Health Affairs. https://www.healthaffairs.org/

Successfully addressing the US opioid overdose epidemic will require a strategy for adolescents and young adults (AYAs). Two in three adults treated for opioid use disorder (OUD) first used opioids when they were younger than age 25. In the past 15 years, AYAs' use of prescription opioids, heroin, and fentanyl has skyrocketed, paralleled by increasing rates of OUD diagnoses and opioid-related overdoses and deaths in AYAs, the latter of which reached almost 5,000 in 2017. Despite these staggering statistics, Generation Z is too rarely prioritized in policy discussions surrounding the opioid epidemic.

AYAs are a unique population, deserving of special consideration, with opportunities to improve short- and long-term outcomes multiplied over a lifetime. However, they are often caught between child- and adult-focused care as their bodies, minds, and roles change rapidly. Their development, particularly related to reward pathways in the brain, contribute to AYA's high-risk and substance-seeking behaviors. This time of transition makes AYAs highly vulnerable to opioid use and abuse.

One in five AYAs report misusing opioids (using without a prescription or not as prescribed) at some point. In most cases, they obtain prescription opioids from family and friends. OUD is prevalent among AYAs, and mental health problems, such as depression, anxiety, and attention-deficit/hyperactivity disorder, commonly co-occur. Youth also often use opioids with other illicit substances (benzodiazepines, cocaine, alcohol, and marijuana). Paralleling other substance use in adolescence, risk factors for opioid misuse include mental health issues, housing instability, school absenteeism, friends who misuse opioids, and living in a rural area.

Effective strategies exist to prevent and treat OUD in AYAs. These include screening, brief intervention, and referral to treatment (SBIRT) to detect and address opioid misuse; and medications (methadone, buprenorphine, and naltrexone), behavioral therapy, and family-centered approaches to treat youth diagnosed with OUD. However, significant barriers in our health care system prevent many AYAs from accessing needed services. Limited screening for opioid use in teen primary care visits is a key challenge, services to support AYAs with OUD are hard to navigate, and stigma from peers and society often inhibits youth from seeking treatment.

Here, we summarize national and state strategies to address the opioid epidemic and describe further reforms needed to tailor these efforts to teens and young adults.

Design And Implement Effective Models Of Care To Prevent And Treat OUD In AYAs

Value-based models can align incentives to improve OUD prevention and treatment among AYAs. The US health care system has not yet widely implemented such models, even for adults, nor adapted them to be developmentally appropriate for young people. However, short-term steps as part of a more comprehensive value-based strategy for OUD prevention and treatment among AYAs are feasible now, and funding is available.

Cover Medically Appropriate Services And Reduce Barriers To Treatment

To detect opioid misuse as early as possible, providers need support for offering routine SBIRT in primary care and other settings. Since opioids are rarely the first substance misused, early detection and intervention for any substance use is critical. Mental health and developmental screening are already reimbursable standards of care in many settings; expanding reimbursement for SBIRT may enable clinicians to more routinely employ it.

Once OUD is detected, medications for OUD (MOUD), including buprenorphine, methadone, and naltrexone, are recommended for AYAs by the American Academy of Pediatrics. Yet, AYAs are significantly less likely than older adults to receive MOUD. The higher barriers they face to accessing MOUD include relatively fewer pediatric prescribers familiar with MOUD and rules against use of MOUD in many youth treatment programs. Incorporating MOUD training in pediatric residency and expanded addiction fellowship training programs would also augment access to treatment.

MOUD should be included as insured services for AYAs across settings (for example, outpatient, intensive outpatient, partial hospitalization, residential, and inpatient), with minimal cost sharing to reduce financial barriers for youth and their families. The Early and Periodic Screening, Diagnostic and Treatment (EPSDT) program can be leveraged for Medicaid coverage of these services for beneficiaries up to age 21. In addition, expanding insurance coverage to services delivered outside the traditional clinical setting can improve OUD outcomes (see section “Provide and Reimburse Services where AYAs Learn and Live”).

