Preconception Health 101

Prevent, Identify, and Manage Risk Factors that Impact Health and Future Pregnancy Outcomes



Preconception Health 101

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Introduction, Background & Special Considerations

Description and summary of preconception health¹

Preconception health services aim to identify and proactively address risk factors that impact health and future pregnancy outcomes. The goal is to prevent, identify, and manage risk factors through targeted interventions. By focusing on reproductive-age individuals' health before conception, these services aim to minimize adverse pregnancy-related outcomes. Preconception health services benefit all individuals of reproductive age, regardless of their pregnancy plans.

This change package provides resources for healthcare providers to assess and enhance the quality of preconception health services. Reproductive Health and Wellness agencies can also utilize it to improve knowledge, attitudes, and practices related to preconception health. The package aims to strengthen these services, integrate contextual factors, and reduce disparities in maternal and pregnancy outcomes.

Nearly half of all pregnancies are unplanned.²

Barriers to Preconception Care^{3,4}

Social Determinants of Health (SDOH) greatly impact healthcare quality and contribute to inequities in health outcomes. It is important to acknowledge the influence of social factors, such as safe neighborhoods, transportation, access to affordable and nutritious food, education and employment opportunities, and secure housing. Thoughtful screening for SDOH-related needs is critical and often overlooked step in the healthcare process. While healthcare providers may not directly address these determinants during clinical encounters, they should be considered when providing education, recommendations, and referrals to address social needs. Health systems should form partnerships with community-based organizations to improve access to necessary services and support. By working together with community partners to identify and address barriers to care, providers can play a stronger role in improving health outcomes for their patients.

Disparities in Reproductive Health Outcomes & Reproductive Justice^{5,6}

Health equity requires equitable opportunities for optimal wellbeing, regardless of identity, social status or circumstances. Extensive research confirms that patient-centered care enhances engagement,⁷ outcomes,⁸ retention, and equity.⁹ A patient-centered approach acknowledges this history and ongoing inequities, prompting providers to reflect on their role in breaking the cycle and facilitating the implementation of appropriate, high-quality, and equitable care for all patients.

Timing of Counseling¹⁰

This change package provides a valuable resource for clinic staff to discuss patients' reproductive goals during visits. Patient-centered approaches can be used to assess all patients' reproductive life goals and needs. Tools (such as a counseling flow chart) can be used effectively with clients to improve active listening and facilitate patient-centered conversations about preconception care, contraception, and fertility, as appropriate.

 $1 \qquad \qquad 2$

Introduction, Background & Special Considerations

Shared Decision Making

The goal of preconception care is to improve health outcomes through education and addressing modifiable risk factors. ¹¹ Shared decision making occurs when a health care provider and a patient work together to make a health care decision that is best for the patient. Consider implementing the SHARE Approach: ¹²

Seek your patient's participation.

Help your patient explore and compare treatment options.

Assess your patient's values and preferences.

Reach a decision with your patient.

Evaluate your patient's decision.

To facilitate patient-centered dialog, consider asking questions like, "How would that be for you?" and "Do you have a sense of what is important to you about ____?"¹⁰

To support patient preparedness for a healthy pregnancy, providers are encouraged by the American College of Obstetricians and Gynecologists¹³ to utilize a checklist to assist in assessing for specific health conditions. A recommended checklist is included in this change package that has been adapted to fit the needs of providers in Ohio.

Title X regulation requires clinicians to provide inclusive care for LGBTQIA+ population.¹⁵

Gender Diverse Patients, LGBTQIA+ Care³

Individuals who identify as lesbian, gay, bisexual, transgender, queer, intersex, asexual, and other sexual and gender minorities (LGBTQIA+) encounter challenges such as social stigma and limited availability of inclusive and high-quality healthcare, leading to inequities in health outcomes. ¹⁴ To address these inequities, the National LGBT Health Education Center offers valuable clinical guidance and educational materials aimed at facilitating the delivery of comprehensive primary and reproductive care to LGBTQIA+ patients. For more information, please visit *LGBTHealthEducation.org*.

Providing Culturally Competent Care¹⁶

To serve the needs of a diverse population, it is imperative to take measures to improve cultural competence. Cultural competence is the ability to collaborate effectively with people from different cultures; and in doing so improve health care experiences and outcomes. Here are a few examples of what this might look like in practice:

- Gear programs to recruit and retain diverse staff.
- Provide cultural competency training for healthcare providers.
- Use interpreter services to enable people from different backgrounds to communicate effectively.
- Provide educational materials to inform staff of different cultural backgrounds.
- Ensure cultural sensitivity in healthcare settings.

Reproductive Life Plan

The goal of preconception care is to optimize health outcomes by providing education and addressing modifiable risk factors for individuals and future pregnancies. Reproductive health clinics offer a broad base of services to many individuals. These services promote a healthy lifestyle for all and include an opportunity for preconception counseling.

About half of all pregnancies in the United States are unintended.¹⁷ Some groups see higher proportions of unintended pregnancies, including those aged 15-24, individuals identifying with minoritized racial/ethnic groups, and/or individuals with lower education and income levels.¹⁸ Utilize the algorithm, shown below, to help guide a conversation to identify the patient's reproductive goals. This may include:

☐ Reproductive	e Life Plan,	as indicated.
----------------	--------------	---------------

☐ Safe pregnancy spacing (18 months between pregnancies).

Reproductive health is largely impacted by overall health. All persons of reproductive age should participate in regular primary care visits to address screening and preventative interventions for common diseases, and to manage chronic illnesses. This can ensure patients receive equitable access to testing and treatment that could prevent longer term chronic disease and adverse outcomes.

Preconception Counseling

Regardless of pregnancy intention or gender, address the following with every patient:

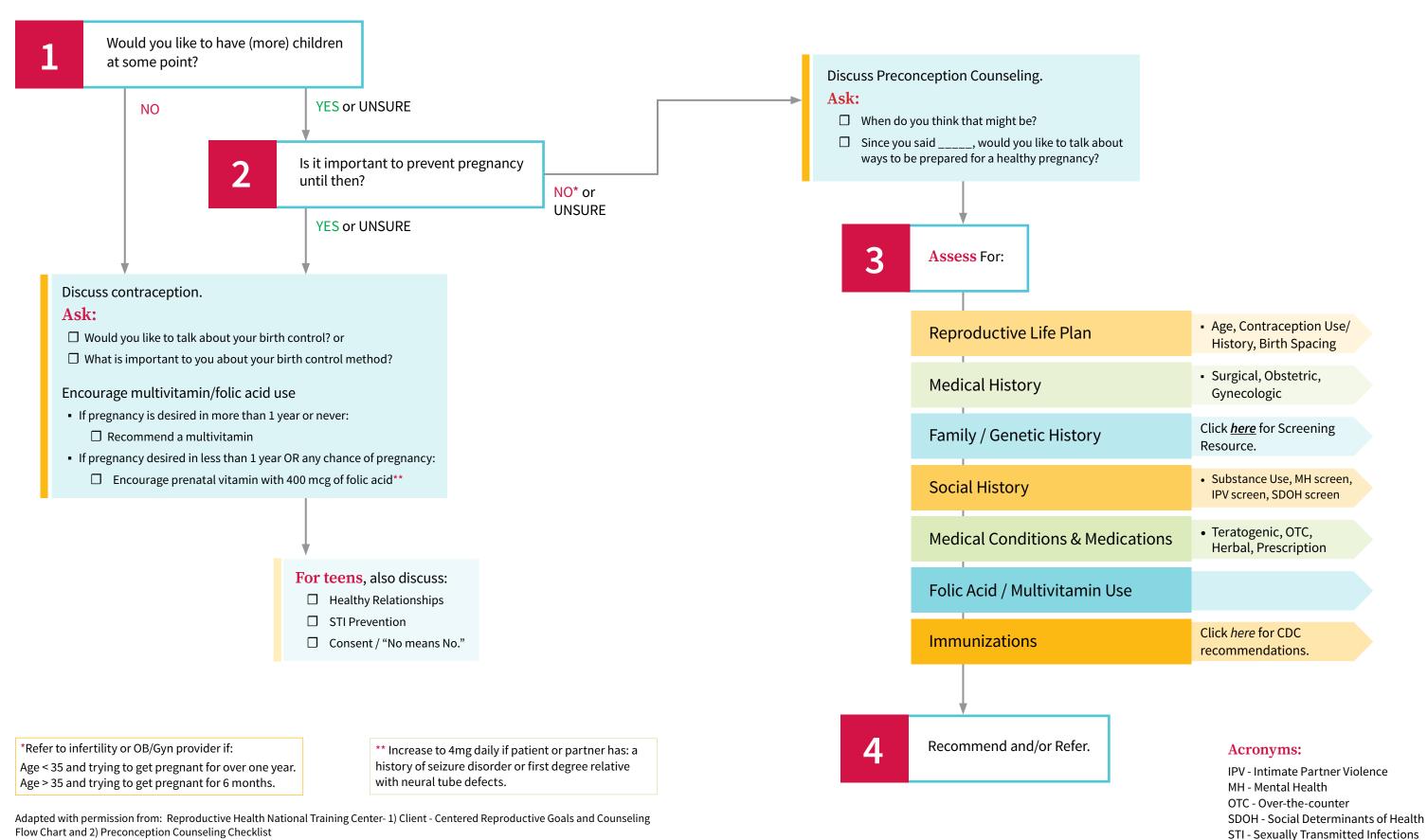
- ☐ Cessation education for tobacco users. (See Substance Use section under Social History for more detail.)
- ☐ Healthy relationships.
- ☐ Sexual coercion, interpersonal violence, and trauma.
- ☐ Appropriate referrals for management of health conditions.
- ☐ Medicaid/enrollment assistance.
- \square Screening and referrals for social determinant of health needs.
- ☐ Providing culturally competent care.
- Reproductive life plan discussion. Utilize the following algorithm to help guide the conversation.

