Parental Opioid Abuse: Barriers to Care, Policy, and Implications for Primary Care Pediatric Providers

Michelle K. Spehr, MSN, RN, CPNP; Jennifer Coddington, DNP, MSN, RN, CPNP; Azza H. Ahmed, DNSc, RN, IBCLC, CPNP; Elizabeth Jones, DNP, RN, CPNP

J Pediatr Health Care. 2017;31(6):695-702.

### Abstract and Introduction

#### Abstract

Parental opioid use is affecting the physical, developmental, and mental health of the pediatric population nationwide and raises questions of safety when these children remain in the care of opioid-addicted parents. Pediatric providers face many barriers to identifying and caring for children beyond the neonatal period who have been affected by parental opioid abuse both in utero and in the home. These barriers include communication between providers and services, identification of intrauterine exposure, parental opioid abuse screening, and knowledge of child protective services involvement. In addition, understanding current state and national health policy regarding parental opioid abuse helps providers navigate these barriers. The purpose of this article is to identify barriers to care of children affected by parental opioid abuse both in utero and in the home, to discuss current health policy surrounding the issue, and to identify implications for the care of these children in the primary care pediatric setting.

#### Introduction

Prescription opioid and heroin abuse is a known, growing epidemic throughout the country (National Institute on Drug Abuse, 2015a, National Institute on Drug Abuse, 2015b). Less often discussed is the increasing role in which parental opioid abuse is affecting children beyond the neonatal period.

In 2012, over 20,000 infants in the United States were born with neonatal abstinence syndrome (NAS; Patrick, Davis, Lehmann, & Cooper, 2015). The number of infants diagnosed with NAS has increased fivefold since 2000 (Patrick et al., 2012). Many of the nation's children are being physically exposed to opioids in utero, which could potentially have lasting effects on child development. Additionally, children of all ages are being affected by opioid use through parental use in the home; however, this is often less examined and researched. It is currently unknown how many children are living in homes specifically affected by parental opioid or heroin abuse because there is no national data collection system (Child Welfare Information Gateway [CWIG], 2014). However, it has been estimated that as many as 2.1 million children live with at least one parent abusing illegal substances (Substance Abuse and Mental Health Services Administration, 2009).

Intrauterine and childhood opioid exposure in the home are a financial burden to the nation. In 2012, initial complications of NAS resulted in a cost of approximately $1.5 billion dollars to the U.S. health care system (National Institute on Drug Abuse, 2015a, National Institute on Drug Abuse, 2015b). This does not begin to address the unknown, long-term financial costs of parental opioid exposure on children including initial hospitalization, readmission, continued developmental therapy or mental therapy, and child protective services (CPS) involvement (França, Mustafa, & McManus, 2016).

Unfortunately, there are many barriers for pediatric providers in addressing parental opioid addiction. Federal and state governments have only begun to initiate legislation that could affect some of these barriers and standardize care of children affected by parental opioid use (U.S. Department of Health and Human Services [USHHS], 2009). Although there is an abundance of literature surrounding the impact of maternal opioid addiction on neonates, there is a lack of literature concerning how maternal and paternal opioid use affect older pediatric populations. It is imperative that pediatric providers understand current barriers and health policy related to parental opioid addiction as it pertains to the child beyond the neonatal period and their role in combating this national issue. The purpose of this article is to identify barriers to care of older children affected by parental opioid abuse both in utero and in the home, to discuss current health policy surrounding the issue, and to identify implications for the care of these children in the primary care pediatric setting.

### Background

The opioid epidemic is having an effect on the physical, developmental, and mental health of the pediatric population nationwide and raises questions of safety when these children remain in the care of opioid-addicted parents (Smith & Wilson, 2016). Parental abuse of opioid drugs can occur in two ways. Parents may abuse legally prescribed opioid drugs such as oxycodone, hydrocodone, codeine, morphine, and fentanyl, or they may obtain these drugs illegally without prescription (NIDA, 2014). Additionally, parents unable to obtain prescription opioids may turn to the illegal drug heroin (NIDA, 2014). Children are affected by parental opioid abuse either through maternal exposure in utero or through parental use in the home (Smith & Wilson, 2016).

#### Exposure in Utero

Neonatal abstinence syndrome (i.e., NAS) is the term used to describe infants who are experiencing symptoms after birth of withdrawal from opioid exposure in utero (Kocherlakota, 2014). In the first few weeks to months of life, opioid-addicted infants can display symptoms such as irritability, continuous crying, decreased sleep, vomiting, diarrhea, poor feeding, tremors, difficulty breathing, and seizures (Behnke & Smith, 2013). Additionally, fetal opioid exposure can result in preterm births, causing potential complications and lasting disabilities for the child (Mactier, 2013).

