



Substance Use Disorders in Pregnancy: A Chance to Break the Cycle

Screening, Brief Intervention, Referral and Treatment (SBIRT)



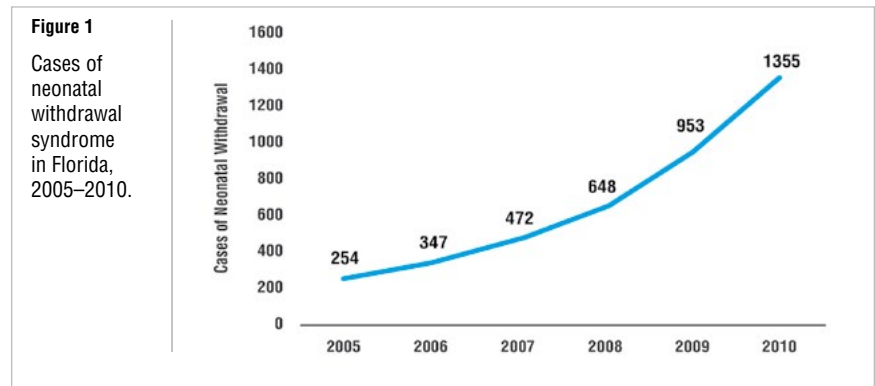
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INTRODUCTION

Substance use disorders (SUD) are a serious issue in obstetrics. The increased use of substances during pregnancy is a critical public health challenge in Florida. According to the Pregnancy Risk Assessment Monitoring System, the prevalence of new mothers using alcohol during pregnancy has increased by 68.1%, from 4.7% in 2000 to 7.9% in 2011.¹

According to data supplied to Florida’s Department of Children and Families by Florida’s Agency for Health Care Administration (AHCA), there has been more than a 500% increase in newborns treated for drug withdrawal between 2005 and 2010 that has been anecdotally attributed to maternal use of prescription drugs. See Figure 1. Given the rise in prescription drug abuse and infants requiring treatment for drug withdrawal, there is reason to believe that Florida’s pregnant women are abusing prescription drugs.²



The successful treatment rate for substance use disorders is now comparable to the compliance treatment achieved in diabetes, hypertension, and other chronic conditions.

Early identification and treatment of substance use disorders in pregnant women can reduce the potential harm to both the mother and the unborn child and reduce the probability of use after birth. Per contract with AHCA, the Managed Care Plans shall have all primary care providers screen enrollees for signs of alcohol or substance abuse as part of the prevention evaluation at the initial prenatal contact.³

The American Congress of Obstetricians and Gynecologists recommends that all pregnant women be screened for licit and illicit substance abuse. The



screenings should include alcohol; tobacco; prescription drugs such as opioids, benzodiazepines, and stimulants; and illicit drugs such as marijuana, cocaine and heroin.^{4,5,6} Given that many women with SUD have

