Thank you for joining our movement and collective vision that all people of reproductive age will achieve optimal health and wellness, fostering a healthy life course for them and for any children they may have.

Women’s health matters, period. And, the health and well-being of young adults now can impact the health of the generation they co-create.

Health care providers and community workers are busy. The time that they have with patients/clients is valuable and important. The intent of this practice bulletin is to provide key information and tips to make the most of those important encounters.
Maternal and infant mortality and morbidity statistics in the US suggest that there is significant room for improvement in centering women’s health. Inequities in maternal and infant outcomes are pervasive, persistent, and the gap is widening between black and white people. These inequities are the result of longstanding systems that have oppressed black and brown people in the US. People living with ability differences, who have diverse gender identities and expression, live in remote areas, and who do not speak English are also at greater risk of neglect and harm. These inequities are unjust and preventable.

While high quality prenatal and postpartum care is critical, many of the modifiable risk factors that drive poor birth outcomes for women and infants need to be addressed before pregnancy, including: interpregnancy interval, exposure to teratogenic medications, treatment of infections, exposure to substances, chronic disease management, and quality nutrition.

Routine health prevention and promotion guidelines exist, but women are not routinely receiving this care. Data from the Centers for Disease Control and Prevention illustrates this point:

- 46.5% of women aged 15-44 received contraceptive counselling (4.5% of men)
- 45.3% of women aged 15-44 with risk were tested for chlamydia
- 31.7% received an influenza vaccine
- 54.5% with high blood pressure were tested for diabetes
- 44.9% with obesity had a health care professional talk with them about their diet
- 55.2% current smokers had a health professional talk with them about their smoking.

There are also significant barriers to the receipt of preventive care, including that over one in ten women in the US do not have health insurance.

One missing piece in current care is limited understanding of a person’s sexual activity and reproductive desires and risks. This important conversation provides the opportunity for patient centered discussions to improve health, both for her and for any future pregnancies.

Women receive care from multiple providers, in multiple sectors, for multiple reasons. Taking the opportunity whenever she is present to ask about and understand her thoughts and decision-making as it relates to her reproductive health and overall well-being is new to clinical practice and very important.

In order to get DIFFERENT RESULTS, we will need to DO things DIFFERENTLY. We are glad you are joining with us to make this happen!
Women’s Preventive Health Guidelines and Recommendations

In 2016, The American College of Obstetricians and Gynecologists (ACOG) launched the Women’s Preventive Services Initiative (WPSI). Through this five-year cooperative agreement with the US Department of Health and Human Services, Health Resources and Services Administration (HRSA), ACOG is engaging a coalition of national health professional organizations and consumer and patient advocates with expertise in women’s health across the lifespan to develop, review, and update recommendations for women’s preventive healthcare services, including HRSA-sponsored Women’s Preventive Services Guidelines. WPSI has released a periodicity table by age as a reminder of routine care: [https://bit.ly/3b8rxZP](https://bit.ly/3b8rxZP)

What is not included in this table is how to address these recommendations within the context of pregnancy desires – reproductive context matters!

Preventive health does not have to be tied to a visit. Integrated systems do better at performing recommended screenings and evaluations. It is difficult to perform evidence based screenings in a patient centered and effective way if done “all at once.” Both women and clinicians can be overwhelmed with question fatigue and unable to have adequate time or focus to address issues that are most important to the woman and her health. New strategies of screening and engagement need to be employed to capture necessary information and open doors of opportunity for creating patient-provider partnerships in improving health.

EXAMPLE: A woman’s pregnancy history may influence her overall future health risks. This is often not considered in routine care. Consider the elements that can raise or lower a reproductive age woman’s risk of cardiovascular disease (CVD):

- Being born premature increases her lifetime risk of CVD
- Hypertension or preeclampsia in pregnancy equals a 2 time increase in CVD
- Gestational diabetes increases risk of CVD (above the risk associated with DM)
- Each stillbirth increases MI risk 2.6-fold
- Recurrent spontaneous abortions (>3) equals a 9-fold MI risk increase
- Exercise and weight reduction reduces CVD risk
- Breastfeeding reduces CVD risk by 10%

A person’s birth history and previous pregnancy outcomes are important elements to consider during routine health promotion counseling.
Pregnancy intention screening is a pathway to context, opening the door for conversation and consideration of the impact of reproductive desires/risks upon clinical decision-making. This information provides better opportunities to support women in receiving the care they deserve, including education, decisional support and advice, and access to resources. Several different models exist and efforts are underway to build evidence on their impact. A standardized and systematic approach is recommended over ad hoc and provider-driven verbal questioning. A standardized approach can decrease bias and inequity in screening and service provision.

Would you like to become pregnant in the next year?

- **Yes**
  - **Step 1: Provide counseling/education**
    - When would you like to become pregnant? (if patient is not trying to get pregnant immediately, assess for birth control use and consider contraceptive counseling.)
    - Can we talk about some simple ways to prepare for a Healthy pregnancy?
  - **Step 2: Provide preconception/interconception care**
    - Prescribe or dispense a multivitamin with folic acid
    - Recommend at least 18 months between a birth and the pregnancy
    - Review medications
    - Screen for and manage chronic conditions
    - Evaluate drug/alcohol/smoking risks
    - Identify support system
    - Assess for safety/violence

- **Unsure**
  - **Step 1: Provide counseling/education**
    - Do you want to have (more) children in the future? If yes, when might that be?
    - How would you feel if you found out you were pregnant today?
    - How important is it to you to prevent a pregnancy now?
    - Are you currently using a birth control method? How is this method working for you?
    - Can we talk about some simple ways to prepare for a healthy pregnancy?

