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This publication for child welfare professionals is produced by the North Carolina Division of Social Services and the Family and Children's Resource Program, part of the Jordan Institute for Families within the School of Social Work at the University of North Carolina at Chapel Hill.

In summarizing research, we try to give you new ideas for refining your practice. However, this publication is not intended to replace child welfare training, regular supervision, or peer consultation—only to enhance them.

Let us hear from you!

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Responding to Opioids

Child welfare professionals know about America's opioid epidemic. Many have seen first hand how opioids can disrupt parents' jobs, relationships, and good judgment. They know and share the pain and frustration of families and communities struggling with the effects of addiction.

But many also have questions about opioids, such as *What is North Carolina doing to combat this epidemic? How can I partner more effectively with parents involved with*

opioids? What do their infants and other children need? What are the most effective treatments for opioid misuse, and how do I find them in my area?

To support child welfare practitioners and the families they serve, this issue of *Practice Notes* takes on these and other questions about opioids. ♦



The Impact of Opioids on the Child Welfare System

6 States Sue Maker of OxyContin as They Battle Expenses, Human Costs of Opioid Crisis
— USA TODAY, MAY 15, 2018

Reversing the Deadly Opioid Crisis in NC
— NEWS & OBSERVER, FEB 15, 2018

As recent headlines confirm, opioid misuse is a crisis for our state and our nation. Here in North Carolina, three people die from opioid overdose every day (NCDHHS, 2017). Deaths linked to opioids in NC grew by an astounding 900% between 1999 and 2016 (Worth & House, 2018). And as the figure at right suggests, overdose deaths are just the tip of the iceberg.

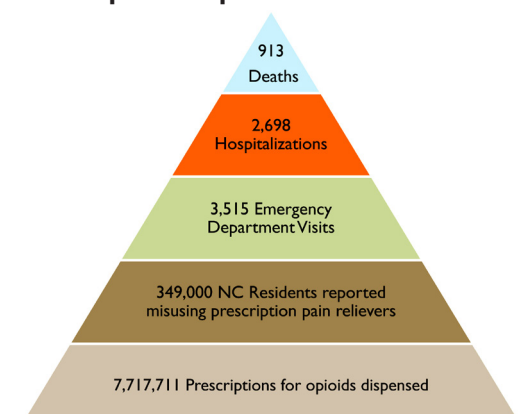
For every single opioid poisoning death in North Carolina in 2014, there were just under three hospitalizations, nearly four emergency department visits for medication or drug overdoses, over 380 people who misused prescription pain relievers, and almost 8,500 prescriptions dispensed for opioids (NCDHHS, 2017).

This epidemic has its roots in the heavy marketing of opioids and a well-intentioned but flawed emphasis on physicians' use of pain scales, which led to an increase in prescriptions for drugs like hydrocodone and oxycodone. By 2016, more than 675 million opioid prescriptions were dispensed

in NC—more than 65 pills for each man, woman, and child in the state (Worth & House, 2018). This, along with the addictive potential of these drugs, led to an epidemic of drug addiction and overdose. In the last several years, the problem has worsened due to cheap and easy access to heroin, which sometimes contains the even more powerful drug fentanyl (Kansagra & Cohen, 2018).

Unintentional opioid-related overdose deaths are estimated to have cost North Carolina over \$1.5 billion in 2015 (Kansagra & Cohen, 2018). By one estimate, the opioid epidemic has cost the *continued next page*

Impact of Opioids in NC in 2014



Source: NCDHHS, 2017

The Impact of Opioids on the Child Welfare System continued from previous page

U.S. more than \$1 trillion since 2001 in lost wages and productivity, health care costs, reduced tax revenue, and increased spending on health care, social services, education, and criminal justice (Altarum, 2018).

What Is the Impact on the Child Welfare System?

But what about the impact on the child welfare system? For example, are opioids in some way behind the steady rise in the number of children in foster care in North Carolina and many other states?

A partial answer to this question comes from the Office of the Assistant Secretary for Planning and Evaluation (ASPE), which is part of the U.S. Department of Health and Human Services. In March 2018, ASPE issued two reports based on a study it conducted on the use of opioids and other substances and the child welfare system.

For the study, ASPE researchers used statistical models and administrative data to estimate the relationship between substance use and involvement with child welfare. They combined this quantitative information with interviews of 188 individuals from 25 U.S. counties, including counties hit hardest by substance abuse. Interviewees included child welfare administrators and practitioners, substance use treatment professionals, judges, and others.

Study results revealed a strong statistical relationship between two indicators of substance abuse (overdose death rates and drug-related hospitalization rates) and child welfare caseloads.* Specifically, researchers found a relationship between substance use and the following:

Higher Caseload Rates. Researchers found that indicators of substance abuse have a statistical relationship with child welfare caseloads. Even when socioeconomic and demographic traits are taken into account, counties with higher overdose death and drug hospitalization rates tend to have higher rates of CPS reports and substantiations.

