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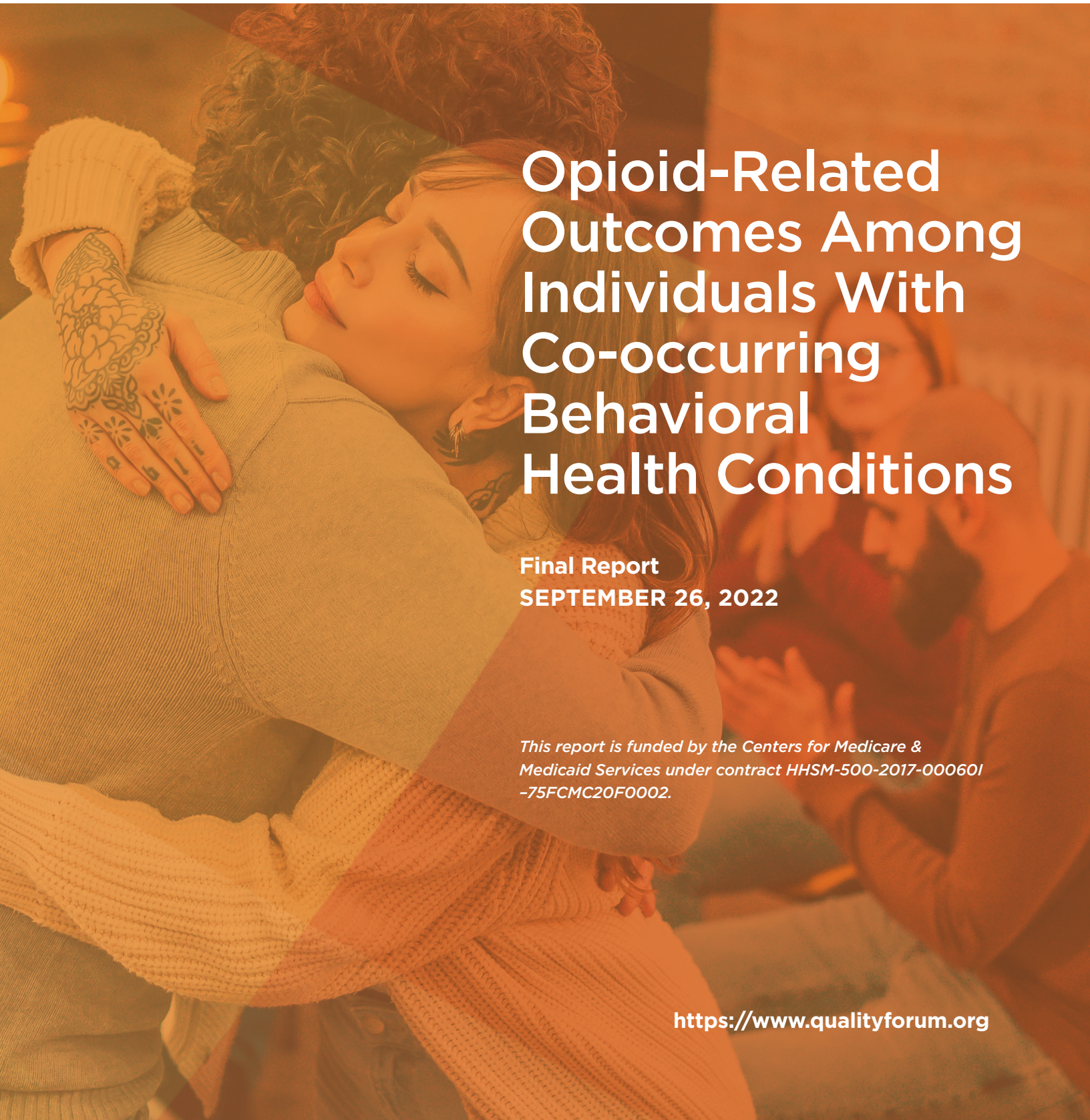

Opioid-Related Outcomes Among Individuals With Co-occurring Behavioral Health Conditions

Final Report
SEPTEMBER 26, 2022

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Executive Summary

With more than 293 individuals dying each day from a drug overdose in 2021, the United States (U.S.) continues to grapple with a devastating opioid and substance use disorder (SUD) crisis.[1,2]

The first wave of the crisis began in the late 1990s and was led by overdose deaths involving prescription opioids. The U.S. then faced two additional waves centered on opioid-related overdose deaths involving heroin, including a wave driven by synthetic opioids (e.g., fentanyl). The country now faces a fourth wave, which is the result of rising polysubstance use (i.e., using more than one drug at once, such as the co-use of opioids and psychostimulants). Certain individuals are especially vulnerable to overdose and mortality during this fourth wave, particularly those with SUDs/opioid use disorder (OUD) and co-occurring behavioral health (BH) conditions (e.g., depression or anxiety).[a,b]

With funding from Centers for Medicare & Medicaid Services (CMS), National Quality Forum (NQF) convened the Opioids and Behavioral Health Committee to develop a quality measurement framework that addresses the fourth wave of the opioid crisis. The goals of the framework are to:

- guide measurements to improve the prevention and monitoring of opioid-related overdoses and mortality among individuals with SUDs/OUD and co-occurring BH conditions, specifically those individuals who use synthetic and semi-synthetic opioids (SSSOs) with other legal and/or illegal drugs;
- apprise stakeholders of opportunities for coordination and partnerships across care settings; and
- enable stakeholders to improve their readiness to implement measures in a rapidly changing landscape.

GAP AREAS

Based on the Committee's work, NQF identified a set of gap areas in which stakeholders need to prioritize new and better approaches to measuring polysubstance use and co-occurring BH conditions:

- **All-payer measures that address opioid use, misuse, and BH conditions**
- **Care coordination and collaboration across settings, providers, and nonmedical professionals**
- **Harm reduction strategies**
- **Person-centeredness and recovery**
- **Linking individuals to evidence-based SUDs/OUD treatment**
- **Recognition of high-risk populations**
- **Monitoring of unintended consequences, impact on quality, and outcomes**
- **Mortality from polysubstance use**

5 GUIDING PRINCIPLES

With these measurement priorities in place, the Committee identified five guiding principles for driving measurement and reducing overdose and mortality for the focused population:

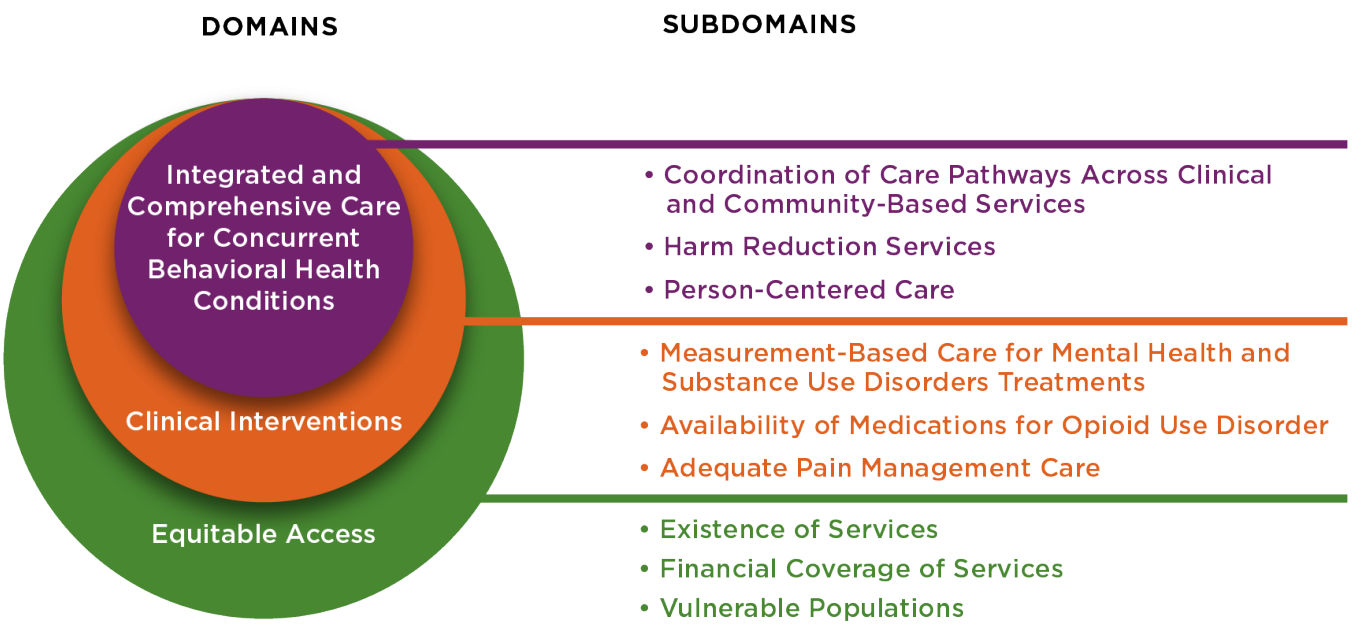
- **Promote health equity**
- **Reduce stigma**
- **Emphasize shared decision making and person-centered care**
- **Encourage innovation**
- **Ensure intentionality in measure development and implementation**

a The Centers for Medicare & Medicaid Services (CMS) has defined behavioral health as encompassing a person's whole emotional and mental well-being, which includes the prevention and treatment of mental disorders, including SUDs.[3] 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).[4] For the purpose of this report, "individuals with SUDs/OUD and co-occurring BH conditions" refer to people who use SSSOs with other legal and/or illegal drugs and also have a behavioral health condition.

b According to The Centers for Disease Control and Prevention (CDC) data, these overdoses include unintentional suicide, homicide, and *undetermined deaths.*

To help identify critical measurement areas and the focus of the framework, the Committee first identified potential adverse events of SUDs/OUD (e.g., increased hospitalizations or suicidality) and several high-risk subpopulations. Based on the Committee's work, NQF then identified a set of gap areas in which stakeholders need new and better approaches to measuring polysubstance use and co-occurring BH conditions.

The Opioids and Behavioral Health Measurement Framework identifies three essential domains (i.e., major categories for measurement), each of which includes three subdomains (i.e., subcategories of measurement that are specific to each domain). This structure ensures comprehensive measurement of opioid-related outcomes among individuals with co-occurring BH conditions. The three concentric circles represent the domains and their relationship to each other. Equitable Access is the outer layer and first domain, which is composed of three subdomains: the existence of services; financial coverage of services; and access for vulnerable populations, such as populations with risk factors related to social determinants of health (SDOH) (e.g., unstable housing, limited transportation, and food insecurity) or with criminal justice involvement. The middle layer and second domain is Clinical Interventions, which builds on the foundation of equitable and accessible services. The Clinical Interventions domain comprises three subdomains: measurement-based care (MBC) for mental health and SUDs/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 SUDs/OUD and co-occurring BH conditions. Thus, the third and innermost layer of the framework is the Integrated and Comprehensive Care for Concurrent



Behavioral Health Conditions domain. This domain has three subdomains, which focus on coordination of the care pathway across clinical and community-based services, harm reduction services, and person-centered care.

To guide how measurement should take place within the framework, NQF worked with the Committee to identify and develop measure concepts for each of the domains and subdomains. Measure concepts are ideas for new performance measures. To help overcome the barriers to measuring SUD/OUD and co-occurring BH conditions, the Committee created a detailed use case for applying the measurement framework. The use case comprises three areas:

- **Critical stakeholders:** Those who are most affected by existing gaps in care or who could help address the measurement areas within the framework.
- **Overarching barriers and solutions:** Challenges of measuring SUD/OUD and co-occurring BH conditions more broadly (including stigma, limited resources, payment, data inconsistencies and limitations, and a rapidly evolving measurement landscape), along with corresponding solutions.
- **Case exemplars:** Three cases that show how stakeholders and overarching barriers and solutions combine for each specific measurement framework domain.

The Committee members also identified larger systemic opportunities to improve 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 measurement framework and the guidance in this report provide a starting point for stakeholders to begin measuring, evaluating, and addressing overdose and mortality for individuals with SUD/OUD and co-occurring BH conditions.

Introduction

The Fourth Wave of the Opioid and SUD Crisis

In 2021, drug overdose-related deaths reached an all-time high, with 107,270 reported fatalities.[1,2] Of these deaths, 80,725 involved opioids.[1] These overdose deaths occur in 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. The U.S. now faces a fourth wave of the opioid and SUD crisis,[7,8] which is the result of rising polysubstance use, such as the co-use of opioids and psychostimulants (e.g., methamphetamine or cocaine).[9]

The coronavirus disease 2019 (COVID-19) pandemic amplified the opioid and SUD crisis. The convergence of these two public health emergencies (PHEs) led to[10] a 46 percent increase in overdose deaths from 2019 to 2021.[11] Individuals with SUDs 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 both SUDs and COVID-19 had worse outcomes than individuals with COVID-19 only.[12,13] The mental health ramifications of social distancing and isolation also have far-reaching impacts, especially for individuals with SUDs.[14] In particular, younger adults and racial/ethnic minorities experienced disproportionally worse mental health outcomes during the pandemic, including increased substance use and suicidal ideation.[14] Furthermore, the COVID-19 pandemic created service disruptions for individuals with SUD and BH seeking treatment or care for the first time.

Final Report Goals and Objectives

The Opioids and Behavioral Health initiative builds upon the results of the **2019-2020 NQF Opioids and Opioid Use Disorder Technical Expert Panel (TEP)**. The goals of this Final Report are to create a measurement framework that improves the prevention and monitoring of opioid-related overdoses and mortality among individuals with co-occurring BH 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 improve their readiness to implement measures in a rapidly changing landscape.