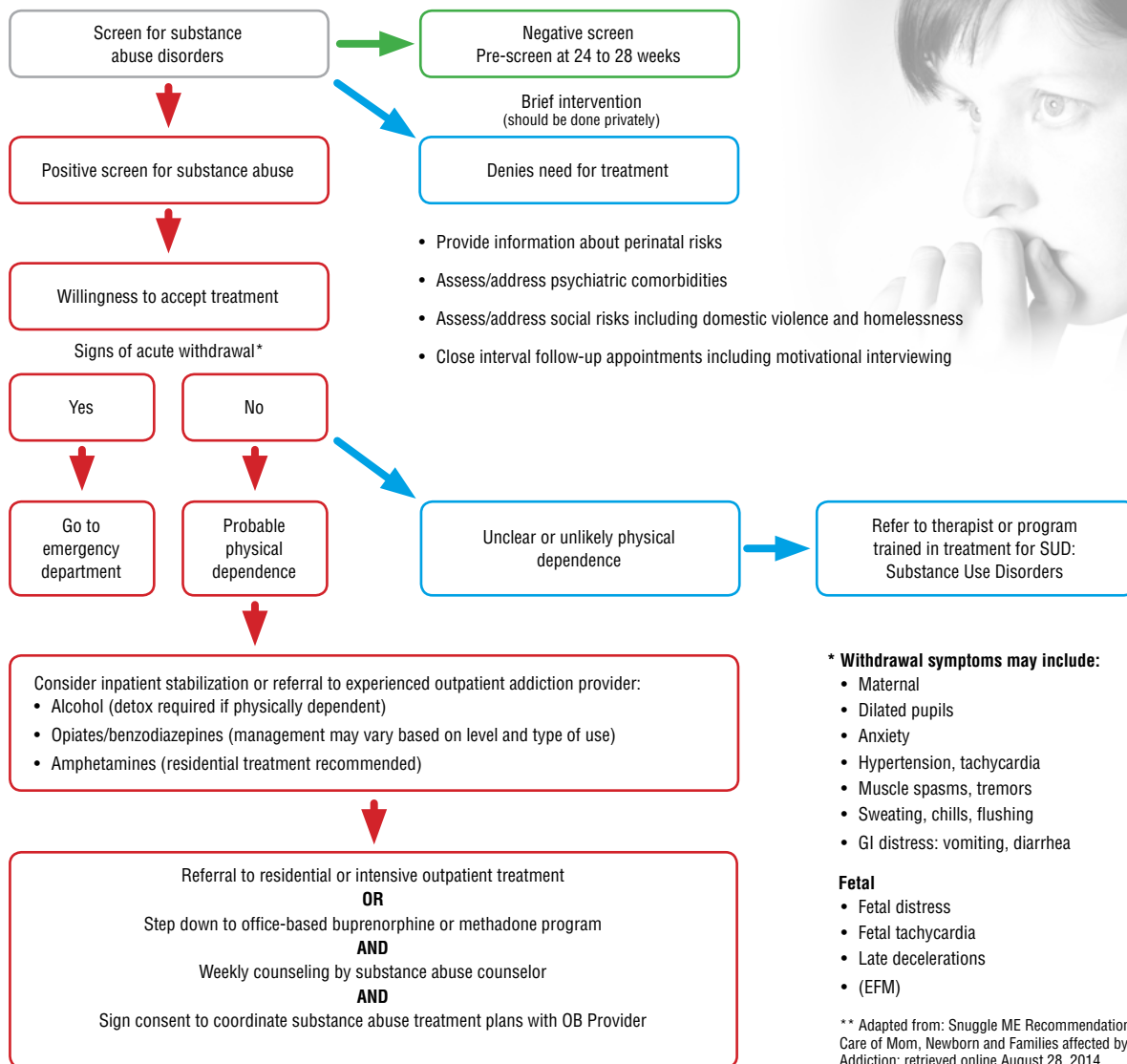
likely experienced trauma or adverse childhood experiences, a screening for these conditions is warranted as well. Screenings should include valid screening tools and observation.

SBIRT OVERVIEW

Intensive research in substance use disorders has resulted in the development of an evidence-based protocol for universal screening questions, brief intervention, and referral to treatment. The successful treatment rate for substance use disorders is now comparable to the

compliance treatment achieved in diabetes, hypertension, and other chronic conditions.⁷ Brief clinical interventions have been shown to be effective to address substance use disorders in the office setting.⁸

Figure 2
Screening and Brief Intervention Algorithm**





The evidence-based practice of Screening, Brief Intervention, Referral and Treatment (SBIRT) is designed to be used by physicians and other practitioners in the medical setting. SBIRT basically consists of three stages: screening, brief intervention, and referral to treatment. Screening is a brief process that can quickly determine the possibility of substance use. Since any possible substance use in pregnancy is of concern, a brief intervention is warranted. Early in the use of SBIRT, the intervention consisted of brief direct advice to the patient. However, recent research has shown that motivational interviewing approaches are more effective.⁹ In addition,

pregnancy offers a unique time in which women are more motivated to adopt healthy behaviors, including stopping substance use for the health and welfare of their baby.¹⁰ After determining the level of severity, patients may be offered a brief intervention, usually consisting of a few sessions of motivational interviewing or motivational enhancement therapy. The purpose of the therapy is to motivate patients to change their substance use patterns. If the substance use disorder is severe or the physician's practice does not have the capacity to provide the brief intervention, the patient is referred to a specialty substance abuse provider.¹¹ See Figure 2 on previous page.

OBSERVATIONS FOR SUBSTANCE USE AND SCREENING

Signs and Symptoms of Substance Abuse

Because of the frequency of complications seen in those who abuse substances, it is important that the physician is alert for clinical and historical cues that may indicate the possibility of substance abuse. Based on clinical observation, laboratory testing for substance abuse may be indicated in order to provide information for the health care of the mother and newborn.

Screening Instruments

Structured and valid tools are available. Most of the tools are self-report questionnaires that are intended to be administered by the provider with the patient.

The most effective screening instruments for substance use disorders are those that can be completed in less than 10 minutes, are used with all patients, and can be adapted to the provider's setting. The questions are framed to assume all patients use some level of substances; therefore, asking about the quantity and frequency of use, rather than the presence of it. The questions must be asked in a nonjudgmental manner.