Higher Foster Care Entry Rates. Rates of drug overdose deaths and drug-related hospitalizations are also linked to higher rates of entry into foster care. This finding is illustrated in Figure 1, which shows a 10% rise in drug overdose death rates correlates with a 4.4% rise in foster care entry rates, while a 10% jump in drug-related hospitalizations correlates with 2.9% growth in foster care entry rates.

More Case Complexity & Severity. When indicators of substance use are high, child welfare cases are more likely to be more complex and/or severe, as measured by the proportion of maltreatment reports that are substantiated and by the proportion of children removed from their homes.

Interviews supported the link between substance use and case complexity. For example, researchers noted that

* Although this study shows a relationship between substance use and child welfare caseloads, it does not prove causality.

FIG. 1
Relationship between Overdose Death and Drug-Related Hospitalization Rates and Foster Care Entry Rates, 2011-2016

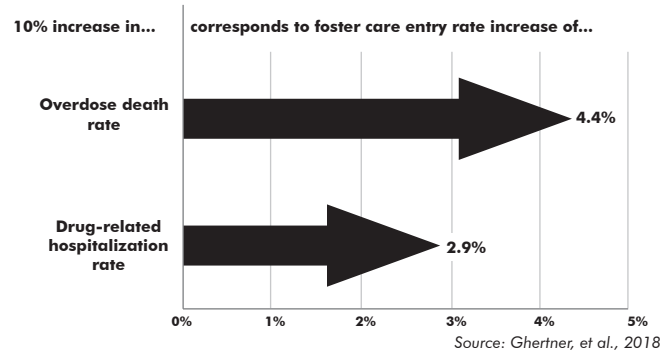
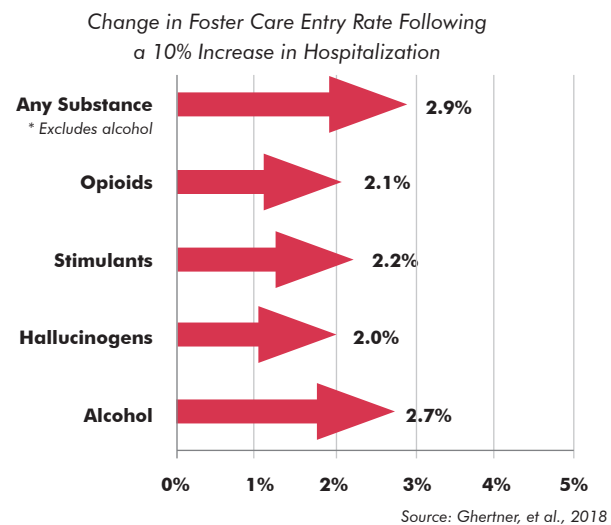


FIG. 2
Relationship of Foster Care Entry Rates to Hospitalizations due to Different Substances, 2011-2016



“caseworkers and judges in areas hardest hit by the [opioid] epidemic described the difficulty of finding family to care for children because in many cases multiple members are misusing opioids. They described this as a substantial shift from recent years” (Ghertner, et al., 2018).

Other Findings

It’s Not Just Opioids. A striking finding is that different substance types correlate in similar ways with foster care entry. Opioid-related hospitalization rates have a relationship with rates of entry into foster care comparable to that of other substance types, as Figure 2 shows. Note that alcohol has a stronger relationship with foster care entry than any illicit or prescription substance; alcohol-related hospitalizations are more than four times as prevalent as opioid hospitalizations (Radel, et al., 2018).

This Time Feels Different. Based on the study, Radel and colleagues conclude, “while the misuse of continued next page

The Impact of Opioids on the Child Welfare System continued from previous page

drugs has always been part of the constellation of issues affecting parenting in families involved in the child welfare system, the current [opioid] crisis has affected communities more broadly than past epidemics.” Interviews revealed much pessimism about opportunities for family success. Many judges, lawyers, and court personnel were strongly inclined to favor placement when there is significant parental substance use, “often regardless of other factors” (Radel, et al., 2018).

Treatment Challenges. Researchers concluded a number of challenges are affecting how child welfare agencies and families interact with substance use treatment options, including lack of family-friendly treatment and misunderstanding and mistrust of medication assisted treatment (MAT). (See page 7 for more on MAT.)

Child Welfare Practice and Resource Issues. Interviews in the 25 U.S. counties participating in the study suggest that “child welfare agencies and their community partners are struggling to meet families’ needs” (Radel, et al., 2018). For example, the system is wrestling with shortages of foster homes, inconsistent substance use assessment practices, and barriers to collaboration with substance use treatment providers and other stakeholders.