Learn more about additional interventions, screenings, and referral resources addressing the above subjects as you continue reading throughout this change package.



Discussion with Young Adults: Discuss the following recommendations with **all young adult patients** as they relate to sexual wellbeing:

- 1. Heathy relationships.
- 2. Sexually Transmitted Infection Prevention.
- 3. Sexual Coercion and Consent. Share that "No means no".
- 4. Future plans.
- 5. Contraception options.



Flow Chart and 2) Preconception Counseling Checklist

5

History

may be associ appropriate, r	ate	_	story assessment shou		ons that should be optimized and/or conditions that d include the following components and, when
Age					
-		creases with advanced mater eased risk of infertility.	nal age. Fertility also c	d€	ecreases, which can result in difficulty trying to
		atient's age is 35 or greater a ultation.	nd they desire to beco	on	ne pregnant, refer to an OB/Gyn provider for
Medical H	ist	ory			
Determine the	-	tient's history of medical con	ditions. Important cor	nc	litions to ask about in relation to preconception
		Anemia			Neural tube defects
		Asthma			Oral Health
		Autoimmune disease			Phenylketonuria
		Cardiac Disorders			Renal Disease
		Diabetes			Seizure Disorders
		Gastrointestinal disease			Sexually Transmitted Infections
		Hypertension			Thrombophilia
		Infectious diseases			Thyroid
		Mental Health			Weight
additional	refe gy, N	errals as indicated to optimize Jephrology, Mental Health ca	e chronic health condit		e provider and dental care provider. Provide ons (e.g. Endocrinology, Neurology, Cardiology,
•		•			
	_	al history that may impact fu			
_		Gastric bypass. There are lik	-	nc	cies that impact pregnancy.
	rior	cesarean section (C-section)).		
Interventi	-				
• P	atie	ere is history of gastric bypas ent will need consultation wit ciated with prior C-section.	O ,.		ult to Nutritionist/Dietitian. ns with future deliveries and risks
Sexual Hea	altl	n Assessment, Reprod	uctive, Obstetric	8	& Gynecologic History Pregnancy Status
If indicated, of	fer a	a baseline pregnancy test and	l encourage your patie	nt	t to seek care before or soon after becoming pregnant
		. •			with OB/Gyn care, refer them to an OB/Gyn provider.
Gynecolog	gic	History			
		gic history, including:			
_		Endometriosis			Pelvic Inflammatory Disease
		Fibroids			Pelvic Pain
		Infertility	П		Polycystic Ovarian Syndrome
		Ovarian cysts			Sexually Transmitted Infections
_		Pap history	٥		

Intervention: If patient has history of gynecologic problems, consider referral to OB/Gyn.

Obstetrics History

Discuss at minimum:

- ☐ Number of pregnancies.
- Outcome of pregnancies (e.g. miscarriage, term delivery, preterm delivery, vaginal birth, cesarean section).
- ☐ History of complications with prior pregnancies, including
- Multiple pregnancy losses (2 or more miscarriages).
- Preterm delivery.
- Fetal anomaly.
- Preeclampsia.
- Intervention: If history of complications with prior pregnancies and desire for future fertility, consider referral for consultation with OB/Gyn and/or Maternal Fetal Medicine physician.

Family/Genetic History

- ☐ Complete brief genetic screen including detail regarding patient, family and partner.
 - Screening resource: https://www.marchofdimes.org/sites/default/files/2023-01/ EHP12542FamilyHealthHistoryFormDownloadablePDF_int.pdf¹⁹ This tool can be used to determine patient's family history and can be completed by patients at home or in the office.
- **Intervention:** If positive screening consider referral to Genetic Counselor.

Social History —

- ☐ Discuss current habits around nutrition and physical activity.
 - Utilize My Plate tool to assess nutritional habits and to use as an educational tool for patients.²⁰
- Intervention: Refer to Nutrition/Dietitian as needed.

Current Employment/Environmental Exposures

Environmental exposure can impact all patients but are more likely to disproportionately impact individuals living below the poverty line. Exposure to toxins during the preconception period can result in fertility challenges, and during the prenatal period can impact have neurodevelopmental impacts on the fetus resulting in future learning disorders, attention deficit hyperactivity disorder (ADHD), and autism, or increased rates of cancer in both populations. Toxic environmental agents can range from population-based exposures such as air pollution and water contamination, to specific individual exposures such as certain foods, personal care products and household chemicals.

- ☐ Screen for environmental toxin exposure that may impact your client and/or future pregnancies.
 - Canned food with Bisphenol A (BPA).
 - Cleaning products containing solvents.
 - Fast food containing phthalates.
 - Fish high in mercury.
 - Lead.
 - Paint thinners/solvents.
 - Pesticides.

- Personal care products containing phthalates, parabens, oxybenzone, and triclosan.
- Prepackaged foods in plastic containers that have Per- and poly- fluorinated alkyl substances (PFAS).
- Tobacco smoke.
- Unwashed produce (pesticides/listeria).
- Vaping liquids.
- Intervention: Educate patient on avoiding any identified environmental toxins to reduce risk.21

History

History

Partner Considerations

☐ When applicable and while assessing for environmental risks, include discussion around the patient's partner exposures and other preconception considerations such as:

- Occupational exposures
- Age

Tobacco use

Health conditions

Genetic concerns

Intervention: Encourage the partner to get established with a primary care provider if they do not already have one.

Substance Use Assessment (Tobacco/Alcohol/Illegal Drugs)

Utilize the Screening, Brief Intervention, and Referral to Treatment (SBIRT) method to assess for substance use disorders as well as patients at risk for developing those disorders.²²

☐ Screening: quickly assess the severity of substance use and identify the appropriate level of treatment.

☐ Brief intervention: increase awareness of substance use and motivation toward behavior change.

☐ Refer: Identify options for those needing more extensive treatment with access to specialty care.

The Tobacco, Alcohol, Prescription medication, and other Substance use (TAPS) Tool can be used to screen patients' risk for SUD.²³ This screener consists of two components: Part 1, to screen for substance use over the last year, and Part 2: to assess substance-specific use over the last three months to identify a risk level. An electronic assessment form can be found *here*; a hard copy can be found in Appendix A. Complete the following steps to arrive at a risk level:

☐ Complete TAPS Part 1.

• If TAPS Part 1 is positive, including any answers other than 'never', complete Part 2.

☐ Complete TAPS Part 2 which focuses on substance use over the last three months.

- Review Part 2 answers to identify a substancespecific risk category.
- » An answer of 'yes' indicates +1 for each substance.
- » A score of 1 indicates problem use with risk of adverse outcomes.
- » Any score of 2+ indicate higher risk.
- Intervention: If tobacco use is identified, utilize the 5As to start the conversation around cessation.²⁴ Refer to tobacco cessation and/or substance use disorder (SUD) resources as needed.

Start the conversation: 5As for Tobacco Cessation

- 1. Ask about tobacco use.
- 2. Advise tobacco users to quit.
- 3. Assess readiness to make a guit attempt.
- 4. Assist with the guit attempt.
- 5. Arrange follow-up care.

Mental Health Screen

A recent U.S. Preventive Services Task Force recommendation indicates annual screening for anxiety disorders in all adults younger than 65.²⁵ An additional recommendation encourages an annual depression screening for all adults.²⁶ Use validated tools to determine the patient's risk level for depression and anxiety.

☐ Screen for depression with the PHQ-9.

☐ Screen for anxiety with the GAD-7.

Mental Health Screener Scoring^{27,28}

PHQ-9 and/or GAD-7 scores of 5, 10, and 15 represent mild, moderate, and severe levels of depressive, anxiety, and somatic symptoms, respectively. Intervention is recommended with a score of 10 or greater, and may include medication, counseling, or a combination of both. A score of 15 or greater indicates treatment is warranted. See Appendix B for copies of both tools with scoring instructions.