Literature concerning long-term effects of prenatal opioid exposure are limited and controversial, but suggested ongoing challenges for the developing child include delayed neurodevelopment at 6 months, language and learning delays, visual impairments, cardiac difficulties, seizure disorders, and increased risk of sudden death (McGlone and Mactier, 2014, Mactier, 2013). Because of potential complications at birth and possible lasting effects of exposure to opioid substances, infants with NAS are more than twice as likely to be readmitted to the hospital during childhood (Patrick, Burke, et al., 2015).

#### Exposure in the Home

During all stages of childhood, parental use of opioids at home is associated with instability and lack of structure in the home setting (Smith & Wilson, 2016). Short-term effects of parental use of heroin and opioids, such as altered judgment and drowsy states, can result in parental inattention to child needs and safety (CWIG, 2014). Postpartum women are especially at risk for oversedation and overdose because of physiologic processes resulting in decreased a drug symptom threshold (Association of State and Territorial Health Officials [ASTHO], 2014). This further endangers infants and other children in the home. Children of parents who are abusing opioids are at an increased risk for abuse and neglect and are more likely to witness unrest and violence in the home setting (Smith and Wilson, 2016, Simmons et al., 2009). Domestic trauma can lead to emotional disturbances such as depression, drug abuse, and posttraumatic stress disorder in childhood and adolescence (Simmons et al., 2009). Because of these issues, the opioid epidemic is overwhelming CPS and the foster care system (CWIG, 2014). In several states, parental substance use is responsible for 60% of child placement in foster care (CWIG, 2014). However, barriers to care and current health policy create many obstacles to solving this issue.

### Barriers and Concerns in Pediatric Practice

Pediatric providers face many barriers to identifying and caring for children of parents with opioid addiction. These barriers include communication between providers and services, identification of intrauterine exposure, screening, knowledge of CPS involvement, and knowledge of current health policy.

"Pediatric providers face many barriers to identifying and caring for children of parents with opioid addiction."

#### Communication Between Providers and Services

Communication between primary care pediatric providers, obstetricians, birthing hospitals, and mental health providers is essential to provide comprehensive care to children of opioid-addicted parents (Salem-Schatz et al., 2004, Goyal et al., 2016). Lack of communication between providers creates a barrier that could potentially lead to delayed follow-up care with primary care providers, as well as loss of key information regarding family situations and the social interworking of patient's needs (Goyal et al., 2016).

Transition of medical records between prenatal clinics, birthing hospitals, and pediatric providers frequently leaves gaps in information between organizations (Hall, 2016). There is typically not seamless integration of maternal history, paternal history, prenatal care, and labor and birth records across electronic health records, which leaves pediatric providers with limited information about risks for parents abusing opioids (Hall, 2016). This could lead to pediatric providers missing crucial information regarding child risk of exposure to opioid use and social factors affecting child development. Hospital systems and pediatric offices must be proactive in transitioning complete records from maternal–fetal medicine to pediatric care (Goyal et al., 2016).

Children coming from families who abuse opioids are often referred to mental health providers because of resulting emotional disturbances, trauma, or behavior concerns (Simmons et al., 2009). However, there is consistently a lack of communication between primary care pediatric providers and mental health providers (Greene, Ford, Ward-Zimmerman, & Foster, 2015). As a result, the impact of parental opioid use on the child may not be fully understood by the primary care provider. To provide complete, comprehensive care to these children, pediatric primary care providers must facilitate interdisciplinary communication.

"To provide complete, comprehensive care to these children, pediatric primary care providers must facilitate interdisciplinary communication."

#### Identification of Intrauterine Exposure

It is difficult to ascertain actual rates of children affected by prenatal opioid use. It is estimated that as few as 55% of infants exposed to opioids in utero will show physical symptoms of opioid withdrawal at birth (Clark & Rohan, 2015). Without reliable indicators of prenatal drug exposure, it can be difficult to identify all infants exposed to opioids in utero (Casper & Arbour, 2013). It becomes even more challenging for pediatric providers to ascertain previous intrauterine opioid exposure as the child grows older. Because of lack of communication, poor integration of medical records, and the controversy of legally mandated testing, most of this identification will come through parental self-report and screening (Association of State and Territorial Health Officials, 2014, Goyal et al., 2016, Hall, 2016). However, parents may be reluctant to disclose previous opioid use (Casper & Arbour, 2013). Obtaining information about previous prenatal opioid exposure is important in understanding the potential long-term effects such as developmental and learning delays, as well as mental health issues (Mactier, 2013, Simmons et al., 2009).

