and Community-Based Services
Improving screening in primary care and mental health settings	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Coordination of Care Pathways Across Clinical and Community-Based Services
Communication across settings regarding overdose events	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Coordination of Care Pathways Across Clinical and Community-Based Services
Management of multiple behavioral health conditions within single coordinated care team	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Coordination of Care Pathways Across Clinical and Community-Based Services
Polypharmacy for controlled substances and psychopharmaceuticals	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Coordination of Care Pathways Across Clinical and Community-Based Services
Screening and prevention for at-risk youth	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Coordination of Care Pathways Across Clinical and Community-Based Services

Measurement Gap	Domain	Subdomain
Deprescribing measures associated with opioid polypharmacy	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Coordination of Care Pathways Across Clinical and Community-Based Services
Appropriate screening and prevention within foster care	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Coordination of Care Pathways Across Clinical and Community-Based Services
Polypharmacy with opioid use	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Coordination of Care Pathways Across Clinical and Community-Based Services
Existence of a centralized pain care treatment plan	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Coordination of Care Pathways Across Clinical and Community-Based Services
Identification of child/adolescent behavioral health risk factors and effective screening and intervention	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Coordination of Care Pathways Across Clinical and Community-Based Services
Screening across settings before prescribing opioids or opioid dose escalations	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Coordination of Care Pathways Across Clinical and Community-Based Services
Percentage of opioid prescriptions with diagnosis codes	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Coordination of Care Pathways Across Clinical and Community-Based Services
Referrals to clinical settings from nonclinical settings	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Coordination of Care Pathways Across Clinical and Community-Based Services
Screening, brief intervention, and referral to treatment with every opioid prescription	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Coordination of Care Pathways Across Clinical and Community-Based Services
Smoking cessation among individuals who use drugs and/or have SUD	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Coordination of Care Pathways Across Clinical and Community-Based Services

Measurement Gap	Domain	Subdomain
Vaping among youth	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Coordination of Care Pathways Across Clinical and Community-Based Services
Co-prescription of naloxone with every opioid prescription	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Harm Reduction Services
Percentage of high-risk patients with opioid prescriptions who are co-dispensed naloxone	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Harm Reduction Services
Youth access to naloxone within educational settings	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Harm Reduction Services
Provision of fentanyl test strips to injectable drug users	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Harm Reduction Services
Measures of recovery and quality of life	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Person-Centered Care
Patient-reported outcomes on an individual's ability to work and socialize and on SDOH	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Person-Centered Care
Inclusion of patient and family voices in assessing care for patients affected by combinations of pain, behavioral health conditions, and/or opioids	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Person-Centered Care
Shared decision making regarding opioid tapering for patients on long-term, high-dose opioid therapy for noncancer pain	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Person-Centered Care
Cultural acceptability of SUD prevention and treatment modalities through a survey	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Person-Centered Care

Measurement Gap	Domain	Subdomain
Patient-reported success and recovery	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Person-Centered Care
Patient- and family-derived assessments of care in the context of OUD/SUD and mental health conditions	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Person-Centered Care
Familial-associated risk and familial engagement in treatment	Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions	Person-Centered Care