This Final Report is an updated version of NQF's September 2021 publication under the same title. The initial version of the report presented a measurement framework to address overdose and mortality resulting from polysubstance use involving SSSOs among individuals with co-occurring BH conditions, targeting an array of risk factors. The updated version adds guiding principles and a use case to support readers in implementing the framework.

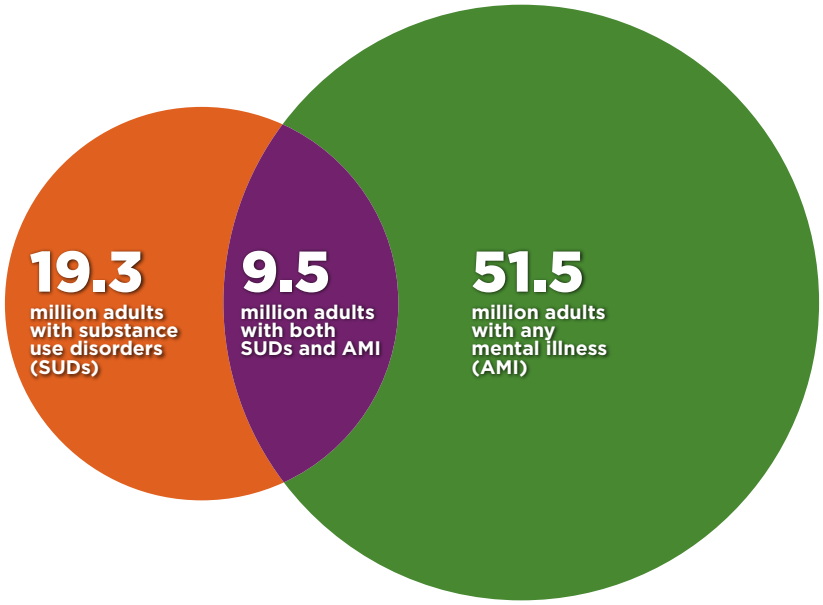
Within the Final Report, the Committee identified existing measures, measure concepts, and recommendations to serve as a starting point for quality measurement for individuals with SUDs/OUD and co-occurring BH conditions. Because measure concepts are ideas for new performance measures, they should be fully specified, developed, and tested as performance measures before implementation. Given the evolution of the opioid crisis, it is important to ensure measure concepts and measurement recommendations evolve as the evidence base grows.

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 the usefulness of the framework. The Committee's objectives also included incorporating outcome measures and patient-reported outcome performance measures (PRO-PMs) to reflect all aspects of care and identifying electronic clinical quality measures (eCQMs) and claims-based measures to help reduce reporting burden. Given the population of interest, the Committee also sought to incorporate

care coordination, SDOH, and disparities-sensitive measures to address the complex needs of individuals with SUD/OUD and co-occurring BH conditions in an equitable and meaningful manner.

As Figure 1 shows, the fourth wave of the opioid crisis has seen a growing overlap of individuals with SUDs and co-occurring mental illness. While 61.2 million adults had either an SUD or a mental illness in 2019, 9.5 million adults had both.[15] Adults represented in the middle of the Venn diagram—those with SUDs and co-occurring mental illness—are especially high-risk populations and are the focus area of the measurement framework in this report. Notably, individuals may shift statuses (i.e., SUDs only, mental illness only, or co-occurring SUDs and mental illness) throughout their life span, so this report offers measures and measure concepts that relate to all three statuses reflected in Figure 1.

FIGURE 1. 9.5 Million Adults Have Co-occurring SUDs and Mental Illness



Adapted from McCance-Katz, E. Results from the 2019 National Survey on Drug Use and Health: Graphics from the Key Findings Report. Webinar. August 7, 2020.

Recommendations From the 2019 NQF Opioids and Opioid Use Disorder Technical Expert Panel (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 convened an Opioids and Opioid Use Disorder TEP from April 2019 to February 2020. The TEP's work culminated in the NQF report titled **Opioids and Opioid Use Disorder: Quality Measurement Priorities.**[16]

The 2019-2020 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 associated priorities for development of future measures. The results included five measure gap priorities:

- Opioid tapering and more general measures related to the treatment of acute and chronic pain

- Measures for special populations (e.g., LGBTQI+, pregnant women, newborns, racial subgroups, and detained persons)
- Short-term transitions between inpatient and outpatient settings and long-term follow-up of clients being treated for OUD across time and providers
- Patient-centered pain management with proper tapering strategies for opioid analgesics
- 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 quality measures for improving care, prevention, diagnosis, health outcomes, and treatment. These included recommendations for measure revisions, new measure development, and inclusion of such measures in the Merit-Based Incentive Payment System (MIPS), alternative payment models (APMs), the Shared Savings Program (SSP), the quality reporting requirements for inpatient hospitals, and the Hospital Value-Based Purchasing (VBP) program.

Opportunities to Build Upon the 2019-2020 Opioids and Opioid Use Disorder TEP

To build on the work of the 2019-2020 TEP, the current Committee 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 focuses specifically on the population that is affected by polysubstance use involving SSSOs among individuals with co-occurring BH conditions. This report identifies measures and measure concepts that could be utilized by all payers; it includes concepts related to levers and/or collaboration between medical, clinical, and other community-based entities that care for the population of interest (e.g., collaborations between medical providers, criminal justice workers, and social workers). 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. Data from the Centers for Disease Control and Prevention (CDC) show overdose deaths increasing by nearly 50 percent from December 2019 to December 2021, with an average of 7,524 overdose deaths per month.[1,2] In May 2020, the U.S. experienced the largest one-month increase in drug overdose deaths ever documented, driven primarily by synthetic opioids.[2] During this time, the U.S. also observed increased overdose death rates with co-involvement of synthetic opioids with prescription opioids, heroin, cocaine, and psychostimulants.[17] This increase was likely driven by the combination of disruptions related to the COVID-19 PHE orders and the spread of SSSOs through the illicit psychostimulant market, especially in Western states.[18] Additional factors related to the pandemic—including economic impacts; social isolation; trauma; anxiety and depression; physical effects of the COVID-19; and disrupted access to care and medications for SUDs/OUD due to workforce shortages, social distancing, severe weather events, and other issues—likely contributed to these record overdose deaths. Approximately 75 percent of all overdose deaths that occurred during the first year of the COVID-19 pandemic were attributed to opioids, with approximately 80 percent of those involving synthetic opioids.[19,20]

Another challenge within the current wave of increased polysubstance use is the overlap between SUD and co-occurring mental illness, with 9.5 million adults having both.[15,21] Mental disorders commonly associated with SUDs include depression, 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).[22-33] Multiple national surveys show that approximately half of adults with mental illness will also experience an SUD, and research indicates similar rates with adolescent populations.[34] In 2019, approximately 3.6 million adults, or 27 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 had an SUD.[15,35]

Some data suggest an increased risk for nonmedical use of prescription opioids from persons with mental health conditions and SUDs,[36] with 43 percent of individuals in SUD treatment for nonmedical use of prescription opioids demonstrating symptoms or a diagnosis of a mental health disorder.[37] Of the 9.5 million adults living with co-occurring mental health disorders and SUDs, fewer than half receive treatment for either diagnosis, and fewer than 8 percent receive treatment for both.[15] 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.[38] 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.[38] While legislation (e.g., the Comprehensive Addiction and Recovery Act) has attempted to control and lessen the use of prescription opioids, significant challenges related to access and interventions exist.

The Role of Mental Health Conditions in Worsening Health Outcomes

Individuals with SUDs and co-occurring mental health disorders experience worse clinical outcomes. The prevalence of opioid-related mortality is higher in individuals who are middle-aged and have substance misuse along with psychiatric comorbidities.[39] Specific risk factors for overdose mortality related to medical and nonmedical opioid use include age, comorbid medical and mental disorders, a history of SUDs, and sources of social and psychological stress.[40-46] Comorbid mental illnesses are associated with increased functional impairments and mortality compared to individuals with only physical illnesses.[47] SUDs and social difficulties can intensify the effects of comorbidities.[48] One study examining the likelihood

of prescription opioid-related overdose or serious opioid-induced respiratory depression (OIRD) found that an SUD diagnosis within six months was strongly associated with OIRD, with bipolar disorder and schizophrenia also strongly associated with increased odds of OIRD.[45] 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.[49-51] Co-occurring SUDs and mental illness, including SMI, also affect inpatient hospital utilization.[52] Individuals with SUDs and mental health disorders have significantly higher rates of inpatient utilization compared with individuals with only SUDs after adjusting for predictors such as homelessness, suicide risk, and pain diagnosis.[52]

Overview of Impacted Populations

Priority Populations With Elevated Rates of Mental Illness and Substance Use

To inform the identification of measurement gaps and priorities, the Committee first identified key subpopulations who engage with the healthcare and social service system in different ways and at different times. 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 priority subpopulations include individuals with SUDs, individuals who recreationally use substances but may not meet the criteria for SUDs, 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 priority populations that are also reflected within the high-risk subpopulations, including individuals with disabilities, individuals living below the federal poverty line, individuals experiencing unstable housing or homelessness, individuals involved with the criminal justice system, and victims of intimate partner violence (IPV). Other populations and subpopulations carry significant risk as well, including individuals affected by disparities related to race and ethnicity (including indigenous populations), gender, and identification with the LGBTQI+ community; rural populations; individuals with co-occurring mental illness and chronic medical conditions; Veterans; adolescents and young adults; and individuals who inject drugs.[53] These populations often experience poor mental health outcomes due to numerous factors, including lack of access to high quality and culturally competent BH services, cultural stigma encompassing mental healthcare and treatment, discrimination, and overall unfamiliarity concerning mental health interventions.[54]

INDIVIDUALS WITH SUDS

SUDs are complex conditions in which individuals have uncontrolled use of a substance despite negative or harmful consequences.[55] As defined in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), SUDs involve a number of diagnostic criteria, which are related to impaired control, social impairment, risky use, and physiological indicators (i.e., tolerance and withdrawal).[4] Per the DSM-5, the diagnostic criteria for an SUD include 11 diagnostic criteria and can be classified as mild, moderate, or severe based on the number of these criteria an individual meets.[56] Individuals can develop an SUD related to alcohol, cannabis (i.e., marijuana), hallucinogens, inhalants, opioids, sedatives, stimulants, and tobacco/nicotine.[55]

OUD is often associated with a high risk for morbidity, mortality, and other adverse health and social conditions.[57,58] Adverse events include, but are not limited to, overdose, infection, injury, hospitalization, and suicide. Individuals with OUD and/or other SUDs may face challenges across multiple facets of their lives, such as unemployment or underemployment, fractured family structures, and involvement with the criminal justice system.

It is common for individuals with an SUD, such as OUD, to also use other substances. Anxiety, depression, PTSD, 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.

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., different physical locations, unaligned care plans and communication, and inadequate medication management coordination). Providers in mental health settings do not always screen for unhealthy drug use or a co-occurring SUD, which further exacerbates silos of care.[59]

INDIVIDUALS WHO USE DRUGS RECREATIONALLY

Not all individuals who use controlled substances (e.g., prescription drugs or illegal drugs) develop an SUD. However, people who use illegal drugs are always at increased risk of overdose and/or other adverse events, particularly 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 analogues, this is also true of other powder-based drugs, such as methamphetamine and cocaine, as well as counterfeit pills (e.g., forged benzodiazepines and painkillers). In addition to high-potency opioids, illegal drugs are often contaminated with other substances, including, but not limited to, industrial compounds, veterinary medications, fungicides, and antipsychotics.[60] 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.[61,62] Injuries related to intoxication and impairment, decreased impulse control, disinhibition, panic and anxiety from excessive drug use, and self-harming and suicidal behaviors all occur at higher rates with drug use.[61-64] These risks are magnified among individuals with psychiatric comorbidities, such as mood, anxiety, and psychotic disorders.[61-64]

INDIVIDUALS PRESCRIBED OPIOIDS FOR PAIN MANAGEMENT

The early stages of the opioid and SUD crisis emphasized overdose risk for patients who were prescribed opioids by healthcare providers. Over the past decade, these overdose death rates have been overshadowed by overdose deaths involving heroin, fentanyl, and psychostimulants. However, each year, tens of millions of Americans still receive opioid prescriptions for acute or chronic pain. Pain treatment is a large public health challenge. Data from the CDC indicate more than 50 million adults in the U.S. experience chronic pain (i.e., pain for more than three months duration), with common conditions including low back pain, osteoarthritis, neck pain, fibromyalgia, and sickle cell anemia. In addition, individuals with disabilities are more likely to be prescribed opioids for pain management.[65,66] Balancing the needs of patients with chronic pain and addressing the opioid crisis require careful consideration of pain management strategies through shared decision making and evidence-based opioid prescribing. Providers must partner with their patients to identify the most appropriate treatment plans. Screening for mental illness, SUDs, risk of suicidality, and risky drug use before the initiation of opioid use and over the course of treatment could help to identify individuals at risk for opioid dose escalations and adverse events.[67]

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

DISABILITIES

The intersection between OUD, BH, and disability (both physical and cognitive) is still not understood. However, according to the 2015-2019 National Survey on Drug Use and Health (NSDUH), individuals with disabilities have a higher prevalence for opioid misuse and OUD than those without disabilities.[66,68] This is due in large part to the need for adequate pain management. Individuals with disabilities are more likely to receive opioids from healthcare providers but less likely to receive OUD treatment.[66] Stigma, lack of awareness and appropriate accommodation, poor

communication, and other systemic issues add barriers to the availability and quality of care individuals with disabilities receive, increasing their risk further.[69,70] This risk is further exacerbated by the fact that BH and SUD treatment providers can underestimate the barriers of accessibility for individuals with physical and cognitive disabilities or may not be fully aware of the existence of congruent conditions.