#### Parental Opioid Abuse Screening

The American Academy of Pediatrics currently recommends screening all parents for substance abuse at every well-child visit (Smith & Wilson, 2016). However, despite growing concern for parental opioid use, this type of screening is not a common standard of care (Lane et al., 2007, Simmons et al., 2009). In one national study, only 44% of at-risk parents were asked about substance abuse, compared with 77% being asked about smoking (Garg, Nelson, Burrell, Duggan, & Sia, 2010).

Few screening tools for parental opioid abuse have been researched for use in the pediatric primary care setting (Lane et al., 2007, Simmons et al., 2009). Lane et al. (2007) validated a two-question screening tool called the Parent Screening Questionnaire to evaluate parental drug and alcohol use. The Parent Screening Questionnaire resulted in a sensitivity of only 29% but a specificity of 95% (Lane et al., 2007). However, this tool does not specifically evaluate the use of opioids. The National Institute on Drug Abuse, 2015a, National Institute on Drug Abuse, 2015b) suggests using the Opioid Risk Tool to screen specifically for opioids, but this tool has not been tested for use on parents in the pediatric setting. In areas witnessing high rates of opioid use, a tool specifically screening for parental heroin and prescription opioid use in the pediatric primary care office might be of value.

Screening tools may be controversial for use in pediatric practices. Some providers argue that screening for parental opioid use is detrimental to their rapport with families or is outside the scope of pediatric practice (Garg et al., 2010, Lane et al., 2007). Other pediatric providers question the usefulness of using these screening tools if they believe that the likelihood of parents admitting to opioid use or seeking treatment is low (Simmons et al., 2009). Parents may be reluctant to disclose use or seek treatment because of fear of judgement or CPS involvement (Lane et al., 2007). Furthermore, public health programs and treatment centers supporting opioid-addicted parents and affected children are often underfunded (Ko et al., 2016). Providers may view screening for parental opioid use as futile if their practice area lacks resources for opioid-addicted parents. However, this screening is essential for pediatric providers to identify children at risk of opioid exposure in the home.

**CPS Involvement.** CPS promotes the safety and wellness of children who may be abused or neglected (CWIG, 2014). Despite sharing this common goal, there is often a divide between pediatric primary care and CPS (CWIG, 2014). Providers are often concerned that parents may not return for future well-child visits if they fear being found as abusing opioids and at risk for CPS involvement (Garg et al., 2010). Without involving CPS in the discussion of the child's primary care, pediatric providers are very limited in their understanding of the child's current home situation and risk further endangering the child (CWIG, 2014). With the common goal of child wellbeing in mind, pediatric primary care providers and CPS organizations must strengthen their interdisciplinary involvement to create a cohesive care model (CWIG, 2014). For this to work, further development of health policy may be required to make clear guidelines concerning identification of parental opioid use and CPS referral.

### Current Health Policy

Health policy at the state and national levels mandates pediatric provider management of parental opioid use concerning screening, surveillance, research of treatment, identification, and referral to CPS (CWIG, 2015). However, current health policy affecting parental opioid use is limited and controversial. Much of this health policy, especially federal legislation, is focused solely on perinatal opioid use and does not address parental opioid use as it pertains to older children. Understanding current legislation surrounding parental opioid use is vital to identifying opportunities for provider and health policy improvement.

#### State Level

Although not specifically focusing on opioid use, The Child Abuse Prevention and Treatment Act was one of the first laws affecting health care providers in the management of substance-exposed children (CWIG, 2015). The Child Abuse Prevention and Treatment Act mandates that all states have policies in place regarding reporting of all infants prenatally exposed to alcohol and drugs, including opioids (Chasnoff & Gardner, 2015). However, states vary in their interpretation of this federal law (CWIG, 2015). Although some states mandate that CPS create alternate plans of care for reported prenatally exposed newborns, other states require only that CPS assess these reported newborns and refer to external resources (CWIG, 2015).

After this initial required reporting at birth, however, many pediatric providers working with older children are often unsure of obligations to report to CPS. Many facilities do not have protocols for reporting child exposure of parental opioid use to CPS (ASTHO, 2014). One study found that only around one sixth of 166 nationwide facilities had protocols that noted instructions for reporting parental opioid exposure of older children to outside agencies (ASTHO, 2014).