- **Ok either way**
  - **Step 1: Provide counseling/education**
    - Are you currently using a birth control method?
    - How is this method working for you?
    - How important is it to you to prevent a pregnancy?
    - What is most important to you in a birth control method?

- **No**
  - **Step 1: Provide counseling/education**
    - Are you currently using a birth control method?
    - How is this method working for you?
    - How important is it to you to prevent a pregnancy?
    - What is most important to you in a birth control method?
  - **Step 2: Provide contraceptive care**
    - If the patient is satisfied with their method, no other care is needed
    - Recommend birth control methods based on patient’s response to questions
    - Evaluate for correct and consistent use
    - Provide full range of contraceptive methods onsite or through referral
    - Offer emergency contraception
The PATH questions are one client-centered approach to assess Parenthood/Pregnancy Attitude, Timing, and How important is pregnancy prevention. PATH can be used with clients of any gender, sexual orientation, or age. PATH is designed to facilitate listening and efficient client-centered conversations about preconception care, contraception, and fertility as appropriate.

**Q1** Do you think you might like to have (more) children at some point?
- Yes
- Not Sure
- No

**Q2** When do you think that might be?
- Now or trying for some time
- Not now or not anytime soon

**Q3** How important is it to you to prevent pregnancy until then?
- Not as important
- Important

I'm available to answer any questions you may have about getting pregnant.

Since you said ________, would you like to talk about ways to be prepared for a healthy pregnancy?

Would you like to talk about your birth control options?

Do you have a sense of what is important to you about your birth control method?

How should I respond to “unsure” or “ok either way”?

These responses are some of the more challenging spaces for clinicians, presenting an opportunity for improvement, particularly around patient-centered, shared decision-making communication skills. Some quick tips that may help you as you serve your patients:

**Open the conversation with “tell me more...”**

**Be guided by a spirit of curiosity and interest in exploring your patient’s desires and thoughts.**

**Be aware that there may be many complex feelings or beliefs about pregnancy and until you understand the woman’s perspective, you will be unable to provide meaningful advice on how to optimize her health and achieve her goals.**

**Offer education on preconception health as well as contraceptive options. Use shared decision-making to evaluate risks with pros and cons and different options in the event of future pregnancy (desired vs surprise).**

**Pay attention to your own biases!**

Be ok with unresolved questions – building trust and rapport over time is key to optimal reproductive wellness.