System Strengths. Researchers also acknowledged that across service systems, professionals recognized that “substance use disorders are chronic diseases, not simply moral failures,” and noted the active efforts being made to secure more and better treatment options for parents (Radel, et al., 2018).

Read More. Follow the links below to read the original briefs on these studies:

- *Substance Use, the Opioid Epidemic, and the Child Welfare System: Key Findings from a Mixed Methods Study*, by Radel et al., 2018. <https://bit.ly/2J3Qs2d>
- *The Relationship between Substance Use Indicators and Child Welfare Caseloads*, by Ghertner et al., 2018. <https://bit.ly/2xsq4hq>

Takeaways for Child Welfare Professionals

These reports confirm that child welfare agencies often feel the effects when communities struggle with substance use, and that the opioid epidemic seems to be having an unusually strong impact. These reports may prove useful to agencies explaining to others the challenges they face or justifying the need for additional resources.

The study is also confirmation that North Carolina is right to be taking steps to address the opioid epidemic. These include the state’s *Opioid Action Plan* (see sidebar) and its efforts to improve recruitment of families for children in foster care. ♦

Response at State and National Level

While agencies try to assist families and cope with the expanding number of children in care, leaders at the national and state levels are also taking action. In October 2017, the White House declared the opioid epidemic a national public health emergency. In November, the president’s commission on opioids released a lengthy set of recommendations, and in March 2018 the White House convened a summit on the opioid epidemic.



The new Family First Prevention Services Act (H.R. 253) is also promising: although the effects will not be immediate, this law gives states more flexibility to spend federal money on critical services—including substance abuse treatment—that can prevent the need for foster care.

In North Carolina, supported by a \$31 million grant, the state has developed an *Opioid Action Plan* for the period 2017-21. The plan addresses seven core strategies:

1. Create a coordinated infrastructure
2. Reduce oversupply of prescription opioids
3. Reduce diversion and flow of illicit drugs
4. Increase community awareness and prevention
5. Make naloxone widely available; link overdose survivors to care
6. Expand treatment and recovery oriented systems of care
7. Measure our impact and revise strategies based on results

For more on North Carolina’s efforts, visit <https://www.ncdhhs.gov/opioids>

It is hoped that these and future actions will have the desired effects. In the meantime, the need to find and sustain high quality resource families is more urgent than ever—a need our state’s efforts around diligent recruitment and retention of resources families seeks to meet. Please see the June 2017 issue of *Practice Notes* for more on this effort.

Learning Resources from the NC Division of Social Services

NCDSS offers the following courses through www.ncswlearn.org:



- Substance Use: How to Work with Families Affected by Drugs and Alcohol
- Methamphetamine: What a Social Worker Needs to Know
- Motivating Substance Abusing Families to Change: An Advanced Practice Course

For more information, class times, or to register, NC child welfare staff should visit www.ncswlearn.org.



In addition, NC child welfare supervisors and county training managers can use the DIY kit “Opioids: Signs and Symptoms of Misuse” to lead a 30-60 minute training in their agency. Available through the “Supervisor Resources” section in ncswLearn.org.

Developing a Plan of Safe Care in North Carolina

The opioid epidemic has been far reaching and has impacted the lives of many. This is especially true for pregnant women and their babies. From 2000 to 2009, the number of women using opioids during pregnancy increased five-fold nationwide (Cleveland, et al., 2016). In North Carolina, hospitalizations associated with drug withdrawal in newborns increased 893% from 2004 to 2015 (NCDHHS, 2017).

Substance use by pregnant women and new mothers can affect the safety and well-being of children. In North Carolina, we develop a Plan of Safe Care (POSC) to support these families. These plans are required by the Comprehensive Addiction and Recovery Act (CARA) of 2016, which also requires:

- Healthcare providers must notify county DSS agencies when they are involved in the delivery or care of a **substance-affected infant** (as defined in policy).
- County DSS agencies must develop a POSC based on the information from the healthcare provider.
- County DSS agencies must refer the child (and the child's POSC) to Care Coordination for Children (CC4C) for services; this must be done before a child protective services (CPS) intake decision has been made.
- CC4C must engage the family to implement the POSC; CC4C services are voluntary. (See page 6 to learn more about CC4C.)

The following answers to common questions about POSCs in North Carolina are based in part on our state's child welfare policy on substance-affected infants, which can be found at: <http://www2.ncdhhs.gov/info/olm/manuals/dss/csm-60/man/CS1439.PDF>.

What should be in a Plan of Safe Care?

A POSC should address both the safety and well-being needs of the

mother, infant, and family. The most successful treatments for opioid use disorders combine medication assistant treatment (MAT) and behavioral therapy (SAMSHA, 2016). (See page 7 for more about MAT.)