There is controversy among states concerning whether parental opioid use should be deemed abuse or neglect. Many pediatric providers remain concerned by the potential impact that state criminalization and mandatory screening/reporting of parental substance use could play in avoidance of well-child care, especially if the state deems it as grounds for termination of custody (Association of State and Territorial Health Officials, 2014, Child Welfare Information Gateway, 2014). Colorado has actively combated this avoidance of care by preventing prenatal drug screenings from being admissible to court (ASTHO, 2014). Criminalization has been addressed in 34 states with regard to childhood exposure to illegal opioid use and drug activity as of 2015 (CWIG, 2015). However, this does not necessarily mandate pediatric providers to report to CPS unless abuse or neglect of the child is observed. In 2015, 14 states deemed prenatal exposure of opioids an act of child abuse or child neglect, meaning that this finding would be reportable (CWIG, 2015). However, even if reports are made, the decision to act on a report of childhood exposure to parental opioid use is often up to the CPS agency (USHHS, 2009). This results in additional confusion and frustration of pediatric providers. Clear national guidelines and better enforcement could lead to an increased understanding of when pediatric providers should make reports to CPS and could allow for further compliance of this issue.

Proper screening of infants for opioid exposure is also subject to state discretion. Currently, the American College of Obstetricians and Gynecologists (ACOG) endorses routine, conversational screening of all women for opioid use during pregnancy (American College of Obstetricians and Gynecologists, 2012, American College of Obstetricians and Gynecologists, 2015, Association of State and Territorial Health Officials, 2014). However, ACOG also believes that it is inappropriate to use positive screening results to provoke legal action against women who abuse drugs or to separate parents and children, because this likely leads to decreased provider–patient relationships and lower rates of prenatal care (American College of Obstetricians and Gynecologists, 2011, American College of Obstetricians and Gynecologists, 2015). States vary in their support of these ACOG recommendations, and few states require mandatory maternal or newborn screening for opioid use (ASTHO, 2014). Mandating universal screening of parental opioid use across state lines in efforts to curb a public health issue (not a criminal issue) would be an opportunity to identify parental opioid use without having to discriminate against parents and affect the family–provider relationship (ASTHO, 2014). This could allow pediatric providers to better identify those children at risk of developing delays as a result of intrauterine exposure, as well as to closely assess children for continued exposure to parental opioid use in the home.

#### Federal Level

Currently, legislators, providers, and organizations around the nation are calling for improved restriction of opioid prescription and use. These stakeholders are also calling for enhanced prevention and access to care of children exposed to parental opioid use. Although there is no specific federal legislation addressing children affected by opioid use in the home, some progress has been made to help those children exposed to opioids in utero.

The Protecting Our Infants Act of 2015 (S. Res. 799/H.R. 1462) requires the USHHS to conduct a review and develop plans to address gaps in research, treatment, and federal efforts related to prenatal opioid abuse (Protecting Our Infants Act of 2015, 2015a, Protecting Our Infants Act of 2015, 2015b). Specifically, it outlines the need to review gaps in research concerning the long-term effects of NAS (Protecting Our Infants Act of 2015, 2015a, Protecting Our Infants Act of 2015, 2015b). Additionally, this law allows the USHHS to continue to help states implement and improve data collection systems and distribute information (Protecting Our Infants Act of 2015, 2015a, Protecting Our Infants Act of 2015, 2015b). This could help further monitor and treat parental opioid use; however, the ways in which the USHHS is able to provide this technical assistance are not clearly outlined. Additionally, The Substance Abuse and Mental Health Services Administration promised to assist six states in improving ties between different services including child welfare, abuse treatment, providers, child care, and education to support opioid-addicted women and their children (Krans & Patrick, 2016). This kind of federal support and assistance could continue to be expanded to additional states.

There was additional legislation to support prenatally exposed children proposed by the 114th Congress. The Nurturing and Supporting Healthy Babies Act (H.R. 4978/S. Res 2872) was proposed in 2016 to gain knowledge to inform Medicaid policy practices for infants prenatally exposed to opioids and to help identify federal barriers to care (Nurturing and Supporting Healthy Babies Act, 2016a, Nurturing and Supporting Healthy Babies Act, 2016b). The Cradle Act (H.R. 3685/S. Res. 2542) would require Medicaid to create new guidelines for the treatment of infants with NAS at residential pediatric recovery centers (The Cradle Act, 2016a, The Cradle Act, 2016b). However, these bills expired with the recent induction of newly appointed officials and now would need to be reintroduced in the 115th Congress to progress to becoming law.

