Substance Use Disorders in High Risk Pregnancy

OBJECTIVE

The objective of this Clinical Practice Guideline (CPG) is to provide evidence-based practice recommendations for the treatment of substance use disorders (SUDs) in high risk pregnancy. The CPG discusses common SUDs as well as behavioral health implications. In addition, the CPG outlines the organizations that WellCare aligns with regarding the topic and relevant Measurements of Compliance and Measureable Health Outcomes.

OVERVIEW

General principles of managing substance use disorders in pregnancy include:

- Use Motivational Interviewing* to assess the member’s readiness to change.
- Provide information when the member is ready, to assist them in understanding the consequences of continued substance use during the pregnancy.
- Use medication assisted therapy where available for opiate addictions, not detoxification.
- For most substances there is a dose-response curve; even reductions in drug use have some benefit to the fetus.
- Alcohol is the substance with the most significant, lifelong consequences to the fetus.

* Please see Clinical Practice Guideline Motivational Interviewing and Health Behavior Change: HS-1047.

GUIDELINE HIERARCHY

CPGs are updated annually or as necessary due to updates made to guidelines or recommendations by the American College of Obstetricians and Gynecologists (ACOG). When there are differing opinions noted by national organizations, WellCare will default to the member’s benefit structure as deemed by state contracts and Medicaid / Medicare regulations. If there is no specific language pertaining to substance use disorders in high risk pregnancy, WellCare will default (in order) to the following:

- National Committee for Quality Assurance (NCQA);
- United States Preventive Services Task Force (USPSTF), National Quality Strategy (NQS), Agency for Healthcare Research and Quality (AHRQ);
- Specialty associations, colleges, societies, etc. (e.g., American Academy of Family Physicians, American Congress of Obstetricians and Gynecologists, American Cancer Society, etc.).

Links to websites within the CPGs are provided for the convenience of Providers. Listings do not imply endorsement by WellCare of the information contained on these websites.

NOTE: All links are current and accessible at the time of MPC approval.

WellCare aligns with ACOG on the topic of substance use disorders in high risk pregnancy.
The prevalence of opioid abuse during pregnancy requires that practicing obstetrician–gynecologists be aware of the implications of opioid abuse by pregnant women and of appropriate management strategies. The following are common issues in treating pregnant women with substance use disorders:1,2

- Substance users may not seek prenatal care because of fear, guilt and shame. In addition, there may be concerns about medical and legal intervention.
- Opioid users may not even realize that they are pregnant if they are not planning pregnancy and misinterpret the early signs of pregnancy as opioid withdrawal symptoms (e.g., nausea, vomiting, cramping).
  - Unintended pregnancy is common in these women; in one study, 86 percent of pregnant opioid-using women reported their pregnancy was unintended.
- Substance use assessment, counseling, and support by a nonjudgmental clinician may motivate some women who use illicit drugs other than opioids to abstain.
- Observational studies suggest that combining treatment of substance abuse with comprehensive prenatal care can reduce the frequency of some maternal and neonatal complications of maternal substance use. Components of this care should be individualized based on patient-specific factors, and may include the following:
  - Counsel about the risks associated with each drug the mother is using;
  - Encourage the member to moderate and, ideally, discontinue use of illicit drugs (dependent on specific drug and pattern of use);
  - Identify comorbid conditions (e.g., psychiatric disorders and physical/sexual/emotional abuse) frequently found in substance abusers. The interrelationships between these issues and substance use need to be addressed in caring for these patients;
  - Address the needs of poorly nourished, homeless, and/or incarcerated pregnant substance abusers. In addition to education about nutrition and weight gain, some of these women may need referral to food assistance programs and shelters, and provision of transportation vouchers and prenatal multivitamins; and
  - Assemble a multidisciplinary team to comprehensively assess and participate in the care of these women and their offspring – the team may include obstetrical, medical, pediatric, psychiatric, addiction medicine, and social service providers.

The ACOG publication can be view here.