POVERTY

Drug overdose-related deaths are associated with structural causes and risk factors, such as poverty, low socioeconomic status (SES), and high rates of unemployment.[71] Research examining the geographic association between measures of economic opportunity, substance use, and opioid prescribing found that areas with higher poverty and unemployment rates typically have increased rates of retail opioid sales, Medicare Part D opioid prescriptions, opioid-related hospitalizations, and drug overdose deaths.[71] 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.[72] 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.[71] Socioeconomic marginalization is an important but underexplored determinant of opioid overdose and SUDs, with important implications for health equity.[72]

UNSTABLE HOUSING AND HOMELESSNESS

Lack of safe and stable housing negatively affects 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.[72] A national study indicated that 75 percent of the people experiencing homelessness and an SUD within the past year also had a comorbid mental illness.[73] Notably, individuals experiencing homelessness 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). This concealment creates missed opportunities to engage at-risk individuals during clinical, social service, and justice-related encounters.

Chronic pain is common among individuals with unstable housing.[74] Individuals experiencing homelessness often sleep outdoors and spend much of their day walking, and the transient and chaotic nature of life often contributes to their pain.[74] Chronic pain in the homeless population is often compounded by injuries, poorly treated medical conditions, insufficient shelter, and repeated exposure to extreme weather elements.[74] A lack of access to health insurance and specialty care also decreases individuals' ability to manage and cope with pain, which often results in increased risks.[74] The combination of these factors translates into higher rates of SUDs, poorer health, and a greater risk of mortality for individuals experiencing homelessness.[74-76]

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.[77] Based on the 2015–2016 NSDUH, the odds of being involved in the criminal justice system increase greatly for persons using opioids.[78] 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.[78] Approximately 30–45 percent of these individuals report having withdrawal symptoms or an inability to control their use, which is indicative of OUD.[78] However, individuals in the criminal justice system often do not receive the care they need as a result of limited funding, resources, and stigma.[79] 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 Food and Drug Administration (FDA)-approved medications for OUD.[78]

Untreated SUDs or OUD during incarceration can result in a fatal relapse post-release due to a loss of tolerance that would have occurred during incarceration.[77] Approximately 75 percent of individuals transitioning from jail back to the community relapse during their first ninety days.[78] To prevent relapse, overdose, and continued misuse of opioids and other drugs, treatment must begin during incarceration and be sustained upon release. 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.[80]

A substantial and growing number of individuals in the justice system have SUDs/OUD and co-occurring mental disorders.[81] When mental illness is combined with SUDs or OUD, the likelihood of recidivism and failure in correctional rehabilitation is greatly increased.[81] Roughly 20 percent of individuals who are incarcerated or on probation and/or parole suffer from a serious or persistent mental health disorder.[78]

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 use, and mental health is an essential area to address.[82] Research indicates that survivors of IPV are at a greater risk for depression, PTSD, and suicide.[82] Survivors of IPV often use substances to cope with emotional trauma, and they may also be coerced into using substances by an abusive partner as a means of control.[82] 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.[82]

Together, OUD and IPV create a synergistic effect that leads to poor health and psychosocial outcomes in women in rural communities.[83] Women in rural areas often experience difficulties when trying to access safety and recovery programs, which complicates removing women from abusive situations.[83] 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 care for IPV and OUD.[83] 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.[84]

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 BH conditions, the Committee reviewed the existing measurement landscape, which is summarized in **NQF's 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 individuals with SUDs/OUD and co-occurring BH conditions. The Committee focused on three subpopulations most impacted by substance use and BH conditions: individuals with SUDs, individuals who use drugs recreationally, 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, where the critical engagement points occur, 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 these discussions, Committee members completed a prioritization survey to identify 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 the **list of identifed measurement gaps,** 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 BH 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 co-occurring BH conditions through the results of the environmental scan, measurement prioritization survey, and Committee web meeting discussions. Key gap areas included all-payer measures; coordination across settings and providers; harm reduction strategies; person-centeredness and recovery; and linkages to appropriate, evidence-based treatment for SUDs/OUD. Committee members also highlighted gap areas related to high-risk populations and noted the importance of monitoring for unintended consequences. The measurement priorities also highlight the importance of ongoing and improved evaluation of mortality related to psychostimulants laced with SSSOs or other compounds.

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

While quality measures independently exist related to opioid use, misuse, and BH, there is a dearth of all-payer quality measures related to the intersection between substance use, including SSSOs, and BH conditions. Quality measures can aid individuals with SUDs/OUD and co-occurring BH 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, the rates of these conditions are increasingly prevalent among individuals with commercial and Medicare plans.[85-89] The burden is not well understood. The purpose of this analysis is to estimate the state Medicaid programs' costs for treating OUD and how these costs have changed over time. We used data from the Medicaid Analytic eXtract files from 17 states between 1999 and 2013 to examine the healthcare costs associated with OUD. Inpatient, outpatient, and prescription medication costs related to the treatment of OUD were included, as were excess costs for other healthcare services (e.g., general medical care). The **Core Quality Measures Collaborative**—a collaborative effort between CMS, NQF, and AHIP to facilitate cross-payer measure alignment—identified measurement gaps in several areas (e.g., pediatrics, maternal health, and primary care), and its Behavioral Health Workgroup noted ongoing efforts to improve measurement for individuals with a mental health condition and/or SUD.[90] A coordinated measurement framework is needed to address gaps in all-payer measures that address the overlap between substance use and BH 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 SUDs/OUD and co-occurring BH 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 emergency department (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 conducted by BH 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 the identification and engagement of high-risk persons through comprehensive care.

Recognizing that both 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, the use of fentanyl test strips, and/or syringe service programs. Committee members identified the co-prescription of naloxone as a critical gap area, especially for high-risk individuals. While harm reduction strategies 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 harm reduction programs.

Measures and Measure Concepts Focused on Person-Centeredness and Recovery

Individuals with SUDs/OUD and co-occurring BH 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. 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, 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.**[91]

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

The current quality measure landscape does not incorporate measures that assess linking individuals with polysubstance use and BH conditions to evidence-based SUDs/OUD treatment and care. While some measures 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 that is focused on follow-up after an overdose to link individuals with BH conditions to MOUD is a notable gap area. This gap is further magnified when looking at priority populations, such as those involved in the criminal justice system.

Measures and Measure Concepts Recognizing 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.[92] 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.

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 (e.g., increased stigma, reduced access to care and treatment services, and decreased access to necessary opioid therapy), impacts on quality, and health outcomes. As measurement efforts evolve, stakeholders who analyze measures must pay special attention to any unintended consequences that may arise. This is especially important for vulnerable populations, as population-based approaches can inadvertently exacerbate disparities in healthcare.[93] Monitoring

for potential unintended consequences is critical regardless of whether a measure is used for quality improvement or accountability.

Committee members discussed how addressing polypharmacy is critical for individuals with polysubstance use involving SSSOs; however, 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 BH conditions may experience stigma, decreased quality of care, and even harm from abrupt tapers or treatment abandonment if using prescription medications.[94] 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 SUDs/OUD and co-occurring BH 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 people who use opioids. Specifically, these opioid-related overdoses are increasingly occurring among people who use psychostimulants (e.g., crystal methamphetamine and cocaine) and illicitly acquire drugs that are adulterated with SSSOs or other compounds.[95] This often occurs without the end user's awareness. Because individuals who use stimulants do not necessarily 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 crisis. Opportunities exist to further incentivize and modernize the U.S. death reporting system, including increases in available data that can improve the accuracy of the true burden and underlying combinations of fatal polysubstance use.

Measurement Framework Guiding Principles

A measurement framework organizes ideas that are important to measure and describes how measurement should take place. These five overarching guiding principles represent cross-cutting themes and critical considerations for using the measurement framework to help overcome and address overdoses and mortality resulting from polysubstance use involving SSSOs among individuals with co-occurring BH conditions. The guiding principles each connect back to the measurement framework by either linking to a specific domain or subdomain or promoting actions that can facilitate the implementation of the framework. Stakeholders should consider the following guiding principles when using the framework to guide their measurement activities:

- **Promote health equity**
- **Reduce stigma**
- **Emphasize shared decision making and person-centeredness**
- **Encourage innovation**
- **Ensure intentionality in measure development and implementation**

Promote Health Equity

Health equity is the attainment of the highest level of health for all people.[96] Unlike equality, which seeks to provide equal treatment and services to all people, equity recognizes and aims to address differences in access and outcomes based on race, ethnicity, disability, sexual orientation, and other factors.[97] Promoting health equity includes raising awareness and creating systems to help account for and address population-level factors, which have a greater impact on health outcomes than individual-level factors.[96] The promotion of health equity is a foundational guiding principle for this measurement framework because it recognizes the subset of vulnerable populations (e.g., individuals with social risk factors or criminal justice involvement) who are at a higher risk for SUDs/OUD and co-occurring BH conditions, and ultimately overdose.[53,77] Through this principle, the Opioids and Behavioral Health Committee is elevating the need to capture and measure barriers to care, including social risk factors, that impact vulnerable populations with SUDs/OUD and co-occurring BH conditions. To promote health equity, the field should continuously reassess measure specifications to ensure they can provide information on any new vulnerable populations that might have been missed during the first creation of the measure (e.g., stratification by age, gender, sexual orientation, and income level). As a guiding principle, health equity becomes the lens through which healthcare systems and payers promote better care and reduce overdose and mortality. This guiding principle aligns with the Equitable Access domain, which provides a concrete way to measure and address disparities that patients, particularly vulnerable populations, face when accessing SUDs/OUD and mental healthcare services.

Reduce Stigma

Stigma creates a fundamental barrier in the provision of quality care for individuals with SUDs/OUD and co-occurring BH conditions. Healthcare settings must recognize stigmas and biases that exist towards patients, evidence-based treatment methods, and prevention strategies. Stigma can present itself at various points in an individual's care pathway. Providers may have biases or assumptions based on a patient's payment method, medical history, or reported medical history, which can impact their decision making. In addition to recognizing internal systemic biases, healthcare systems must acknowledge and consider the stigma that patients themselves face from those

around them. This guiding principle aims to influence the use of the measurement framework to overcome stigma by measuring and assessing care points at which individuals with SUDs/OUD and co-occurring BH conditions may experience stigma, including accessing care, receiving evidence-based interventions and harm reduction services, and/or during care transitions. Although stigma is a complex area to evaluate, the Committee agreed it was important to measure stigma through patient-reported outcomes (PROs) or by assessing stigma-related unintended consequences. By measuring stigma across the three domains of the framework, healthcare providers may understand gaps in their care provision and ultimately improve their approach to care.

Emphasize Shared Decision Making and Person-Centered Care

Person-centered care builds on the principles of health equity and stigma reduction. Understanding an individual's previous traumas, informed decisions, and desires regarding the provision of their care and SUDs/OUD treatment choices is critical for achieving optimal health outcomes and ultimately reducing mortality. Person-centered care should also incorporate elements of trauma-informed care, which aims to understand a patient's life situations, both past and present, to make informed decisions. Given the high prevalence of trauma among patients in BH settings, it is important for clinicians to recognize how long-ago traumas can continue to impact patient functioning and decision making. Shared decision making is defined as a process of communication through which providers and patients work together to make optimal healthcare decisions that align with the patients' goals.[98] Shared decision making aims to achieve person-centeredness by promoting clear communication, tailoring evidence to individual patients, and placing value on a person's informed goals, preferences, values, and concerns.[98] Person-centered care can help providers understand the drivers that lead a particular patient to use opiates and identify harm reduction strategies that best fit the patient's risk profile. This guiding principle dismantles the idea that abstinence is the only outcome to measure for individuals with SUDs/OUD and co-occurring BH conditions and encourages healthcare organizations to collaborate with advanced harm reduction programs conducted by other community organizations to achieve optimal care. Furthermore, this principle aligns with the person-centered care subdomain and promotes the idea that centering care on a patient's goals and focusing on broader sets of outcomes may lead to better health and a reduction in mortality.[99]

Encourage Innovation

The landscape of BH and SUDs/OUD is rapidly changing and evolving, and measurement should be flexible enough to account for these changes while still promoting standardization. Measurement efforts for SUDs/OUD and co-occurring BH conditions should consider new and innovative approaches to care, including trauma-informed care, evidence-based harm reduction strategies, treatments, interventions, telehealth and remote care platforms, and APMs. This principle recognizes that measure development can be a multiyear process. Additionally, it acknowledges that implementation of the measurement framework can be challenging. However, this principle also encourages health systems and payers to be flexible and to begin implementing internal quality measures and metrics for quality improvement efforts, not just accountability. Innovation should be considered in the formation of partnerships and collaboration models. Healthcare organizations should be innovative in partnering with local harm reduction services or organizations and leveraging the voices of influential community leaders. Innovation should also be applied to data collection efforts to help inform care and treatment approaches for people with SUDs/OUD and co-occurring BH conditions.

Ensure Intentionality in Measure Development and Implementation

To address overdose and mortality resulting from polysubstance use involving SSSOs among individuals with co-occurring BH conditions, measure development and implementation must be purposeful and actionable. This principle seeks to expand implementation of the measurement framework by ensuring that future measures are intentional in addressing stigma, promoting health equity and person-centeredness, and encouraging innovation. Measurement efforts should consider the medical interventions they promote, the data they require, the accountability they offer, and the outcomes they aim to derive. Intentional measures consider and recognize differences in healthcare settings and resources. Resource limitations, including staffing shortages, often exist when addressing SUDs/OUD and BH conditions, particularly for healthcare settings that care for vulnerable populations. Measure developers should carefully consider the cost implications and reporting burden that new measures may have on providers, as they may inadvertently dismay providers from wanting to care for patients with SUDs/OUD.