Intervention: For a PHQ-9 or GAD-7 of 10 or greater, refer to primary care provider and/or mental health professional. If your patient has a positive answer to question 9 on the PHQ-9, immediately assess for suicide risk.

Relationship Health

Studies show that social relationships have short- and long-term effects on health, for better and for worse. ²⁹ Adults who are more socially connected are healthier and live longer than their more isolated peers. However, unhealthy relationships can contribute to psychological distress and lead people of all ages to engage in unhealthy behaviors (e.g., food consumption, heavy drinking, smoking) to cope with the stress.³⁰

Healthy Relationships

According to the One Love Foundation, below are 10 signs of a healthy relationship:31

- 1. Comfortable Pace
- 5. Respect
- 9. Healthy Conflict

2. Trust

- 6. Equality and Respect
- 10. Fun

- 3. Honesty
- 7. Kindness
- 4. Independence
- 8. Taking Responsibility

Unhealthy Relationships

According to the One Love Foundation, below are 10 signs are indicators of an unhealthy relationship:³²

- 1. Intensity
- 5. Sabotage
- 9. Deflecting Responsibility

- 2. Possessiveness
- 6. Belittling or Guilting
- 10. Betrayal

- 3. Manipulation4. Isolation
- 7. Guilting8. Volatility
- Intimate Partner Violence and Coercion

Some of these signs may point to the presence of **sexual coercion** in a relationship. Sexual coercion has been defined as a continuum of tactics to elicit sexual activity from unwilling partners ranging from non-forceful verbal tactics to physical force.³³

HARK is a validated, four-question assessment tool to screen for Intimate Partner Violence (IPV). For patient scores ≥ 1 , there is an 83% probability of IPV experienced in the past year. This individual is 16 times more likely to have experienced IPV in the last year than someone with a HARK score of 0.

- ☐ Screen for IPV using an appropriate tool.³⁵ To find the HARK assessment, see Appendix C.
- Intervention: 1) Discuss healthy relationships; 2) If IPV is identified refer to social work, mental health provider and/or community resources as needed.

Social Determinants of Health Screen

Social determinants of health (SDOH) address several basic individual needs such as housing, food, employment, education and more. If SDOH needs exist, it may cause significant challenges for your patient to adhere to healthcare recommendations. By knowing the SDOH barriers in your community, you will be better equipped to connect patients with appropriate recommendations and resources.³⁶

- ☐ Screen for SDOH needs. Many electronic health records have a built-in SDOH screener. If not, consider administering a tool such as WellRx to identify SDOH needs for your patient.³⁷ See Appendix D.
- Intervention: If any SDOH needs are identified, refer to social work and/or community resources as needed.

History

Medications

Drawing from medical history obtained, determine patient's current level of medication use, including over-the-counter (OTC), herbal and prescription options. Medications may affect pregnancy and may need to be discontinued or changed to reduce risk during pregnancy.

☐ Encourage patient to continue current medication regimen until discussed with prescribing provider or OB provider.

Assess for herbal medications. Some herbal supplements such as melatonin or CBD may be harmful during pregnancy.



Teratogenic Medications^{11,38}

Teratogens are substances that cause congenital disorders in a developing fetus and impact the brain and/or spinal cord, cause physical malformations including cleft lip, neurological conditions, and cardiovascular or heart abnormalities. Assess for teratogens, including but not limited to:

- Angiotensin Converting Enzyme (ACE) Inhibitors.
- Some antibiotics.
- Anticoagulants (blood thinners).
- Some antiepileptic drugs (AEDs).
- Antimicrobials.

- Antineoplastics / Chemotherapeutics.
- Antithyroid medications.
- Hormonal medication.
- Lithium.
- Retinoids.
- Vitamin A (common in skincare products).

Medications are labeled and defined by Pregnancy and Lactation Labeling Rule (PLLR) which provides healthcare providers the information needed to understand the risks associated with use of various medications during or after pregnancy.

Intervention: If desiring pregnancy refer to Primary Care provider or OB/Gyn if concern for any teratogenic medications to ensure discontinuation/changing medication regimen prior to pregnancy.

Immunizations

Immunizations have benefits for adults and children alike. It is important to review immunization status prior to and during pregnancy, to ensure the best protection. However, there are some vaccines that are contraindicated during pregnancy.

☐ Assess patient for vaccination history.

☐ Consider downloading the "CDC Vaccine Schedules" app free for iOS and Android devices.

Materials available for no charge at:

https://www.cdc.gov/vaccines/schedules/hcp/imz/adult.html

https://www.cdc.gov/vaccines/schedules/hcp/imz/adult-conditions.html

Intervention: Ensure up to date on all recommended vaccinations, provide needed vaccinations or refer to Primary Care Provider as needed to obtain vaccinations.

Adult Immunization Schedule

Legend

Recommended for adults who: 1) meet age requirement, 2) lack documentation of vaccination, or 3) lack evidence of past infection.

Recommended vaccination for adults with an additional risk factor or another indication.

Recommended vaccination based on shared clinical decision-making.

Vaccine	19-26 years	27-49 years	Pregnancy considerations	
COVID-19	2- or 3- dose pri	2- or 3- dose primary series and booster (See not		
Influenza inactivated (IIV4) -or- Influenza recombinant (RIV4) -or- Influenza live, attenuated (LAIV4)	1 dose annually		Contraindicated	
Tetanus, diphtheria, pertussis	1 dose Tdap each pregnancy management	· ·	1 dose Tdap	
(Tdap or Td)	1 dose Tdap, then Td or Td	ap booster every 10 years	each pregnancy	
Measles, mumps, rubella (MMR)	1 or 2 doses depending on indi	cation (if born in 1957 or later)	Contraindicated*	
Varicella (VAR)	2 doses (if born	2 doses (if born in 1980 or later)		
Zoster recombinant (RZV)	2 doses for immunocomprom	N/A		
Human papillomavirus (HPV)	2 or 3 doses depending on age at initial vaccination or condition 27 through 45 years		Not recommended*	
Pneumococcal (PCV15, PCV20, PPSV23)	1 dose PCV15 followed by PPSV2	23 or 1 dose PCV20 (See notes)^	N/A	
Hepatitis A (HepA)	2, 3, or 4	doses depending on vaccine		
Hepatitis B (HepB)	2, 3, or 4 doses depending	3 doses (See notes)^		
Meningococcal A, C, W, Y (MenACWY)	1 or 2 doses depending on in	ecommendations		
Meningococcal B (MenB)	2 or 3 doses depending of see notes for booste 19-23 years	Precaution**		
Haemophilus influenzae type b (Hib)	1 or 3 doses depen	N/A		

N/A = No recommendation / not applicable

[^]See notes at: https://www.cdc.gov/vaccines/schedules/hcp/imz/adult.html

^{*}Vaccinate after pregnancy

^{**}Vaccination might be indicated if benefit of protection outweighs risk of adverse reaction

Source: National Center for Immunization and Respiratory Diseases; Materials developed by CDC.

Reference to specific commercial products, manufacturers, companies, or trademarks does not constitute its endorsement or recommendation by the U.S. Government, Department of Health and Human Services, or Centers for Disease Control and Prevention.

Exam

A physical exam should be performed with special attention to the thyroid to assess for abnormalities that may indicate thyroid disease (e.g. nodules or goiter), and for signs of androgen excess which may indicate Polycystic Ovarian Syndrome which may affect fertility. Exam should include:

Height/Weight/BMI

If the patient is overweight **or** underweight, additional risks may exist for patients trying to conceive and during pregnancy. Individuals interested in becoming pregnant should maintain a healthy body mass index or BMI. BMI is a common tool that measures a person's weight in relation to their height, as shown below.³⁹ However, utilizing BMI only as an indicator of health has limitations as it does not take into account fat vs lean mass, location of body fat, etc.^{40,41}

Underweight	Ideal	Overweight	Obese
BMI < 18.5	BMI 18.5-24.9	BMI 25-29.9	BMI > 30

П	Document	height and	weight.	then	assess	for	BMI.

- ☐ Encourage your patients to complete 30 minutes of regular, moderate-intensity physical activity, at least 5 days a week in order to:
 - Achieve or maintain a healthy weight.
 - Increase muscle tone, strength, and endurance.
 - Increase energy, improve mood, posture, and sleep.
- Intervention: Consider referral to Nutrition/Dietitian if BMI <18.5 or > 30 and/or the patient indicates a need for nutrition or activity education prior to pregnancy.

Vital Signs with Special Attention to Blood Pressure

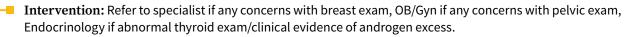
Document all vital signs, including blood pressure.

- ☐ If blood pressure is > 130/80, the patient may be at risk for hypertension.
- Intervention: Refer to Primary Care Provider if patient is at risk for hypertension.