Because of the use of publicly funded programs in opioid treatment and prevention, it is vital that federal policy become further involved in taking action on the opioid epidemic and its effects on older children in the home setting. Monitoring state-specific parental opioid use incidence rates is important to ensure that adequate treatment and resources exist to address the mental and physical effects of parental opioid abuse within jurisdictions (Ko et al., 2016).

### Implications for Pediatric Primary Care

Pediatric primary care providers are poised to play a critical role in prevention, education, screening, and referral of families at risk of parental opioid addiction. These providers will be most involved with monitoring parental opioid abuse and its affects during the infant, childhood, and adolescent periods (USHHS, 2009).

At all well-child visits, pediatric providers should conduct a thorough social and family history to assess for potential drug abuse. Additionally, providers are encouraged to screen every family for parental opioid use at well visits and refer the parent to their primary practitioner or other treatment resources in the case of a positive screening result (Smith & Wilson, 2016). Parents of newborns should especially be screened for parental opioid abuse, because the stress of life changes and postpartum depression may be associated with higher risk for initial use of illicit substances or relapse (Chapman and Wu, 2013, Association of State and Territorial Health Officials, 2014). Family screening could be important in identifying children currently living in households with opioid use or could alert providers to children who may be at high risk for abuse (Simmons et al., 2009). If parents do not regularly receive primary care, child well-visits could be the only chance for screening certain families who would otherwise go undetected (Lane et al., 2007).

Providers should approach parents in an empathetic, nonjudgmental way concerning substance use, because this could lead to a more engaged, open, and trusting relationship with the family (Smith & Wilson, 2016). It is important for providers to acknowledge any personal biases and to ensure these do not compromise decisions of care. Pediatric primary care providers must be prepared to care for children affected by parental opioid abuse including both those who were previously exposed to opioids in utero and those who continue to be exposed to parental opioid use in the home ().

#### Table.  Implications for primary care pediatric providers

|  |  |
| --- | --- |
| **Child exposed in utero** | **Child exposed in the home** |
|          Increase communication and record sharing between obstetric/NICU providers.         See at-risk newborns within 2 days of discharge         Assess weight gain         Monitor for hearing and vision defects         Screen for developmental delays, cognitive delays, attention deficit hyperactivity disorder, behavior issues, and learning impediments and refer to early intervention programs as necessary         Report to CPS if suspected use of fetal opioid exposure |          Assess for parental substance abuse at each well-child check-up         Continue to encourage breastfeeding         Educate parents on safety plans, postpartum depression, treatment options, and safe sleep         Refer at-risk children to counseling and social services         Understand specific state legislation on indications for reporting to CPS         Always report to CPS if child abuse or neglect is suspected |

Note. CPS, Child protective services.

#### Management of the Child Exposed In Utero

Children being discharged home from the hospital with a known history of prenatal opioid exposure should be seen by the primary pediatric provider within 2 days (Kocherlakota, 2014). Infants with known exposure in utero should be frequently and carefully monitored for weight gain to assess for complications of exposure, including failure to thrive (Hudak and Tan, 2012, Kocherlakota, 2014). Additionally, practitioners should continue to encourage breastfeeding in this population whether or not the mother is continuing to use opioids or is participating in a treatment program (Reece-Strerntan & Marinelli, 2015). If available, the family should be referred for home visits to better monitor compliance of care (Kocherlakota, 2014).

Children exposed to opioids in utero should also be closely monitored for hearing and vision deficits; particularly including careful assessment at every well-child visit for hearing impairment, strabismus, and nystagmus (Kocherlakota, 2014, Mactier, 2013). Additionally, the child should be carefully monitored for developmental delays and cognitive delays through reliable tools such as the Ages and Stages Questionnaire, as well as parental reports of attention deficit hyperactivity disorder, behavior issues, and learning delays at every well-child visit (Kocherlakota, 2014). At-risk children with any developmental issues should be referred to early intervention programs such as Early Head Start or Head Start (USHHS, 2009). In fact, many states' health policies include prenatal opioid exposure as a risk factor that should result in referral for intensive developmental assessment (USHHS, 2009).