Measurement Framework for Opioids, Polysubstance Use, and Mental Health

Building on the work of the 2019 NQF Opioids and Opioid Use Disorder 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 BH conditions. The development of a measurement framework for opioids, polysubstance use, and mental health is a critical step to organizing existing measures, measure concepts, gaps, and opportunities to improve care for individuals with SUDs/OUD and co-occurring BH conditions. Current measurement efforts tend to focus on portions of this population, such as those with OUD or BH 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 BH conditions.[100] However, given the relationship between BH conditions and substance use, it is essential to move to a comprehensive measurement approach that holistically looks at the intersection of BH and substance use.

The measurement framework, as shown in Figure 2, includes three domains and nine subdomains. NQF and the Committee identified three domains:

- **Equitable Access**
- **Clinical Interventions**
- **Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions**

These domains reflect the Committee's categorization of existing measures, measure concepts, and the results of the measurement gap prioritization exercise into key themes. Committee members then identified critical subdomains, each of which represents the key components to measure within the overarching domain to ensure comprehensive performance measurement for this population. Each subdomain ties directly to the identified measurement gap areas, identifying potential measure concepts to move the field forward. Measure scans revealed a combination of NQF-endorsed measures, measures that are no longer NQF-endorsed, and measures that have never been endorsed. Because NQF endorsement assesses the scientific acceptability of quality measures, the framework both references and links to applicable NQF-endorsed measures where possible.

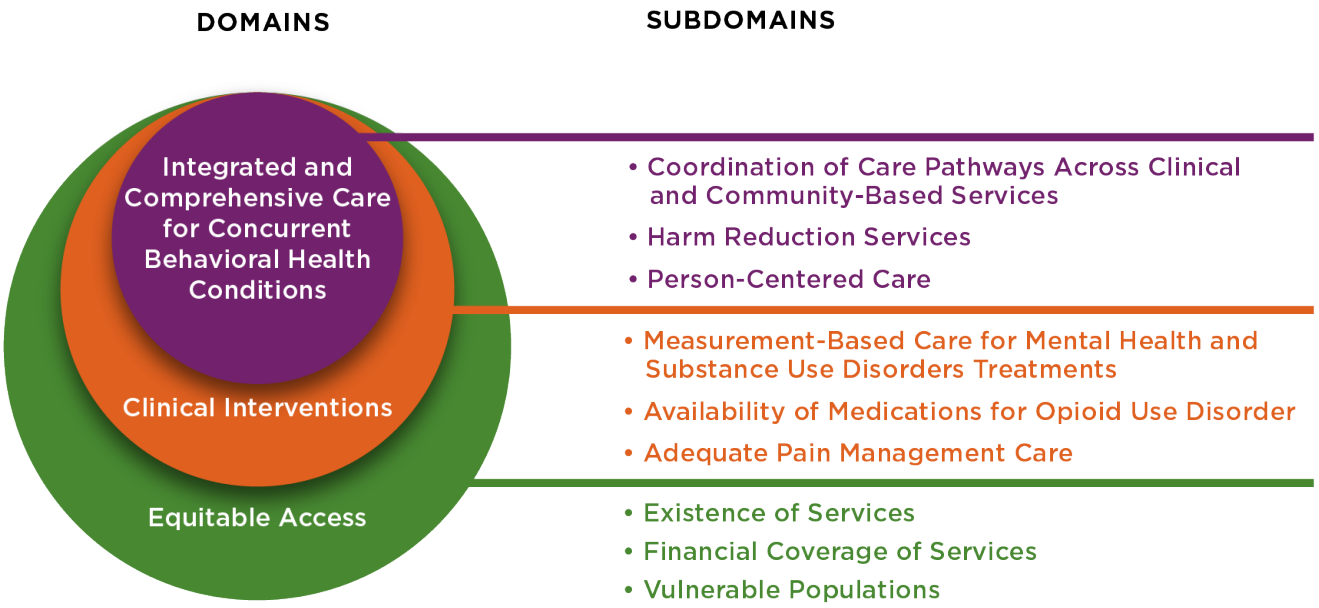
When discussing the measurement framework, the Committee emphasized the relationship between the three domains and decided upon a concentric circle approach. The outermost domain, Equitable Access, is a foundational and essential component to improving outcomes and addressing mortality, and it is critical 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. The middle layer is the Clinical Interventions domain. Once people have access to evidence-based care, it is essential for providers to offer clinical, community-based, and other types of interventions that improve health, address overdose, and reduce mortality resulting from polysubstance use in individuals with SUDs/OUD and co-occurring BH conditions. High quality care often exists in silos, and for an individual to receive optimal care and clinical interventions, they must receive person-centered, integrated, and comprehensive care across clinical and community-based services. Thus, the innermost circle is the Integrated and Comprehensive Care for Concurrent

Behavioral Health Conditions domain. The Committee agreed that a measurement framework must convey the connected relationship between the three domains so that stakeholders understand the need 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. Measurement for individuals with SUD/OUD and co-occurring BH conditions remains an evolving area, so measure concepts 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 either 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 focus more on outcomes 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. Measurement progression begins with process measures and evolves to outcomes measures, including PRO-PMs.

FIGURE 2. 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 BH conditions. Equity is a critical area of focus, given that mortality associated with polysubstance use with SSSOs in individuals with BH conditions is increased when SDOH-related factors are present.[100,101] 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.[102] For individuals with SUDs/OUD and co-occurring BH conditions, equitable access refers to affordable and convenient prevention, treatment, and recovery services that advance equity and quality for all, especially priority populations. Stigma can be a barrier for individuals obtaining needed treatment for SUDs/OUD and other BH conditions; therefore, ensuring equitable access can help reduce stigma.[103,104] This is particularly important for harm reduction strategies because individuals engaged in abstinence-only treatment programs can face stigma when exploring other evidence-based treatment strategies (e.g., MOUD).

Disparities exist across racial and ethnic groups, as well as by geographic location, in access to evidence-based SUDs/OUD treatment, and especially for access to buprenorphine-waivered providers.[105,106] Certain demographic risk factors related to gender, age, race, and ethnicity—including identifying as male, being 18–25 years of age, and being non-Hispanic Black or non-Hispanic other—decrease the odds of individuals with co-occurring mental illness and OUD receiving mental health treatment in the past year.[107] Without equitable access to best-practice programs, individuals cannot obtain services that support better health outcomes, including a reduction in overdoses. Equitable access extends past the clinical setting and ensures that individuals with SUDs/OUD have access to community-based services to help begin and maintain recovery.[108] In its 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

This subdomain measures whether services that support individuals with SUD/OUD and co-occurring BH conditions exist and are accessible, both of which are critical to improving outcomes. To measure the existence of services, measure concepts could assess whether a given service exists in a particular region. Measure concepts may include existence and quality of a range of pain management treatments or nontraditional care services that are particularly

important for individuals with co-occurring BH conditions, such as peer supports, care coordination, and/or transportation support. 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, including whether services are language-accessible and culturally appropriate. 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.[109,110] The existence of care services alone will remain inadequate for rural populations when people lack transportation, access to internet/phone service, and the ability to overcome 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. Uninsured individuals with SUDs/OUD and co-occurring mental illness have lower odds of receiving mental health treatment within the past year when compared with individuals with private or other insurance.[107] 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 SUDs/OUD treatment services. Measure concepts for measuring the affordability of services include measuring insurance reimbursement for social work services to address SUDs/OUD and BH treatment.

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 SUDs/OUD and co-occurring BH conditions. This subdomain specifically measures whether vulnerable populations are equitably able to access needed services in an affordable manner. While the previous subdomains extend to the general population, this subdomain emphasizes the importance of measurement for vulnerable populations. As identified earlier, these populations include, but are not limited to, youth, individuals experiencing homelessness, those involved in the criminal justice system, and Veterans.[53]

This subdomain recognizes that disparities in access, treatment, quality, and financial coverage exist across racial and ethnic groups.[105,106] Research shows that Black patients are half as likely to obtain follow-up appointments for OUD following release from the ED.[111] Despite an increase in the use of buprenorphine for OUD, it remains primarily accessible to Whites and beneficiaries of employer-based insurance.[111] The combination of poverty, substance use, untreated mental health conditions, and unstable housing can lead to an increase in OUD in underserved communities.[112]

Existing quality measures do not sufficiently address access and financial coverage for vulnerable populations. The Committee discussed critical measure gap areas related to equitable access and financial coverage, especially for individuals involved in the criminal justice system and those who are young. SDOH play a critical role for individuals involved in the criminal justice system, including those being released from jail or prison. Quality measures that identify whether these individuals have access to core needs, such as housing and food, when released from incarceration will help to promote health equity. Committee members discussed stigma as an access issue, especially for access to harm reduction services and MOUD. Opportunities also exist to measure whether health plan coverage—including both referrals and access to SUD/OUD treatment and mental health services—is in place immediately after an individual is released from incarceration.

Committee members also identified young individuals as a vulnerable population for the development of co-occurring SUDs/OUD and BH conditions. To effectively prevent drug use and/or SUDs/OUD in youth, it is vital that young people have access to the appropriate care and interventions where they can be screened for anxiety, depression, trauma, and other mental health concerns. Timely access and coverage can help to support children and adolescents in their development of coping skills to preempt reliance on substances.

TABLE 1. EXAMPLES OF MEASURE CONCEPTS FOR ACCESS

EXISTENCE OF SERVICES

- Percentage of individuals with SUD/OUD and mental health conditions who have access to home and community-based services (e.g., peer support, care coordination, and nonmedical transportation)
- Percentage of individuals with access to holistic pain management (e.g., physical therapy, occupational therapy, integrated care, and complementary care)
- Percentage of individuals who reported having access to information in their preferred language, including through modalities appropriate for patients with vision and hearing impairments (e.g., sign language)

FINANCIAL COVERAGE OF SERVICES

- Percentage of individuals with SUD/OUD and mental health conditions who receive case management services that are covered

VULNERABLE POPULATIONS

- Percentage of individuals released from incarceration with insurance coverage in place that includes SUD/OUD and BH services immediately post-incarceration
- Percentage of adult individuals leaving incarceration with fully reinstated insurance coverage (e.g., Medicaid)
- Percentage of adult individuals leaving incarceration and seeking support for health-related social needs (e.g., housing, food) who received access to services within seven days of release
- Percentage of adult individuals leaving incarceration with SUD/OUD and mental health disorders who obtain wrap-around support within seven days of release

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 BH conditions through appropriate, evidence-based clinical interventions. The Committee identified three key subdomains to measuring clinical interventions for individuals with SUD/OUD and co-occurring BH conditions: (1) MBC for mental health and SUDs/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 SUDs/OUD Treatment

This subdomain focuses on measuring whether individuals with SUD/OUD and co-occurring BH conditions are receiving MBC for mental health and SUDs/OUD treatment. MBC is an approach in which clinical care is based on data collected through patient- or clinician-administered structured assessments of treatment response.[113] Current quality measures related to MBC focus on individuals with either SUDs/OUD or BH conditions; however, quality measures related to MBC for individuals with SUDs/OUD and co-occurring BH conditions are lacking.

Providers can measure BH outcomes within given time frames using scales such as the Montgomery-Asberg Depression Rating Scale (MADRS) or the Patient Health Questionnaire-9 (PHQ-9) for depression or anxiety, as well as the 17-item Brief Addiction Monitor (BAM) for alcohol or drug use. 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. Providers are moving towards MBC and The Joint Commission's outcome measure standards for behavioral healthcare and human services include the use of MBC to assess patient outcomes.[114] 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. This tension reflects the need for and growing interest in MBC for patient outcomes for individuals with BH conditions. While there are widely accepted scales to measure response to treatment for mental health conditions, the field has struggled to develop scales that reflect recovery from SUDs. The measurement tools that currently exist (e.g., the BAM and the Brief Assessment of Recovery Capital [BARC-10]) assess responses to SUD treatment; they focus on improvements in benefits (e.g., treatment team alliance, coping skills) and reductions in distress (e.g., depression symptoms, feelings of hopelessness).[115,116]

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 the response to treatment as MBC requires. Notably, the Veterans Health Administration (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 on 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. 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.[117-119] Stigma can be a barrier to the availability of MOUD because healthcare providers may hold stigmatizing attitudes or unconscious bias towards individuals with SUDs and/or OUD, which may reduce the likelihood of providing MOUD.[120] 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 states that have expanded Medicaid under the Affordable Care Act (ACA).[121,105,106]

Measurement approaches highlighting initiation and retention with MOUD should include disparities-sensitive measures to further highlight quality gaps across populations, focusing on demographics and regionality. 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 of both buprenorphine and naltrexone.

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 SUDs/OUD treatment with pharmacotherapy, they do not address comorbidity. The Committee discussed measure concepts that incorporate MOUD for individuals with co-occurring BH conditions. Measure concepts arising from this Committee discussion included the percentage of individuals with BH conditions screened for SUDs/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 BH condition after an ED or inpatient visit for SUDs/OUD and identified measure concepts related to following up with MOUD within seven days after an SUD/OUD visit.