Use Quality Measures Specific To AYAs

Selecting appropriate quality measures is key to assessing effective interventions and successfully implementing value-based models for OUD. The National Quality Forum and others have outlined multiple quality measures for OUD, including initiation of and continued engagement in MOUD treatment and counseling. Additional work is needed to adapt existing quality measures to AYAs, to consider new, developmentally

appropriate quality measures salient to youth and families, and to establish relevant benchmarks. Existing quality measure domains in need of further development are youth- and family-reported measures related to functioning and quality of life (for example, return to school/employment, reintegration into healthy family/peer relationships).

Develop Alternative Payment Models That Address Opioid-Related Harm In AYAs

Alternative payment models (APMs) can serve as the vehicle to align incentives to prevent and treat OUD for AYAs. Within APMs, AYA-specific quality measures and benchmarks can be incorporated into widely adopted models, such as accountable care organizations and other primary care–focused models that adjust payments based on quality, experience, and cost. The Centers for Medicare and Medicaid Services has recently provided targeted state funding to implement payment and care delivery innovations relevant to opioid misuse prevention and OUD treatment among AYAs. The Integrated Care for Kids (InCK) Model will provide funding to selected states to implement a local service delivery and payment model focused on reducing opioid-related harms for Medicaid and Children's Health Insurance Program-insured children up to age 21. The Maternal Opioid Misuse (MOM) Model addresses the fragmentation of care for pregnant and postpartum Medicaid beneficiaries with OUD, including teens and young women.

Bundled payments for groups of OUD-related services have also been developed. In the recently launched Addiction Recovery Medical Home Model (ARMH-APM), rewards are tied to successful longitudinal patient outcomes and integration of care. Similarly, in one variation of the Patient-Centered Opioid Addiction Treatment (P-COAT) Model, bundled payments for an Opioid Recovery Team cover all expenses related to pharmacological treatment, counseling, and care management. P-COAT also provides add-on payments to support technology-based treatment and recovery support tools. Medicare has also recently announced plans to implement many provisions of the SUPPORT for Patients and Communities Act, such as weekly bundled payments for OUD treatment programs, new outpatient care coordination payment codes for OUD treatment, and expanded coverage of telehealth services.

Multiple funding streams are readily available to support these OUD initiatives. Programs available in all states include the 21st Century Cures Act, the Child Abuse Prevention and Treatment Act, the Substance Abuse Prevention and Treatment Block Grant, the Temporary Assistance for Needy Families Block Grant, and the Title IV-E Demonstration Waivers Program. In addition to these, the Substance Abuse and Mental Health Service Administration's Medication Assisted Treatment for Prescription Drug and Opioid Addiction program expands MOUD access by providing grants to states with the highest rates of OUD treatment admissions.

Implement Reforms To Reach AYAs Where They Learn And Live

Since AYAs are among the lowest users of primary care, providers and policy makers should bring more services to where youth learn and live.

At School

With the vast majority of teens in school settings, school-based health centers and other school-linked services provide a convenient setting for mental health and substance use screening, treatment, and recovery support. Some states offer SBIRT in schools, including public middle and high schools in Massachusetts, Wisconsin, New Mexico, and New York. Recovery high schools are another novel strategy where schools offer intensive monitoring and recovery support for AYAs.

At Home

Home visiting programs can screen high-risk youth and connect them to addiction care. Funding sources for programs serving young parents with OUD include the Maternal, Infant, and Early Childhood Home Visiting program. Family-oriented services with a multigenerational approach should be considered given the high rate of OUD among first-degree relatives of individuals with OUD.

In The Community

Intensive community-based outreach and recovery support services can also be leveraged to reach AYAs. Peer support workers and recovery coaches are individuals in long-term recovery from substance use disorder who provide emotional support and community service connections as AYAs navigate the complex OUD treatment system. Several state Medicaid programs cover peer support services for youth. Mobile adolescent health services programs can facilitate access to treatment, particularly for youth who are homeless or in unstable housing.