Physical Exam

- ☐ Complete "Head-to-toe" Exam⁴² including the following areas:

 *As indicated (if symptomatic e.g. breast lump, abnormal vaginal
 - HEENT (head, eyes, ears, nose, and throat) exam, including thyroid exam
 - Chest
 - Clinical Breast Exam*
 - Abdomen
 - Extremities
 - Neurologic
 - Skin (Assess for signs of androgen excess hirsutism/acne/ acanthosis nigricans)
 - Genitourinary/Pelvic*
 discharge or screening indicated e.g. pap test, STI screening)





Screening Tests

Screening tests are helpful in identifying areas of potential concern and when further tests or referrals may be needed. For individuals interested in becoming pregnant, many steps can be taken before trying to conceive to assess for health conditions and potential risk factors, including various screening tests. Consider discussing the following elements for health optimization, including screenings recommended prior to pregnancy.

Pregnancy Test ——

If indicated, offer a baseline pregnancy test and encourage your patient to seek care before or soon after becoming pregnant.

Health Maintenance

Dependent upon the medical history, conversations may center around:

- ☐ Encouraging positive health behaviors (e.g., eating a healthy diet, adequate physical activity, stopping use of alcohol, etc.).
- ☐ Diagnosing untreated and/or managing known medical problems.
- ☐ Assessing current medications for safety in pregnancy/lactation.
 - https://www.infantrisk.com/infantrisk-center-resources

Genetic Considerations & Testing

Family and medical history, for both your patient and their partner, can help identify which genetic tests to order, recommendations to provide, and when to refer for genetic counseling. If your patient or their partner has a family history of genetic condition(s), they should be offered testing and genetic counseling. It is ideal to complete screenings prior to pregnancy. Share that a simple blood test is often all that is needed to identify carrier traits. Some carrier screening tests are recommended for all patients while others are based on a patient's family history and/or racial/ethnic background. Basic carrier screenings⁴³, as recommended by American College of Obstetricians and Gynecologists:

Racial/ethnic backgrounds	Screening Recommendation(s)		
All race/ethnicities	Cystic fibrosis, spinal muscular atrophy, and Fragile X syndrome		
African ancestry	Thalassemia and sickle cell disease		
French Canadian / Cajun / Creole ancestry	Tay-Sachs disease		
Jewish ancestry	Cystic fibrosis, Tay-Sachs disease, Canavan disease, and familial dysautonomia		
Southeast Asian or Mediterranean ancestry	Thalassemia		

- ☐ Identify family background and history of health conditions. Click here for a sample form https://www.marchofdimes.org/sites/default/files/2023-01/EHP12542FamilyHealthHistoryFormDownloadablePDF_int.pdf
- Intervention: Offer testing and/or referral for genetic counseling as needed.

Folic Acid -

Recommend 400 mcg for all patients attempting to conceive. Increase to 4 mg if there is history of a previous neural tube defect for the patient, the patient's partner, or any first-degree relatives.

Screening Tests

Infectious Disease Screening:11

Complete age and risk-based screenings.

Toxoplasmosis ⁴⁴ : If desiring pregnancy, counsel against changing cat litter, avoiding raw meat, wear
gloves when gardening, and regular hand washing with soap and water after contact with garden so
or sand.

- ☐ Hepatitis C⁴⁵: The CDC now recommends screening for all pregnant people.
- Intervention: Provide screening, treatment, and counseling as needed.

Sexually Transmitted Infections (STI) Screening⁴⁶

Complete age and risk-based screenings.

☐ Screen all women for syphilis.

In Ohio, the number of syphilis cases doubled between 2017-2021⁴⁷

- Screen all pregnant women for syphilis at first prenatal appointment or with positive pregnancy test if there may be a delay to prenatal care.
- Screening all pregnant women for syphilis and providing early treatment can prevent congenital syphilis.
- ☐ Screen all women for HIV.
- ☐ Screen for chlamydia and gonorrhea, as indicated below:
 - All sexually active women under 25 years of age.
 - Sexually active women >25 if at increased risk, including having a new or multiple partners; a sex
 partner who has an STI; practice inconsistent condom use when not in a mutually monogamous
 relationship; have a previous or coexisting STI; have a history of exchanging sex for money or
 drugs; or have a history of incarceration.
- ☐ Screen for Human Papillomavirus (HPV) regardless of HPV vaccination history.
 - Screen women aged 21-65 every 3 years with cytology.
 - Women aged 30-65 can be screened every 5 years with a combination of cytology and HPV testing.
- Intervention: Offer screening, treatment, referral, and counseling as needed.



Screening Tests

Anemia 48

Anemia is the most common hematologic disorder worldwide, most prevalent among children and females of reproductive age. Anemia is identified as a significant and potentially modifiable contributor to severe maternal morbidity and is associated with numerous risks during pregnancy, delivery, and postpartum. Identification and treatment of anemia prior to pregnancy is important because treatment to normalize iron levels may take four to six months and the body's iron requirements will increase during pregnancy.

- ☐ Screening test: Complete Blood Count (CBC).
- ☐ If positive for anemia (Hemoglobin <12.0 gm/dl):
 - Consider ordering iron indices (Iron, Ferritin, TIBC), hemoglobinopathy screening (hemoglobin electrophoresis).

Biochemical Tests for Diagnosis of Anemia:				
Test	Results Indicating Iron Deficiency Anemia	Results Indicating Thalassemia	Results Indicating Anemia of Chronic Disease	
Iron level	Decreased level	Normal	Decreased level	
Total iron-binding capacity (TIBC)	Increased capacity	Normal	Decreased capacity	
Ferritin level	Decreased level	Normal	Increased level	
Iron/TIBC	Less than 18%	Normal	More than 18%	

- ☐ Discuss iron-rich foods. See Iron-Rich Foods table in Appendix E.
- ☐ Discuss foods and medications that increase or decrease iron absorption.
- Intervention: 1) If iron indices and/or hemoglobinopathy screening results are abnormal, consider referral to Internal Medicine or Hematology provider.
- 2) For Iron Deficiency Anemia, prescribe iron supplementation to be taken on an empty stomach (e.g., at bedtime) and at least one hour before eating to maximize absorption. See Iron Supplements table in Appendix E.
 - Dose supplements once a day or every other day.
 - Do not use slow-release formula.
- 3) Screen for food insecurity and refer to nutrition support programs. See Appendix E to review iron-rich foods and items that affect iron absorption.

Patients at Risk for Anemia in Pregnancy include those with:

- Short-interval pregnancy.
- Multiple gestation or Multiparity.
- Late prenatal care.
- Placental abnormalities (e.g., previa).
- Nutritional deficiencies, food insecurity.
- History of abnormal uterine bleeding.

- Adverse socioeconomic factors.
- Iron deficiency in prior pregnancy.
- GI abnormalities affecting absorption (e.g., gastric bypass, IBD).

Most prenatal/multi-

contain enough iron

vitamins do not

to meaningfully

impact IDA.

- Chronic disease or Tobacco Use
- Excessive blood loss with delivery

Counseling and Education

Contraception

Determine history and current level of contraception use.

☐ Ensure knowledge of 18-month healthy birth spacing.

Intervention: Offer contraception including same-day options, update reproductive life plan in chart, offer contraception counseling, discuss ways to prevent STIs, and encourage use of condoms.

Multivitamin and Folic Acid

Nutritional needs change as birthing persons move through their child-bearing years and beyond. Benefits of taking folic acid during pregnancy occur by 4 weeks gestation, before most people know they are pregnant. Everyone benefits from taking a multivitamin, regardless of pregnancy intention, to build strong bones, prevent heart disease, and strengthen hair, skin, and nails.





- Assess for appropriate multivitamin use, depending on course of reproductive life plan.
 - If pregnancy is desired in more than 1 year, recommend a multivitamin.
 - If pregnancy is desired in less than 1 year, recommend a prenatal vitamin with folic acid.
- ☐ Recommend folic acid.
 - 400 mcg daily for at least one month before and during pregnancy.
 - 4 mg daily if history of seizure disorder for patient or partner, or any history of first degree relative for patient or partner with neural tube defects.
- ☐ Encourage 200-300mg/day of DHA to support development of baby's brain and eyes and encourage heart health for mom.
- ☐ Talk about adverse effects and share that too many vitamins can be harmful.

Intervention: If not currently taking a multivitamin, discuss over-the-counter (OTC) and prescribed options for vitamins. If patient is using OTC, discuss important details to focus on to ensure an appropriate selection.

Counseling and Education

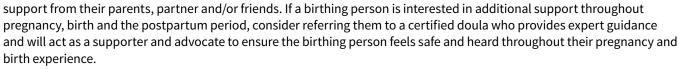
Establishing Strong Care Relationships

Birthing persons who indicate an interest in getting pregnant, or who believe they currently are pregnant, should be encouraged to establish care with an appropriate clinician, such as an Obstetrician/ Gynecologist (OB/Gyn), a certified nurse-midwife (CNM), or a family practice physician.