Opportunities exist to both initiate MOUD, and in some circumstances, 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 SUDs/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 their 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, regardless of whether individuals are actively being prescribed opioid analgesics. Opioids are often prescribed to treat acute and chronic pain. While this subdomain focuses specifically on individuals with SUDs/OUD and co-occurring BH conditions, it is important that all patients with pain participate in shared decision making and experience appropriate, evidence-based pain management approaches. Healthcare providers should partner with their patients to identify the most appropriate treatment plan for a given patient based on their needs, values, goals, preferences, concerns, and risks. Opioid use risks are magnified for individuals with a history of SUDs and for those with other risk factors, such as disabilities, recreational drug use, and/or mental illness. Current quality measures do not adequately address the unique treatment needs of individuals with SUDs/OUD and co-occurring BH conditions.

The Committee identified that prescribing guidelines for opioids are insufficient for addressing the needs of individuals with SUDs/OUD and co-occurring BH 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 for individuals with SUDs/OUD and BH conditions, and described potential measure concepts to build on existing guidelines (e.g., 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

MEASUREMENT-BASED CARE FOR MENTAL HEALTH AND SUD/OUD TREATMENT

- Improvement or maintenance of functioning for all patients seen for mental health and substance use care
- Improvement or maintenance of functioning for dual-diagnosis populations (e.g., through use of the BAM or the Patient-Reported Outcomes Measurement Information System [PROMIS])
- Percentage of individuals with SUD/OUD and a co-occurring mental health condition identified as having social risk factors (e.g., food insecurity, transportation insecurity, and homelessness) who have demonstrated improvement in clinical status within a given time frame

AVAILABILITY OF MOUD

- Percentage of individuals with identified SUD/OUD and mental illness with MOUD initiated in the ED
- Percentage of individuals with identified SUD/OUD and mental illness (e.g., through screening) with MOUD initiated during incarceration
- Percentage of individuals inducted and stabilized on a therapeutic dose of MOUD before release from incarceration

ADEQUATE PAIN MANAGEMENT CARE

- 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

Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions

The Committee agreed on the importance of measuring integrated and comprehensive care as it relates to outcomes of individuals with SUD/OUD and co-occurring BH conditions. Coordination across care settings and collaboration across providers—both those within and outside of the medical system—are essential to improving outcomes. However, current measurement approaches do not always reflect the importance of integrated care, especially for individuals with polysubstance use and BH conditions. Furthermore, by recognizing the intricate relationship between SDOH, SUDs/OUD, and BH conditions, measures of integrated and comprehensive care should also acknowledge and incorporate stakeholders outside of traditional healthcare settings (e.g., housing and employee assistance programs, health literacy efforts, educational settings, harm reduction service providers, and the criminal justice system). Harm reduction service providers are an especially important piece of comprehensive care for individuals, and it is essential to include harm reduction services (e.g., syringe service programs, fentanyl test strips) as part of efforts to increase access to services for individuals with polysubstance use and co-occurring BH 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 SUDs, individuals who use drugs recreationally, 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 SUDs/OUD and co-occurring BH conditions often interact with several medical professionals, including pharmacists, emergency medical technicians, psychiatrists, social workers, and nurses. It is important for quality measures to encompass a wide range of healthcare professionals and include the various settings to which these individuals may present (e.g., EDs, inpatient hospitals, inpatient psychiatric facilities, primary care, and institution for mental disease [IMD] facilities). In its 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

Care coordination is considered "the deliberate synchronization of activities and information to improve health outcomes by ensuring that care recipients' and families' needs and preferences for healthcare and community services are met over time."[122]. Care coordination encompasses effective communication and facilitates linkages between the community and healthcare system.[123] This subdomain highlights coordination across the care pathway and focuses on the extent to which care is coordinated and integrated to holistically care for an individual with SUD/OUD and co-occurring BH conditions.

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, including leveraging the power of religious and spiritual organizations and personnel. Community-based services and care are important mechanisms for improving and maintaining health for individuals with SUDs/OUD and co-occurring BH conditions outside of the traditional healthcare setting. Community-based services, including but not limited to recovery and 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.[108] Linkages to employment services are critical, as employment is known to be a key factor in successful recovery for individuals with SUDs and mental illness. It is imperative for community-based service providers, including case managers and healthcare providers, to have sufficient time to liaise with one another to support care coordination.

Given that individuals who misuse opioids are more likely to suffer from BH conditions than those who do not, measurement opportunities exist to improve screening processes to ensure at-risk individuals are identified and treated properly. Silos in care delivery, separate treatment settings, and a lack of coordination between SUD and mental health providers often result in a failure to assess an individual's full BH state. According to a National Institute on Drug Abuse (NIDA) principle of effective treatment, comprehensive assessments are imperative for individuals in specialized care settings who have SUDs/OUD and mental health disorders. Gaps in screening exist in primary care, SUD treatment settings, and mental health settings. Committee members also emphasized the need for quality measures focused on healthcare organizations and providers screening for homelessness and SUDs as well as measuring the ability to connect individuals experiencing homelessness to appropriate social and community-based programs. Measure concepts could also include measuring the percentage of individuals with known SUDs/OUD who are screened for psychiatric disorders at SUD treatment centers or the percentage of individuals with mental health disorders who are screened for SUDs at mental health centers. The **Inpatient Psychiatric Facility Quality Reporting (IPFQR)** Program includes multiple measures of screening and treatment for patients with alcohol, drug, or tobacco use or misuse. Many of these measures are no longer endorsed by NQF because the measure developer is in the process of respecifying them as eCQMs, which are preferred because they involve lower burden data sources. Once these measures are developed into eCQMs, they may be appropriate models 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 SUDs/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 BH conditions. As stakeholders improve screening and coordinated care, there are measurement opportunities to focus on coordination of care for individuals with concurrent BH 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 BH conditions, such as concurrent use of opioids and gabapentinoids.[124] Measuring the number of providers who are 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 whether 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 SUDs/OUD and co-occurring BH 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 differences in appropriate follow-up across 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 SUDs/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 establish a primary care relationship and are linked to community-based services upon leaving incarceration.

Harm Reduction Services

This subdomain highlights opportunities to measure the implementation and use of harm reduction services to reduce overdose and mortality resulting from polysubstance use among individuals with co-occurring BH conditions. Harm reduction activities include practical strategies focused on reducing negative consequences associated with drug use.[125] Over the past several years, stakeholders have begun distributing naloxone to reverse an opioid overdose. Although it is not specific to individuals with SUDs/OUD and co-occurring BH 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 discussed the need to promote youth access to naloxone, which could be accomplished through a school nurse. Committee members also discussed exploring overdose response training and safety planning as a potential measure concept to evaluate whether patients who are co-prescribed naloxone also receive education in overdose prevention and response.

Additional harm reduction strategies include testing for human immunodeficiency virus (HIV) and hepatitis C and enrolling individuals in assistance programs (e.g., Medicaid, Supplemental Nutrition Assistance Program [SNAP], and MOUD). Other harm reduction strategies that the Committee discussed included measuring the use of syringe services programs and the distribution of fentanyl test strips to people who inject drugs. 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 Concurrent Behavioral Health Conditions domain. Person-centered planning, which is a facilitated, individual-directed, and positive approach to the planning and coordination of a person's services and supports based on individual aspirations, needs, preferences, and values, is central to person-centered care.[126] Providers and patients should use person-centered planning and shared decision making to make informed, person-centered decisions about the most appropriate treatment plan and path to recovery for each individual.[127] Therefore, measure concepts related to person-centeredness should implicitly or explicitly acknowledge different recovery paths (e.g., religious/spiritual approaches, 12-step programs, harm reduction, and MOUD) by not incentivizing or penalizing any specific pathway. 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 SUDs/OUD and co-occurring BH conditions, and there are opportunities to further assess and improve person-centered care for this population. Although 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 SUD/OUD and co-occurring BH conditions. 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 experience also provides an opportunity to assess care approaches for person-centeredness. Opportunities 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, BH, and/or SUDs/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

COORDINATION OF CARE PATHWAYS ACROSS CLINICAL AND COMMUNITY-BASED SERVICES

- Percentage of mental health providers who screen for SUD/OUD in BH settings
- Percentage of individuals with diagnosed SUD/OUD who are screened for mental disorders in SUD treatment settings
- 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)
- Percentage of individuals with SUD/OUD who are referred to an evidence-based treatment program (e.g., from the ED)
- Percentage of individuals with SUD/OUD who are referred to a community-based service (e.g., supportive housing and employment services)
- 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)
- Percentage of individuals experiencing homelessness who are connected to social and community-based programs related to their specific social risk needs
- Percentage of SUDs/OUD treatment providers with co-located mental health services
- Percentage of providers who have a shared/integrated treatment plan between general health and BH providers

HARM REDUCTION SERVICES

- Percentage of high-risk patients who are co-prescribed naloxone with an opioid prescription at least once annually
- Percentage of patients with OUD discharged from care episodes (e.g., residential treatment or an inpatient admission) with naloxone

PERSON-CENTERED CARE

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

Opioid and Behavioral Health Use Case: Measurement Framework in Action

The Committee created a use case to support the implementation and application of the Opioids and Behavioral Health Measurement Framework. It includes three distinct sections that help demonstrate how the framework can be applied to providing and assessing care for individuals with SUD/OUD and co-occurring BH conditions:

- Five critical stakeholders who are significantly affected by existing gaps in care and measurement: patients, providers, payers, measure developers, and policymakers
- The top five overarching barriers and corresponding solutions for implementing the measurement framework: stigma, limited resources, payment, data inconsistencies and limitations, and a rapidly evolving measurement landscape
- Three specific case exemplars, one for each of the framework domains, that depict how stakeholders can use the solutions to overcome barriers related to measurement of individuals with SUD/OUD and co-occurring BH conditions

Critical Stakeholders

In considering the overarching measurement framework barriers and solutions, the Committee identified five critical stakeholders who are most affected by existing gaps in care and/or can help address measurement across the framework domains and their corresponding subdomains:

- **Patients and their support systems** – Patients are people who need care, regardless of whether they are successful or unsuccessful in accessing it. A patient's support systems can include their immediate family or anyone the patient may choose, including but not limited to friends or colleagues. As showcased by the measurement framework, patients should be at the center of healthcare, as they are the most affected by poor quality services.
- **Providers and allied health professionals** – This stakeholder group encompasses healthcare systems, physicians, nurses, pharmacists, social workers, peer support specialists, community health workers, recovery specialists, and all other clinical and community-based members of a care team a patient may come across. This stakeholder group may also include payers who offer care services (e.g., Kaiser Permanente). A patient's main encounter with the healthcare system is through the care they receive from providers. Providers are often affected by limited resources and challenging payment structures of their healthcare system. However, providers can make a difference in the stigma patients experience and can contribute to the rapidly evolving measurement landscape.
- **Private and public payers** – This stakeholder group constitutes public payers, such as Medicare or Medicaid, private insurance plans, and large employer groups, as well as different systems, such as accountable care organizations (ACOs). Payers can create or help to eliminate the barriers that patients and clinicians face through their reimbursement and payment structures. Payers can also initiate quality improvement through reimbursement mechanisms.
- **Measure developers** – Measure developers can actively consult with other stakeholder groups to understand the challenges and needs for providing care for individuals with SUD/OUD and co-occurring BH conditions. Developers must then design and test measures that help address the identified need and challenges.
- **Policymakers** – Policymakers and regulatory bodies play a substantial role in creating measurement requirements at both the state and local levels. Currently, there are variations in reporting structures and requirements that make standardization challenging. Policymakers can help create standardization and move the field forward.

Overarching Measurement Framework Barriers and Solutions

Implementing a measurement framework may require substantial changes from end-users of this report. To help achieve the goals of the measurement framework, this section identifies challenges related to implementing measurement across the framework domains and subdomains and corresponding solutions and strategies. The Committee identified five overarching barriers for the critical stakeholders, which are presented as obstacles in the case exemplars. The identified solutions provide examples of how to overcome these challenges and can range depending on the level of resources or infrastructure required for implementation.

Stigma

BARRIERS

Stigma can be a significant barrier in the provision of person-centered care. As a result of stigma, providers may fail to understand a patient's goals and may not actively align their care plans with the patient's preferences or needs. Stigma exists at the individual, organization, and system-wide level. Stigma in providers, patients, and health plans may limit patients' access to community-based resources that help address social risk factors that may contribute to poor health outcomes.

SOLUTIONS

Solutions to address stigma fall into three themes, as described in Table 4. Solutions related to person-centered care address active engagement between the patient and the care team, such as goal setting and coordination of care. Solutions related to policies and approaches address ways that healthcare organizations can redefine practices across individual, organizational, and system levels to diminish stigma. Solutions related to education address opportunities to help stakeholders learn how to recognize and reduce stigma, including through the lens of harm reduction and trauma-informed care.