**WORLD HEALTH ORGANIZATION (WHO)**3

The World Health Organization provides 18 recommendations to identify and manage substance use and substance use disorders during pregnancy. In its 2014 publication, the WHO outlines research by the Guideline Development Group (GDG). While the GDG recognized that extensive research needs to be done to provide a solid evidence base (evidence was either lacking or very limited), the group also applied a decision table to assess not only the quality of the evidence of effectiveness, but combined it with certainty about the harms and benefits, values and preferences, feasibility and resource implications.3

The guidelines offer five governing principles:
1. Prioritizing prevention
2. Ensuring access to prevention and treatment services
3. Respecting patient autonomy
4. Providing comprehensive care
5. Safeguarding against discrimination and stigmatization

The guidelines have six focus areas:
1. Screening and brief intervention
2. Psychosocial interventions
3. Detoxification
4. Dependence management
5. Infant feeding
6. Management of neonatal withdrawal


**Evidence Based Practice**

**MEASUREMENT OF COMPLIANCE**

CMS has not published any measures for this topic. NCQA has published the following measures for this topic:

**Follow-Up After Hospitalization for Mental Illness.** Members who are hospitalized due to a mental health diagnosis should follow up with a mental health practitioner:
• 7-Day Follow-Up should include an outpatient visit, intensive outpatient visit or partial hospitalization with a mental health practitioner within 7 days after discharge.
• 30 Day Follow-Up should include an outpatient visit, intensive outpatient visit or partial hospitalization with a mental health practitioner within 30 days after discharge.

Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (IET). Adolescent and adult Members with a new episode of alcohol or other drug (AOD) dependence should receive the following:
• Initiation of AOD Treatment should include members who initiate treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter or partial hospitalization within 14 days of the diagnosis.
• Engagement of AOD Treatment should include members who initiated treatment and who had two or more additional services with a diagnosis of AOD within 30 days of the initiation visit.

Refer to the Pregnancy and Postpartum Care CPG (HS-1029) for guidelines specific to evidence-based pregnancy and postpartum care.

Care Management

The goals of treatment include the achievement of abstinence or reduction in the use and effects of substances during pregnancy, reduction in the frequency and severity of relapse to substance use, and improvement in psychological and social functioning. To accomplish these goals, Providers should include the following elements of the treatment:

FETAL ALCOHOL SPECTRUM DISORDER (FASD)\(^{1,5}\)

FASD is an umbrella term that encompasses the range of physical, mental, behavioral, and cognitive effects that can occur in individuals with prenatal alcohol exposure, including:
• Fetal alcohol syndrome
• Partial fetal alcohol syndrome (pFAS)
• Neurobehavioral disorder associated with prenatal alcohol exposure (ND-PAE), sometimes called neurodevelopmental disorder associated with prenatal alcohol exposure

The terminology for FASD continues to evolve to reflect the spectrum of clinical presentations. Terms that have been used in the past to describe clinical or neurodevelopmental effects of prenatal alcohol exposure include “alcohol-related birth defects,” “fetal alcohol effects,” “alcohol-related neurodevelopmental disorder” (ARND), and “neurodevelopmental disorder/alcohol-exposed” or “static encephalopathy/alcohol-exposed”. Facial features of FASD include:
• Small head
• Epicanthal folds
• Low nasal bridge
• Small eye openings
• Flat midface
• Short nose
• Smooth philtrum
• Thin upper lip
• Underdeveloped jaw

Effects of Alcohol in Pregnancy
• Is teratogenic (interferes with normal development) and may cause irreversible central nervous system effects.
• Abnormalities include reduced brain volume with specific reductions in the frontal lobe, striatum and caudate nucleus, thalamus, and cerebellum; thinning of the corpus callosum; and abnormal functioning of the amygdala. These areas influence impulse control and judgment, transfer of information between the hemispheres, memory and learning, motor coordination, ability work toward goals, and perception of time.
• A “safe” threshold or pattern of alcohol consumption has not been identified. A fetus is particularly vulnerable to maternal alcohol consumption due to inefficient elimination and prolonged exposure. Alcohol is eliminated from the fetal compartment at a rate of only 3 to 4 percent of the maternal rate. In addition, much of the alcohol excreted by the fetus into the amniotic fluid is “recycled” through fetal swallowing of amniotic fluid and intramembranous absorption.
• Alcohol has the potential to cause deleterious effects at all stages of gestation.
  o Significant alcohol exposure during the first trimester is associated with facial anomalies and major structural anomalies, including brain anomalies.
  o Exposure in the second trimester increases the risk of spontaneous abortion.
Exposure in the third trimester predominantly affects weight, length, and brain growth. However, neurobehavioral effects may occur with a range of exposures throughout gestation, even in the absence of facial or structural brain anomalies.