Long-term effects of prenatal opioid exposure have the potential to be combated by positive parent interactions and safe home environments starting during the newborn period and continuing throughout childhood (CWIG, 2014). Pediatric practitioners could help foster these positive parenting practices with well-formed relationships and continuous care throughout childhood.

#### Management of the Child Exposed in the Home

Pediatric primary care providers must continue to monitor for complications of parental opioid abuse in the home. If possible, pediatric providers should meet with at-risk families before birth to build rapport and to ease the transition of care (Smith & Wilson, 2016). Children exposed to parental opioid use are frequently taken out of the home setting and placed with other relatives or foster families (CWIG, 2014). Practitioners must be prepared to work closely with guardians and foster care families to better monitor child behavioral and psychological difficulties as a result of stress and life changes (CWIG, 2014).

During infancy and young childhood, pediatric providers should discuss child safety plans and available support systems with parents if at risk for opioid use (ASTHO, 2014). This should especially occur if the parent previously used drugs, because these parents are more likely to seek opioids during the child's infancy (ASTHO, 2014). Infants are at increased risk for SIDs if parents are abusing opioids (Kocherlakota, 2014, Mactier, 2013). All parents, but especially those with opioid addictions, should be counseled on the importance of safe sleep and putting the child on his/her back in the crib if parents become drowsy themselves (Mactier, 2013).

Older children and adolescents exposed to parental opioid use in the home are at increased risk of developing mental illness and behavior disturbances in response to emotional trauma (Simmons et al., 2009). These children could benefit from prompt referral to counseling, psychologists, and social services (Simmons et al., 2009). When this occurs, pediatric providers should continue to increase open communication with mental health clinicians to fully understand psychological effects of opioid exposure on the child.

At every office visit, pediatric providers should carefully monitor families at risk for opioid abuse for signs of child abuse and neglect such as failure to thrive, abnormal bruising, unexplained injury, abnormal social interactions for developmental age, and abnormally dirty skin or clothing (Smith & Wilson, 2016). Increased reporting to CPS could lead to earlier interventions that support positive parenting and decreased effects of child abuse/neglect and could potentially lead to parents receiving needed treatment (Smith & Wilson, 2016).

#### CPS and Health Policy

It is essential that providers be aware of state guidelines concerning CPS involvement and should refer accordingly. Information on state regulations and policies can typically be found on individual state CPS Web sites or by visiting CWIG's Web site on system-wide laws and policies. Regardless of state guidelines, every child suspected of maltreatment, abuse, or neglect as a result of parental opioid use should be immediately reported to CPS for further evaluation (Smith & Wilson, 2016). Additionally, pediatric providers and CPS must be proactive in improving connections and communication to facilitate comprehensive care for children affected by parental opioid use (CWIG, 2014). CPS should be a resource to help parents and families improve positive parenting and the child's environment. CPS typically has negative connotations when they become involved with the family, but a positive spin on what CPS can provide as far as support and resources is what should be stressed to parents.

"CPS should be a resource to help parents and families improve positive parenting and the child's environment."

Pediatric providers must also be aware of their current state policies concerning screening, criminalization, and mandated reporting with regard to parental opioid use. In this way, providers can adopt processes to carefully balance compliance with state laws, safety of children, and rapport with parents who could potentially avoid preventative care. Providers must understand their community's current rate of opioid use and be aware of the community needs and options for treatment (Smith & Wilson, 2016).

Looking forward, pediatric providers should be cognizant of future legislation proposing research, funding, or mandates concerning parental opioid use. Most federal laws currently focus on physical effects of opioid exposure to children in utero. However, it is essential that future federal legislation address complications surrounding childhood exposure to drug use in the home after the neonatal period and the long-term effects of children who are exposed in utero. Pediatric providers need additional research on the effects of opioid exposure throughout all childhood stages to fully understand long-term effects, appropriate treatment, and incidence of child exposure to opioid use in individual communities (Smith & Wilson, 2016). Pediatric practitioners could join their professional organizations in lobbying for state and national laws that aim to research and combat negative outcomes associated with parental opioid use, especially with regard to those children beyond the neonatal period.

### Conclusion

Parental opioid abuse is creating long-term consequences on the health of children nationwide (Mactier, 2013, McGlone and Mactier, 2014). Primary care providers must be diligent in assessing for and identifying parental opioid use in the pediatric setting. Further work is needed to create clinical practice guidelines for both long-term treatment of children prenatally exposed to opioids and of those children being exposed to parental opioid use in the home.