TABLE 4: OVERARCHING SOLUTIONS TO ADDRESS STIGMA

Person-Centered Care

- Promote person-centered care (e.g., use goal attainment scales) and educate providers to elicit patient-specific goals
- Bring payers, providers, peer advisors, and patients together through advisory panels/councils
- Require the inclusion of individuals with SUD/OUD experience as part of the care team for peer support

Policies and Approaches

- Examine and update organizational policies and practices that may unintentionally reinforce stigma
- Broaden the definition of a patient's support system to include community organizations, peer support groups, or any individual identified by the patient
- Establish an individual(s) who patients, patient support systems, or patient advocates can call for acute concerns or stigma-related challenges and barriers

Education

- Educate all employees of a healthcare system, patients, and community-based service organizations on the following:
  - » How stigma is perpetuated and how it can impact care
  - » The differences between withdrawal and physical dependence and SUD and how they impact a patient's quality of life and a patient's brain
  - » Harm reduction strategies that go beyond providing naloxone
  - » Treatment strategies that go beyond abstinence
  - » The importance and value of trauma-informed care
  - » The benefits of using person-first language (e.g., individuals with OUD) and refraining from using stigmatizing language (e.g., "user" or "addict")
  - » The positive and negative ways healthcare organizations may impact individuals who use drugs and their communities
- Utilize public campaigns to reduce stigma and support interventions and harm reduction services for OUD/SUD
  - » Leverage advocates such as local chaplains, recovery coaches, or respected community leaders to advocate and discuss anti-stigma tactics

Limited Resources

BARRIERS

Limited resources can impede the provision and quality of care that individuals with SUD/OUD and co-occurring BH conditions receive. Providers are often working within healthcare systems that are understaffed; have limited leadership buy-in and internal funding; and are managing patients with complex needs, which can make data collection an added burden. Resource constraints can ultimately prevent providers and healthcare systems from implementing evidence-based practices and/or other essential nonmedical services, such as case management or discharge planning. Measurement is best supported by a robust healthcare system that has the required personnel and budget to establish a strong data collection and reporting infrastructure.

SOLUTIONS

Table 5 describes three themes that address limited resources, along with examples of corresponding solutions. The solutions related to external funding address opportunities to secure and use revenue streams that support SUD/OUD treatment. Solutions related to partnerships and collaborations address ways for providers to expand services by working alongside a broad range of organizations. Solutions related to structural changes identify potential efficiencies in care processes that prevent gaps in care/treatment and reduce adverse events.

TABLE 5: OVERARCHING SOLUTIONS TO ADDRESS LIMITED RESOURCES

External Funding

- Apply for Medicaid 1115 waivers to expand covered services
- Seek and apply for local or state funds, or foundational grants, that cover the cost of providing MOUD, increase funding for SUD/OUD professionals, and allow the healthcare organization to move to a sustainable financing system
- Partner with payers to promote full coverage of SUD/OUD treatment, including harm reduction services, to eliminate and/or reduce patient co-pays
- Identify funding sources that can support or help minimize patients' social risk factors (e.g., unstable housing) to allow focus on recovery

Partnerships and Collaborations

- Partner with community-based organizations, including faith-based organizations, to expand resources and knowledge
- Increase the system's capacity by:
  - » using a hub-and-spoke model to expand access to care through satellite locations;
  - » engaging interns, medical and nursing students, social workers, psychologists, family and marital therapy students, and peer coaches; and
  - » utilizing online consultations with specialists to connect care teams with patients who present at the ED.
- Join an ACO, independent physician association (IPA), or another aggregated practice accountable for managing a population using APMs
- Partner with and advocate for federal and state regulators to remove barriers that impede service delivery and quality improvement activities

Structural Changes

- Increase the number of buprenorphine prescribers, including in underserved areas, and increase the number of patients each waivered provider can treat
- Examine current staffing models and identify whether patient follow-up processes are clearly defined, and if not, create a task force to create processes and educate staff
- Establish sufficient time for clinicians to deploy best practices, implement person-centered care, gather documents, and discuss care goals
- Assess internal barriers for hiring staff with the necessary expertise (e.g., clinical social workers, addiction and treatment specialists, and peer support specialists) and make the case for resources to executive leadership

Payment Challenges

BARRIERS

Challenges related to payment often exist in tandem with the previous barrier (i.e., limited resources) and have far-reaching impacts. Payment challenges prevent providers from offering services and patients from accessing the care they need.[128] Reimbursement structures are limited for SUD/OUD interventions and harm reduction services, which ultimately reduces access to these services. Individuals with SUD/OUD may lack or have limited insurance coverage for services and medications, and providers may face complex systems that make reimbursement or coverage challenging. Silos between physical and behavioral care exacerbate the complexity of payment processes and protocols, which can make obtaining referrals or continuity of care challenging.

SOLUTIONS

Solutions to address payment challenges are grouped into three themes, as described in Table 6. Solutions related to parity in reimbursement and coverage address strategies to mitigate financial barriers to care. Solutions related to expanded resources address opportunities to improve access to care. Solutions related to continuity of care address ways that care teams and technology can improve communication about patient care.

TABLE 6: OVERARCHING SOLUTIONS TO ADDRESS PAYMENT CHALLENGES

Parity in Reimbursement and Coverage

- Expand methadone maintenance coverage to commercial insurers
- Ensure pharmacy coverage for all forms of MOUD
- Provide reimbursement to support complex discharge planning, transitions of care, and care coordination services
- Invest in reimbursement parity for SUD/OUD treatment activities and harm reduction strategies
- Increase flexibility of reimbursement mechanisms to align better with patient needs and clinical presentations (e.g., bundled payments to cover complex and co-occurring conditions, Medicaid 1115 waivers to improve flexibility)
- Expand telemedicine to include reimbursed case management and other services that address housing, transportation, and other SDOH

Expanded Resources

- Educate patients and providers on payment structures, benefits, and parity to make navigation of complex systems easier
- Improve coordination between healthcare SUD/OUD services and the criminal justice system
- Create a 24/7 network that provides care beyond regular business hours and includes access to specialists, mental health crisis services, and case management
- Support and implement no-wrong-door policies

Continuity of Care

- Create a universal referral process that uses established standards (e.g., Fast Healthcare Interoperability Resources [FHIR] and United States Core Data for Interoperability [USCDI]) to facilitate interoperable communication among the diverse providers involved in the referral process
- Establish an accountability program or attribution model that assigns accountability to all providers who co-manage a patient with an anchor provider (e.g., primary care provider)

Data Inconsistency and Limitations

BARRIERS

Data inconsistency and limitations have led to challenging data collection processes, poor data quality, and a lack of available patient-level data on diagnosis, medication prescription and administration, and treatment. Many factors result in poor data, including the lack of consistent guidance on how stakeholders can be accountable for collecting, verifying, and storing high quality data. Inconsistencies can exist at the individual level in which providers may collect more information than is necessary, or patients may experience distrust or reporting burden. Larger systematic inconsistencies can exist between the prescriber shown on the data report and the individuals making prescription decisions or having incomplete data due to differences in payment methods used by a patient. Privacy concerns can also create challenging scenarios and cause gaps in a patients' medical records.

SOLUTIONS

Solutions to address data inconsistency and limitations fall within two themes, as described in Table 7. Solutions related to integration of systems address interoperability of data across providers, health systems, and payers, while solutions related to standardization address opportunities for diverse stakeholders to create and utilize standard practices for information sharing.

TABLE 7: OVERARCHING SOLUTIONS TO ADDRESS DATA INCONSISTENCY AND LIMITATIONS

Integration of Systems

- Integrate EHR systems across settings so that information is available to more providers
- Standardize existing EHR data infrastructure (e.g., collection and storage of standardized data elements) to allow for better outcome tracking and measurement
- Establish all-payer claims databases and registries with consistent and up-to-date information from EHRs and other data resources that can allow for more holistic measurement
- Assign an "anchor provider" who takes responsibility for a population with a specific diagnosis by co-managing care with specialists and other providers to ensure the patients' needs are met
- Use an EHR system that all care team members can use to link data and patient information, identify high-risk uses of illicit substances, and help mitigate use or harm

Standardization

- Include patients in the measure development process to ensure measures yield meaningful outcomes that can be used for accountability
- Create accountability through regulatory measures and payment processes
- Create incentives to encourage EHR vendors to cohesively work toward standardized data specifications and other aspects of interoperability
- Incentivize healthcare organizations to participate in activities that reduce burden, decrease internal resource competition, and increase measurement
- Create patient-generated surveys and leverage patient registries
- Create hybrid measures using claims and clinical data that provide insights into unique challenges of this population
- Standardize systems and handoff processes to allow claims and clinical data to be interoperable and make it easier for data to follow the patient should they change payers or care settings

Rapidly Evolving Measurement Landscape

BARRIERS

The healthcare system is evolving and requires new and better data systems to support the development of quality measures. This rapidly evolving measurement landscape poses a barrier to the quality of the care patients receive, as healthcare organizations may not be equipped or prepared to implement new measures. New measures can require amendments to network contracts, which require time and resources. When a new measure is established, multiple data sources may be needed for each quality measure (e.g., enrollment, medical claims, and pharmacy claims), which can create a reporting burden for providers and administrative staff. Reporting burden is further exacerbated by the challenges related to selecting, implementing, and using validated PRO scales for data collection. Lastly, providers may have limited knowledge on measurement and data science and may not understand the full value that measures add to quality of care.

SOLUTIONS

Two overarching themes and their related solutions address the rapidly evolving measurement landscape, which are described in Table 8. Solutions related to education address ways that quality measurement can be incorporated into academic and on-the-job training. Solutions related to the expansion of collected data address ways to incorporate different types of information into the measurement of SUDs/OUD treatment.

TABLE 8: OVERARCHING SOLUTIONS TO A RAPIDLY EVOLVING MEASUREMENT LANDSCAPE

Education

- Incorporate information on quality measures and the measure development process into residency and pre-graduate level provider programs
- Engage patients, patient advocates, and peer navigators in measure development and advisory groups to inform measure development
- Educate practicing providers on current SUD/OUD measures and data elements being collected to highlight how measures add value and support better approaches to care
- Create a continuous education curriculum that includes training on measurement-based and outcome-driven care

Expansion of Data Collected

- Ensure all medications administered during a hospitalization are reflected in the EHR
- Obtain funding to support the development of patient-generated surveys, which will help identify and improve the gaps in care
- Use validated patient-reported outcome measures (PROMs) at beginning of SUD/OUD and mental health-related interventions at standardized, incremental time periods

Case Exemplar Selection Process

The Committee developed three case exemplars to provide more detailed guidance on implementing the Opioids and Behavioral Health Measurement Framework. To identify the case exemplars, the Committee sought scenarios that showcase the following:

- **Prevalent challenges or barriers in SUDs/OUD and behavioral healthcare pathways**
- **Challenges, barriers, or performance gaps that can be attributable to a known entity and can be addressed**
- **Diversification of settings that show variation in performance and can be applicable to many stakeholders**

Each case exemplar begins with a clinical narrative for one measurement framework domain that showcases common challenges and barriers experienced by stakeholders in a healthcare setting. This approach allows readers to apply their own unique experiences to the framework. Following the narrative, each case exemplar lists a series of barriers and solutions. This is followed by a table that identifies broad categories and specific examples of solutions that stakeholders can implement to overcome the barriers identified. Where feasible, the strategies include relevant existing measures or measure concepts to showcase the framework in action.

Case Exemplar: Equitable Access Domain

Case Narrative: Equitable Access

The patient is a 32-year-old White, homeless male with a history of severe OUD, frequent methamphetamine use, and bipolar affective disorder. The patient also has a family history of SUD/OUD. The patient was brought to the local ED, which he has frequented various times in the past few years, via Emergency Medical Services (EMS) with an abscess on his right forearm, diaphoresis, and a fever of 104°F. The ED is exceptionally busy and crowded, with a long wait time for ED and inpatient beds. The ED is also short staffed and does not have a specific provider to care for individuals presenting with SUD.

The patient has erythematous streaks on his forearm and reports he feels light-headed and nauseous. The patient is started on intravenous (IV) antibiotics after blood cultures are sent to the laboratory. Upon reviewing the patient's medical record, the resident in the ED identifies that the patient was revived at the ED six months ago after an opioid overdose. After that visit, the patient was referred for OUD treatment but states he was never able to be seen by the treatment center and could not afford the transportation to visit the center frequently. He does not have any family support to assist him with transportation. The patient reports also going to another hospital within the last year, but the resident is unable to access any records or data from that visit.

The resident asks the attending physician whether they can start the patient on buprenorphine, but the resident is told they cannot keep the patient long enough to enter moderate withdrawal before induction due to limited beds. Given how busy the physicians are, no one has an in-depth discussion with the patient about his treatment goals and preferences. The patient is slated to be discharged and a social worker provides a printout listing nearby methadone program addresses and phone numbers; however, no one verbally communicates about the information on the printout with him. The patient is unclear on how much money the treatment programs will cost him and does not think he can afford treatment, nor does he have the finances to afford transportation to get to the program. The patient ultimately decides not to pursue further treatment after he is discharged from the ED with a prescription for antibiotics.

Case Exemplar Barriers and Solutions: Equitable Access

BARRIERS

The case exemplar illustrates four fundamental barriers that prohibit individuals with SUD/OUD with co-occurring BH conditions from accessing adequate and timely care: (1) lack of interoperability, data, and data collection infrastructure; (2) limited workforce, resources, and education; (3) cost, or perceived cost, and limited access to treatment services; and (4) stigma. The following list provides examples of alternative approaches, strategies, and solutions the stakeholders within the case could take to overcome these barriers:

SOLUTIONS

Solutions for the lack of interoperability, data, and data collection infrastructure:

- The hospital implements a communication protocol and data sharing agreements between ED and hospital providers, EMS, and integrated case management system, including participation in a Health Information Exchange (HIE).
- The hospital captures better data points to inform treatment approaches through the following items:
  - » Measure concepts, such as the percentage of individuals with SUD/OUD and mental health conditions who have access to home and community-based services (e.g., peer support, care coordination, and nonmedical transportation); the percentage of individuals with access to holistic pain management (e.g., physical therapy, occupational therapy, integrated care, and complementary care); and the percentage of individuals with SUD/OUD and mental health conditions who receive case management services that are covered by insurance

Solutions for limited workforce, resources, and provider education:

- The provider coordinates with an in-house social worker, who arranges a warm handoff that same day with the local treatment center and other appropriate resources based on the patient's preference.
- The case worker connects the patient with a member of the hospital's peer support group, who meets with the patient prior to discharge.
- The hospital contracts with a 24/7 network to provide access to specialists and/or providers with SUD expertise.
- The hospital develops a program that supports buprenorphine induction in the ED prior to discharge.