- Teratogenic effects vary depending upon the quantity and pattern (e.g., binge drinking, daily drinking) of alcohol consumption, maternal and fetal genetics, maternal age, maternal nutrition, and smoking, among other factors.

Despite the risk factors listed below, all women are at risk of giving birth to a child with FASD if they consume alcohol:

- Low educational attainment
- Higher maternal age
- Higher gravidity and parity
- History of miscarriages and stillbirths
- Poor maternal nutrition during pregnancy
- History of FASD in previous children
- Substance use, including tobacco
- Mental health problems including depression
- History of physical or sexual abuse
- Social isolation including living in a rural area during pregnancy
- Intimate partner violence
- Paternal alcohol and drug use at the time of pregnancy
- Other maternal family members with substance use at the time of pregnancy
- Poverty

Clinical Features of FASD
The characteristic clinical features of FASD include three facial dysmorphisms (short palpebral fissures, thin vermillion border, and smooth philtrum), growth retardation, and central nervous system (CNS) abnormalities. The predominant clinical features may vary with age. Facial dysmorphisms may be apparent at birth (though may not be recognized). Growth retardation may occur prenatally or post-natally. CNS impairment may not be apparent until the child is in school. Most individuals with FASD are diagnosed during childhood. In the CDC Fetal Alcohol Syndrome Surveillance project, the average age at ascertainment of FAS was 48.3 months.

OPIATE USE IN PREGNANCY
Opioid abuse in pregnancy includes the use of heroin and the misuse of prescription opioid analgesic medications. Opioid use in pregnancy is not uncommon, and the use of illicit opioids during pregnancy is associated with an increased risk of adverse outcomes. The current standard of care for pregnant women with opioid dependence is referral for opioid-assisted therapy with methadone, but emerging evidence suggests that buprenorphine also should be considered.

Medically supervised tapered doses of opioids during pregnancy often result in relapse to former use. Abrupt discontinuation of opioids in an opioid-dependent pregnant woman can result in preterm labor, fetal distress, or fetal demise. During the intrapartum and postpartum period, special considerations are needed for women who are opioid dependent to ensure appropriate pain management, to prevent postpartum relapse and a risk of overdose, and to ensure adequate contraception to prevent unintended pregnancies. Patient stabilization with opioid-assisted therapy is compatible with breastfeeding. Neonatal abstinence syndrome is an expected and treatable condition that follows prenatal exposure to opioid agonists.

Many of the medical risks associated with heroin addiction are the same for both pregnant and non-pregnant women, and similar for addiction to other opiates. Opiate users typically have financial, social, and psychological problems that cause psychosocial stress, expose them to violence, and affect their options and treatment. Multiple obstetrical complications have been associated with opiate-dependence in pregnancy including:

- Placental abruption
- Intra-amniotic infection
- Preeclampsia
- Premature rupture of membranes
- Miscarriage
- Fetal death
- Fetal growth restriction
- Premature labor and delivery
- Placental insufficiency
- Postpartum hemorrhage

Opioid Maintenance Assisted Therapy in Pregnancy
- For opioid-dependent women, medication assisted therapy with methadone or buprenorphine offers overwhelming advantages compared to continued use of heroin (e.g., oral administration, known dose and purity, safe and steady availability, improved maternal/fetal/neonatal outcomes).
- Therapy offers a unique opportunity to bring women into medical and obstetrical care systems.
- Maintenance therapy is preferable to medication-assisted withdrawal (detoxification) because it is safe and associated with a lower rate of resumption of heroin use.
- After delivery, Neonatal Abstinence Syndrome (NAS) is likely to occur.
Medication assisted therapy can ensure the safety of pregnant women and their infants. Objectives include a reduction in adverse birth and pregnancy outcomes. It is important to note that infant withdrawal is treatable and shows no long-term adverse neurobehavioral consequences with *in utero* exposure.