Clinical practice guidelines should be based on what we know about the population, their social situation, and current delivery of care. To eliminate current barriers to parental opioid abuse, health policy needs to become uniform among states and include additional policy regarding older children affected by opioid use (Child Welfare Information Gateway, 2014, U.S. Department of Health and Human Services, 2009). Pediatric providers could further influence health policy by advocating for state legislation to unify parental screening or infant testing, thereby decreasing barriers of screening, communication, and identification. Providers must also support federal legislation promoting further research of state-specific incidence rates and promoting funding for treatment of parental opioid use and childhood effects. Efforts should be made across disciplines to coordinate care of these complex pediatric patients and their families.

#### References

1.     American College of Obstetricians and Gynecologists. (2011). Substance abuse reporting and pregnancy: The role of the obstetrician-gynecologist. Obstetric Gynecology, 117, 200–201.

2.     American College of Obstetricians and Gynecologists. (2012). Opioid abuse, dependence, and addiction in pregnancy. Obstetric Gynecology, 197, 1070–1076.

3.     American College of Obstetricians and Gynecologists. (2015). Alcohol abuse and other substance use disorders: Ethical issues in obstetric and gynecologic practice. Obstetric Gynecology, 125, 1529–1537.

4.     Association of State and Territorial Health Officials. (2014). Neonatal abstinence syndrome: How states can help advance the knowledge base for primary prevention and best practices for care. Arlington, VA: Author. Retrieved from [www.astho.org](http://www.astho.org/)

5.     Behnke, M. B., & Smith, V. C. (2013). Prenatal substance abuse: Short and long-term effects on the exposed fetus. Pediatrics, 131, 1009–1024.

6.     Casper, T., & Arbour, M. W. (2013). Identification of the pregnant woman who is using drugs: Implications for perinatal and neonatal care. Journal of Midwifery & Women's Health, 58, 697–701.

7.     Chapman, S. L. C., & Wu, L. (2013). Postpartum substance use and depressive symptoms: A review. Women Health, 53, 479–503.

8.     Chasnoff, I. J., & Gardner, S. (2015). Neonatal abstinence syndrome: A policy perspective. Journal of Perinatology, 35, 539.

9.     Child Welfare Information Gateway. (2014). Parental substance use and the child welfare system.Washington, DC: Author. Retrieved from <https://www.childwelfare.gov/pubPDFs/parentalsubabuse.pdf>

10.  Child Welfare Information Gateway. (2015). Parental drug use as child abuse. Washington, DC: Author. Retrieved from <https://www.childwelfare.gov/pubPDFs/drugexposed.pdf>

11.  Clark, L., & Rohan, A. (2015). Identifying and assessing the substance-exposed infant. The American Journal of Maternal/Child Nursing, 40(2), 87–95.

12.  França, U. L., Mustafa, S., & McManus, M. L. (2016). The growing burden of neonatal opiate exposure on children and family services in Massachusetts. Child Maltreatment, 21(1), 80–84.

13.  Garg, A., Nelson, C. S., Burrell, L., Duggan, A. K., & Sia, C. (2010). Association of substance use discussion by pediatric providers with the parent-provider relationship and maternal behavior change. Clinical Pediatrics, 49, 240–248.

14.  Goyal, N. K., Hall, E. S., Kahn, R. S., Wexelblatt, S. L., Greenberg, J. M., Samaan, Z. M., & Brown, C. M. (2016). Care coordination associated with improved timing of newborn primary care visits. Maternal Child Health Journal, 20, 1923–1932.

15.  Greene, C. A., Ford, J. D., Ward-Zimmermann, B., & Foster, D. (2015). Please break the silence: Parents' views on communication between pediatric primary care and mental health providers. Families Systems & Health, 33(2), 155–159.

16.  Hall, E. S. (2016). Informatics for perinatal and neonatal research. In J. Hutton (Ed.), Pediatric Biomedical Informatics (pp. 152–154). New York, NY: Springer.

17.  Hudak, M. L., & Tan, R. C. (2012). Neonatal drug withdrawal. Pediatrics, 129(2), e540-e560.

18.  Ko, J. Y., Patrick, S. W., Tong, V. T., Patel, R., Lind, J. N., & Barfield, W. D. (2016). Incidence of neonatal abstinence syndrome—28 states, 1993–2013. Morbidity and Mortality Weekly Report, 65(31), 799–802.

19.  Kocherlakota, P. (2014). Neonatal abstinence syndrome. Pediatrics, 134, 547–561.

20.  Krans, E. E., & Patrick, S. W. (2016). Health policy in practice opioid use disorder in pregnancy health policy and practice in the midst of an epidemic. Obstetrics & Gynecology, 128, 4–10.

