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# Screening the “Invisible Population” of Older Adult Patients for Prescription Pain Reliever Non-Medical Use and Use Disorders

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## Abstract

**Background:** In the United States, the number of older adults reporting non-medical use of prescription pain relievers (NMUPPR) between 2015 and 2019 has remained constant, while those meeting criteria for opioid use disorders (OUDs) between 2013 and 2018 increased three-fold. These rates are expected to increase due to increased life expectancy among this population coupled with higher rates of substance use. However, they have consistently lower screening rates for problematic prescription pain reliever use, compared to younger cohorts.

**Objectives:** This commentary reviewed trends in older adult NMUPPR and OUDs and reviewed several available screening tools. We then considered reasons why providers may not be screening their patients, with a focus on older adults, for NMUPPR and OUDs. Finally, we provided recommendations to increase screenings in healthcare settings.

**Results:** Low screening rates in older adult patients may be due to several contributing factors, such as providers' implicit biases and lack of training, time constraints, and comorbid conditions that mask NMUPPR and OUD-related symptoms. Recommendations include incorporating more addiction-related curricula in medical schools, encouraging participation in CME training focused on substance use, attending implicit bias training, and breaking down the silos between pharmacy and geriatric, addiction, and family medicine.

**Conclusions:** There is a growing need for older adult drug screenings, and we have provided several recommendations for improvement. By increasing screenings among older populations, providers will assist in the identification and referral of patients to appropriate and timely substance use treatment and resources to ultimately ameliorate the health of older adult patients.

**Keywords:** older adults, prescription pain relievers, non-medical use, substance use, screening

## Introduction

In the United States, older adults have consistently used prescription pain relievers (PPRs) more than adults in younger cohorts. Despite reporting the highest rates of PPR use, older adults report the lowest rates of non-medical use (NMU) (Han et al., 2017; Schepis et al., 2020b). However, while older adults are the least likely to report NMU, adults in other age cohorts have experienced significant declines in non-medical use of prescription pain relievers (NMUPPR) between 2015-2019, while those who were 50 years old and older remained the same (Schepis et al., 2022). Further, the rates of diagnosed opioid use disorders (OUDs) have increased nearly three-fold between 2013 and 2018 (Shoff et al., 2021). NMUPPR occurs when a person takes PPRs in a way that differs from prescribed (i.e., longer duration, larger doses, increased frequency) or without a prescription (NIDA, 2022). Han and colleagues (2017) reported rates of PPR use by age cohort, with the older adult cohort having the highest rates of use. Approximately 39.5% of people who were 50 years old or older reported using PPRs within the past 12 months in 2015. This rate was higher than those that were 30 to 49 years old (37.0%) and those 18 to 29 years old (35.7%) (Han et al., 2017). Several contributing factors may account for this, including older adults' increased access to clinicians through frequent physician office visits and their elevated rates of chronic pain (30.8%) (Olsson et al., 2013; Ford et al., 2021; Maree et al., 2016; Zelaya et al., 2020). This may also be associated with older adults' increased rates of chronic pain; nearly one in three adults 65 years of age and older are affected (Dahlhamer et al., 2018). Although older adults report the highest rates of PPR use, they also have the lowest rates of non-medical use (Odani et al., 2020; McCabe et al., 2019). McCabe and colleagues provided evidence for this with their analysis of 2015-2016 National Survey on Drug Use and Health (NSDUH) data. Their study revealed that individuals who were 50 years old and older had the lowest rates of past 12-month NMUPPR. Only 2.5% of the total older adult population reported past 12-month NMUPPR, compared to 5.7% of those aged 26 to 49 years old and 7.8% of those aged 18 to 25 years old (McCabe et al., 2019).

While these findings on NMUPPR may suggest that prevention and harm reduction efforts should focus on younger cohorts, the consistent rates of NMUPPR and increasing rates of opioid use disorders (OUDs) in older adults are also of rising concern (Schepis & McCabe, 2016). There are likely many contributing factors associated with these increases including concern for withdrawal and mental health crises, which have been positively associated with tapering off PPRs and undermanaged chronic pain (Fenton et al., 2022). Further, the United States' older adult population increased by 34.2% over the last decade and is expected to continue increasing with the influx of aging Baby Boomers (US Census Bureau, 2020). Older adults are also frequently prescribed a multitude of medications by their providers, putting them at an increased risk for unintentional, adverse health effects associated with interactions from their PPR use (SAMHSA, 2020). Older populations also experience aging-related biological changes that make them more susceptible to OUD development and an array of adverse health outcomes, such as organ dysfunction, unintentional overdose, and possible mortality (Chang 2018; Schepis et al., 2020b; Schepis & McCabe, 2016; West et al., 2015; Odani et al., 2020; Simoni-Wastila & Yang, 2006; Patterson & Jeste, 1999). Mason and colleagues (2022) recently reported that rates of opioid-related overdose deaths have increased 10-fold for adults aged 55 and older in the United States, increasing from 0.9 per 100,000 older adults in 1999 (518 deaths) to 10.7 per 100,000 in 2019

(10,292 deaths). Studies have also shown that most older adults with NMUPPR obtain the PPRs from their providers (Schepis et al., 2020b; Cicero et al., 2012). This highlights the important role providers play in identifying, diagnosing, and treating NMUPPR and OUD.