**Pharmacology and Physiology of Opioid Addiction**

Opioid addiction may develop with repetitive use of either prescription opioid analgesics or heroin. Heroin is the most rapidly acting of the opioids and is highly addictive. Prescribed opioids that may be abused include codeine, fentanyl, morphine, opium, methadone, oxycodone, meperidine, hydromorphone, hydrocodone, propoxyphene, and buprenorphine (the partial agonist). The onset and intensity of euphoria will vary based on how the drug was taken and the formulation; however, all have the potential for overdose, physical dependence, abuse, and addiction. Injection of opioids also carries the risk of cellulitis and abscess formation at the injection site, sepsis, endocarditis, osteomyelitis, hepatitis B, hepatitis C, and human immunodeficiency virus (HIV) infection.

During pregnancy, chronic untreated heroin use is associated with an increased risk of fetal growth restriction, placental abruption, fetal death, preterm labor, and intrauterine passage of meconium (13). These effects may be related to the repeated exposure of the fetus to opioid withdrawal as well as the effects of withdrawal on placental function. Additionally, the lifestyle issues associated with illicit drug use put the pregnant woman at risk of engaging in activities, such as prostitution, theft, and violence, to support herself or her addiction. Such activities expose women to sexually transmitted infections, becoming victims of violence, and legal consequences, including loss of child custody, criminal proceedings, or incarceration.

**Screening for Opioid Use, Abuse, and Addiction**

Screening for substance abuse is a part of complete obstetric care and should be done in partnership with the pregnant woman. Both before pregnancy and in early pregnancy, all women should be routinely asked about their use of alcohol and drugs, including prescription opioids and other medications used for nonmedical reasons. Routine screening should rely on validated screening tools, such as questionnaires including 4P’s and CRAFFT (for women aged 26 years or younger) (below).5

<table>
<thead>
<tr>
<th><strong>4 P’s</strong></th>
<th><strong>CRAFFT—Substance Abuse Screen for Adolescents and Young Adults</strong></th>
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<tbody>
<tr>
<td>Parents: Did any of your parents have a problem with alcohol or other drug use?</td>
<td><strong>C</strong> Have you ever ridden in a CAR driven by someone (including yourself) who was high or had been using alcohol or drugs?</td>
</tr>
<tr>
<td><strong>Partner:</strong> Does your partner have a problem with alcohol or drug use?</td>
<td><strong>R</strong> Do you ever use alcohol or drugs to RELAX, feel better about yourself, or fit in?</td>
</tr>
<tr>
<td><strong>Past:</strong> In the past, have you had difficulties in your life because of alcohol or other drugs, including prescription medications?</td>
<td><strong>A</strong> Do you ever use alcohol or drugs while you are by yourself or ALONE?</td>
</tr>
<tr>
<td><strong>Present:</strong> In the past month have you drunk any alcohol or used other drugs?</td>
<td><strong>F</strong> Do you ever FORGET things you did while using alcohol or drugs?</td>
</tr>
<tr>
<td>Scoring: Any “yes” should trigger further questions.</td>
<td><strong>F</strong> Do your FAMILY or friends ever tell you that you should cut down on your drinking or drug use?</td>
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<tr>
<td></td>
<td><strong>T</strong> Have you ever gotten in TROUBLE while you were using alcohol or drugs?</td>
</tr>
<tr>
<td></td>
<td><strong>Scoring:</strong> Two or more positive items indicate the need for further assessment.</td>
</tr>
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</table>

Pregnant women with opioid addiction often seek prenatal care late in pregnancy; exhibit poor adherence to their appointments; experience poor weight gain; or exhibit sedation, intoxication, withdrawal, or erratic behavior. On physical examination, some signs of drug use may be present, such as track marks from intravenous injection, lesions from interdermal injections or “skin popping,” abscesses, or cellulitis. Positive results of serologic tests for HIV, hepatitis B, or hepatitis C also may indicate substance abuse. Urine drug testing is an adjunct to detect or confirm suspected substance use, but should be performed only with the patient’s consent and in compliance with state laws. Pregnant women must be informed of the potential ramifications of a positive test result, including any mandatory reporting requirements. Laboratory testing for HIV, hepatitis B, and hepatitis C should be repeated in the third trimester, if indicated. The use of an antagonist, such as naloxone, to diagnose opioid dependence in pregnant women is contraindicated because induced withdrawal may precipitate preterm labor or fetal distress. Naloxone should be used only in the case of maternal overdose to save the woman’s life.
Intrapartum and Postpartum Management