Determine the patient's risk factors for complications during pregnancy. Assess for:

- \square Age (under 20 or over 35).
- ☐ Preexisting health conditions (e.g. hypertension, diabetes, seizure disorders).
- ☐ Substance use disorders.
- ☐ Select pregnancy conditions including but not limited to: gestational diabetes, multiple gestation, prior pre-term birth or pregnancy loss after the first trimester (> 12 weeks gestation).
- Intervention: Refer to an OB/Gyn or Maternal Fetal Medicine (MFM) specialist if risk factors are present.

The support of others can be beneficial throughout pregnancy. Encourage individuals to utilize social



Pregnancy Dating _____

If your patient is actively trying to conceive, remind them to keep track of their menstrual cycles to aid in pregnancy dating. Using the date of the first day of the last menstrual period is the best way for clinicians to calculate a due date, which is typically confirmed with ultrasound measurements. In addition, ovulation tests can be used to determine accurate time for contraception. This provides necessary information to monitor the health of the birthing person and baby during pregnancy.



Referral Resources

Mental Health Support

988 Suicide & Crisis Lifeline

Call or text 988 for 24/7, free and confidential support to Ohioans in a behavioral health crisis.

Ohio CareLine

- Call 800-720-9616 for 24/7, free, confidential support from a licensed behavioral health professional.
- https://mha.ohio.gov/get-help/welcome

SAMHSA's Mental Health Treatment Locator

- A comprehensive resource providing the ability to search for substance use and mental health facilities, health care centers, buprenorphine practitioners, and opioid treatment providers.
- https://findtreatment.gov/

The Office of Population Affairs (OPA) Title X Family Planning Clinic

- Offer a broad range of services, including mental health resources.
- Find Title X clinic near you at https://opa-fpclinicdb.hhs.gov/

Maternal Mental Health Support

POEM (Perinatal Outreach & Encouragement)

- Call 614-315-8989 for free parent-to-parent support and connections to mental health care and community resources for moms and birthing persons in Ohio.
- An additional program, POEM Rise, provides services exclusively by and for Black mothers, including a providers of color network. - https://mhaohio.org/poem-rise/
- https://mhaohio.org/get-help/maternal-mental-health/

National Maternal Mental Health Hotline

- Pregnant and postpartum individuals can call 833-TLC-MAMA (833-852-6262) for mental health concerns. Available 24/7 by call or text, we encourage any mom who is struggling or feeling alone to reach out for help.
- https://mchb.hrsa.gov/national-maternal-mental-health-hotline

Chronic Diseases – See these resources for additional information:

Gestational diabetes

- http://ohiogdm.com/
- https://diabetes.org/diabetes/gestational-diabetes
- https://www.marchofdimes.org/find-support/topics/pregnancy/gestational-diabetes

Hypertension

- https://www.cdc.gov/bloodpressure/index.htm
- https://www.heart.org/en/health-topics/high-blood-pressure/the-facts-about-high-blood-pressure

Seizure disorders

- https://www.cdc.gov/epilepsy/index.html
- https://www.aans.org/en/Patients/Neurosurgical-Conditions-and-Treatments/Epilepsy
- See this link from the Epilepsy Foundation regarding risks during pregnancy due to Epilepsy: https://www.epilepsy.com/lifestyle/family-planning/pregnancy-risks

Thyroid disease

https://www.thyroid.org/thyroid-information/

Substance Abuse/Addiction

The National Rehab Hotline is free and available 24/7/365 to help anyone struggling through a substance use or mental health crisis get immediate help.

- 866-210-1303 (National Hotline)
- https://nationalrehabhotline.org/

The Ohio Women's Network connects women with services to help overcome substance use disorders.

https://www.ohiowomensnetwork.org/

If you are experiencing a substance use crisis, call 988 to receive 24/7, free and confidential support by a trained specialist.

Breast & Cervical Cancer

Breast & Cervical Cancer Project provides information and helps women navigate cancer screenings.

- 1-844-430-BCCP (2227)
- https://odh.ohio.gov/know-our-programs/breast-cervical-cancer-project/welcome-to

Tobacco Cessation

Ohio Tobacco QuitLine

- Call 800-QUIT-NOW (800-784-8669) to receive free, 24/7 counseling support and cessation materials for all Ohioans
- Includes support for smoking and/or vaping, and a special pregnancy protocol.
- https://ohio.quitlogix.org/en-US/
- https://odh.ohio.gov/know-our-programs/tobacco-use-prevention-and-cessation/cessation

SDOH Resources

The 211 network provides information and referrals to social services and organizations that support the community.

- Support provided for crisis & emergency, housing, food, and health.
- Call 211 for assistance, or
- Visit https://www.211.org/ to find with your local 211 resource.

Several services are offered by the **Office of Family Assistance** located within the Ohio Department of Job and Family Services. Common questions on cash assistance, childcare, child support, child welfare, employment and training assistance, food assistance and unemployment can be found here:

https://jfs.ohio.gov/ocomm_root/ourservices/1000OurServices.stm

The **Office of Population Affairs Title X Family Planning Clinic** offers a broad range of family planning and preventive health services. These services include HPV vaccination, provision of HIV pre-exposure prophylaxis (PrEP), breast and cervical cancer screening, and screening for obesity, smoking, drug and alcohol use, mental health, and intimate partner violence.

https://opa-fpclinicdb.hhs.gov/

Employment

Employment assistance is available from several sources across Ohio:

- OhioMeansJobs.com can help individuals find a job, build a career, and more.
- https://ohiomeansjobs.ohio.gov/

To apply for **Unemployment Insurance Benefits**:

- Visit http://unemployment.ohio.gov/ to complete an online application, or
- For assistance call 877-644-6562 or visit https://ifs.ohio.gov/ouio/ClaimInformationPage.stm

Ohio Mental Health and Addiction Services provides employment services to help individuals with serious mental health conditions find employment.

Visit https://mha.ohio.gov/get-help/finding-a-job for more detail.

Food insecurity

A list of currently available food assistance programs can be found:

https://jfs.ohio.gov/cash-food-and-refugee-assistance/food-assistance/food-programs

To apply for food assistance:

- Complete an online application at: https://benefits.ohio.gov/
- To apply in person or request an application through your local county agency. Find contact information at: https://jfs.ohio.gov/county/county_directory.
- Local foodbanks can be found here: https://www.oashf.org/foodbanks.html

Referral Resources

Women, Infants, and Children (WIC)

WIC is the Special Supplemental Nutrition Program for Women, Infants, and Children. WIC helps eligible pregnant and breastfeeding women, and parents of children up to 5 years of age by providing supplemental, highly nutritious foods, education, support, and referrals.

To find your local WIC clinic, you can:

- Visit https://www.signupwic.com/
- Call 844-601-6881.
- Text: wic + your zip code to 1-844-601-6881 (example: wic43215).

Learn more about the program at: https://odh.ohio.gov/know-our-programs/Women-Infants-Children/program-description

Housing instability

Find affordable and accessible rental housing throughout Ohio at: https://www.ohiohousinglocator.org/

Ohio Housing Finance Agency (https://ohiohome.org/housingassistance.aspx) helps with the following:

- Eviction Moratoriums
- Mortgage information
- Financial Assistance Information
- Legal Resources (facing eviction/foreclosure)

Transportation

Medical transportation services are available. View the Medicaid Transportation Assistance document linked below, or contact your local county department of job and family services for assistance.

- Medicaid Transportation Assistance detail: https://medicaid.ohio.gov/static/Families%2C+Individuals/Programs/ Transportation-Card.pdf
- Find your local JFS office at: http://jfs.ohio.gov/

Intimate Partner Violence

Ohio Alliance to End Sexual Violence

Find a rape crisis center near you

https://oaesv.org/get-help/rape-crisis-centers/

Ohio Sexual Violence Helpline

Visit the website or call to receive resources and support for survivors of sexual violence.

• For assistance call (844) 644-6435 or visit https://www.ohiosexualviolencehelpline.com/

Teen Dating Violence Resources

Young people experience violence, which can have long-lasting impacts. Visit this website:

https://www.nsvrc.org/blogs/teen-dating-violence-prevention-resources-2022

OhioHeals

This resource, available to Ohioans who have experienced or been exposed to violence, focuses on identification, treatment and resources for victimized youth and their families.

https://www.ohioheals.org/

Find a helpline

Provides a list of domestic violence and emotional abuse hotlines in Ohio

https://findahelpline.com/us/oh/topics/abuse-domestic-violence

Ohio Domestic Violence Network:

Locate a program near you at https://www.odvn.org/find-help/

- Please note, not all programs are emergency shelters. Many programs offer other services including legal advocacy, support groups, counseling, and housing assistance.
- If you need help finding a program, contact 1-800-934-9840 or 614-781-9651.