There are several screening instruments for alcohol use that are appropriate for use in the general population, including the CAGE, MAST, and AUDIT. Additionally some of these instruments have been modified to identify both alcohol and drug use. These include CAGE-AID, and the MAST/AD. Specialized tools for pregnant women include the TWEAK, T-ACE, and 5P's and the CRAFFT for young women.

- T-ACE is a 4-item instrument appropriate for detecting heavy alcohol use in pregnant women who are actively consuming alcohol.

- TWEAK identifies pregnant women who are at risk for alcohol use. It consists of five items and uses a 7-point scoring system. The TWEAK is considered to be more sensitive than the CAGE and MAST and more specific than the T-ACE.
- Prenatal substance abuse screen (5Ps) has been used to identify women who are at risk for substance use disorders in a prenatal setting. A "yes" response to any item indicates that the woman should be referred for a substance use assessment. Originally the tool (4Ps) consisted of four questions; now the six question tool includes questions on peer use and tobacco use. Studies show that the 5Ps identified women with high levels of drug use, but also a larger group of women whose pregnancies were at risk from a smaller amount of substance use.¹²
- CRAFFT is appropriate for young expectant mothers between the ages of 15 and 24. It is designed to screen for both alcohol and use of other drugs.

Computerized screening instruments have also been found to be effective and well accepted by pregnant women. Potential advantages of computerized screening tools include:

- Reduced time to administer.
- Increased anonymity that patients feel when they do not have to answer the potentially stigmatizing question face-to-face with the practitioner—resulting in more appropriate answers.
- Ability to collect more detailed information than is easily obtained by paper forms.¹³



Using computerized instruments, such as the new Screening Brief Intervention (SBI) tool have been determined to be feasible in a busy medical practice.¹⁴ Each screening tool provides direction on interpreting the results.

The Washington State Substance Use Screening and Instrument Database is available to help practitioners find instruments that are appropriate to their needs. It is important for practitioners to adopt a screening tool that best suits their practices' needs. The resource can be found at: <http://lib.adai.washington.edu/instruments/>

Laboratory Testing

Urine toxicology testing determines the presence or absence of drugs within a specific period of time (varies by substance). A woman must give consent for drug testing. Laboratory testing is useful as a follow-up to written or verbal screening or observations but not as a stand-alone means of identifying substance use. These tests do not indicate the severity of the use. Below are the benefits and limitations associated with laboratory testing are discussed.

Benefits of Lab Testing

- Confirms the presence of a drug
- Determines the use of multiple drugs
- Determines if a newborn is at risk for withdrawal

Limitations of Lab Testing

- Negative results do not rule out substance use.
- A positive test does not tell how much of a drug is used or how often.
- A positive test does not identify user characteristics such as intermittent use, chronic use, or addiction.
- Alcohol, which is the most widely-abused substance and has the greatest impact on the fetus, is the hardest to detect due to its short half-life
- Alcohol, which is the most widely-abused substance and has the greatest impact on the fetus, is the hardest to detect due to its short half-life.
- A woman who knows she will be tested may delay access to prenatal care because of fear of potential repercussions
- False positive results can be devastating for a drug-free client. They can be as high as five percent.
- Urine toxicology has no value in identifying or minimizing the teratogenic effects that occur early in pregnancy.
- Women may avoid detection by abstaining for 1–3 days prior to testing, substituting urine samples, or increasing oral beverage intake just before the testing to dilute the urine.
- Specific tests, panels, and methods vary from site to site and can be challenging to correctly interpret.¹⁵

Note: False positive drug tests can be confirmed with the GCMS (Gas Chromatography, Mass Spectroscopy) procedure. Also laboratory drug screen results can be interpreted with the assistance of a certified Medical Review Officer – an individual with a specialized training certification that helps providers interpret drug screening results.

ADDRESSING BARRIERS TO SCREENING

Lack of Provider Time for Screening

The screening instruments are very brief and can be completed in the waiting room and scored by staff while escorting the patient to the exam room. Another option is a computerized instrument described above which is also completed in the waiting room, summarized and scored with a printout available for the physician.