Women receiving opioid-assisted therapy who are undergoing labor should receive pain relief as if they were not taking opioids because the maintenance dosage does not provide adequate analgesia for labor. Epidural or spinal anesthesia should be offered where appropriate for management of pain in labor or for delivery. Narcotic agonist–antagonist drugs, such as butorphanol, nalbuphine, and pentazocine, should be avoided because they may precipitate acute withdrawal. Buprenorphine should not be administered to a patient who takes methadone. Pediatric staff should be notified of all narcotic-exposed infants. In general, patients undergoing opioid maintenance treatment will require higher doses of opioids to achieve analgesia than other patients.

Women should be counseled that minimal levels of methadone and buprenorphine are found in breast milk regardless of the maternal dose. Breastfeeding should be encouraged in patients without HIV who are not using additional drugs and who have no other contraindications. The current buprenorphine package insert advises against breastfeeding; however, a consensus panel stated that the effects on the breastfed infant are likely to be minimal and that breastfeeding is not contraindicated. Swaddling associated with breastfeeding may reduce neonatal abstinence syndrome symptoms, and breastfeeding contributes to bonding between mother and infant as well as providing immunity to the infant.

Neonatal Abstinence Syndrome

Although maternal methadone or buprenorphine therapy improves pregnancy outcomes and reduces risky behavior, its use puts the neonate at risk of neonatal abstinence syndrome, which is characterized by hyperactivity of the central and autonomic nervous systems. Infants with neonatal abstinence syndrome may have uncoordinated sucking reflexes leading to poor feeding, become irritable, and produce a high-pitched cry. In infants exposed to methadone, symptoms of withdrawal may begin at any time in the first 2 weeks of life, but usually appear within 72 hours of birth and may last several days to weeks. Infants exposed to buprenorphine who develop neonatal abstinence syndrome generally develop symptoms within 12–48 hours of birth that peak at 72–96 hours and resolve by 7 days. Close communication between the obstetrician and pediatrician is necessary for optimal management of the neonate. All infants born to women who use opioids during pregnancy should be monitored for neonatal abstinence syndrome and treated if indicated. Treatment is adequate if the infant has rhythmic feeding and sleep cycles and optimal weight gain.

Long-Term Infant Outcome

Recent data on long-term outcomes of infants with in utero opioid exposure are limited. For the most part, earlier studies have not found significant differences in cognitive development between children up to 5 years of age exposed to methadone in utero and control groups matched for age, race, and socioeconomic status, although scores were often lower in both groups compared with population data (36). Preventive interventions that focus on enriching the early experiences of such children and improving the quality of the home environment are likely to be beneficial.

MARIJUANA USE IN PREGNANCY

Marijuana is the most common illicit substance used during pregnancy. The drug is transferred across the placenta and into breast milk. The impact of prenatal marijuana use on pregnancy outcome is not clear. Adverse effects have not been consistently reported and there is no strong evidence of an increase in congenital anomalies or growth restriction. Observational studies have not reported an association between marijuana use and preterm birth.

The self-reported prevalence of marijuana use during pregnancy ranges from 2% to 5% in most studies. A growing number of states are legalizing marijuana for medicinal or recreational purposes, and its use by pregnant women could increase even further as a result. Because of concerns regarding impaired neurodevelopment, as well as maternal and fetal exposure to the adverse effects of smoking, women who are pregnant or contemplating pregnancy should be encouraged to discontinue marijuana use. Obstetrician–gynecologists should be discouraged from prescribing or suggesting the use of marijuana for medicinal purposes during preconception, pregnancy, and lactation. There are insufficient data to evaluate the effects of marijuana use on infants during lactation and breastfeeding, and in the absence of such data, marijuana use is discouraged. In addition, ACOG recommends the following:

- Before pregnancy and in early pregnancy, all women should be asked about their use of tobacco, alcohol, and other drugs, including marijuana and other medications used for nonmedical reasons.
- Women reporting marijuana use should be counseled about concerns regarding potential adverse health consequences of continued use during pregnancy.
Women who are pregnant or contemplating pregnancy should be encouraged to discontinue marijuana use.