---

When Her Answer is “Yes”
Key Preconception Considerations

<table>
<thead>
<tr>
<th>Component of Care</th>
<th>Key Questions/Assessments</th>
<th>Key Recommendations/ Patient Education Supports</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Family Planning Guidance</strong></td>
<td>Would you like to become pregnant in the next year? (woman indicates “yes”)</td>
<td>• Based on desires regarding timing of pregnancy and issues you and patient agree should be addressed prior to conception, provide appropriate contraceptive guidance.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• If relevant, educate about safest interconceptional lengths (18-59 months).</td>
</tr>
</tbody>
</table>
| **Nutrition Status**                    | • Body Mass Index (BMI)  
• Assess use of Folic Acid and other nutritional supplementation                                                                                     | • Counsel about advantages of achieving healthy weight, including the specific risks of underweight or obesity, if applicable, to future pregnancies.                                                                                                                      |
|                                         |                                                                                                                                                           | • Recommend a varied and balanced diet and a multivitamin with at least 400 mcg folic acid for daily use (even if pregnancy plans change).                                                                                                                              |
|                                         |                                                                                                                                                           | • Refer to detailed guidance for specific nutrients and nutrition related disorders under Nutrition tab in full Clinical Toolkit.                                                                                                                                |
| **Infectious Disease Status and Immunizations** | • Review immunization status  
• Assess risks for, at a minimum, influenza, Hepatitis B, rubella, varicella, tuberculosis, HIV, HPV                                                                                       | • Offer Hepatitis B, HPV, Rubella and Varicella immunizations, as indicated (if administer live vaccines, caution against conception for appropriate interval).                                                                                                          |
|                                         |                                                                                                                                                           | • Test for infectious diseases listed on left, as indicated and provide counseling on risk reduction behaviors.                                                                                                                                                        |
| **Chronic Diseases**                    | Review patient history for evidence of chronic disease (e.g. hypertension, diabetes, seizure disorder, etc.)                                                                                                      | • Educate woman on implications of the disease on her own health should she conceive and on her pregnancy outcomes.                                                                                                                                                |
|                                         |                                                                                                                                                           | • Evaluate target organs affected by disease (e.g. kidneys in diabetes).                                                                                                                                                                                                 |
|                                         |                                                                                                                                                           | • Strive for optimal control with fewest/safest medications.                                                                                                                                                                                                         |
|                                         |                                                                                                                                                           | • Enlist specialists (e.g. maternal-fetal medicine, internists) for guidance.                                                                                                                                                                                          |
| **Medications**                         | Assess prescription, OTC and herbal medication profile                                                                                                      | • Help woman achieve safest medication profile prior to conception (may require working with other specialists to achieve — e.g. mental health, internists, dermatologists, etc.)                                                                                                        |
|                                         |                                                                                                                                                           | • For essential medication, aim for the choice(s) that balance optimal effectiveness with lowest teratogenic potential at the lowest effective dose.                                                                                                                 |
|                                         |                                                                                                                                                           | • Stress that herbal products are not required to be tested for safety in and around pregnancy.                                                                                                                                                                         |
|                                         |                                                                                                                                                           | • Educate women NOT to stop prescription drugs prescribed for chronic diseases without medical consultation—even if she thinks she become pregnant.                                                                                                                     |
| **Substance Use**                       | Use a tool such as the NIDA Quick Screen to assess substance exposures: In the past year, how often have you used the following?  
• 4 or more drinks of alcohol in a day (never, once or twice, monthly, weekly, daily or almost daily)?  
• Tobacco products (never, once or twice, monthly, weekly, daily or almost daily)?  
• Prescription drugs for non-medical reasons (never, once or twice, monthly, weekly, daily or almost daily)?  
• Illegal drugs (never, once or twice, monthly, weekly, daily or almost daily)?                                                                 | • Advise all women that no amount of alcohol has proven safe at any time in pregnancy                                                                                                                                                                                |
<p>|                                         |                                                                                                                                                           | • Use best practice such as SBIRT to counsel women who screen positive for alcohol, prescription and illegal drug abuse.                                                                                                                                               |
|                                         |                                                                                                                                                           | • Use best practice of 5As to counsel women who use tobacco products.                                                                                                                                                                                                 |
|                                         |                                                                                                                                                           | • Refer women who disclose signs of symptoms of addiction for more extensive treatment.                                                                                                                                                                                |
| <strong>Previous Pregnancy Outcomes</strong>         | If history of prior pregnancy, assess if complicated by: miscarriage, preterm birth, low birth weight, congenital anomalies, cesarean birth, preeclampsia, GDM, uterine anomalies, birth trauma | • If yes to any of these, refer to guidance for specific outcome under Reproductive History tab in full Clinical Toolkit.                                                                                                                                               |</p>
<table>
<thead>
<tr>
<th>Component of Care</th>
<th>Key Questions/Assessments</th>
<th>Key Recommendations/ Patient Education Supports</th>
</tr>
</thead>
</table>
| Genetic Risks     | Undertake a quick genetic screen:  
• Do you, your partner, previous children or other relatives have a birth defect, genetic condition, developmental delay or learning disability?  
• Are you or your partner of Eastern European or Jewish ancestry? Of Caucasian, non-Hispanic ancestry? Of French-Canadian or Cajun ancestry? Of African, Mediterranean or Asian ancestry?  
• Have you had two or more miscarriages?  
• Have you or your partner had a previous pregnancy result because of a birth defect, genetic disease, or death before or after birth?  
• Will you be 35 years old or older when you plan to give birth? | • If yes to any of the queries in the screen, refer to guidance under Genetic history tab in full Clinical Toolkit.  
• In most situations, the couple should be referred to a qualified health care provider for appropriate counseling and potential testing. |
| Mental Health History | • All women should be assessed for depression at least once a year (an assessment tool such as the PDQ-9 screen can be used)  
• In addition, ask about: history of mental illness; mood disorders, suicidal ideation, homicidal ideation, postpartum depression, behavioral changes | • If under current treatment, assess safety of drug profile (see Medication tab in full Clinical Toolkit).  
• Underscore the risks of stopping any medication without medical supervision, even if she thinks she has become pregnant.  
• Counsel woman about potential for exacerbations or recurrences in and following pregnancy and about strategies to identify and manage such occurrences.  
• Refer to specific guidance for depression, bipolar disorders and schizophrenia under Mental health tab in full Clinical Toolkit. |
| Interpersonal Violence | Explain that you regularly ask all women a series of questions to assess their safety. Suggested queries include:  
• Are you in a relationship with a person who threatens or physically hurts you?  
• Within the past year have you been hit, slapped, kicked or otherwise physically hurt by someone?  
• Do you ever feel afraid of your partner?  
• Has anyone forced you to have sexual activities that made you feel uncomfortable?  
• Does your partner also want a pregnancy in the next year? | • If the woman answers “yes” to any of the first 4 questions:  
• Acknowledge the trauma;  
• Express concern for her welfare  
• Provide referrals to local and national resources (refer to interpersonal Violence tab in full Clinical Toolkit for specific guidance).  
• Educate women in violent relationships that there is no evidence that pregnancy resolves violence and that, in fact, it often increases during pregnancy.  
• Encourage woman to create a safety plan.  
• If woman indicates partner not supportive of pregnancy plans, explore more fully. |

---

**Preconception Health for Reproductive Age Women Living with HIV**

All people, regardless of their HIV status, should be asked about their reproductive wishes. There are some special considerations for reproductive age people living with HIV, such as potential drug-drug interactions between some hormonal contraceptives and antiretrovirals and the need to attain maximum viral suppression before attempting conception to protect women’s health and to reduce the risk of transmission to partners and infants. For comprehensive clinical guidance, see the US DHHS AIDSInfo Preconception Counseling and Care for Women of Childbearing Age Living with HIV [https://bit.ly/2STKvLC](https://bit.ly/2STKvLC)

**Sample Dot Phrases to Assist with Documentation**

Here are some suggested “short cuts” that might be helpful with documentation.