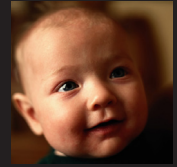
The POSC should also include screening the infant to determine whether they require early intervention services through the local Children's Developmental Services Agency.

Families with a POSC may also benefit from social support, parental education, parent/caregiver support groups, childcare, housing, and economic assistance (SAMSHA, 2016). Note, however, that each POSC should be *individualized* to address the unique needs of the family.

Must DSS accept all healthcare providers' notifications as CPS assessments?

No. Prenatal substance use does not inherently mean there is child maltreatment (Jones & Kaltenbach, 2013; NPA, 2017). We must look at the impact on the infant's health and safety. For guidance, see North Carolina's revised Intake policy and screening tools, which can be found here: <https://bit.ly/2wDYjlk>.

We can build upon a huge strength—mothers' love for their children—to create a catalyst for recovery.



Why must we refer to CC4C before we make a CPS intake decision?

County DSS agencies cannot share information with CC4C if a child protective services intake decision has been made. To ensure we comply with confidentiality laws and meet the requirement to create a POSC for every infant identified as substance-affected, we must refer to CC4C before a screening decision occurs.

How many Plans of Safe Care have been developed?

Between Aug. 2017 and Feb. 2018, county DSS agencies received 2,727 notifications about substance-affected infants from healthcare providers, 2,641 POSCs were developed, and 2,637 families were referred to CC4C. There is currently no waitlist for families to receive CC4C services. CC4C staff are charged to manage the entire target population in their county, which requires use of population management strat- continued next page

Highlight: Proactive Practice

In the Buncombe County Department of Health and Human Services (DHHS), healthcare providers and child welfare professionals proactively ensure substance-affected infants and their families get adequate, timely support. Buncombe DHHS has embedded an assessment worker at the county's primary hospital, Mission. When Mission identifies a substance-affected infant, this worker is on hand to initiate screened-in reports that involve a child or parent at the hospital. This worker also collaborates with families and the medical team in discharge planning. CFT meetings are often conducted in the hospital as part of the planning process.

Buncombe DHHS also has two prevention staff who work with pregnant substance-using women, frontloading services and educating them about what to expect when the baby is born. Because these families know in advance about the notification requirement and possible DSS involvement, they are less likely to go into crisis if a CPS Assessment occurs. Mothers are encouraged to seek MAT to assist with cravings and stabilize opioid use, as they are more motivated to modify their substance use during pregnancy than any other time in their life.

Buncombe DHHS is currently collecting data to track the outcomes of this work. Anecdotally, many families have reported feeling supported throughout the CPS process. Hospital staff have noticed an increase in home health support and other community resources due to front-loading services.

Based on a May 1, 2018 interview with Buncombe County Health and Human Services



egies to prioritize children.

How does the POSC requirement change our work with families?

If the report is screened in, we must conduct our assessment as usual, while collaborating with CC4C as they implement the POSC. The POSC should go beyond immediate safety concerns to address caregivers' substance-use treatment and the infants' well-being and developmental needs. CC4C is a required collateral contact in these cases. If the family continues to In-Home or Permanency Planning services, activities on the POSC must be included in the family-services agreement, if these activities are still necessary to ensure safety and well-being.

POSCs and the increased focus on substance-affected infants also underscores the importance of consistently and thoroughly addressing safe sleeping arrangements (AAP, 2016).

How can we best work with hospitals/healthcare providers?

Healthcare providers are very concerned about confidentiality when notifying DSS of substance-affected infants. This is due to federal laws protecting information related to substance use and its treatment. Encourage medical providers to have mothers **sign consent forms** allowing them to release information to DSS. This addresses hospitals' confidentiality concerns while ensuring DSS receives enough information to complete a POSC and make a referral to CC4C.

Also, be sure to normalize mothers' fears and highlight the benefits of releasing their information. For example, point out that if a mother is in active recovery and following treatment recommendations, the hospital notification may be screened out by CPS.

Build relationships and trust with medical providers. Most do not understand the child welfare system. Provide frequent and consistent education about our role, legal and policy mandates, and goals/priorities in our work with families. Have pro-

Strengthening the Promotion of Safe Sleep

A review of child fatalities in North Carolina in 2015-16 by the NC Division of Social Services Child Fatality Review Team showed that 31% involved **unsafe sleep**. The vast majority occurred when a child was co-sleeping with a caregiver in a bed or on a sofa. Often caregivers had a safe sleep option, but did not use it.



