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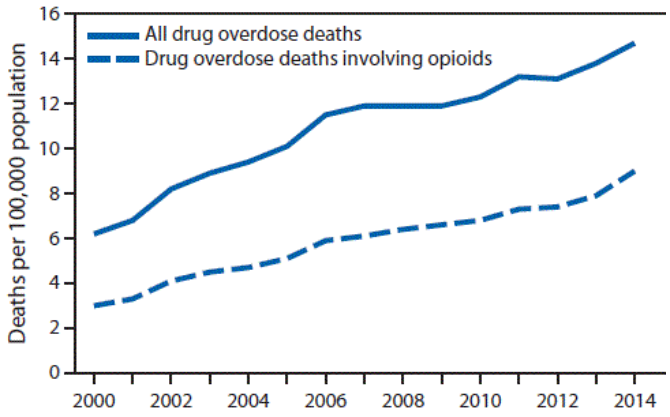
Identification of Substance Misuse In Primary Care

The current epidemic of substance misuse is well documented, with legal and illegal opioids receiving considerable attention. Drug overdoses are the leading cause of accidental death in the US. There is a strong association between mood, anxiety, and bipolar disorder and substance use disorders. Substance misuse over time worsens a patient's mental health symptoms. Patients benefit from early and accurate diagnosis. Routine use of a multidimensional (multi-condition) mental health assessment tool in primary care aids in identifying a wide variety of under-diagnosed mental health disorders, including substance use conditions. These multi-condition tools can also be used to monitor progress once treatment has begun.

FIGURE 1 **Drug & Opioid Drug Overdose Fatalities 2000-2014[1]**



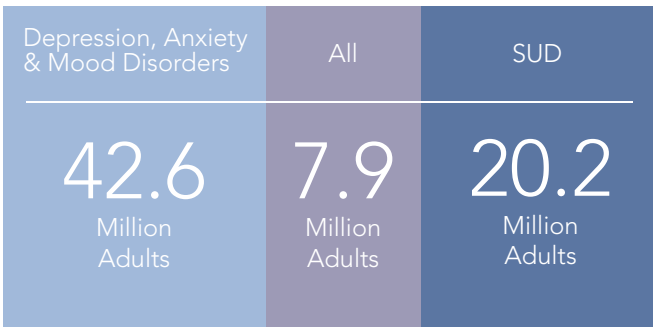
The well-publicized epidemic of drug misuse has brought with it an increase in deaths from heroin and prescription opioid overdose. According to the Centers for Disease Control and Prevention[1] (see Figure 1 above), the number of fatalities from opioid overdose has quadrupled in the past decade and a half, with illicit and prescription drug misuse each contributing to this surge in equal proportions. Drug overdose is the leading cause of accidental death in the U.S., with 52,404 lethal drug overdoses in 2015. Opioid addiction is driving this epidemic, with 20,101 overdose deaths related to prescription pain relievers, and 12,990 overdose deaths related to heroin in 2015.[2]

Figure 2 below, from SAMHSA's 2014 survey,[3] shows the prevalence of Substance and Alcohol Use Disorders (SUDs) in gray. The large overlap between SUDs and the most common mental health disorders, the light blue rectangle to the left, is noteworthy. Over 63 million Americans suffer from one or both of these two types of conditions. In a 2016 Blue Cross Blue Shield (BC/BS)[4] report looking at the lives of 40 million of its subscribers, anxiety and mood disorders were ranked among 200 common medical conditions as the number one contributor to lost years of life and poor overall health in the US. In this same report, SUDs were found to be the fifth largest driver of overall sickness and disability.

With a public health crisis of this size, primary care practitioners and healthcare policy-makers are challenged to find a solution. In the Surgeon General's 2016 report[5] on addiction, there is a call to institute prevention measures, aiming to avert the initiation of substance misuse and to catch it once it occurs at the earliest possible moment. Screening for the social and mental health-related antecedents to drug and alcohol misuse, as well as screening for nascent or ongoing misuse, are important components of the Surgeon General's recommendations.

The American Psychiatric Association's Practice Guide-

FIGURE 2 **SAMHSA's 2014 National on Drug Use & Health in the U.S.[3]**



lines for the Psychiatric Evaluation of Adults[6] recommends the assessment of patients for the use of tobacco, alcohol, and other substances and any misuse of prescribed or over-the-counter medications.

The national movement to integrate behavioral healthcare into primary care practices has been advanced as a critical access point for such screening. As part of the Behavioral Health Integration (BHI) effort, it is important to take away the right message from these studies.[7,8,9,10]

First, in absolute terms, the SUDs and mood and anxiety disorders are extremely widespread and impactful. Beyond the pain, suffering, and disruption to family and work life that are their more immediate effects, these conditions, ranked number one and number five overall, have dramatic and pervasive secondary effects on overall physical health. Second, the patterns observable in the BC/BS Health Index report[4] demonstrate that social and economic factors play an important role in the expression of these conditions, and that these socio-economic stressors play out in parallel, manifesting in mental distress or substance misuse or both. To manage SUDs in primary and specialty care, electronic assessments can serve as a starting point.[6] With the typical in-office screening, physicians find that many patients are reluctant to be honest when asked these questions face-to-face. Time constraints for the typical office visit add to the reluctance of diving into the details of these problems and understanding them within the context of a patient's culture, stage of life, and lifestyle.