1. Family planning/pregnancy timing: []
2. Nutritional status and multivitamins: standard multivitamin recommended. BMI is []
3. Infectious disease risk and immunizations:  
   Vaccines [] up to date. [STI risk, HIV, TB, Varicella, Rubella status, Zika risk]
4. Chronic diseases: []
5. Medications: []
6. Substance use: [No substance use including tobacco alcohol or drugs]
7. Previous pregnancy outcomes: [No significant risk factors related to her from prior pregnancy]
8. Genetic risks: Age [], race/ethnicity [], family history []
9. Mental health history:  
   [Screens negative for depression and no significant history in the past.]
10. Intimate partner violence: [Screens negative for any risks, feels safe at home in a stable relationship]
Chronic Disease Management

Standardize the inclusion of reproductive goals and risks into routine chronic disease management plans. Common primary care conditions include: diabetes, hypertension, obesity and metabolic syndrome, mental health and substance use disorders, seizures, hypothyroidism, autoimmune diseases, and asthma.

**EXAMPLE** problem list related to diabetes *(should do for any chronic condition)*:

**Diabetes Care Plan** *(example)*

- A1C goal <7 *(If pregnancy is planned it would be <6.5)*
- Medications: On metformin, GLP-1, statin, ACE-I *(If pregnancy is planned teratogens would be avoided and consideration for conversion to insulin as gold standard)*
- Complications: None. perform annual microalbumin, eye and foot exam *(If there were microvascular complications, risk of future pregnancy on maternal morbidity and mortality increases)*
- Recommended immunizations: pneumonia, annual flu
- Weight loss and activity goals reviewed
- Reproductive/Preconception Planning: Progesterone IUD placed in 2016, daily multivitamin with folate recommended, not interested in pregnancy in near future *(If pregnancy desired, plan for a preconception care visit and specialty consultation)*

**Common and frequently missed issues....**

**Diabetes** Reproductive planning and goal setting are frequently left out of routine diabetes care. Women with diabetes who may become pregnant have a very different management plan than women who do not desire pregnancy. Providers must be intentional about counseling, education, and guidance based on a woman’s reproductive desires - both to prevent unintended pregnancy without optimal glycemic control or appropriate medication management, as well as to optimize her diabetes management and overall health if pregnancy is desired.

**Multivitamin with folate** Routine consumption is a CDC recommendation – this should be a part of standard health advice for ALL women of reproductive age, make it a part of the routine medication reconciliation process which should be completed at every visit.

**Medications** Common meds prescribed in primary care with teratogenic potential: ACE-Is, ARBS, Spironolactone, Statins, Warfarin, Valproic Acid, carbamazepine, Lithium, Phenytoin, Methotrexate and other DMARDs. Have a way to link a woman’s reproductive goals to medication risks. Individualized conversations will need to center around the risks and benefits of continuing vs. changing or stopping medications prior to pregnancy.

**Hypothyroidism** Thyroid supplementation goals are different in pregnancy (most recommend a TSH <2). Fetal development depends on adequate thyroid hormone as early as the first missed menses. Generally this means an increase of 25% of the current dose. Educate and plan on the importance of increased thyroid supplementation at onset of pregnancy (one method is to double the prepregnancy dose on two days of the week until TSH is performed).

**Obesity s/p gastric bypass** Women undergoing gastric bypass need education and support post surgery. Recommendations are to avoid pregnancy in the first 12-18 months post bypass. Education and awareness regarding the potential for contraceptive failures of oral contraceptives due to decreased gut absorption and increased micronutrient supplementation needs post bypass are important aspects of primary care.

**Mental health and substance use disorders** In addition to the review of medications and medical risks, care of women with complex mental health issues requires the engagement of a team with an awareness of the intersectionality of the individual’s life circumstances and ability to have autonomy for reproductive decision making. Non-judgmental and supportive shared decision-making is critical, recognizing the chaotic social environments which require discussions on barriers to achieve goals and choices, while at the same time recognizing that women may be at high risk of reproductive coercion.
Coding & Billing Considerations

ICD-10 CODES MOST RELEVANT

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z31.69</td>
<td>Preconception Counseling</td>
</tr>
<tr>
<td>Z30.09</td>
<td>General Contraceptive Counseling</td>
</tr>
<tr>
<td>Z71.3</td>
<td>BMI/dietary counseling</td>
</tr>
<tr>
<td>Z71.82</td>
<td>Exercise counseling</td>
</tr>
<tr>
<td>Z13.31</td>
<td>Depression screening</td>
</tr>
<tr>
<td>Z13.32</td>
<td>Maternal Depression screening – at a pediatric visit</td>
</tr>
<tr>
<td>Z13.39</td>
<td>Alcohol or other behavioral health risk screening including IPV</td>
</tr>
<tr>
<td>Z11.3</td>
<td>STI screening</td>
</tr>
</tbody>
</table>

Routine E&M coding, prevention coding, dual visits (preventive and problem based at same day) and time-based billing, procedural codes and E&M coding at same time.