### **How Can Healthcare Providers Care for Older Patients with NMUPPR and OUD?**

To provide effective treatment for patients with NMUPPR and/or OUDs, it is essential to screen and intervene as early as possible (SAMHSA et al., 2016). While researchers are developing machine learning algorithms with large datasets to predict OUD in patients with strong predictability, identification begins with the providers (Lo-Ciganic et al., 2020). This is done through frequent screenings for prescription drug non-medical use (NMU) and substance use disorders in all healthcare settings, including both inpatient and outpatient settings. In fact, the United States Preventive Task Force issued a grade B recommendation to screen adults that are 18 years old or older for unhealthy drug use – including NMUPPR – whenever further diagnostic and treatment-related services can be provided (USPTF et al., 2020). However, older patients are consistently screened less frequently than younger patients, even when receiving prescriptions with refills and/or from multiple healthcare providers – making them the “invisible population,” (Kuerbis et al., 2014; SAMHSA, 2020). Indeed, older adults see medical providers more than any other age cohort, giving ample opportunities for screenings, yet problematic PPR use often goes undetected (SAMHSA, 2020).

### **How Should Providers Screen Older Adult Patients for NMUPPR and OUD?**

According to the Substance Abuse and Mental Health Services Administration (SAMHSA), providers are recommended to screen patients of all ages often, especially when considering changes to medicinal regimens or when potentially problematic substance-related scenarios arise (SAMHSA, 2020). These include, but are not limited to, physical injuries, acute pain, and surgeries. Following screening, providers are encouraged to share the results with the patient. For patients with negative results or no evidence of NMUPPR/OUD, providers are recommended to provide encouraging, positive reinforcing comments. Patients with positive results, indicative of NMUPPR and/or OUD, should receive further diagnostic testing – since screenings are not diagnostic in nature – and may be referred to another, more specialized provider (SAMHSA, 2020). Any conversations regarding NMUPPR/OUD and screening results should be provided in a gentle, normalizing, and respectful way. Currently, there are no strict recommendations for how frequently older adults should be screened, however several organizations have recommended annual screenings (SAMHSA, 2020).

Several screening tools can be used to detect NMUPPR in patients, including older patients, although there is a paucity of validated measures for this specific population (SAMHSA, 2020). These screening tools include, but are not limited to, the NIDA Drug Use Screening Tool, World Health Organization (WHO)’s ASSIST Screener, WHO’s ASSIST-Lite Screener, Brief Addiction Monitor Scale, and the Tobacco, Alcohol, Prescription medication, and other Substance use tool (TAPS). Each of these screening tools is free of charge. See Figure 1 for a thorough review of each of these screening tools, as well as links to access them. Providers may also identify NMUPPR and/or OUD symptomology through in-depth conversations during patient-centered appointments; however, this should provide supplemental information to the screening tools used (CSAT, 1997).

### **Why are Adults Not Getting Screened?**

When considering older adults, many contributing factors have led to their low screening rates, however many of these factors are equally relevant to adults in younger cohorts as well. One of the largest contributors to providers’ low rates of screening among adults may be a lack of training and ability to confidently discuss substance use and use disorders with their patients (Muzyk et al., 2019). In the United States, there is no pre-established OUD screening/treatment curriculum that is widely implemented in medical schools (Muzyk et al., 2019). Medical students’ training in substance use and addiction medicine varies. As of the 2020-2021 academic year, the United States has 155 Liaison Committee on Medical Education (LCME) accredited medical schools (AAMC, 2022). Of these 155 medical schools, training on opioid use screenings is included in pre-clerkship courses in 149 schools, clinical experience in 55 schools, as a required clerkship in 152 schools, and as a required didactic session in their clinical years in 67 schools (AAMC, 2022). This inconsistency in training has been identified and efforts are being made to create a curriculum that can be implemented widely throughout medical schools. In 2014, the NIDA Centers for Excellence for Physician Information (NIDA CoEs) collaborated with the American Medical Association and several medical schools to develop a curriculum on substance use, with hopes of better preparing future providers for the anticipated increases in substance use (NIDA, 2014). This curriculum is free of charge and available online (NIDA, 2017). Additionally, the Coalition

on Physician Education in Substance Use Disorders (COPE), a volunteer-led organization, promotes substance use training for physician students. In 2021, COPE hosted a Medical Student Curriculum Challenge, which called for medical students to creatively devise a curriculum for substance use that could be implemented in medical schools. The 2021 challenge winners' curricula are available online as well (COPE, 2021). See Figure 2 for resources relating to these curricula.