To help prevent deaths from unsafe sleep, the NC Division of Social Services urges child welfare workers to:

- Explicitly describe to caregivers of infants and very young children the fatal risks of unsafe sleep conditions; be sure to discuss the risks of suffocation.
- Talk with families about the specifics of what to do and what not to do regarding infant sleep environments.
- Pay attention to indicators an infant could possibly be at increased risk of unsafe sleep. These include:
 - Multiple families temporarily sharing living space
 - Lack of beds for all children
 - Children born testing positive for drugs
 - Transient families
 - Parent has untreated mental health conditions

To learn more on this topic, NC county child welfare professionals should attend the webinar "Child Welfare Practice and Safe Sleep" on June 27, 2018. Register on ncswlearn.org by June 20. If you miss it, soon after the event you will find a recording here: <https://fcrp.unc.edu/multimedia/>.

viders explain their treatment recommendations and how we can support families. Ensure that DSS expectations align with provider recommendations, especially about treatment. For example, if we require the mother to stop using opioids (as opposed to participating in MAT), we will significantly increase the risk of relapse and overdose (SAMSHA, 2016). Having a Child and Family Team meeting before the infant is discharged is a great way to ensure consistency.

What else do we need to know?

Substance-affected infants are NOT born addicted to opioids—even if they are dependent and experience withdrawal (SAMSHA, 2016). "Addiction is a brain disease that causes people to continue to use substances even though it harms them. Physical dependence is when the body gets used to having the substance and only functions normally with it" (Townsend, 2017). Labels have power, and the term "addict" carries a lot of stigma.

We want to be careful about our language in case records, documentation, and in conversations due to the potential long-term impact on the child. Children labeled as "addicts" may face discrimination in the community or at school (SAMSHA, 2016).

It's also important not to judge or penalize mothers who struggle with substance use disorders. Doing so makes it unlikely they will be honest about their substance use and engage in treatment—ultimately increasing risk to children (NPA, 2017). Instead, we must focus on getting mothers the resources they need to manage their illness.

Families affected by the opioid epidemic are often in crisis, but with this crisis comes an opportunity. We can build upon a huge strength—mothers' love for their children—to create a catalyst for recovery. As one mom put it, "Keeping my children is my reason for staying clean. I'm willing to fight [my addiction] for the rest of my life" (Cleveland, et al., 2016). ♦

Partnering with CC4C to Serve Substance-Affected Infants

Ensuring the safety, well-being, and permanence of children and their families is a huge job—too big for a single agency or profession. Knowing this, North Carolina’s child welfare workers have long partnered with a wide range of community stakeholders, including Care Coordination for Children (CC4C).

With the passage of the Comprehensive Addiction and Recovery Act (CARA) of 2016, with its requirements related to Plans of Safe Care (POSC), the partnership between CC4C and child welfare agencies has become more necessary and frequent than ever.

CC4C

CC4C is an at-risk population management program for children birth to 5 years of age administered through a partnership between Community Care of North Carolina and the NC Divisions of Public Health and Medical Assistance.

CC4C serves any child birth to 5 who meets certain risk criteria such as having special health care needs, extreme poverty, recurrent physical/emotional abuse, chronic neglect, maternal depression, parental substance use, children in foster care, infants in the NICU transitioning to community services, and children exposed to substances. CC4C program goals are to:

- Improve children’s health outcomes
- Strengthen relationships between parents and infants
- Promote quality care
- Strengthen the family’s relationship with the medical home, and
- Minimize the lifelong impacts of the child’s risk.

All CC4C services are voluntary and may be refused or ended by the family at any time.

Referrals Related to POSC

Under CARA, healthcare providers must share information on substance-affected infants with the local (i.e.,

county) DSS, which in turn must refer these children to CC4C. Importantly, all substance-affected infants must be referred to CC4C before a CPS Intake screening decision occurs. Timely referrals keep DSS in compliance with confidentiality and help CC4C get involved with the family as early as possible to provide a wide range of family support, regardless of the child welfare system’s involvement.

Services, Tools, and Resources

Although CC4C’s primary aim is to connect substance-affected infants and other at-risk children with a medical home, they also assess families for overall needs and provide support and referrals as needed for family needs that can impact the child. CC4C services are provided either by a registered nurse or a social worker, and can be provided in person, over the phone, or at medical appointments. Despite the large number of referrals to CC4C for substance-affected infants, they currently have no waitlist for services.

To assess family needs and track progress towards goals, CC4C uses the Life Skills Progression, administered at 6-month intervals. They also use other evaluations, such as the SWYC (Survey of Well-Being of Young Children), to assess for typical development and make referrals as needed.

CC4C’s broad array of support and referral includes: housing, food security, parental mental health/substance use, maternal depression, domestic violence, smoking cessation, or support of the parent/child dyad. They use a family-driven and family-centered process for identifying and prioritizing family needs.