Domestic Violence Programs/Shelters in Ohio:

View a list of shelter programs in Ohio with additional information regarding availability of legal aid services at:

https://www.eriecounty.oh.gov/SheltersDomesticViolenceProgramsinOhio.aspx

National Domestic Violence Hotline

- 24/7 access to essential tools and support to help survivors of domestic violence so they can live their lives free of abuse. You can call, chat online or text.
- Chat online at: https://www.thehotline.org/
- Call: 1-800-799-SAFE (7233), TTY 1-800-787-3224
- Text: Text "START" to 88788.

New Mother Resources

Safe Sleep

- Learn more about infant safe sleep by using the ABC's: Alone, on their Back, in a Crib.
- https://odh.ohio.gov/know-our-programs/maternal-infant-wellness/safe-sleep

Celebrate One

- Tips on caring for baby and safe sleep habits.
- https://new.columbus.gov/Government/Mayors-Office/Initiatives/ CelebrateOne/Safe-Sleep

Crib for Kids

- Learn more about safe sleep and obtain a Cribette portable crib from a Cribs for Kids Partner in your area.
- Crib Locator: https://cribsforkids.org/request-a-crib/
- Safe Sleep Video Library: https://safesleepacademy.org/video-library/
- More information: https://cribsforkids.org/

Mothers and Children First (Bold Beginnings)

Ohio Mothers and Children First provides support services to pregnant mothers and their families, including prenatal care, parenting education, education and employment supports, material assistance, enrollment in nutrition and other social support, childcare, and more.

Program information: https://boldbeginning.ohio.gov/mothers-and-children-first

Doula Services Locator Website

A certified doula is a trained professional who guides and supports another person through childbirth. The doula will act as a supporter and advocate, and will seek to ensure the birthing person feels safe and heard throughout their pregnancy and birth experience. Locate doula services at:

https://www.dona.org/what-is-a-doula-2/find-a-doula/



Appendices



Appendix A: The Tobacco, Alcohol, Prescription Medications, and Other Substance (TAPS) Tool: Part 1

NIDA Clinical Trials Network The Tobacco, Alcohol, Prescription medications, and other Substance (TAPS) Tool

TAPS Tool Part 1

Web Version: 2.0; 4.00; 09-19-17

General Instructions:

The TAPS Tool Part 1 is a 4-item screening for tobacco use, alcohol use, prescription medication misuse, and illicit substance use in the past year. Question 2 should be answered only by males and Question 3 only be females. Each of the four multiple-choice items has five possible responses to choose from. Check the box to select your answer.

•	gment: it number:		
1.	In the PAST 12 MONTHS, how often had cigarettes, cigars, pipes, or smokeless		roduct (for example, cigarettes, e-
	☐ Daily or Almost Daily	☐ Weekly	☐ Monthly
	Less Than Monthly	☐ Never	
2.	In the PAST 12 MONTHS, how often had One standard drink is about 1 small gla (Note: This question should only be ans	ss of wine (5 oz), 1 beer (12	
	☐ Daily or Almost Daily	☐ Weekly	☐ Monthly
	Less Than Monthly	☐ Never	
3.	In the PAST 12 MONTHS, how often had One standard drink is about 1 small gla (Note: This question should only be ans	ss of wine (5 oz), 1 beer (12	
	☐ Daily or Almost Daily	Weekly	☐ Monthly
	Less Than Monthly	☐ Never	
4.	In the PAST 12 MONTHS, how often hat heroin, methamphetamine (crystal methamphetamine)		•
	☐ Daily or Almost Daily	☐ Weekly	☐ Monthly
	Less Than Monthly	☐ Never	
5.	In the PAST 12 MONTHS, how often had more than prescribed or that were not put this way include: Opiate pain relievers (Medications for anxiety or sleeping (for example, Adderall or Ritalin)	prescribed for you? Prescript for example, OxyContin, Vic	ion medications that may be used odin, Percocet, Methadone)
	☐ Daily or Almost Daily	☐ Weekly	☐ Monthly
	☐ Less Than Monthly	Never	
Dig	gital tool available at: https://nida.nih.gov/	′taps2	

Appendix A: The Tobacco, Alcohol, Prescription Medications, and Other Substance (TAPS) Tool: Part 2, Page 1

NIDA Clinical Trials Network The Tobacco, Alcohol, Prescription medications, and other Substance (TAPS) Tool

TAPS Tool Part 2

Wah	Varcion:	20.4	00	09-19-17	
vven	version:	Z.U: 4	· OO:	09-19-17	

General Instructions:	1105 101010111 210, 1100, 00 10 11
The TAPS Tool Part 2 is a brief assessment for tobacco, alcohol, and ill prescription medication misuse in the PAST 3 MONTHS ONLY. Each of	f the following questions and
subquestions has two possible answer choices- either yes or no. Check	the box to select your answer.
In the PAST 3 MONTHS, did you smoke a cigarette containing tobal if "Yes", answer the following questions: a. In the PAST 3 MONTHS, did you usually smoke more than 10 cig	garettes each day? 🏻 Yes 🔲 No
b. In the PAST 3 MONTHS, did you usually smoke within 30 minute	s after waking?
 In the PAST 3 MONTHS, did you have a drink containing alcohol? [If "Yes", answer the following questions: a. In the PAST 3 MONTHS, did you have 4 or more drinks containing 	
question should only be answered by females). Yes No	
 b. In the PAST 3 MONTHS, did you have 5 or more drinks containin question should only be answered by males). ☐ Yes ☐ No 	g alcohol in a day?* (Note: This
*One standard drink is about 1 small glass of wine (5 oz), 1 beer (12 oz) c. In the PAST 3 MONTHS, have you tried and failed to control, cut No	, or 1 single shot of liquor. t down or stop drinking?
d. In the PAST 3 MONTHS, has anyone expressed concern about y	our drinking?
3. In the PAST 3 MONTHS, did you use marijuana (hash, weed)? \square If "Yes", answer the following questions:	∕es ☐ No
 a. In the PAST 3 MONTHS, have you had a strong desire or urge to week or more often? ☐ Yes ☐ No 	use marijuana at least once a
 b. In the PAST 3 MONTHS, has anyone expressed concern about y No 	our use of marijuana? ☐ Yes ☐
4. In the PAST 3 MONTHS, did you use cocaine, crack, or methamphe No	etamine (crystal meth)? Yes
If "Yes", answer the following questions:	
a. In the PAST 3 MONTHS, did you use cocaine, crack, or methamponce a week or more often? \square Yes \square No	phetamine (crystal meth) at least
b. In the PAST 3 MONTHS, has anyone expressed concern about y methamphetamine (crystal meth)? \square Yes \square No	our use of cocaine, crack, or
5. In the PAST 3 MONTHS, did you use heroin? ☐ Yes ☐ No If "Yes", answer the following questions:	
a. In the PAST 3 MONTHS, have you tried and failed to control, cut Yes $\hfill\square$ No	down or stop using heroin?
b. In the PAST 3 MONTHS, has anyone expressed concern about you	ur use of heroin? Yes No

Digital tool available at: https://nida.nih.gov/taps2

Appendix A: The Tobacco, Alcohol, Prescription Medications, and Other Substance (TAPS) Tool: Part 2, Page 2

	In the PAST 3 MONTHS, did you use a prescription opiate pain reliever (for example, Percocet, Vicodin) not as prescribed or that was not prescribed for you? Yes No
If "\	Yes", answer the following questions:
	a. In the PAST 3 MONTHS, have you tried and failed to control, cut down or stop using an opiate pair reliever? \square Yes \square No
	b. In the PAST 3 MONTHS, has anyone expressed concern about your use of an opiate pain reliever? \square Yes \square No
	In the PAST 3 MONTHS, did you use a medication for anxiety or sleep (for example, Xanax, Ativan, or Klonopin) not as prescribed or that was not prescribed for you? Yes No Yes", answer the following questions:
	a. In the PAST 3 MONTHS, have you had a strong desire or urge to use medications for anxiety or sleep at least once a week or more often? Yes No
	b. In the PAST 3 MONTHS, has anyone expressed concern about your use of medication for anxiety or sleep? \square Yes \square No
	In the PAST 3 MONTHS, did you use a medication for ADHD (for example, Adderall, Ritalin) not as prescribed or that was not prescribed for you? Yes No Yes", answer the following questions:
	a. In the PAST 3 MONTHS, did you use a medication for ADHD (for example, Adderall, Ritalin) at least once a week or more often? \square Yes \square No
	b. In the PAST 3 MONTHS, has anyone expressed concern about your use of a medication for ADHE (for example, Adderall or Ritalin)? \square Yes \square No
If "Y	In the PAST 3 MONTHS, did you use any other illegal or recreational drug (for example, ecstasy/molly, GHB, poppers, LSD, mushrooms, special K, bath salts, synthetic marijuana ('spice'), whip-its, etc.)? Yes No Yes", answer the following questions: he PAST 3 MONTHS, what were the other drug(s) you used?
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Cor	mments:

# Appendix B: PHQ-9 Screener for Depression

# Patient Health Questionnaire - 9²⁷ (PHQ-9)

Over the <u>last 2 weeks</u> , he by any of the following p (Use "\sum " to indicate your a		ered Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasur	e in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless		0	1	2	3
3. Trouble falling or staying	g asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having I	ittle energy	0	1	2	3
5. Poor appetite or overea	ting	0	1	2	3
6. Feeling bad about yours have let yourself or you	self — or that you are a failure or r family down	or 0	1	2	3
7. Trouble concentrating on newspaper or watching	n things, such as reading the television	0	1	2	3
noticed? Or the opposi	slowly that other people could he te — being so fidgety or restles ving around a lot more than usu	s 0	1	2	3
9. Thoughts that you would yourself in some way	d be better off dead or of hurting	g 0	1	2	3
	For offic	E CODING <u>0</u> +	+	· +	<u></u>
			=	Total Score	:
	roblems, how <u>difficult</u> have the at home, or get along with o		nade it for	you to do	your
Not difficult at all □	Somewhat difficult	Very difficult □		Extreme difficul	

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# Appendix B: PHQ-9 & GAD-7 Screener Scoring

Mental Health Screener Scoring ^{27,49}			
GAD-7 Score	Severity	PHQ-9 Score	
< 10	Mild (< 5 is minimal)	< 10	
10-14	Moderate	10-14	
> 15	Moderately Severe	15-19	
≥ 15	Severe	≥ 20	

# Appendix B: Generalized Anxiety Disorder – (GAD-7) Screener

GAD-7				
Over the <u>last 2 weeks</u> , how often have you been bothered by the following problems?  (Use "\sum " to indicate your answer)	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it is hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid as if something awful might happen	0	1	2	3
(For office coding: Total S	Score T	=	+ +	·)

Source: https://www.phqscreeners.com/

# Appendix C: HARK Screener³⁴

For any HARK result equal to or greater than 1, refer the patient to Social Work, Mental Health provider, and/or Community resources as needed.

# **HARK Screener**

HARK questions - one point is given for every "YES" answer.

# **H** HUMILIATION

Within the last year, have you been humiliated or emotionally abused in other ways by your partner or your ex-partner?

# **A** AFRAID

Within the last year, have you been afraid of your partner or ex-partner?

#### R RAPI

Within the last year, have you been raped or forced to have any kind of sexual activity by your partner or ex-partner?

#### K KIC

Within the last year, have you been kicked, hit, slapped or otherwise physically hurt by your partner or ex-partner?

# **Appendices**

# Appendix D: WellRx Questionnaire³⁷

DOB Male Female	
WellRx Questions	
1. In the past 2 months, did you or others you live with eat smaller meals or skip meals be	cause you didn't have money for food
Yes	No
2. Are you homeless or worried that you might be in the future?	
Yes	No
3. Do you have trouble paying for your utilities (gas, electricity, phone)?	
Yes	No
4. Do you have trouble finding or paying for a ride?	
Yes	No
5. Do you need daycare, or better daycare, for your kids?	
Yes	No
6. Are you unemployed or without regular income?	
Yes	No
7. Do you need help finding a better job?	
Yes	No
8. Do you need help getting more education?	
Yes	No
9. Are you concerned about someone in your home using drugs or alcohol?	
Yes	No
10. Do you feel unsafe in your daily life?	
Yes	No
11. Is anyone in your home threatening or abusing you?	
Yes	No

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# **Appendix E: Iron Supplements**

Iron Supplements			
Preparation	Dose		
Ferrous fumarate	106 mg elemental iron per 325 mg tablet		
Ferrous sulfate	65 mg elemental iron per 325 mg tablet		
Ferrous gluconate	34 mg elemental iron per 300 mg tablet		
Iron dextran	50 mg elemental iron per milliliter, intramus- cularly or intravenously		
Ferric gluconate	12.5 mg iron per milliliter, intravenously only		
Iron sucrose	20 mg iron per milliliter, intravenously only		

# **Appendix E: Iron-Rich Foods**

Iron-Rich Foods			
Animal Sources	Plant Sources		
Red meats (Beef, lamb, pork) Poultry (Turkey, chicken) Eggs Dried beef Liver Seafood (oysters, clams, shrimp, scallops, tuna)	Enriched breakfast cereals; iron-fortified cereals, breads, pastas, rice Dried beans, lentils, dried peas Tofu Vegetables: sweet potatoes, spinach, broccoli, string beans, kale, chard, peas Greens (beet, collard, dandelion) Dried fruits (raisins, apricots, peaches, dates) Prune juice Strawberries, watermelon		
	Molasses, maple syrup		

# Appendix E: Food and Drugs That Affect Iron Absorption

Food and Drugs That Affect Iron Absorption		
Decrease Iron Absorption	Increase Iron Absorption	
Coffee, tea	Broccoli	
Dairy products	Citrus fruits, juices	
Eggs	Peppers	
Grains, nuts, seeds, legumes (high in phytic acid)	Red meats (beef, lamb)	
Soy products	Seafood	
Calcium	Strawberries	
Cholestyramine	Vitamin C (ascorbic acid)	
Levothyroxine		
Methyldopa		
Pica (clay, laundry products)		
Proton pump inhibitors (to reduce gastric acids)		

References

References

- Reproductive Health National Training Center. (2022). Preconception Health Toolkit. Retrieved 7/27/2023 from: https://rhntc.org/resources/preconception-health-toolkit
- 2. Finer, L. B., & Zolna, M. R. (2016). Declines in Unintended Pregnancy in the United States, 2008-2011. The New England journal of medicine, 374(9), 843 -852. https://doi.org/10.1056/NEJMsa1506575
- 3. National Preconception Health and Health Care Initiative. (2020). Women's Health Practice Bulletin. Retrieved from Before, Between & Beyond Pregnancy: <a href="https://beforeandbeyond.org/wp-content/uploads/2021/02/phc-bulletin-0223211.pdf">https://beforeandbeyond.org/wp-content/uploads/2021/02/phc-bulletin-0223211.pdf</a>
- 4. Centers for Medicare and Medicaid Services. (2017). The accountable health communities health-related social needs screening tool, 1-9. Retrieved from <a href="https://innovation.cms.gov/Files/worksheets/ahcm-screeningtool.pdf">https://innovation.cms.gov/Files/worksheets/ahcm-screeningtool.pdf</a>
- Reproductive Health National Training Center. (2022). Patient Experience Improvement Toolkit. Retrieved 7/27/2023 from https:// rhntc.org/resources/patient-experience-improvement-toolkit
- Reproductive Health National Training Center. (2020). Same-Visit Contraception: A Toolkit for Family Planning Providers. Retrieved 7/27/2023 from: https://rhntc.org/resources/same-visit-contraception-toolkit-family-planning-providers
- 7. Street, R.L., Jr., Makoul, G., Arora, N.K., & Epstein, R.M. (2009). How does communication heal? Pathways linking clinician-patient communication to health outcomes. Patient Education and Counseling, 74(3), 295-301. https://doi.org/10.1016/j.pec.2008.11.015
- 8. Stewart, M., Brown, J.B., Donner, A., McWhinney, I.R., Oates, J., Weston, W.W., & Jordan, J. (2000). The impact of patient-centered care on outcomes. Journal of Family Practice, 49, 796-804. PMID: 11032203. https://pubmed.ncbi.nlm.nih.gov/11032203/
- Safran, D.G., Montgomery, J.E., Chang, H., Murphy, J., & Rogers, W.H. (2001). Switching doctors: Predictors of voluntary disenrollment from a primary physician's practice. Journal of Family Practice, 50(2), 130-136. PMID: 11219560 https://pubmed.ncbi. nlm.nih.gov/11219560/
- 10. Reproductive Health National Training Center. (2021). Client-Centered Reproductive Goals and Counseling Flow Chart. Retrieved 7/27/2023 from: https://rhntc.org/resources/client-centered-reproductive-goals-and-counseling-flow-chart
- 11. Reproductive Health National Training Center. (2021). Preconception Counseling Checklist. Retrieved 7/27/2023 from: https://rhntc.org/resources/preconception-counseling-checklist
- 12. Agency for Healthcare Research and Quality, Rockville, MD. Content last reviewed September 2020. The SHARE Approach: A Model for Shared Decisionmaking Fact Sheet. Retrieved on 7/20/2023 from: https://www.ahrq.gov/health-literacy/professional-training/shared-decision/tools/factsheet.html
- 13. ACOG Committee Opinion No. 762: Prepregnancy Counseling. (2019). Obstetrics and gynecology, 133(1), e78 -e89. https://doi.org/10.1097/AOG.000000000003013
- 14. Ayhan Balik CH, Bilgin H, Uluman OT, Sukut O, Yilmaz S, Buzlu S. A Systematic Review of the Discrimination Against Sexual and Gender Minority in Health Care Settings. International Journal of Health Services. 2020;50(1):44-61. doi:10.1177/0020731419885093 https://pubmed.ncbi.nlm.nih.gov/31684808/
- 15. Office of Population Affairs. (2022). Title X Program Handbook. Retrieved 7/27/2023 from: https://opa.hhs.gov/sites/default/files/2022-08/title-x-program-handbook-july-2022-508-updated.pdf
- 16. Nair, L., & Adetayo, O. A. (2019). Cultural Competence and Ethnic Diversity in Healthcare. Plastic and reconstructive surgery. Global open, 7(5), e2219. https://journals.lww.com/prsqo/Fulltext/2019/05000/Cultural_Competence_and_Ethnic_Diversity_in.43.aspx
- 17. Centers for Disease Control and Prevention. (2023). Unintended Pregnancy. Retrieved 7/27/2023 from: https://www.cdc.gov/reproductivehealth/contraception/unintendedpregnancy/index.htm
- 18. Centers for Disease Control and Prevention. (2015). Evidence Summary: Prevent Unintended Pregnancy. Retrieved 7/27/2023 from: https://www.cdc.gov/sixeighteen/docs/6-18-evidence-summary-pregnancy.pdf
- 19. March of Dimes Foundation. (2013). Family Health History Form. Retrieved 7/27/2023 from: https://www.marchofdimes.org/sites/default/files/2023-01/EHP12542FamilyHealthHistoryFormDownloadablePDF_int.pdf
- 20. U.S. Department of Agriculture. (2023). MyPlate Quiz. Retrieved 7/27/2023 from: https://www.myplate.gov/form/myplate-quiz#question_1
- 21. The American College of Obstetricians and Gynecologists. (2013). Reducing Prenatal Exposure to Toxic Environmental Agents. Retrieved from ACOG: https://www.acog.org/-/media/project/acog/acogorg/clinical/files/committee-opinion/articles/2021/07/reducing-prenatal-exposure-to-toxic-environmental-agents.pdf
- 22. Substance Abuse and Mental Health Services Administration. (2022). Screening, Brief Intervention, and Referral to Treatment (SBIRT). Retrieved 7/27/2023 from: https://www.samhsa.gov/sbirt
- 23. National Institutes of Health National Institute on Drug Above. (n.d.) Tobacco, Alcohol, Prescription medication, and other Substance use Tool. Retrieved 7/17/2023 from: https://nida.nih.gov/taps2/
- 24. Agency for Healthcare Research and Quality, Rockville, MD. (2012). Five Major Steps to Intervention (The "5 A's"). Retrieved 7/20/2023 from: https://www.ahrq.gov/prevention/guidelines/tobacco/5steps.html
- 25. U.S. Preventative Services Task Force. (2023). Anxiety Disorders in Adults: Screenings. Retrieved 7/27/2023 from: https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/anxiety-adults-screening
- 26. U.S. Preventative Services Task Force. (2023). Depression and Suicide Risk in Adults: Screening. Retrieved 7/27/2023 from: https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/screening-depression-suicide-risk-adults