CPT CODES FOR BILLING

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>96161</td>
<td>Maternal depression screening at pediatric visits</td>
</tr>
<tr>
<td>96127</td>
<td>Depression, anxiety, suicide screening</td>
</tr>
<tr>
<td>96160</td>
<td>Substance use/alcohol screening</td>
</tr>
<tr>
<td>99406 (if &gt;3 min and &lt;10), 99407 (if &gt;10 minutes)</td>
<td>Counseling for tobacco cessation (must use version of F17.2 (nicotine dependence))</td>
</tr>
<tr>
<td>99408 (if &gt;15 min and &lt;30 min) (by separate behavioral health provider if same day or used alone for specific focused visit, cannot bill with E&amp;M codes)</td>
<td>Counseling for substance use</td>
</tr>
</tbody>
</table>

LGBTQIA+ Health

Folks who identify as lesbian, gay, bisexual, transgender, queer, intersex, asexual, and other sexual and gender minorities (LGBTQIA+) face stigma and lack of access to high quality, affirming care, resulting in health disparities. The National LGBT Health Education Center provides clinical guidance and learning resources for providing comprehensive primary and reproductive care for LGBTQIA+ patients and clients. [LGBTHealthEducation.org](http://www.LGBTHealthEducation.org)

Health Justice is when all people have the opportunity to attain their full health potential and no one is disadvantaged from achieving this potential because of their social position or other socially determined circumstance.

“When we talk about disparities we shouldn’t talk about people, but about policies. Black isn’t a risk factor, racism is.”

—DR. JOIA CREAR-PERRY OF NATIONAL BIRTH EQUITY COLLABORATIVE

Health Justice

Health Justice is when all people have the opportunity to attain their full health potential and no one is disadvantaged from achieving this potential because of their social position or other socially determined circumstance.

“When we talk about disparities we shouldn’t talk about people, but about policies. Black isn’t a risk factor, racism is.”

—DR. JOIA CREAR-PERRY OF NATIONAL BIRTH EQUITY COLLABORATIVE

LGBTQIA+ Health

Folks who identify as lesbian, gay, bisexual, transgender, queer, intersex, asexual, and other sexual and gender minorities (LGBTQIA+) face stigma and lack of access to high quality, affirming care, resulting in health disparities. The National LGBT Health Education Center provides clinical guidance and learning resources for providing comprehensive primary and reproductive care for LGBTQIA+ patients and clients. [LGBTHealthEducation.org](http://www.LGBTHealthEducation.org)
Electronic Nicotine Delivery Systems (ENDS)

Electronic Nicotine Delivery Systems (ENDS) are battery-operated devices designed to deliver nicotine with flavorings and other chemicals in aerosol instead of smoke. ENDS come in many different shapes and sizes. ENDS are commonly known as e-cigarettes, e-hookah, vape pens or tank and mod systems. ENDS are tobacco products.

ENDS aerosol is NOT harmless water vapor
- ENDS aerosol contains nicotine, fine particulate matter, volatile organic compounds, heavy metals and other compounds whose acute and long-term impacts are unknown.
- Exposure to secondhand ENDS aerosol should be avoided, especially by pregnant women, infants, children, and adolescents.
- The CDC has stated that air containing ENDS aerosol is not clean air.

ENDS are NOT an FDA-approved cessation method
- While some people report that they have quit smoking using ENDS, the US Preventive Services Task Force guidelines state that there is insufficient evidence to promote them for tobacco cessation, and the FDA has not approved them for this use.
- Many ENDS users become “dual users,” continuing to smoke combustible tobacco while also using ENDS.
- Studies have shown that experienced ENDS users alter the power of their devices and puff patterns to deliver nicotine at similar levels to combustible tobacco.
- Pregnant women and those trying to become pregnant may think that switching from other tobacco products to ENDS is better for their baby due to less stigma associated with their use. It is important to counsel women that nicotine use of any kind is harmful to a developing fetus.

ENDS are a poison control hazard
- Liquid nicotine is extremely poisonous when it is ingested or makes contact with bare skin.
- Children are often drawn to e-liquids because they smell fruity or sweet and may be mistaken for candy.
- Even 1 teaspoon of liquid nicotine can be fatal for infants and young children and smaller amounts can cause severe illness.
- It is important to counsel patients to call poison control – 1-800-222-1222 – if liquid nicotine has been ingested or come into contact with skin.

Harmful & Potentially Harmful Ingredients in ENDS Aerosol

- NICOTINE
- VAPOR SUBSTANCES
- FINE PARTICULATES
- HEAVY METALS
- VOLATILE ORGANIC COMPOUNDS
- OTHER COMPOUNDS

ENDS are used by women across education and income levels
- Combustible tobacco use is more common in populations with lower income, lower education, and those who live in rural areas.
- ENDS use among women is highest among suburban white women with more than a high school education.
- It is important to screen all women for all tobacco products, not just populations that have traditionally used combustible tobacco at higher rates.
Pharmacotherapy for Tobacco Cessation

Counseling and medication are effective when used by themselves for treating tobacco dependence; however, counseling and medication used together is more effective than either alone. Several effective medications are available to help treat tobacco dependence, and clinicians should encourage their use by all patients attempting to quit smoking—except when medically contraindicated or with specific populations for which there is insufficient evidence of effectiveness (e.g., pregnant women, smokeless tobacco users, light smokers, and adolescents).