While any child meeting risk criteria can work with CC4C, children in foster care can particularly benefit. CC4C

Collaborating with CC4C

1. Complete the DSS-1404 (CC4C Referral Form):
 - Include the child’s name and any known contact information
 - Include the referral source as DSS
 - Check “CPS Plan of Safe Care”
 - Complete page 2
2. Have a follow up conversation with the CC4C care manager to offer any further information that might help CC4C assess and engage the family

ensures each child in foster care has a medical home and meets the accelerated primary care visit schedule recommended for kids in care.

There is no defined time-line to a family’s work with CC4C. The care manager and family set goals and work to meet them. When goals are met, the family can defer involvement unless or until support is needed again. CC4C works closely with Early Intervention and the Child Development Services Association to ensure services are coordinated and not duplicative.

Performance

CC4C has a statewide benchmark of interacting with 7.5% of all children age 0-5 who are Medicaid eligible. Between July and December 2017, they exceeded this benchmark by seeing 9.8% of North Carolina children in this age range. Additionally, CC4C reports that among children in foster care, those engaged with CC4C are more likely to receive routine care (e.g., dental visits, well care visits, immunizations) than those who are not. ♦

CC4C and Medical Homes

Learn more about CC4C and medical homes by taking *Fostering Connections I and II*, a pair of brief, self-paced, on-demand, online courses available to NC child welfare professionals at <http://ncswLearn.org>.

Medication-Assisted Treatment (MAT) for Opioid Use Disorder

In the field of child welfare today there is growing emphasis on evidence-based practice. While we have yet to develop a solid base of empirical evidence for much of what we do, there are interventions that have been proven to be indisputably effective and which we should embrace. Medication-assisted drug treatment (MAT), the gold standard for treatment of opioid use disorder, is one such intervention (Mittal, et al., 2017).

Opioids

Opioids include a variety of medications. They comprise both illegal drugs, like heroin, and pain medications that are available legally with a prescription, like fentanyl, oxycodone (OxyContin), hydrocodone (Vicodin), codeine, morphine, and others (NIDA, n.d.).

All opioids are chemically related. They work by binding with opioid receptors on nerve cells, which is how they reduce pain. Side effects of opioids include drowsiness, confusion, nausea, and constipation (SAMHSA, 2015). The drugs can also create euphoric feelings, or a “high,” in some people, which can lead to misuse (NIDA, n.d.). When combined with certain genetic or psychological predispositions, opioid misuse can lead to addiction (Sheridan, 2017).

Opioid Use Disorder

Sometimes, even when people take opioids pre-

scribed by doctors for medical conditions, they become dependent on the drugs. This dependence can lead to addiction, overdoses, and death (NIDA, n.d.).

Opioid use disorder (OUD) is a chronic brain disease related to ongoing use of opioids (Pew Charitable Trusts [PCT], 2016). Symptoms of OUD include a strong desire for opioids, inability to control or reduce use, continued use despite consequences, development of a tolerance, using larger amounts over time, and spending a lot of time to obtain and use opioids (SAMHSA, 2015). People with OUD can also experience severe withdrawal symptoms when they stop or reduce opioid use, such as negative mood, nausea or vomiting, muscle aches, diarrhea, fever, and insomnia (SAMHSA, 2015).

Addiction is complex and can be difficult to understand. People who are addicted may make choices that harm themselves or their loved ones. They may behave irrationally. This is because addiction causes parts of the brain to function improperly. Brain sys-

tems involving reward and pleasure, motivation, and memory malfunction in people who are addicted. They may pathologically pursue reward and/or relief by using substances. That intense drive can override other, healthier instincts (PCT, 2016).

MAT

Research shows people with OUD who abruptly stop using opioids and try to maintain abstinence on their own are likely to start using again. While relapses are often a normal part of the recovery process, they do increase the risk of fatal overdose (NIDA, 2018).

Medications are available that help people maintain abstinence from prescription pain pills or heroin by reducing or blocking the euphoric effects of opioids, relieving cravings, and reducing painful withdrawal symptoms (Kaplan, 2018).

Medications are most effective in treating addiction when combined with therapy and other types of social support. This combi-

MAT is the gold standard for the treatment of opioid use disorder.

nation of medication plus counseling is called medication-assisted treatment

(MAT). MAT is the most effective treatment for opioid use disorders. It is more effective than therapy or medication alone (PCT, 2016).

MAT can be provided in inpatient settings, though many people receive it while participating in out-patient counseling (with groups or individually). Some people choose to supplement their MAT with participation in peer support groups (e.g., 12-step programs such as Narcotics Anonymous).

MAT Medications

The three medications commonly used in MAT are methadone, buprenorphine (Suboxone, Subutex), and naltrexone (Vivitrol) (NIDA, 2016). Federal regulations require that methadone be administered in a certified opioid treatment program facility. Buprenorphine may be prescribed by an approved physician on a weekly or monthly basis. Naltrexone can be prescribed by any physician (PCT, 2016).