Pregnant women or women contemplating pregnancy should be encouraged to discontinue use of marijuana for medicinal purposes in favor of an alternative therapy for which there are better pregnancy-specific safety data.

COCAINExE USE IN PREGNANCY

Public and professional interest in prenatal cocaine use is high, although many more pregnant women smoke cigarettes, drink alcohol, or smoke marijuana than use cocaine. Female crack/cocaine users in their thirties constitute a fast growing group of new users who do not use other substances. Cocaine readily crosses the placenta and fetal blood-brain barrier; vasoconstriction is the major purported mechanism for fetal and placental damage. The few adequately controlled reports suggest that cocaine’s effects are related to dose and stage of pregnancy. Studies that evaluated the relationship between maternal cocaine exposure found cocaine use during pregnancy significantly increased the risks of:

- Preterm birth
- Low birth weight
- Small for gestational age infant
- Shorter gestational age at delivery
- Reduced birth weight
- Others have reported increased risks of miscarriage, placental abruption and decreased length and head circumference at birth.

In addition, the use of cocaine and amphetamine use in pregnancy can cause the following:

- Cardiovascular cocaine toxicity is increased in pregnant women.
- Cocaine toxicity usually causes hypertension, which may mimic preeclampsia.
- Amphetamines including methamphetamine — A diagnosis of amphetamine abuse is becoming more common among women of reproductive age, including hospitalized pregnant women.
- Methamphetamine, commonly known as speed, meth, and chalk, or as ice, crystal, and glass when smoked, is a powerfully addictive stimulant. It is a known neurotoxic agent, which damages the endings of brain cells containing dopamine.
- Amphetamines and their byproducts cross the placenta.
- Methamphetamine exposure during pregnancy has been associated with maternal and neonatal morbidity and mortality. In studies that controlled for confounders, methamphetamine exposure was associated with a two- to fourfold increase in risk of fetal growth restriction, gestational hypertension, preeclampsia, abruption, preterm birth, intrauterine fetal demise, neonatal death, and infant death.

SMOKING IN PREGNANCY

Cigarette smoking during pregnancy is the most important modifiable risk factor associated with adverse pregnancy outcomes. In 2002 in the United States, 5 to 8 percent of preterm deliveries, 13 to 19 percent of full-term infants with growth restriction, 5 to 7 percent of preterm-related deaths, and 23 to 34 percent of sudden infant death syndrome (SIDS) deaths were attributable to prenatal smoking. In addition, smoking and secondhand smoke exposure increase the risk of infertility, placental abruption, preterm premature rupture of membranes (PPROM), and placenta previa. Other items:

- Despite the known harmful effects of smoking, 23 percent of American women report smoking cigarettes in the three months before pregnancy.
- In the United States, the Pregnancy Risk Assessment Monitoring System (PRAMS) survey reported a prevalence of 11 percent during the last three months of pregnancy in 2010.
- Smoking prevalence was highest in women aged 20 to 24 years (17.6 percent), were American Indians/Alaska Natives (26.0 percent), had <12 years of education (17.4 percent), and had Medicaid coverage during pregnancy or at delivery (17.6 percent).
- The use of biochemical markers, including exhaled carbon monoxide and urinary cotinine, has shown that pregnant women underreport both smoking status and the extent of smoking.

Effects of Smoking in Pregnancy

- Impaired fetal oxygen delivery is the best-studied cause of adverse outcome in pregnant women who smoke. Pathologic evaluations of the placentas of...
smokers have shown structural changes, including a reduction in the fraction of capillary volume and increased thickness of the villous membrane when compared to nonsmokers.