On Their Phones

With AYAs spending increasing amounts of time on mobile devices, texting can be leveraged for one-on-one recovery support. Other digital health strategies need to be tested in younger populations, such the recently Food and Drug Administration-approved Pear Therapeutics' reSET mHealth app, which is currently only approved for those older than age 18.

In The Foster Care System

A surge of children, including teens, have entered the foster care system amid the opioid epidemic. The full continuum of OUD services should be offered and covered for teens in foster care. Young adults who age out of foster care at age 18 are particularly vulnerable since many have ongoing behavioral health and substance use disorder needs, yet find themselves aging out of eligibility for Medicaid coverage and other social support programs. Intensive transition services and better oversight by state health and human services departments are needed for youth leaving the foster care system.

In The Juvenile Justice And Corrections System

The opioid epidemic is also contributing to more youth entering the juvenile justice or correctional systems. Although teens should have the full continuum of OUD care while incarcerated, many correctional facilities prohibit MOUD. Lapses in Medicaid coverage in many states for youth while incarcerated make providing comprehensive care operationally and financially challenging. Medicaid coverage should be continued for incarcerated youth, especially those with OUD, to facilitate the initiation or continued receipt of appropriate services.

Handoff and reintegration services are also important for youth receiving OUD treatment to prevent relapse and recidivism. Individuals who do not receive methadone or buprenorphine while incarcerated are at high risk of overdose upon community reintegration due to loss of opioid tolerance. Although some correctional settings offer a single dose of injectable naltrexone prior to community reintegration, overdose risk remains high one month later when naltrexone's effects wear off. Thus, ensuring a careful handoff and transition of care is critical; such services should be uniformly offered and reimbursed.

Enhance Addiction Care Coordination And Data Integration Systems For AYAs

To support OUD-related clinical and policy initiatives targeting AYAs, improved infrastructure for care delivery and data resources are needed.

Coordinate Care For AYAs With OUD

Currently, no model for care coordination exists specifically to support AYAs across the range of relevant services and settings. However, several states have enacted policies to facilitate care coordination initiatives for individuals with OUD. For example, Virginia requires all Medicaid managed care organizations to use Addiction and Recovery Treatment Services care coordination to support individuals with OUD, in which behavioral health providers work directly with primary care physicians, families, and community organizations. For youth, parents and other supportive adults should be

considered key members of the care coordination team, aligned with a multigenerational approach.

Share Patient-Level Data Across Systems

Successful opioid-related data linkages have been made in prescription drug monitoring programs and other opioid-related data-sharing systems. Requirements or incentives for clinicians have led to more robust use of these systems by prescribers. Data sharing across state lines should be a special consideration for AYAs since youth often move during their educational, work, and relationship transitions.

Confidentiality and privacy are also important considerations, as laws on the rights of teens to seek confidential substance use care vary from state to state. While recognizing the benefit of supportive parents and other trusted adults, access to confidential care is important, including redacting sensitive services in insurance billing documentation that may be sent to parents.

Monitor The Epidemiology Of Opioid Misuse Among AYAs

State and national opioid-related surveillance systems should focus on AYAs as unique populations. Frequently, the intensive surveillance of the opioid epidemic reports only the most severe opioid-related outcomes (for example, overdose mortality) that are relatively rare among young people. Metrics should include experimentation with opioids, problematic opioid use, OUD diagnosis, and nonfatal overdose. Additionally, published epidemiologic data often only report results by large age subgroups (for example, 15–24 years); finer categorization of age would reflect the distinct developmental stages of adolescence and young adulthood.

Moving Forward For Generation Z

Effectively curbing the opioid epidemic today and changing trends for the future requires special consideration for the AYAs of Generation Z. Although opioid-related overdoses should continue to be a public health focus, more efforts are needed upstream in prevention, early detection, and intervention for opioid misuse. There is increasing recognition of the critical gap in early screening for all substance use among AYAs—from opioids to vaping and marijuana, which are rising at alarming rates. From new payment models to specific care delivery strategies, the spectrum of reforms described here to reduce the harms from opioids on Generation Z can support them in their adolescence and young adulthood, with benefits to be realized over a lifetime.