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FDA-Approved Drugs Used in MAT

Medication	Mechanism of action	Route of administration	Dosing	Available through
Methadone	Full agonist	Available in pill, liquid, & water forms	Daily	Opioid treatment program
Buprenorphine	Partial agonist	Pill or film (placed inside cheek or under the tongue)	Daily	Any prescriber with the appropriate waiver
		Implant (inserted beneath the skin)	Every six months	
Naltrexone	Antagonist	Oral formulations	Daily	Any health care provider with prescribing authority
		Extended-release injectable	Monthly	

Source: PCT, 2016

MAT for Opioid Use Disorder continued from previous page

Each of these drugs works differently. Drugs that are *agonists* bind to the opioid receptors that heroin would bind to. *Antagonists* block these receptors, rather than binding with them, stopping opioid drugs from having any effect.

Methadone is a *full agonist*, meaning it lessens symptoms of opioid withdrawal and blocks the effects of other opioid drugs. Its effects last 24-36 hours. Even though methadone binds to and activates the brain's opioid receptors like heroin or other opioids would, methadone does not have the same euphoric effect because it binds much more slowly (NIDA, 2018). No optimal length of treatment for methadone has been established, but 12 months is usually considered the minimum amount (PCT, 2016).

Buprenorphine is a *partial agonist*, meaning it binds with opioid receptors, but not as strongly as a full agonist does. The medication's effects plateau after reaching a certain level, so people do not get a greater effect even with repeated dosing. Buprenorphine reduces cravings and withdrawal symptoms. It does not produce the euphoria of other opioids and has fewer dangerous side effects. Buprenorphine is available as a tablet, a film that dissolves in the mouth, or a subdermal implant that lasts 6 months. This can be a good option for people

who struggle with taking a daily medication (NIDA, 2018).

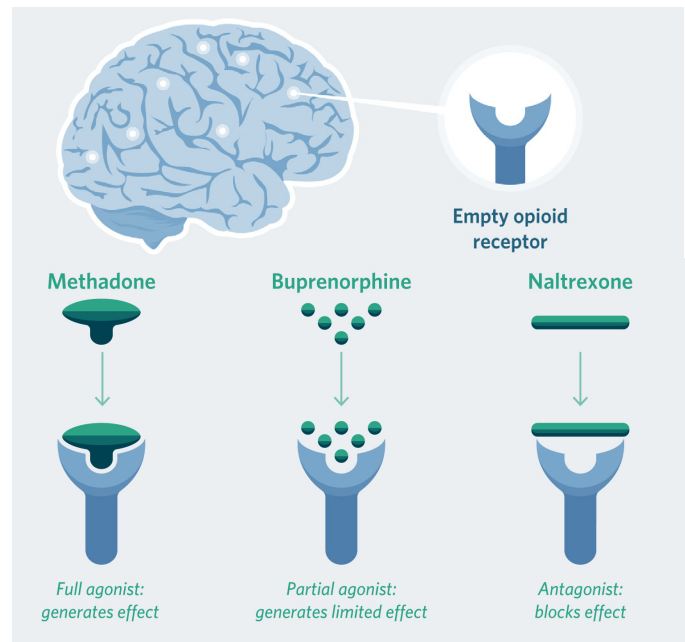
Naltrexone is an *antagonist*. It prevents opioids from binding to opioid receptors. Naltrexone does not create a euphoric feeling, and therefore does not create dependence (PCT, 2016). If someone takes opioids while on Naltrexone, the opioids have no effect. Naltrexone can only be given to patients who have completely detoxed from opioids, so it is not an ideal option for early treatment (AATOD, 2017). One advantage of naltrexone is that it comes both as a daily pill and as a long-lasting injectable.

A physician should work with each individual to determine which medication would be best for their treatment plan based on their symptoms and needs.

Misconceptions and Misunderstandings

Misunderstandings about MAT have slowed the spread of this highly effective treatment. There is a misperception that MAT is just substituting one addiction for another, since some of the treatment medications are also opioids. Medications for OUD are prescribed to people who have developed a high tolerance for opioids. The dosage they receive helps prevent withdrawal and intense cravings, but does not create a euphoric effect or "high." Patients on MAT

How OUD Medications Work in the Brain



Source: PCT, 2016

can function normally, drive safely, attend work or school, and be successful as parents (NIDA, 2018).

Patients may plan to wean off all medications eventually, but a decision about when that is safe to do must be decided between the patient and their doctor. The timeframe may depend on the severity of their addiction and any other health issues. Generally, medications used in MAT are tapered slowly over a period of months or years to give brain circuitry time to recover from prolonged drug use (NIDA, 2018).