Fear of Addressing a Positive Screen

When the screening indicates possible alcohol, tobacco, or other drug use, the physician or other medical staff should advise the patient of the risks associated with use. The Washington State Department of Health [Substance Abuse during Pregnancy: Guidelines for Screening and Management](#) recommends that the practitioner assume that all women have some knowledge of the effects of



Figure 3

Behavior Patterns	Physical Signs	Laboratory	Medical History
<ul style="list-style-type: none"> ▪ Sedation ▪ Inebriation ▪ Euphoria ▪ Agitation ▪ Aggressiveness/violent behavior ▪ Paranoia ▪ Increased physical activity ▪ Anxiety, nervousness, panic ▪ Disorientation ▪ Irritability ▪ Prescription drug seeking behavior ▪ Suicidal ideations or attempt ▪ Memory loss ▪ Psychosis ▪ Erratic behavior 	<ul style="list-style-type: none"> ▪ Markedly dilated or constricted pupils ▪ Rapid eye movements ▪ Tremors ▪ Track marks or abscesses or injection sites ▪ Inflamed or eroded nasal mucosa, nose bleeds ▪ Increased pulse and blood pressure ▪ Increased body temperature ▪ Hair loss ▪ Hallucinations, panic, anxiety ▪ Nystagmus ▪ Gum or periodontal disease, including broken teeth, severe decay, infections ▪ Skin conditions: abscesses, dry or itchy, acne type sores ▪ Weight loss - low BMI, malnutrition 	<ul style="list-style-type: none"> ▪ MCV over 95 ▪ Elevated MCH, GGT, SGOT, Bilirubin, Triglycerides ▪ Anemia ▪ Positive urine toxicology for drugs ▪ STI testing (retest in third trimester if at risk) ▪ HepC 	<ul style="list-style-type: none"> ▪ Frequent hospitalizations ▪ Gunshot or knife wound ▪ Unusual infections (cellulitis, endocarditis, atypical pneumonias, HIV) ▪ Cirrhosis ▪ Hepatitis ▪ Pancreatitis ▪ Frequent falls, unexplained bruises ▪ Chronic mental illness

Adapted from the Washington State Department of Health - *Substance Abuse During Pregnancy: Guidelines for Screening and Management, 2015*

drugs, alcohol, and cigarettes on pregnancy and the patient should be asked what she knows about use. The practitioner should then provide additional information as is necessary. Women for whom the screen indicated a risk, may state that they are not using. It is important for the physician to build rapport and trust with the patients, as judgemental perceptions will alienate women from seeking care.¹⁶ Many women are able to abstain during pregnancy and should be encouraged on her choice. She should also be advised about the benefits of abstaining from inappropriate use of substances after the birth to achieve a more stable early life environment for the infant and reduced exposure to substances and toxic stress. Screening should occur in each trimester and postpartum. In some situations, the woman may deny use but there are other indications of use through observations or medical history. See Figure 3 above. In these cases it may be advisable to have more discussions with the woman and conduct laboratory testing after obtaining consent to do so. Additionally, if there is concern regarding the use of controlled substances such as opioids, providers may register with E-FORCSE, Florida's Prescription Drug Monitoring Program (PDMP) to verify the woman's prescription and dosing.

Since most women can abstain from use during pregnancy, those who do admit use, likely have a substance use disorder that will require a referral to a specialty substance abuse therapist or program for treatment. Given that many women with substance use disorders have a history of trauma, the provider should investigate whether they may be using the substances to cope with current psychosocial stressors. These women will need support in abstaining from substance use and in addressing the traumatic issues and their psychosocial aftermath.

Maintaining a safe environment within the obstetrician's office is also essential in supporting women with a history of substance use disorders. In order to elicit honest answers to the screening instrument and the follow-up questions, the office must be a safe environment as indicated below:

- Assume that all women want a healthy baby. However, do not assume that all women know when they became pregnant or welcomed the pregnancy. Some women may have been using substances prior to the knowledge of the pregnancy.
- Educate office staff about the importance of a positive and nonjudgmental attitude in establishing a trusting relationship and welcoming environment.



- Ask every question in a health context to lessen the stigma associated with substance use and express concern for the health of the mother and the baby.
- Be empathetic, nonjudgmental, and supportive when asking about use. Consider the patient's needs and living situation.¹⁷

Lack of Access to Treatment

Medical providers often express concern that if they identify patients with substance use disorders, there is no place for patients to receive treatment. The Florida Managed Medical Assistance (MMA) program provides substance abuse treatment as a benefit. This service must be provided in accordance with the time lines specified in the contract as shown below:

1. Urgent Care — within one (1) day of the request
2. Sick Care — within one (1) week of the request
3. Well Care Visit — within one (1) month of the request

It is strongly recommended that you be familiar with the specialists in your area with training in addictions. There are specialists who are certified by the American Board of Addiction Medicine that can serve as consultants and referral sources. Many treatment programs are gender specific and some are specialized to treat pregnant women with substance use disorders. At times, access to treatment is of concern when medical providers identify patients with substance use disorders. The Managed Care Plans can provide assistance in locating appropriate providers.