Solutions for cost, or perceived cost, and limited access to treatment services:

- The care team engages in shared decision making with the patient to discuss the patient's unique treatment goals prior to giving him information on specific treatment programs.
- The patient is initiated on appropriate treatment (e.g., buprenorphine) prior to discharge while taking into account the time period between discharge and the follow-up appointment with the treatment center.
- The social worker addresses the transportation limitations and provides options for virtual OUD treatment services, and the case worker offers the patient a list of community resources that are near his preferred location.
- The hospital expands telemedicine offerings to include case management services that address housing, transportation, and other SDOH.
- The hospital establishes a no-out-of-pocket-cost buprenorphine Bridge Clinic in the hospital.

Solutions for stigma:

- The hospital implements antibias and anti-stigma training for ED staff and providers who may come across individuals with SUDs/OUD and co-occurring BH conditions to address the overlapping stigmas that exist for SUD, SDOH, and vulnerable populations.
- The hospital facilitates opportunities for trainees to gain experience in OUD/SUD treatment and care provision in outpatient drug treatment settings.
- The hospital provides continuing education credits to staff to increase knowledge and awareness of diversity, anti-stigma, and antibias, including grand rounds that feature individuals with SUD/OUD and cases of successful treatment.

Care Exemplar: Clinical Interventions Domain

Case Narrative: Clinical Interventions

The patient is a 47-year-old non-Hispanic, African American woman with unstable housing presenting to the ED with shortness of breath, tachycardia, and altered mental status late at night. Her chest x-ray was sent to radiology and showed an enlarged heart. During her first night in the hospital, the patient became increasingly irritable, diaphoretic, and nauseous. She had difficulty falling asleep and reported lower back and leg pain to the overnight nurses, asking for opioids for pain relief. While the patient is experiencing withdrawal, the care team does not accurately recognize the symptoms, nor do they request a pain consult for the patient. Instead, the team mistakenly believes she is stubborn and irritable. By morning, her cardiopulmonary workup revealed signs of congestive heart failure, and during morning rounds, her team found "track marks" on her arms. The nurse realizes the patient was likely in opioid withdrawal, but the patient went untreated, and no addiction medicine consultation was requested.

The patient reports she became depressed after her mother's death several years ago and began to occasionally use heroin with her new boyfriend, first sniffing, and then ultimately injecting up to five to six bags a day within a year. The physician makes a mental note that the heroin was likely adulterated with fentanyl but does not mention this to the patient. The patient also shared she has had a long history of depression since childhood and chronic back pain following injuries from a fall. She has never received any mental health services for her depression. The patient revealed that six months ago, she entered a methadone treatment plan, which was initially successful, but she stopped treatment due to worsening depression. Despite being referred by the same ED system, there was limited information and only one BAM screening in the patient's medical history. The results of the BAM were not acted on, and there was no mention of follow-up regarding her referral.

The patient reports wanting to attempt another form of medication treatment for OUD, as she found it challenging to get to the methadone program each day. While the inpatient physician is considering prescribing her buprenorphine, he is worried that her heart condition is a contraindication. The physician also only believes she can afford a methadone maintenance program; however, the patient's treatment and payment options were not explored, nor were her goals discussed at any point. The patient is monitored for another night and is sent home with an appointment in the cardiology clinic for next month and a list of nearby meetings for an abstinence-only treatment program. No additional follow-up was conducted.

Case Exemplar Barriers and Solutions: Clinical Interventions

BARRIERS

The case exemplar illustrates four fundamental barriers that prohibit individuals with SUD/OUD and co-occurring BH conditions from receiving appropriate and timely clinical intervention: (1) limited MBC and validated assessment tools, (2) inadequate use of evidence-based treatment for SUDs/OUD and co-occurring BH conditions, (3) lack of shared decision making and patient education, and (4) insufficient follow-up processes and strategies. The following list provides examples of alternative approaches, strategies, and solutions the stakeholders within the case could take to overcome these barriers:

SOLUTIONS

Solutions for the limited use of measurement-based care and validated assessment tools

- The provider administers the BAM every 1-3 months to monitor the patient's progress and discusses which items the patient may be struggling with to tailor clinical interventions in real time.
- The hospital assesses MBC:
  - » Existing quality measures, such as Adult Depression: PHQ-9 Follow-Up at Six Months and/or Assessed for SUD Treatment Needs Using a Standardized Screening Tool
- Measure concepts, such as improvement or maintenance of functioning for dual-diagnosis populations (e.g., through use of the BAM or Patient-Reported Outcomes Measurement Information System [PROMIS]) and/or the percentage of individuals with SUD/OUD and a co-occurring mental health condition identified as having social risk factors who have demonstrated improvement in clinical status within a given time frame

Solutions for the inadequate use of evidence-based treatment for SUDs/OUD and co-occurring behavioral health conditions

- The provider is notified via a flag in the EHR of the patient's depression history, which the provider is then able to address through a referral and transition plan, which they give to the patient and with her consent, her peer support.
- The provider conducts a screening early in the intake process, which reveals the patient is in withdrawal, subsequently triggering adequate treatment of her symptoms.
- The hospital drives improvement in care by measuring and evaluating the availability and use of MOUD using measure concepts, such as the percentage of individuals with identified SUD/OUD and mental illness with MOUD initiated in the ED.

Solutions for the lack of shared decision making and patient education

- The provider discusses the patient's goals regarding harm reduction, substance use, personal health, and her ideal outcomes of care and creates a plan and interventions centered on those goals.
  - » Measure concepts, such as PROs on whether the patient feels engaged and heard
- The hospital uses peer navigators to guide the patient through transitions of care and follow-up planning.
- The provider educates the patient on harm reduction strategies before discharge (e.g., requesting an addiction consult service to provide overdose education and distribute naloxone to the patient prior to discharge).

Solutions for insufficient follow-up processes and strategies

- The provider starts the patient on buprenorphine before she leaves the ED, and the social worker schedules her next treatment at a local treatment center.
- A hospital case worker is assigned to the patient, alongside a peer navigator, who ensures the patient understands and can follow through with the follow-up plan.
- The case worker connects the patient to services that can address the patient's housing status.
- The care team asks the patient who they consider their support network, and with the patient's permission, the team provides the identified individual(s) with the follow-up plan.
- The EHR alerts the case worker to contact the patient within a week following discharge to confirm whether the patient followed up with a referral and whether any support is needed.
- The hospital monitors and tracks follow-up processes and strategies.
  - » Existing quality measures, such as Discharged to the Community With Behavioral Problems

Case Exemplar: Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions Domain

Case Narrative: Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions

The patient is a 62-year-old married Hispanic woman with three grown children and four grandchildren. She retired from working at a local preschool a decade ago and lives in a rural area. She has a history of rheumatoid arthritis, asthma, general anxiety disorder, and long-term opioid use. She is currently taking high-dose, extended-release oxycodone three times a day with morphine as needed for breakthrough pain. Despite long term use of a high-dose, extended-release opioid, and her other risk factors, no one gives the patient a naloxone kit or discusses overdose prevention with her or her husband.

She is regularly seen in the nearby Federally Qualified Health Center (FQHC) for her primary care and meets with a rheumatologist, who is part of a separate healthcare system, every 6 to 12 months to review her pain regimen. There is a long wait to be seen by her rheumatologist, and the patient often needs to fill her pain prescriptions early but cannot get through to the front desk on the phone. Her anxiety has worsened over the past year as two of her children, along with all her grandchildren, moved further away and she found herself in prolonged periods of loneliness and with a lack of family support. Her husband and children are not actively engaged as partners in her care.

Although she saw a psychiatrist 10 years ago for anxiety, she has not taken anxiety medication regularly since her retirement, and the nearby FQHC no longer has a full-time mental health clinician on staff. She was referred to a psychiatric nurse practitioner (NP) over telehealth and had a virtual intake conducted; however, her Wi-Fi often cut out, she could not understand the clinician well, and she had unanswered questions about medication options. The NP does not have access to the medical records, and given the connectivity issues, the NP did not hear the patient report she is on oxycodone. The NP discussed prescribing a selective serotonin reuptake inhibitor (SSRI) or clonazepam. The patient chose clonazepam since the NP said it will help her feel better faster. There was no discussion of any behavioral interventions.

Since the patient is receiving care at three separate, uncoordinated systems, no one recognizes that she is now on opioids and benzodiazepines. She also often uses all the morphine within the first week of picking up the refill, and as a result, she has been trying to augment it with other unknown pain relief options. She gets pills from a neighbor who she occasionally visits when she feels especially anxious or lonely. The patient says she would like to take fewer medications but is scared the pain will get worse if she makes any changes.

Case Exemplar Barriers and Solutions: Integrated and Comprehensive Care for Concurrent Behavioral Health Conditions

BARRIERS

The case exemplar illustrates four fundamental barriers that prohibit individuals with SUD/OUD and co-occurring BH conditions from receiving integrated and comprehensive care: (1) care is not tailored to individualized patient needs, (2) silos between physical and mental care, (3) limited or nonexistent interaction and engagement of the patient's support system, and (4) lack of connectivity. The following list provides examples of alternative approaches, strategies, and solutions the stakeholders within the case could take to overcome these barriers:

SOLUTIONS

Solutions for when care is not tailored to individualized patient needs

- The hospital has a system in place to obtain feedback on the patient experience and cultural competencies.
  - » Measure concepts, such as the percentage of patients who reported that their mental health and SUDs/OUD treatment was coordinated or the patient's experience of care for all patients seen for mental health and substance use care
- The provider conducts regular screening to help identify solutions for instances in which medications are not being taken as prescribed.
  - » Existing quality measures, such as Evaluation or Interview for Risk of Opioid Misuse
- The provider raises and discusses the patient's individual risks and circumstances, care decisions, and potential harm reduction services based on identified risks.
  - » Existing quality measures, such as Risk of Continued Opioid Use (COU)
- The hospital has an "anchor provider" who coordinates care for a population with a specific diagnosis and helps to ensure that co-managing providers (e.g., specialists) are accountable for meeting the patients' needs.

Solutions for silos between physical and behavioral healthcare

- The health system has an interdisciplinary team who conducts case reviews across specialists and disciplines (e.g., pain management, psychiatry, rheumatology, and pharmacy) for patients with SUDs/OUD and co-occurring BH conditions.
- The health system uses information systems, including EHRs, that facilitate collaboration across physical and mental health services and contribute to improved coordination processes.
  - » Measure concepts, such as the percentage of providers who have a shared/integrated treatment plan between general health and BH providers to track progress
- The health system provides early career training and ongoing professional education to foster a culture of integrated care as a standard practice among its providers.
- The health system uses health plan data and a prescription drug monitoring program (PDMP) to identify polypharmacy risks and/or high-risk medication regimens, and the system alerts and informs the telehealth provider.
- The hospital system maintains documentation of medication reconciliation and adverse drug reaction (ADR) monitoring.
  - » Existing quality measures, such as PDMP_Benzo: Benzodiazepine: Prescription Drug Monitoring Program (PDMP) Checks or Safe Opioid-Prescribing Practices or **NQF #3389**: *Concurrent Use of Opioids and Benzodiazepines*

Solutions for no engagement of patient's support system

- The provider appoints a patient advocate/peer navigator to assist the patient with a follow-up appointment and interpretation of medical information.
- Both the provider and peer navigator engage members of the patient's chosen support network (e.g., her husband, children, and/or neighbor) by answering their questions and providing them with relevant information (e.g., transition plan) to help the patient.
- The hospital collects, disseminates, and routinely updates information on resources and services that can help patients with SUDs/OUD and co-occurring BH conditions (e.g., support groups, faith-based organizations).
- The organization has an established group of volunteers, including those with lived experiences, who are willing and able to talk with patients who are feeling lonely.

Solutions for the lack of connectivity

- The provider asks about the patient's resources and telehealth limitations early to establish and use the best method of care (e.g., phone call, video call).
- The provider trains the patient when a new care method/platform is implemented (e.g., teaches her to use the video conferencing platform).
- The telehealth provider communicates with an "anchor provider" to acquire access to the complete health record and explore alternative methods for speaking with the patient.

Discussion

The Opioids and Behavioral Health measurement framework aims to improve the prevention and monitoring of opioid-related overdoses and mortality among individuals with BH conditions who also use SSSOs. However, the Committee and NQF recognize there are growing complexities and evolving practices in this field. While readers of this report should monitor ongoing changes in policy legislation and recommendations to further aid implementation of the framework, next steps can help advance this work.

Leveraging the Measurement Framework in a Coordinated Approach

The measurement framework is intended to support a comprehensive measurement approach for individuals with polysubstance use involving SSSOs who have co-occurring BH conditions. While specific measures and measure concepts can be used for either accountability or quality improvement, quality measures related to SUDs/OUD are a critical mechanism to holding care providers, payers, and policymakers accountable for providing optimal care for individuals with SUDs/OUD and BH 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 SUDs/OUD and BH conditions, leaders should ensure selected measures encompass equity and person-centeredness, with specific attention to areas in which priority populations intersect (e.g., individuals who are Black, male, and involved with the justice system or Veterans with cognitive and physical disabilities).[129] Given the disparities that exist for individuals with SUDs/OUD and BH conditions, equity should be foundational in ensuring priority populations are obtaining services that promote better outcomes and reduced mortality.