Conclusion

Addiction is a chronic, life-threatening illness, like diabetes or hypertension. With those diseases, medications are often prescribed to control symptoms, in addition to the recommended lifestyle changes related to diet and exercise. Doctors familiar with MAT think of medications for opioid use disorders in the same way as they think of drugs for hypertension (Sheridan, 2017). These medications are a very important tool for fighting the opioid epidemic and for helping families torn apart by addiction. ♦

Find MAT in NC

- SAMHSA's Behavioral Health Treatment Services Locator <https://findtreatment.samhsa.gov/>
- North Carolina Pregnancy & Opioid Exposure Project <http://ncpoep.org/services/>

Preventing Substance Use Among Youth in Foster Care

Youth in foster care have higher rates of substance use than youth in the general population (Kim, 2017; Braciszewski, 2012; Barn, 2015; Traube, 2012). Research has focused on understanding the variables that contribute to these higher rates. While there is still much debate on exact causes, there is agreement that certain risk and protective factors influence the likelihood of substance use among youth in foster care.

Risk and Protective Factors

Risk Factors. History of maltreatment and trauma are risk factors for the development of behavioral health challenges (Kim, 2017). Thus, the experiences youth have prior to being placed in care do play a role in increasing the risk of substance use.

Risk factors shown to have a higher relationship with future substance use are: school exclusion, involvement in the criminal justice system, association with deviant peers, a history of behavior problems, and co-morbid mental health diagnoses—specifically depression and conduct disorder (Kim, 2017; Babowich, 2016).

Two of the most discussed risks factors are poor relationships with primary caregivers and lack of caregiver supervision. Given that foster care is typically a result of unsafe parenting practices, it makes sense that youth in care would experience these two risk factors at higher rates (Kim, 2012; Traube, 2012).

Protective Factors. The most consistently discussed protective factors are positive relationships with caregivers and level of caregiver supervision (Kim, 2017; Braciszewski, 2012; Barn, 2015; Traube, 2012). This has implications for youth with multiple placements, since they may have a harder time connecting with caregivers.

Other protective factors include school engagement, problem-solving skills, and emotional regulation (Kim, 2017; Traube, 2012, Barn, 2015).

Prevention Strategies

Many substance use prevention strategies focus on strengthening the youth's relationship with caregivers, building caregiver skills for helping youth address behavioral challenges, and improving youth problem solving and peer refusal skills.

An example of this is KEEP SAFE, an intervention that works with caregivers and youth together and separately to build skills that support positive parenting, problem solving, and skills to address peer pressure. One recent study showed KEEP SAFE significantly reduced substance use in foster youth 18 months after participating in the program (Kim, 2017).

Prevention strategies also address the need for increased supervision, particularly for teens. Adolescent brain development puts teens at a higher risk for unsafe behavior because the part of the brain that supports risk taking develops before the part of the brain that supports problem solving and judgment. This means teens are particularly vulnerable to substance use and other risky behavior (Galvan, 2007). Supervision includes knowledge of where teens are and who they are with, building relationships with their peer groups, and paying attention to red flags of substance use.

Opioid Use Prevention

While the risk and protective factors and prevention strategies apply to all types of substance use, there are specific strategies that focus on the prevention of opioid use. According

to a national survey, 3.6% of youth age 12-16 reported misusing opioids in 2016 (SAMHSA, 2017) and prescription drug use is one of the fastest growing drug problems in the United States (USDHHS, 2017).

Many of the recommendations from SAMHSA and the U.S. Department of Health and Human Services reflect the protective factors mentioned above, particularly building strong relationships. Other key strategies for preventing teen opioid use are:

- **Treat pain cautiously.** Most opioid use starts with a prescription for pain management. Consider alternatives and talk with medical providers about risks and concerns specific to each youth.
- **Store and dispose of medications safely.** Many adults use prescription opioids safely, but this can increase risk for youth. Over half who reported misusing prescription drugs said they got them from a friend or relative (CBHSQ, 2017).
- **Know red flags** that could indicate opioid use: drowsiness, constipation, nausea, dizziness, vomiting, dry mouth, headaches, sweating, and mood changes (USDHHS, 2017).
- **Talk with youth about the risks** of drug use and how to get help when they need it.
- **Support caregivers.** “Keeping Youth Drug Free” is a great resource to help caregivers feel comfortable and informed so they can support youth in their home. Download it here: <https://bit.ly/2yVUatT>. ♦

Here's What Child Welfare Workers Can Do

- Know the factors that increase the likelihood of substance use and strengthen protective factors to decrease risk
- Consider caregiver connectedness when making placement decisions; it protects against teen substance use
- Pay close attention to youth with mental health diagnoses; they are at higher risk of substance use
- Teach caregivers about red flags and the importance of supervising teens
- Encourage positive parenting practices
- Educate caregivers about the specific risks of opioid use and strategies for prevention



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