- 27. Pfizer. INSTRUCTION MANUAL: Instructions for Patient Health Questionnaire (PHQ) and GAD-7 Measures. (n.d.) Retrieved 7/27/2023 from: https://www.phqscreeners.com/images/sites/g/files/g10016261/f/201412/instructions.pdf
- 28. Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: validity of a brief depression severity measure. Journal of general internal medicine, 16(9), 606 -613. https://doi.org/10.1046/j.1525-1497.2001.016009606.x
- Umberson D, Montez JK. Social relationships and health: a flashpoint for health policy. J Health Soc Behav. 2010;51 Suppl(Suppl):S54-66. doi: 10.1177/0022146510383501. PMID: 20943583; PMCID: PMC3150158. https://journals.sagepub.com/doi/10.1177/0022146510383501
- 30. Kassel, J. D., Stroud, L. R., & Paronis, C. A. (2003). Smoking, stress, and negative affect: correlation, causation, and context across stages of smoking. Psychological bulletin, 129(2), 270 -304. https://doi.org/10.1037/0033-2909.129.2.270
- 31. One Love Foundation. (2023). 10 Signs of a Healthy Relationship. Retrieved 7/27/2023 from: https://www.joinonelove.org/wp-content/uploads/2023/01/ID_Healthy-Signs.pdf
- 32. One Love Foundation. (2019). 10 Signs of Unhealthy Relationship. Retrieved 7/27/2023 from: https://www.joinonelove.org/wp-content/uploads/2019/12/10-Unhealthy-Signs.pdf
- 33. Pugh, B., & Becker, P. (2018). Exploring Definitions and Prevalence of Verbal Sexual Coercion and Its Relationship to Consent to Unwanted Sex: Implications for Affirmative Consent Standards on College Campuses. Behavioral sciences (Basel, Switzerland), 8(8), 69. https://doi.org/10.3390/bs8080069
- 34. Sohal, H., Eldridge, S., & Feder, G. (2007). The sensitivity and specificity of four questions (HARK) to identify intimate partner violence: a diagnostic accuracy study in general practice. BMC family practice, 8, 49. https://doi.org/10.1186/1471-2296-8-49
- 35. Agency for Healthcare Research and Quality, Rockville, MD. (May 2015) Intimate Partner Violence Screening. Retrieved 7/27/2023 from: https://archive.ahrq.gov/ncepcr/tools/healthier-pregnancy/fact-sheets/intimate-partner-violence-provider-fact-sheet.pdf
- 36. Agency for Healthcare Research and Quality, Rockville, MD. (2021) SDOH & Practice Improvement. Retrieved 7/27/2023 from: https://www.ahrq.qov/sdoh/practice-improvement.html
- 37. Page-Reeves, J., Kaufman, W., Bleecker, M., Norris, J., McCalmont, K., Ianakieva, V., Ianakieva, D., Kaufman, A. Addressing Social Determinants of Health in a Clinic Setting: The WellRx Pilot in Albuquerque, New Mexico. (2016) The Journal of the American Board of Family Medicine May 2016, 29 (3) 414-418; DOI: https://doi.org/10.3122/jabfm.2016.03.150272
- 38. Cleveland Clinic. (Oct. 2022) Teratogens. Retrieved 7/27/2023 from: https://my.clevelandclinic.org/health/articles/24325-teratogens
- 39. Olsen, N., Brazier, Y. Measuring BMI for adults, children, and teens. (2018) Medical News Today. Retrieved 7/27/2023 from: https://www.medicalnewstoday.com/articles/323622
- 40. American Medical Association. (2023). AMA adopts new policy clarifying role of BMI as a measure in medicine. Retrieved from AMA: https://www.ama-assn.org/press-center/press-releases/ama-adopts-new-policy-clarifying-role-bmi-measure-medicine
- 41. Fitch, Joshua. Contemporary Pediatrics. (2023). AMA asking physicians to de-emphasize BMI use for health and obesity assessment. Retrieved from Contemporary Pediatrics: https://www.contemporarypediatrics.com/view/ama-asking-physicians-to-de-emphasize-bmi-use-for-health-and-obesity-assessment
- 42. Wolters Kluwer Health, Inc. (2023). Bates' Visual Guide to Physical Examination. Retrieved 7/27/2023 from: https://batesvisualguide.com/multimedia.aspx?categoryid=21787#21768
- 43. The American College of Obstetricians and Gynecologists. (2017). Carrier screening for genetic conditions. Committee Opinion No. 691. Retrieved 7/27/2023 from: https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2017/03/carrier-screening-for-genetic-conditions
- 44. Centers for Disease Control and Prevention. (2022) Parasites Toxoplasmosis (Toxoplasma infection). Toxoplasmosis: Pregnancy FAQS. Retrieved 7/27/2023 from: https://www.cdc.gov/parasites/toxoplasmosis/gen_info/pregnant.html
- 45. Centers for Disease Control and Prevention. Viral Hepatitis. (2023) Testing Recommendations for Hepatitis C Virus Infection. Retrieved 7/27/2023 from: https://www.cdc.gov/hepatitis/hcv/guidelinesc.htm
- 46. Centers for Disease Control and Prevention. Sexually Transmitted Infections Treatment Guidelines. (2021). Screening Recommendations and Considerations Referenced in Treatment Guidelines and Original Sources. Retrieved 7/27/2023 from: https://www.cdc.gov/std/treatment-guidelines/screening-recommendations.htm
- 47. Ohio Department of Health, STD Surveillance Program. Total Syphilis: Five-Year Report. Accessed on 9/20/2023 from: https://odh.ohio.gov/know-our-programs/std-surveillance/resources/total-syphilis-five-year-report
- 48. Anemia in Pregnancy: ACOG Practice Bulletin, Number 233. Obstetrics & Gynecology 138(2):p e55-e64, August 2021. https://doi.org/10.1097/aog.000000000004477
- 49. Anxiety & Depression Association of America. GAD-7 Anxiety. Retrieved 8/27/2023 from: https://adaa.org/sites/default/files/GAD-7_Anxiety-updated_0.pdf