- Another problem is that carbon monoxide exposure from smoking causes the formation of carboxyhemoglobin, which also impairs fetal oxygen delivery.
- Smoking may also result in direct damage to fetal genetic material.
- Other possible mechanisms responsible for adverse fetal outcomes in mothers who smoke include direct toxicity of the more than 2500 substances found in cigarettes, such as ammonia, polycyclic aromatic hydrocarbons, hydrogen cyanide, vinyl chloride, nitrogen oxide, and carbon monoxide.
- Finally, exposure to nicotine results in sympathetic activation leading to acceleration of fetal heart rate and a reduction in fetal breathing movement.

**Adverse Outcomes in Pregnant Smokers**

- **Reduction in birth weight.** The birth weight deficit associated with smoking is 100-300 grams, depending on the number of cigarettes smoked. Smoking in the third trimester appears to have the greatest impact. Women who smoke are 1.5 to 3.5 times more likely to have a LBW infant; risk increases with increasing cigarette consumption.
- **Stillbirth.** Studies have shown a relative risk ranging from 1.2 to 1.4 in smokers. A dose response curve has been reported, with heavy smokers having the greatest risk.
- **Preterm premature rupture of membranes (PPROM).** There is a consistent increase in risk of PPROM among smokers, with relative risks ranging from 1.9 to 4.2.
- **Placental abruption/placenta previa.** Cigarette smoking increases the risk of placental abruption, with reported adjusted relative risks of 1.4 to 2.5. Dose-response curve analysis has consistently revealed that the risk of abruption is greatest among heavy smokers. Cigarette smoking has also been consistently associated with placenta previa, with reported relative risks ranging from 1.4 to 4.4. A dose-response curve for this complication has not been consistently replicated.

**MEASURABLE HEALTH OUTCOMES**

Targeted Case Management outcomes (Extended Program Goals) result from successful self-management (see Case Management Objectives).

- **SYMPTOMS:** Improved Member sobriety through increased coping skills. Compare Member response to CAGE Assessment questions related to symptom changes to substance use pre- and post- engagement at 6-12 months. In absence of data sources, Provider and Member narrative may be used.
- **ADHERENCE:** Improved Member adherence to medication and attendance of substance use treatment/appointments. Compare pharmacy and office visit claims data pre-and post- engagement to validate adherence to timely refill of the prescribed medication(s) and provider visit(s). Member’s prescription refills demonstrate at least an 80% adherence rate (verified by claims or member/provider narrative) over a 6 month interval. In absence of pharmacy and office visit claims data, the Member narrative and/or professional reporting of adherence to medication and attendance of behavioral health related appointments may be used.
- **ENGAGEMENT:** Improved Member social engagement/social support system with others through meaningful roles and relationships in his/her social life, educational and occupational settings. Compare member narrative pre- and post- engagement at 6-12 months.
- **UTILIZATION:** Decreased Member substance use episodes leading to emergency room visits and hospital stays. Compare utilization data pre- and post- engagement 6-12 months. In absence of data sources, Provider and Member narrative may be used.

**CASE GOALS**

Case Goals Should target specific care gaps and/or adherence issues, and measure the member’s progress towards self-management and adherence which lead to the targeted health outcomes above, for example:

- **SYMPTOMS:** Reduction of behavioral health symptoms by 10% using valid, reliable rating scales (e.g. BDRS, PHQ-9, GAD, etc.).
- **SYMPTOMS:** Member describes a routine that includes checking and logging behavioral health symptoms per treatment recommendation over the last 30 days and shares data with treatment provider.
**SYMPTOMS:** Member describes coping skills and support system over the last 30 days that demonstrates improved adherence to guideline and/or treatment recommendations.

**ADHERENCE:** Attendance of >75% of behavioral health and medical appointments during a 90-day period

**ADHERENCE:** Member reports >90% adherence to daily medication plan and demonstrates familiarity with pill taking strategies (e.g. bubble packs, pill boxes, calendaring, etc.).

**ENGAGEMENT:** Increased frequency of social engagement by ≥25% over previous period as measured by number of social interactions (self-report).

**UTILIZATION:** Documentation of use of the of Therapist visit, Case Management intervention, Crisis Line call, Primary Care Physician call or visit, or Urgent Care visit prior to emergency department visit or BH Inpatient Admission ≥75% of the time.