<table>
<thead>
<tr>
<th>Nicotine Patches</th>
<th>Trade Name</th>
<th>Schedule</th>
<th>Side Effects</th>
<th>Length of Treatment</th>
<th>FDA Pregnancy Category</th>
<th>Lactation Risk Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicotine Patches</td>
<td>Over the counter (OTC)</td>
<td>21 mg patch/day for first 4 weeks 14 mg patch/day, weeks 7-8 7 mg patch/day, weeks 9-10</td>
<td>Local skin reactions Insomnia Vivid dreams</td>
<td>8-12 weeks</td>
<td>D</td>
<td>L3: Limited Data- Probably Compatible</td>
</tr>
<tr>
<td>Nicotine Patches</td>
<td>Nicoderm CQ (OTC)</td>
<td>21 mg patch/day for first 6 weeks 14 mg patch/day, weeks 7-8 7 mg patch/day, weeks 9-10</td>
<td></td>
<td>8-12 weeks</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Nicotine Nasal Spray**

<table>
<thead>
<tr>
<th>Nicotine Nasal Spray</th>
<th>Trade Name</th>
<th>Schedule</th>
<th>Side Effects</th>
<th>Length of Treatment</th>
<th>FDA Pregnancy Category</th>
<th>Lactation Risk Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicotine Nasal Spray</td>
<td>Nicotrol NS (Prescription)</td>
<td>2 sprays = 1mg (1/nostril) = 1 dose 1-2 doses/hr max: 5 doses/hr 40 doses/day</td>
<td>Nasal irritation</td>
<td>3-6 months</td>
<td>D</td>
<td>L3: Limited Data- Probably Compatible</td>
</tr>
</tbody>
</table>

**Nicotine Gum**

<table>
<thead>
<tr>
<th>Nicotine Gum</th>
<th>Trade Name</th>
<th>Schedule</th>
<th>Side Effects</th>
<th>Length of Treatment</th>
<th>FDA Pregnancy Category</th>
<th>Lactation Risk Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicotine Gum</td>
<td>Nicorette 2mg (OTC)</td>
<td>1-24 cigarettes/day = 9-12 pieces/day (2 mg/piece) max 24</td>
<td>Mouth soreness Upset stomach</td>
<td>12 weeks</td>
<td>D</td>
<td>L3: Limited Data- Probably Compatible</td>
</tr>
<tr>
<td>Nicotine Gum</td>
<td>Nicorette 4mg (OTC)</td>
<td>1-24 cigarettes/day = 9-12 pieces/day (4mg/piece) max 24</td>
<td>Upset stomach</td>
<td>12 weeks</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Nicotine Oral Inhaler**

<table>
<thead>
<tr>
<th>Nicotine Oral Inhaler</th>
<th>Trade Name</th>
<th>Schedule</th>
<th>Side Effects</th>
<th>Length of Treatment</th>
<th>FDA Pregnancy Category</th>
<th>Lactation Risk Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicotine Oral Inhaler</td>
<td>Nicotrol Inhaler (Prescription)</td>
<td>6-16 cartridges/day</td>
<td>Local mouth and throat irritation</td>
<td>12 weeks</td>
<td>D</td>
<td>L3: Limited Data- Probably Compatible</td>
</tr>
</tbody>
</table>

**Nicotine Lozenges**

<table>
<thead>
<tr>
<th>Nicotine Lozenges</th>
<th>Trade Name</th>
<th>Schedule</th>
<th>Side Effects</th>
<th>Length of Treatment</th>
<th>FDA Pregnancy Category</th>
<th>Lactation Risk Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicotine Lozenges</td>
<td>Nicorette (OTC)</td>
<td>One piece every: 1-2 hours (weeks 1-6) 2-4 hours (weeks 7-9) 4-8 hours (weeks 10-12)</td>
<td>Sore throat Heart burn Hiccups Nausea</td>
<td>12 weeks</td>
<td>D</td>
<td>L3: Limited Data- Probably Compatible</td>
</tr>
<tr>
<td>Nicotine Lozenges</td>
<td>Nicorette Mini Lozenge</td>
<td>Same as above</td>
<td>Same as above</td>
<td>Same as above</td>
<td></td>
<td>L3: Limited Data- Probably Compatible</td>
</tr>
</tbody>
</table>

**Non-Nicotine: First line FDA Approved Agents**

<table>
<thead>
<tr>
<th>Non-Nicotine: First line FDA Approved Agents</th>
<th>Trade Name</th>
<th>Schedule</th>
<th>Side Effects</th>
<th>Length of Treatment</th>
<th>FDA Pregnancy Category</th>
<th>Lactation Risk Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bupropion</td>
<td>Zyban/Wellbutrin (Prescription)</td>
<td>150 mg once daily in the AM for 3 days then twice daily with the second dose 8 hours after first</td>
<td>Insomnia Dry mouth</td>
<td>2-3 months</td>
<td>C</td>
<td>L3: Limited Data- Probably Compatible</td>
</tr>
<tr>
<td>Varenicline</td>
<td>Chantix (Prescription)</td>
<td>0.5 mg once daily for 3 days then 0.5 mg BID for 4 days, then 1 mg BID to end tx.</td>
<td>Nausea</td>
<td>12 weeks + optional additional 12 weeks</td>
<td></td>
<td>L4: No Data- Possibly Hazardous</td>
</tr>
</tbody>
</table>