To further understand and target disparities that exist for individuals with SUDs/OUD and BH 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 is used for considering patient-related factors when computing performance measure scores.[130] Given the complexity of individuals with SUDs/OUD and co-occurring BH conditions, failure to utilize 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. Further, risk adjustment can allow for a clearer pathway to understanding the needs of people with SUDs/OUD and co-occurring BH conditions. Potential social risk factors often adjusted for include disability, race, ethnicity, insurance type/status, relationship status, SES, income, disadvantaged areas, and rurality/urbanicity. 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 a risk factor for SUDs in a given community.[131]

While an overall focus on the measurement of BH services is appropriate, organizations may also consider risk stratification by the type of provider to understand areas in which 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 the implementation of the measurement framework and to advance measurement for the population of interest, stakeholders should assess how to best overcome barriers to care for individuals with SUD/OUD and co-occurring BH conditions. Common barriers to care, including insurance coverage disruptions, burdensome regulations or policies, and financial disincentives, often limit the availability and/or provision of evidence-based services for individuals with SUDs/OUD and co-occurring BH conditions, especially in under-resourced areas. States may submit proposals for Medicaid Section 1115 demonstration waivers, and many states currently have demonstration projects underway that aim to improve care for individuals with SUD and/or BH conditions without increasing overall costs.[132] Examples of current demonstration projects include reimbursing for care coordinators and transportation services and expanding coverage for SUD treatment-related inpatient admissions in settings previously subjected to Medicaid's IMD exclusion.[133] Opportunities exist to ensure that all states with Medicaid Section 1115 demonstrations are making meaningful progress, especially as it relates to access and the coordination of clinical and community-based services.[108]

To support integrated and comprehensive care for individuals with SUDs/OUD and co-occurring BH conditions, diverse stakeholders must overcome structural barriers to coordinated care, using approaches such as co-location of SUD and BH services, reimbursement for peer navigation and other nonmedical services, and bundled payment plans that pay capitated rates rather than fee-for-service (FFS) schedules that disallow reimbursement for adjunctive services that may enhance treatment adherence and retention. There is potential to strengthen payment and benefit parity across physical healthcare, behavioral healthcare, and SUDs/OUD treatment, and it is important for providers (including behavioral healthcare providers working in general medical care settings) to have adequate payment and reimbursement rates. In addition to payment structures, payers have an opportunity to address overdose and mortality by supporting data continuity and sharing across health plans. EHRs may also serve as a tool to support data sharing, considering they can track both medical and BH information for an individual. The use of integrated treatment plans between physical and behavioral healthcare providers may also provide an opportunity to support data continuity and sharing.

Coordinated efforts are critical to providing life-saving physical, mental, and emotional health support to individuals facing a BH crisis. The newly approved 988, three-digit crisis phone number may improve integration and care coordination.[134] In 2022, when individuals with an urgent mental health need call 988, they will be connected to trained crisis workers who can offer support, crisis intervention, and safety planning.[134] The shift to 988 supports the movement from a law enforcement and justice system response to a response focused on immediately connecting individuals to care when they are in suicidal, mental health, and substance use crises.[134] As first responders, paramedics and EMS also play an important role in a coordinated approach to measurement and care for individuals with SUDs/OUD and co-occurring BH conditions. Obtaining data on the type of emergency response, the diagnosis, and any medications administered in the field can be challenging. Consistent and thorough documentation of these critical aspects of care is needed to better understand risk profiles for patients and related health outcomes. When data are available, they can be difficult to interpret. Standardization of the reporting of EMS events could support measurement efforts and can help to identify which events are related to substance use and/or overdose.

There is a need for improved 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.[80] Moreover, criminal justice involvement is a missed opportunity to ensure continuous insurance coverage and to engage high-risk individuals in comprehensive care.[129] While Medicaid expansion has been associated with improving rates of MOUD post-incarceration,[135]

enrollment assistance programs are likely necessary to increase rates of effective insurance coverage at release.[89]

There are unique challenges and opportunities for rural and frontier communities. Notably, rural and frontier counties often lack buprenorphine-waivered physicians, which limits access to evidence-based SUDs/OUD treatment. Although 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. Stakeholders should consider how to optimize care for remote individuals, especially those with co-occurring SUDs/OUD and BH conditions 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.[136]

Lastly, potential exists to grow the use of evidence-based treatment and harm reduction services. For example, education and training programs may support the use of evidence-based treatment for individuals with SUDs/OUD and ensure care providers are trained on the value of integrated and comprehensive care. 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.[137] Professional societies and training programs can encourage, or even require, trainees to treat patients with MOUD during their training. If providers 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., state laws against syringe exchanges), reimbursement barriers (e.g., harm reduction services considered out of network), and geographic and transportation-based barriers (e.g., lack of harm reduction services in rural communities). Because of these barriers, traditional healthcare, criminal justice, and SUD treatment settings do not have clear linkages and referral networks to accessible harm reduction services. To support access to and measurement of harm reduction activities, payers can explore their ability to reimburse for the provision of harm reduction services, including syringe service programs, naloxone distribution and overdose education, and/or drug testing services.

Conclusion and Next Steps

The U.S. continues to face challenges related to combatting the evolving opioid and SUD crisis. The crisis, which has entered a fourth wave driven by psychostimulant involvement, has been magnified by the impacts of the COVID-19 pandemic. Individuals with SUDs/OUD and co-occurring BH conditions are particularly vulnerable to overdose and mortality resulting from substance use.

A coordinated care and measurement approach can support the almost 10 million adults with SUDs/OUD and co-occurring mental health disorders.[138] Recognizing the importance, the Committee identified a series of measurement gaps and priorities relevant to these populations 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 BH conditions. The measurement framework reflects the intricate relationship between many aspects of care, including equitable access to care, evidence-based clinical interventions, and coordinated and integrated care.

Equitable Access is a foundational domain within the measurement framework because without access, individuals cannot obtain the services that protect life and improve outcomes. The next domain, Clinical Interventions, builds on a foundation of accessible, equitable, and evidence-based services. While access to evidence-based clinical interventions may exist for some, the availability of integrated and comprehensive care is essential for all individuals with SUDs/OUD and co-occurring BH 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 SUDs/OUD and co-occurring BH 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.[131]

The Committee sought to drive implementation of the measurement framework by creating guiding principles, identifying barriers and solutions, and generating a use case to demonstrate the framework in action. While these additions identify critical considerations, the Committee encourages additional work. Future work could identify challenges and gaps faced by each of the identified key stakeholders and provide tailored strategies to help them overcome these barriers. More work to increase implementation can ensure that individuals with SUDs/OUD and co-occurring BH conditions receive equitable and safe care from any service they seek. In addition, future work should consider how to decrease measurement burden through the harmonization of existing and new measures, as well as how to incorporate potential new measures on person-centered planning, person-centered outcomes, and community resilience and other community level factors. With more than 290 individuals dying each day from a drug overdose—and with nearly 80 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.[1,2,11] The measurement framework and its measure concepts provide a starting point for the measure developer community, researchers, healthcare providers, social service providers, the criminal justice system, community-based organizations, and federal agencies to collectively address overdose and mortality for individuals experiencing SUDs/OUD with co-occurring BH conditions. Using quality measures that align with the coordinated measurement framework, stakeholders can assess opportunities for improvement in the management of patients and clients with SUDs/OUD and co-occurring

BH conditions. Beyond the development of quality measures themselves, 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.

RESOURCES

MEASURE INVENTORY

The measure inventory contains a list of measures found by National Quality Forum (NQF) that were used by the Opioids and Behavioral Health Committee to inform the Measurement Framework.

MEASURE CONCEPT INVENTORY SCAN

Includes measure concepts that 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**

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.

PUBLIC COMMENTS AND COMMITTEE RESPONSES

REFERENCES

Committee Members, CMS Liaisons, Federal Liaisons, and NQF Staff

COMMITTEE MEMBERS

Laura Bartolomei-Hill, LCSW-C (Co-Chair)
Social Worker, University of Maryland Medical Center
Baltimore City, MD

Caroline Carney, MD, MSc, FAMP, CPHQ (Co-Chair)
President, Magellan Behavioral Health and Chief Medical Officer, Magellan Health
Phoenix, AZ

Jaclyn Brown
Ambassador, Shatterproof
Mesa, AZ

Mary A. Ditri, DHA, FHELA, FACHE
Vice President, Community Health, New Jersey Hospital Association
Princeton, NJ

Carol Forster, MD
Executive Director, Med Pharm Consulting, PLLC
Herndon, VA

Anita Gupta, DO, MPP, PharmD
Adjunct Assistant Professor, Adjunct, Department of Anesthesiology and Critical Care, Johns Hopkins School of Medicine
Baltimore, MD

Barbara Hallisey, MSW, LCSW
Chief of Clinician Programs, Eastpointe Human Services
Beulaville, NC

Lisa Hines, PharmD, CPHQ*
Chief Quality & Innovation Officer, Pharmacy Quality Alliance
Alexandria, VA

Brian Hurley, MD, MBA, DFASAM
Medical Director of the Division of Substance Abuse Prevention and Control, Los Angeles County Department of Public Health
Los Angeles, CA

Margaret Jarvis, MD
Chief, Addiction Medicine, Department of Psychiatry, Geisinger Health System
Waverly, PA

Sander Koyfman, MD
Chief Medical Officer, Athena Psych
New York City, NY

Richard Logan, PharmD
Partner, Logan & Seiler, Inc.
Charleston, MO

Perry Meadows, MD, JD, MBA
Medical Director Government Programs, Geisinger Health System
Danville, PA

Susan Merrill, MSW, LCSW
Social Worker, New Mexico Department of Health, Family Health Bureau, Children's Medical Services
Santa Fe, NM

Pete Nielsen, MA
President & Chief Executive Officer, CCAPP-California Consortium of Addiction Programs and Professionals
Sacramento, CA

Rebecca Perez, MSN, RN, CCM
Senior Manager of Education and CMSA Foundation Executive Director, Case Management Society of America
High Ridge, MO

Rhonda Robinson Beale, MD
Senior Vice President, Deputy Chief Medical Officer of Mental Health Services, United Health Group
Eagle, ID

Tyler Sadwith*
Technical Director, Technical Assistance Collaborative
Boston, MA

Eric Schmidt, PhD
Supervisory Health System Specialist, Veterans Health Administration Office of Performance Measurement
San Jose, CA

Richard Shaw, LMSW, CASAC
Coordinator of Dual Recovery Services, Tompkins County Mental Health Department
Ithaca, NY

Ben Shirley, CPHQ
Performance Measurement, Pharmacy Quality Alliance
Alexandria, VA

Sarah J. Shoemaker-Hunt, PhD, PharmD
Principal Associate/Health Services Researcher, Abt Associates
Cambridge, MA

Eri Solomon
Lead Organizer, Jewish Alliance for Law and Social Action (JASLA)
Boston, MA

Elizabeth Stanton, MD, MBA
Chief Medical Officer, Partners Health Management
Gastonia, NC

Steven Steinberg, MD
Family Medicine Physician, Southern California Permanente Medical Group
Panorama City, CA

Y. Claire Wang, MD, ScD
Associate Deputy Director, Division of Substance Abuse and Mental Health, Delaware Department of Health and Social Services
New Castle, DE

Sarah Wattenberg, LCSW-C
Director of Quality and Addiction Services, National Association for Behavioral Healthcare
Washington, DC

Jameela Yusuff, MD, MPH, MSHCDL, FACP
Chief Medical Officer, University Hospital at Downstate, (Downstate Health Sciences University)
Brooklyn New York

CMS LIAISONS

Michael Paladino
NQF Opioids and Behavioral Health Task Order Contracting Officer's Representative (COR)

Sophia Chan, PhD
NQF Risk Adjustment COR

Helen Dollar-Maples, BSN, RN
Director, Division of Program and Measurement Support

Gequencia Polk, MBA
NQF Indefinite Delivery, Indefinite Quantity (IDIQ) COR

FEDERAL LIAISONS

Girma Alemu, MD, MPH
Health Resources and Services Administration (HRSA)

Ellen Blackwell, MSW
Centers for Medicare & Medicaid Services (CMS)

Jennifer Burden, PhD
Department of Veterans Affairs (VA)

Laura Jacobus-Kantor, PhD
Department of Health & Human Services (HHS) Office of the Assistant Secretary for Planning and Evaluation (ASPE)

Joseph Liberto, MD
Department of Veterans Affairs (VA)

Margaret L. O'Brien, PhD, JD
Substance Abuse Mental Health Services Administration (SAMHSA)

Wesley Sargent, EdD, EdS, MA
Centers for Disease Control and Prevention (CDC)

John Snyder, MD, MS, MPH
Health Resources and Services Administration (HRSA)

Shawn Terrell, MSW, MS
Administration for Community Living

Jodie Trafton, PhD
Department of Veterans Affairs (VA)

NQF STAFF

Kathleen Giblin, RN
Senior Vice President, Emerging Initiatives

Allie Herr, MPH
Senior Managing Director, Emerging Initiatives

Meredith Gerland, MPH
Senior Director, Emerging Initiatives

Chuck Amos, MBA
Senior Director, Emerging Initiatives

Katie Berryman, MPAP
Director of Project Management, Program Operations

Monika Harvey, PMP
Project Manager, Program Operations

Carolee Lantigua, MPA
Manager, Emerging Initiatives

Debbie Olawuyi, MPH
Analyst, Emerging Initiatives

Mia Vanelli
Associate, Emerging Initiatives

Arthur Robin Williams, MD, MBE
Consultant

*These individuals participated in the first year of this project.

NATIONAL QUALITY FORUM
1099 14TH STREET, NW SUITE 500
WASHINGTON, DC 20005

https://www.qualityforum.org