21.  Lane, W. G., Dubowitz, H., Feibelman, S., Kim, J., Prescott, L., Meyer, W., & Tracy, J. K. (2007). Screening for parental substance abuse in pediatric primary care. Ambulatory Pediatrics, 7, 458–462.

22.  Mactier, H. (2013). Neonatal and longer term management following substance misuse in pregnancy. Early Human Development, 89, 887–892.

23.  McGlone, L., & Mactier, H. (2014). Infants of opioid-dependent mothers: Neurodevelopment at six months. Early Human Development, 91, 19–21.

24.  National Institute on Drug Abuse. (2014). Commonly abused drugs charts. Bethesda, MD: Author. Retrieved from <https://www.drugabuse.gov/drugs-abuse/commonly-abused-drugs-charts>

25.  National Institute on Drug Abuse. (2015a). Chart of evidence-based screening tools for adults and adolescents. Bethesda, MD: Author. Retrieved from <https://www.drugabuse.gov/nidamedmedical-health-professionals/tool-resources-your-practice/screening-assessment-drug-testing-resources/chart-evidence-based-screening-tools-adults>

26.  National Institute on Drug Abuse. (2015b). Dramatic increase in maternal opioid use and neonatal abstinence syndrome. Bethesda, MD: Author. Retrieved from <https://www.drugabuse.gov/related-topics/trends-statistics/infographics/dramatic-increases-in-maternal-opioid-use-neonatal-abstinence-syndrome>

27.  Nurturing and Supporting Healthy Babies Act, H.R. 4978, 114th Cong. (2016a).

28.  Nurturing and Supporting Healthy Babies Act, S. Res. 2972, 114th Cong. (2016b).

29.  Patrick, S. W., Burke, J. F., Biel, T. J., Auger, K. A., Goyal, N. K., & Cooper, W. O. (2015). Risk of hospital readmission among infants with neonatal abstinence syndrome. Hospital Pediatrics, 5, 513–519.

30.  Patrick, S. W., Davis, M. M., Lehmann, C. U., & Cooper, W. O. (2015). Increasing incidence and geographic distribution of neonatal abstinence syndrome: United States 2009 to 2012. Journal of Perinatology, 35, 650–655.

31.  Patrick, S. W., Schumacher, R. E., Benneyworth, B. D., Krans, E. E., McAllister, J. M., & Davis, M. M. (2012). Neonatal abstinence syndrome and associated health care expenditures. JAMA, 307, 1934–1940.

32.  Protecting Our Infants Act of 2015, S. Res. 799, 114th Cong. (2015a).

33.  Protecting Our Infants Act of 2015, H.R. 1462, 114th Cong. (2015b).

34.  Reece-Strerntan, S., & Marinelli, K. A. (2015). Academy of breastfeeding medicine clinical protocol #21: Guidelines for breastfeeding and substance use or substance use disorder. Breastfeeding Medicine, 10(3), 135–141.

35.  Salem-Schatz, S., Peterson, L. E., Clanton, M., Ezhuthachan, S., Luttrell, R. C., Newman, C., & Westbury, R. (2004). Barriers to first-week follow-up of newborns: Finding from parent and clinician focus groups. Joint Commission Journal of Quality Safety, 30, 593–601.

36.  Simmons, L. A., Havens, J. R., Whiting, J. B., Holz, J. L., & Bada, H. (2009). Illicit drug use among women with children in the United States 2002–2003. Annals of Epidemiology, 19, 187–193.

37.  Smith, V. C., & Wilson, C. R. (2016). Families affected by parental substance use. Pediatrics, 138(2), e1-e13.

38.  Substance Abuse and Mental Health Services Administration. (2009). The national survey on drug use and health report: Children living with substance depending or substance abusing parents: 2002–2007. Rockville, MD: Substance Abuse and Mental Health Services Administration.

39.  The Cradle Act, H.R. 3865, 114th Cong. (2016a).

40.  The Cradle Act, S.R. 2542, 114th Cong. (2016b).

41.  U.S. Department of Health and Human Services. (2009). Substance exposed infants: State responses to the problem. Rockville, MD: Author. Retrieved from <https://www.ncsacw.samhsa.gov/files/Substance-Exposed-Infants.pdf>

J Pediatr Health Care. 2017;31(6):695-702. © 2017 Mosby, Inc