**Non-Nicotine: Second Line Non-FDA Approved Agents**

<table>
<thead>
<tr>
<th>Non-Nicotine: Second Line Non-FDA Approved Agents</th>
<th>Trade Name</th>
<th>Schedule</th>
<th>Side Effects</th>
<th>Length of Treatment</th>
<th>FDA Pregnancy Category</th>
<th>Lactation Risk Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clonidine</td>
<td>Generic Catapress (Prescription)</td>
<td>0.15-0.75 mg per day</td>
<td>Dry mouth Dizziness Sedation</td>
<td>3-10 weeks</td>
<td>C</td>
<td>L3: Limited Data- Probably Compatible</td>
</tr>
<tr>
<td>Nortriptyline</td>
<td>Generic Pamelor (Prescription)</td>
<td>75-100 mg per day</td>
<td>Sedation Dry mouth</td>
<td>12 weeks</td>
<td>C</td>
<td>L2: Probably Compatible</td>
</tr>
</tbody>
</table>
Quality health care is an important part of women’s health equity. In the US we recognize that health is not yet considered a human right and, as a result, there are people in need of clinical care who do not have health insurance. Clinicians and community partners need to be active in advocating for the larger services and supports that women and families need to be well.

While health care is key, the social drivers of health such as safe neighborhoods, transportation, access to affordable, quality food, educational and employment opportunities, and safe housing are vitally important. While health care providers may not be able to address these issues in a clinical encounter, they can and should CONSIDER these drivers of health in providing education and health recommendations. Telling women to do something that they are unable to do can INCREASE stress, guilt and frustration. Health care systems should build partnerships with community groups and local organizations to support efforts to increase access to these needed services and supports. New strategies include making legal assistance available to patients dealing with housing problems as well as proactively engaging in public forums around safe housing and community transportation.

Screening for the social determinants of health should be undertaken carefully. Consider working with groups of patients to co-design how this is done. Trust is a critical component in all clinical encounters including social drivers. Making sure that resources are available to respond to people who reveal these needs is essential.

Intimate Partner Violence Screening and Response

The US Preventive Services Task Force recommends that all women of reproductive age should be screened for intimate partner violence (IPV), regardless of their partner’s gender. Several different instruments can be used to screen women for IPV. The following instruments accurately detect IPV in the past year among adult women: Humiliation, Afraid, Rape, Kick (HARK); Hurt, Insult, Threaten, Scream (HITS); Extended–Hurt, Insult, Threaten, Scream (E-HITS); Partner Violence Screen (PVS); and Woman Abuse Screening Tool (WAST). HARK includes 4 questions that assess emotional and physical IPV in the past year. HITS includes 4 items that assess the frequency of IPV, and E-HITS includes an additional question to assess the frequency of sexual violence. PVS includes 3 items that assess physical abuse and safety. WAST includes 8 items that assess physical and emotional IPV.

Key elements to successful IPV screening implementation:

- Staff and clinician training about how to screen and discuss IPV in a patient-centered manner
- Policies for seeing women alone as a standard practice
- Signage/messaging in practice and bathrooms demonstrating that location is a safe place with confidential resources/cards/phone numbers
- Policies for confidentiality of documentation/access to EHR
- System and education for developing a safety plan (recommend performing a Danger Assessment-5 if positive screen as first next step)
- System for connecting to community resources

### Screening Tools for Social Determinants of Health

Three screening tools can aid physicians in addressing multiple social determinants of health in a primary care setting.

<table>
<thead>
<tr>
<th>Screening Tool</th>
<th>Number of Questions</th>
<th>Source</th>
</tr>
</thead>
</table>
Micronutrients

Nutritional problems among US women of reproductive age are reflected in high rates of overweight and obesity and in eating disorders, which can lead to underweight and nutrient deficiencies. According to the National Health and Nutrition Examination Survey, the following are among the nutrient deficiencies common in women of reproductive age:

**Iron deficiency** – 11%

**Hypovitaminosis D** (serum 25-hydroxyvitamin D =37.5 nmol/L)
- 42% for non-Hispanic black women
- 4.2% for Non-Hispanic white women

**Consumption of less than the recommended 400 mcg folic acid daily**
- 81% for Non-Hispanic black women
- 79% for Hispanic women
- 60% for non-Hispanic white women

US women who are of low-income are at increased risk for nutritional deficiencies and imbalances due to poor access to quality foods.

Taking a daily multivitamin has benefits for women regardless of their desire to become pregnant. Counseling patients on regular multivitamin use and foods that are good sources of nutrients can help them improve their health and, if desired, prepare for future pregnancies.