BRIEF INTERVENTIONS

Brief interventions consist of a dialogue with the patient that provides awareness of the consequences of substance use during pregnancy and provides motivation to seek treatment when indicated. Extensive research shows that brief interventions alone can be effective with women with a mild use of alcohol.¹⁸ Additional research (less extensive than for alcohol) shows possible benefit for cannabis,¹⁹ benzodiazepine,²⁰ amphetamines,²¹ and cocaine.²² The recommended approach for brief interventions is motivational interviewing which is described in more detail in the companion [Brief #6: Substance Use Disorders in Pregnancy: A Chance to Break the Cycle – Motivational Interviewing – Promoting Healthy Behaviors](#).

Motivation interviewing can be used to address the use and promote abstinence or to encourage the patient to seek specialty treatment. For most women who are identified as using substances during pregnancy, a referral to a specialty provider is warranted, at least for a comprehensive assessment. The brief interventions may also explore how the women feels about her pregnancy. Pregnancy is often a time when traumatic experiences, especially child maltreatment, resurface. The physician should be sensitive to this issue as well and consider the need for other services and supports to help the woman prepare for the birth and the infant's care.

REFERRAL

As the Screening and Brief Intervention Algorithm depicts, if a woman screens positive for drug and/or alcohol use during pregnancy, the obstetrical provider should refer her for further assessment and/or substance abuse treatment. The brief intervention discussed above can be used to help her decide to go to treatment. If a woman is not ready to accept treatment, the provider may be able to point out the discrepancy between her

goal of a healthy baby and how the substance use may negatively impact the baby's health.

Women tend to under-report substance use in pregnancy; therefore, evaluation by a professional trained in substance use disorders may be considered, preferably conducted in the medical clinic. If the physician suspects physical dependency on drugs or alcohol, a provider trained in addiction medicine should evaluate whether



she is appropriate for outpatient treatment or whether she may require admission for medically assisted stabilization such as detoxification or medication assisted treatment (MAT). Best outcomes for the mother with opiate dependency and her infant are seen with medication assisted treatment. MAT is available at many addiction treatment centers and involves a multidisciplinary approach with efforts from the addiction treatment center, the obstetrical provider, and pediatrician or neonatologist. Specialty addiction treatment centers have a comprehensive assessment process that can put a referred patient into an appropriate level of care: residential, intensive outpatient, or outpatient. Many centers can accommodate MAT with an appropriate level of substance abuse treatment. As stated above, outpatient substance abuse treatment is a covered benefit for pregnant women enrolled in a MMA health plan. Transportation and child care are often barriers to accessing treatment for women. The MMA care coordinators could provide assistance in locating these services, as well as the outpatient substance abuse treatment. If possible, her initial treatment appointment should be scheduled by the obstetrical provider while the patient is in the office. When a referral is made, the practitioner should ask the patient to sign a medical release

allowing communication between her obstetrician and the specialty provider.²³

As mentioned earlier, many women with substance abuse disorders have been exposed to trauma and may have other mental health symptoms, such as depression and anxiety. Specialty addiction treatment centers can also treat these co-morbidities that need to be addressed for the effective treatment of substance use disorders. Additionally, women who have trauma histories may need assistance in preparing for the birth of the baby, including psychotherapy to address any maltreatment and the preparation for a relationship with the infant. Many addiction treatment centers also have case management services available to women to help educate and support them during treatment.

Note that the MMA health plans do not provide substance abuse residential treatment. This service must be accessed through the Managing Entities contracted through the Department of Children and Families to provide state and federally funded substance abuse and mental health services. The MMA health plan should be able to help the physician make contact with the Managing Entity.

SUMMARY

Pregnancy provides an excellent opportunity to intervene with substance use, including substance use disorders, as women are motivated to have a healthy baby. Universal screening in obstetrics is recommended, as well as the use of SBIRT. Women want to have a healthy pregnancy and want their newborn to be healthy as well. This motivational factor makes pregnancy an opportune

time to intervene, not just for the prenatal period, but after the birth as well. The MMA health plans are well positioned to promote the use of valid screening instruments, brief interventions, and to assist physicians in accessing substance abuse treatment for their patients as well as other mental health and parenting services as indicated.

REFERENCES AND RESOURCES

For more information on SBIRT please see the Substance Abuse and Mental Health Service Administration website at <http://www.samhsa.gov/sbirt>

Also see Guide to Utilizing Screening, Brief Intervention and Referral to Treatment for Medicaid Practitioners on the AHCA website at <http://www.fdhc.state.fl.us/Medicaid/SBIRT/index.shtml>

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