Specific for Members requiring hospitalization: The Member participates in provider follow-up visit within 7 days of hospital discharge.

### CASE MANAGEMENT OBJECTIVES

Case Management Objectives should focus on improving the member’s self-management skills and mental health, while encouraging sobriety, through:

- Implement Behavioral Health Care Plan
- Review member’s drug history
- Identify member’s drug of choice
- Assist issues that may lead to problems in pregnancy
- Assess level of motivation for sobriety, identifying longest period of sobriety
- Review what worked in the past to maintain sobriety
- Utilize motivational interviewing techniques to promote sobriety
- Provide information regarding community and treatment resources
- Refer to professional resources including: Substance use treatment options, psychiatry, counseling, etc.
- Provide medical resources necessary to maintain positive physical health
- Encourage attendance of scheduled appointments
- Encourage adherence of prescribed medication
- Encourage of sober social contact and interaction within sober social groups and social supports

### OTHER CONSIDERATIONS

Substance abuse during pregnancy is common. Nationally, up to 25 percent of expectant mothers use illicit drugs. When a pregnant woman is addicted to drugs or alcohol, her baby is also addicted. Various pilot programs exist to medically stabilize the expectant mother and her baby. Replacement therapy and/or complete detoxification may be recommended depending on the clinical situation and staff at the pilot programs may assist with making that determination.

### MEMBER EDUCATIONAL RESOURCES

WellCare contracts with Krames/StayWell for Member educational materials utilized by Case Managers. Items are available to review with Members to address knowledge gaps. Case Managers verbally educate Members on the topics below related to substance use disorder.

- Recognizing the Signs of Substance Abuse in Teens
- When you Suspect Your Child is Using Alcohol or Drugs
- For Teens: Understand the Cycle of Addiction
- Signs of Addiction: Social Use
- Understanding the Disease of Addiction
- Understanding Inhalant Abuse
- Understanding Methamphetamine Abuse and Addiction
- Understanding Marijuana Abuse
- Understanding Heroin Abuse and Addiction
- Addiction: Ask Yourself These Questions
- Addiction: Getting Help
- Cocaine: Getting Help
- Alcoholism: Getting Help
- Alcoholism: Resources for Family and Friends
- Treating Heroin Addiction
- Treating Drug Abuse and Addiction
- Treating Inhalant Abuse
- Life After Combat: Coping with Alcohol Abuse
- Recovering from Addiction: Continuing with Counseling
- Recovering from Addiction: Coping with Relapse
- Recovering from Addiction
These materials are in the approval process and will be available for member educational mailing in the future. Providers may wish to research the titles above related to substance use disorders that Case Managers utilize with Members.

Related WellCare Guidelines

In addition to the information contained in this document, please reference the following CPGs: Behavioral Health Conditions in High Risk Pregnancy: HS 1040 and Substance Use Disorders: HS 1031.

NOTE: Clinical Policies can be accessed by going to www.wellcare.com – select the Provider tab, then “Tools” and “Clinical Guidelines”.

References

5. Ewing H. A practical guide to intervention in health and social services with pregnant and postpartum addicts and alcoholics: theoretical framework, brief screening tool, key interview questions, and strategies for referral to recovery resources. Martinez (CA): The Born Free Project, Contra Costa County Department of Health Services; 1990.

Disclaimer

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Medical Policy Committee Approval History

<table>
<thead>
<tr>
<th>Date</th>
<th>History and Revisions by the Medical Policy Committee</th>
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<tbody>
<tr>
<td>1/27/2017</td>
<td>Approved by MPC. Enhanced Care Management and Measures of Compliance sections. Revised with CM, DM, QI, UM, BH and the Chief Medical Directors.</td>
</tr>
<tr>
<td>7/7/2016</td>
<td>Approved by MPC. Included additional items from ACOG.</td>
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<tr>
<td>9/17/2015, 5/7/2015</td>
<td>Approved by MPC. Added information on SSRIs.</td>
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<tr>
<td>2/5/2015</td>
<td>Approved by MPC. New.</td>
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