<table>
<thead>
<tr>
<th>Vitamin</th>
<th>Benefits</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Prevents eye problems, keeps skin and immune system healthy.</td>
<td>Milk, eggs, liver, fortified cereals, darkly colored orange or green vegetables (such as carrots, sweet potatoes, pumpkin, and kale), and orange fruits (such as cantaloupe, apricots, peaches, papayas, and mangos)</td>
</tr>
<tr>
<td>Folic Acid (B9, folate, or folacin)</td>
<td>Essential for normal cell growth and development. Helps the body make red blood cells that carry oxygen from lungs to all parts of the body. Helps prevent brain and spine birth defects that can occur before a woman knows she's pregnant.</td>
<td>Dried beans and other legumes, leafy green vegetables, asparagus, oranges and other citrus fruits, and poultry; fortified or enriched bread, pasta, and cereals.</td>
</tr>
<tr>
<td>Thiamin (B1)</td>
<td>Helps the body convert carbohydrates into energy. Necessary for the heart, muscles, and nervous system to function properly.</td>
<td>Fortified breads, cereals, and pasta; red meat, fish, dried beans, soy foods, peas, whole grain foods, and wheat germ.</td>
</tr>
<tr>
<td>Riboflavin (B2)</td>
<td>Essential for turning carbohydrates into energy and producing red blood cells. Also important for vision.</td>
<td>Meat, eggs, legumes (such as peas and lentils), nuts, dairy products, leafy green vegetables, broccoli, asparagus, and fortified cereals.</td>
</tr>
<tr>
<td>Niacin (B3)</td>
<td>Helps the body turn food into energy, helps maintain healthy skin, and is important for nerve function</td>
<td>Red meat, poultry, fish, fortified hot and cold cereals, and peanuts</td>
</tr>
<tr>
<td>B6</td>
<td>Important for normal brain and nerve function. Helps the body break down proteins and make red blood cells</td>
<td>Potatoes, bananas, beans, seeds, nuts, red meat, poultry, fish, eggs, spinach, and fortified cereals</td>
</tr>
<tr>
<td>B12</td>
<td>Helps to make red blood cells and is important for nerve cell function</td>
<td>Fish, red meat, poultry, milk, cheese, and eggs. Also added to some breakfast cereals</td>
</tr>
<tr>
<td>C (ascorbic acid)</td>
<td>Essential for healthy bones, teeth, gums, and blood vessels. Helps the body absorb iron and calcium, contributes to brain function and healing, and helps form collagen, which holds cells together</td>
<td>Red berries, kiwis, red and green bell peppers, tomatoes, broccoli, spinach, and juices from guava, grapefruit, and orange</td>
</tr>
<tr>
<td>D</td>
<td>Strengthens bones by helping the body absorb bone-building calcium</td>
<td>A multivitamin that comes from sunlight! Also from egg yolks, fish oils, and fortified foods such as milk</td>
</tr>
<tr>
<td>E</td>
<td>An antioxidant that helps protect cells from damage. Important for the health of red blood cells</td>
<td>Vegetable oils, nuts, leafy green vegetables, avocados, wheat germ, and whole grain foods</td>
</tr>
</tbody>
</table>

Immunizations

All women of reproductive age should have their immunization status routinely assessed and updated. Immunity is important to:

- Protect all women from preventable morbidity and mortality, including cervical dysplasia and cancers from HPV infections.
- Protect women who become pregnant from the increased severity of some communicable diseases in pregnancy, such as influenza and varicella.
- Decrease the risks of vertical transmission of some infectious diseases to the fetus, neonate and infant.

See [BeforeandBeyond.org](http://BeforeandBeyond.org) or [CDC.gov/vaccine](http://CDC.gov/vaccine) for more information, including the latest immunization schedules and resources for health care providers and patients.
Making Your Clinic a Welcoming Environment

Research has identified four common themes of successful patient engagement. These include personalization; access to necessary resources; commitment to delivering quality care; and building a positive patient-provider relationship.

How can you enhance connection with patients? Connecting is the ability to identify with people and relate to them in a way that increases your influence with them. Connecting goes beyond words. Consider having a bulletin board or social media posts that share information about staff and providers so patients see them as full people. Spend time at community events so patients can see you outside of clinic walls from time to time. There are lots of ways to build connection.

How can you create an experience everyone enjoys? Maya Angelou said, “I’ve learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel”. Talk with patients and staff about “customer service” strategies to help reduce fear and create a feeling of safety and being seen and heard. Consider the entire journey - from learning about the clinic’s services to scheduling an appointment through visit follow up.

How are your patients greeted and treated? From the moment a patient is coming in to the moment they are walking out is the opportunity to create an expression of authentic patient-engagement. How do patients feel about your clinic waiting rooms? Do you have art and images up on the wall? Find out what patients think and consider inviting patients and local artists to contribute to creating an affirming place.

Here are five steps to get started on building strong patient engagement:

1. **Begin the process** of facilitating an organizational mindset and culture that supports patient engagement at multiple-levels;

2. **Engage your team** in creating a clear vision and plan for patient engagement;

3. **Solicit input** from your patients as well as staff, so that policies, procedures, clinic design, etc. are created in partnership with them;

4. **Consider technology** solutions that can be used to support and streamline your processes to help transition your clinic into a more patient-centric and patient-engaged model;

5. **Demonstrate and model a commitment** to the process of increasingly involving and partnering with patients in their care, and work with your team and with patients to identify and celebrate milestones.

VISIT ShowYourLoveToday.com for additional patient and consumer information.
Resources for Your Practice

Additional clinical information and provider support is available on the Before and Beyond website. BeforeandBeyond.org

This bulletin was developed by partners of the National Preconception Health and Health Care Initiative as part of the National Preconception Health / Women’s Wellness Project

This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number UF3MC31239- Providing Support For The Collaborative Improvement and Innovation Network (CoIIN) To Reduce Infant Mortality. The grant amount totals $1,494,993. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.

Sarah Verbiest, DrPH, MSW, MPH sarahv@med.unc.edu
Daniel Frayne, MD, MPH dan.frayne@mahec.net
Erin McClain, MA, MPH erin_mcclain@unc.edu
Suzanne Woodward, BS suzannew@med.unc.edu

Preconception Health+Health Care Initiative
A National Public-Private Partnership

UNC
SCHOOL OF MEDICINE
Center for Maternal and Infant Health

UNC
SCHOOL OF SOCIAL WORK
Jordan Institute for Families