Additional challenges include the discomfort providers may feel when discussing substance use with their patients. This may be because providers do not want to be perceived as disrespectful, accusatory, or invasive, as they think this may negatively affect the patient-provider relationship (SAMHSA, 2020; Austin et al., 2022). Providers may also feel limited by the time constraints on an office visit. Studies have shown that providers overwhelmingly viewed their lack of time as a barrier to screenings – particularly among their older adult patients who come in with other comorbid conditions that need to be discussed (McNeely et al., 2018; Austin et al., 2022).

### **Why are Older Adults Not Getting Screened?**

In comparison to their younger counterparts, older adults are less likely to be screened for substance use, including NMUPPR and OUDs (Kuerbis et al., 2014; SAMHSA, 2020). There are several contributing factors, in conjunction with those mentioned above. Choi et al. (2014) analyzed 2008-2012 data from the National Survey on Drug Use and Health and found that older adults (50 years old and older) that met the Diagnostic and Statistical Manual of Mental Disorders (DSM) – IV criteria for a substance use disorder were significantly less likely to have a perceived need for treatment. Older adults were also less likely to obtain treatment, because they are not ready to stop use, and lack knowledge about available treatment options (Choi et al., 2014). Consequently, they may be less likely to initiate conversations about their NMUPPR or other drug use with their providers.

Additionally, older adults are more likely to have other comorbid conditions – such as cognitive decline, depression, or other expected aging developments – that mask NMUPPR and OUD-related symptoms, which may make it more challenging for providers to identify (SAMHSA, 2020, Kuerbis, 2020, CSAT, 1997). Providers may also have unintentional implicit biases that lead them to believe that older adult patients do not participate in NMUPPR or meet criteria for OUDs in later life. These biases may also lead providers to believe that older patients may not benefit from treatment (Kuerbis et al., 2014).

### **With Increasing Rates of NMUPPR and OUDs Among Older Adults and Suboptimal Rates of Screenings Being Completed, What Should Providers and Healthcare Organizations Do?**

While steps are being taken to increase training for future providers, there are additional tangible steps that can - and should - be taken to assist those already in the workforce. This is essential in promoting high-quality addiction-specific medical knowledge because research has shown that providers often feel uncomfortable and lack training to screen patients for NMUPPR and OUDs (SAMHSA, 2020; McNeely et al., 2018; Muzyk et al., 2019). The Centers for Disease Control and Prevention (CDC) has online training on opioid prescribing and screenings through their interactive training series (CDC, 2020). The CDC is one of many organizations offering continuing medical education (CME) in substance use and substance use disorders.

Implicit bias trainings can also be utilized by addressing ageism in clinical practices to better prepare providers to screen and talk about substance use with their older patients. Teaching medical students and providers about geriatrics is not enough; research has shown education has not significantly improved attitudes toward older patients (Samra et al., 2017). Some people may be resistant to this idea – citing that it will not influence clinical outcomes. However, students and faculty, who may provide “hidden” ageism and stigma in the curricula, will benefit from further education in addiction medicine and geriatrics (Gonzalez et al., 2019). By addressing implicit biases (ageism), providers can take the next needed steps to reduce disparities in NMUPPR and OUD by screening older adults and talking to them to prevent such non-medical use. One next step that can be taken includes intentional positive contact with older adults. According to the Positive Education about Aging and Contact Experiences (PEACE) Model, these interactions should be one-on-one and should include equal power dynamics and the sharing of personal information and/or stories (Levy, 2018).

As the older adult population continues to grow, primary care providers may be increasingly burdened with the task of screening their older patients for NMUPPR and OUD. Some of this burden can be alleviated by incorporating geriatricians in older adult patient care, especially when there are concerns for polypharmacy or NMUPPR. Including

geriatricians in prescription drug management and substance use disorders can allow them to use their skills to address the unique needs of older adults, while also improving the compatibility of their prescription drugs (Kauer et al., 2009; Han, 2018). Pharmacists should also play a role in this multidisciplinary team and can help to check medication incompatibility and polypharmacy through medication reconciliation (Wu et al., 2021).

Other approaches to implementing wide-scale screenings in primary care settings have been studied and found evidence to support their use. Konkle-Parker and colleagues (2022) tested an intervention that provided tablets to patients that were waiting to see their providers. The self-administered screening was coupled with a short training on motivational interviewing for providers. This study found the rates of patients being referred to in-clinic treatment increased approximately five-fold (Konkle-Parker et al., 2022). Furthermore, a study by McNeely and colleagues (2021) found that including electronic health record-integrated screening tools that provide prompts to screen during routine office visits increased screenings significantly.

### Conclusion

This commentary draws light to the increasing rates of older adult NMUPPR and OUDs in the United States. While older adults see providers frequently, they are not often screened for NMUPPR and OUDs, and this commentary has discussed some of the many contributing factors, including provider hesitancy, ageism, time constraints, and lack of training. Medical schools throughout the United States lack consistency in their training for substance use and use disorders and current providers may not feel equipped to address this in older adult patients. We have provided recommendations to better prepare America's providers with the confidence and necessary skills to screen these patients, including CME and implicit bias trainings, and the inclusion of geriatricians. Given the anticipated trends for older adults with NMUPPR and OUDs, the time to get the workforce ready is now.

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