In patients with substance misuse it is important to understand the role played by social distress and its mediation through symptoms like insomnia, anxiety, and depression. As the above SAMHSA[3] findings indicate, alcohol and substance misuse often begins with individuals trying to manage either incipient or burgeoning psychiatric symptoms, whether these symptoms comprise a diagnosable condition or merely exist in a subsyndromal form. A strong association between mood and anxiety disorders and SUDs has long been established in the literature.[11] What is perhaps less well appreciated is the particularly strong link between Bipolar Disorders and SUD. Merikangas et al[12] demonstrated in their 20-year prospective study that bipolar spectrum conditions have the strongest association with alcohol and benzodiazepine use disorders, while unipolar depression was associated strongly with only benzodiazepine dependence. Compared to those without a mood disorder, a diagnosis of bipolar disorder type II was found to bring with it a 9-fold increase in alcohol misuse and 21-fold increase in alcohol dependence. Maremmani et al[13] found that bipolar spectrum symptoms place former heroin addicts at the greatest risk for polysubstance abuse during ongoing opioid maintenance treatment. A similar conclusion was reached by Khazaal et al[14] in their study of temperament in alcohol and opioid addiction: bipolar symptoms, irritability and anxiety were all important risk factors among these individuals.

Swendsen et al,[15] in their 10-year prospective study, reported an extension of these findings to include a survey of anxiety as well as mood disorders. Here too, showing a strong link emerged between bipolar disorders and SUD, while a range of anxiety conditions was also found to have higher associations with SUD than did unipolar depression.

Over time, misuse of substances exacerbates the symptoms users are trying to improve. While several studies have documented the pernicious effects of substance misuse on mood disorders, two recent reports stand out. Kemp et al[16] found that SUD was implicated in a worsening course of bipolar disorder and, with it, resistance to treatment. And Jaffee et al[17] found that, among patients with bipolar disorder, the duration of alcohol and substance use was linearly correlated with an increased risk of an ensuing depressive episode.

In order to find meaningful misuse patterns, rather than counting glasses of vodka and puffs of marijuana, standardized questionnaires improve identification of risk for substance misuse.[8] Routine use of an electronic multi-condition assessment tool can focus attention not

only on substance misuse, but also on mood and anxiety symptoms from the mildest to the most severe. The multi-condition screening and assessment tool, the M3 Checklist, is designed to help clinicians find a wide range of mood and anxiety disorder symptoms — not just depression – while it also asks patients whether they have resorted to alcohol or drug use to manage some of their mood or anxiety symptoms.[18] The symptoms of stress and distress are the context within which querying for alcohol and drug use may best determine when patterns of use are problematic.

Furthermore, the M3 Checklist allows clinicians to track patients over time, each time asking about alcohol and drugs along with its survey of mood and anxiety symptoms. Being able to recognize the slow development of bipolar and anxiety symptoms, discoverable through this tracking, is an invaluable tool in our effort to manage substance misuse. One version of this very narrative was depicted in a 2008 report of Oronsky & Martin.[19] In it, they found evidence that, among patients suffering from chronic pain with an unrecognized diagnosis of bipolar disorder, the widespread practice of prescribing antidepressants as a treatment for pain actually increased the risk of opiate addiction. They write:

> "In our experience, psychological dependence on narcotics diminishes with appropriate treatment for bipolar disorder. If an antidepressant has already been prescribed, the patient should be closely evaluated for a worsening of psychiatric and/or pain symptoms and discontinuing the antidepressant medication in this case may be warranted."

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The onset or worsening of bipolar symptoms over time, within the context of ongoing antidepressant treatment, is one of the many trends the M3 was engineered to track, given the fact that 15-20% of people who screen positive for depression actually have bipolar depression.[20] The ability to catch a worsening of psychiatric symptoms at the earliest possible time helps to prevent an iatrogenic mishap: making patients worse despite a well-intentioned treatment. Giving antidepressants to a patient with undiagnosed bipolar disorder is one such potential mishap. But at a more general level, it is important to appreciate how symptoms of overactivation, be they bipolar or anxiety related, place patients at risk for alcohol and drug misuse. An effective primary care mental health assessment tool must be able to measure all of the dimensions of mood and anxiety disorders (not merely depression) along with usage patterns of alcohol and drugs.

Currently, the M3 Checklist along with the AUDIT-C (Alcohol Use Disorder Identification Test) are ordered through LabCorp. Once completed, these multi-condition, patient rated assessments are returned directly to a practices's electronic health record (EHR) with limited disruption to the practice workflow and is available for review during the patient's appointment. By appreciating the complex interrelationship of substance misuse and other common mental health disorders, and by having the data fully integrated into many EHRs, the M3 Checklist is a modern, state-of-the-art instrument for the identification and monitoring of SUD as part of the overall BHI effort.

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