



# Overview

## Women's Health Overview

### Well-Woman Visit: The When, Why and What

It is well-documented that keeping up with preventive health care leads to better overall health and well-being. One of the most important preventive visits for women is a well-woman exam. A well-woman exam is a unique opportunity to check in on all aspects of one's health. This includes physical and emotional well-being, ensuring all screenings are up to date and checking in on one's reproductive health, including any concerns a patient may have. This article will help you know what to expect during a well-woman exam.

A large part of a well-woman exam is taking the patient's history. During this time, your provider will review your medical, family, menstrual, obstetrical and sexual histories. Your provider will review any symptoms or concerns that you are currently experiencing. This includes but is not limited to concerns with menstrual cycles, vaginal discharge, pelvic pain, abnormal bleeding, sexually-transmitted infections and breast concerns. These appointments are very private and intimate. They serve as an

excellent opportunity to discuss any concerns — especially those involving mental health, sexuality and all types of abuse. Abuse can be emotional, physical or sexual. It's important to feel comfortable talking with your provider about any of these issues, remembering they are there to help you with any concerns without judgment.

Next is a physical exam. The visit will start with taking your vital signs, including weight and blood pressure. Your provider will listen to your heart and lungs, and assess your thyroid and abdomen. A breast exam will be completed including visual inspection and palpation of the breast tissue. The next part of the exam can be the most intimidating but is a very important part of the visit — the pelvic exam. A pelvic exam consists of a visual inspection of the exterior genitalia, visualizing the internal vaginal tissue and cervix. It also includes palpation. If needed, samples will be taken during this part of the exam. You and your provider will use shared

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### Tips to Help You Benefit From Your Test Results

- Be sure you understand why a given test is being ordered. Is it meant to help evaluate a symptom? Monitor a chronic condition? Assess whether a treatment is working?
- Ask your provider to review the results and explain what they mean for your health. Try to look at the report with your doctor. It's especially important to ask about any result flagged as abnormal by the laboratory system.
- Ask your provider to explain how your results compare with your prior results. Laboratory reports will always provide a "normal" reference range. But what's usually more helpful is to see how a given result compares to your previous results.
- Request copies of your results and keep them in your own record system. Past laboratory results provide useful information to health providers and can be very useful to you as well. If you ever have questions about your health, change health providers, move to a new city, or go to an emergency room, you will be able to quickly access this useful information about yourself. It is also useful if you want to research your health condition.



# From the chairman

The United States has the unenviable distinction of spending the most on health care with the least return on that investment. We spend more per capita than most other developed nations. The life expectancy of U.S. citizens has fallen slightly and is well below most western European countries. Most of these countries treat health care as a fundamental right and not as an optional exercise.

Medicaid expansion in Nebraska was late in coming and has yet to bear fruit. Another opportunity before our Legislature during this legislative session is the extension of Medicaid coverage for mothers who currently lose coverage within 60 days of birth. This important piece of legislation deserves serious consideration. It allows patients with underlying medical or psychiatric illnesses to continue to receive the care they would not otherwise be able to afford. For example, it would allow better control of hypertension and diabetes, and an appropriate transition from obstetrical to primary care. In so doing, mothers are better prepared for their next pregnancy, enter that pregnancy in better health and have an unprecedented opportunity to improve the health of their babies. I would encourage you to read this legislation, and if you support it, consider expressing your opinion to your elected representatives.

In this edition of our newsletter, we address other ways to improve health. Well-woman examinations, recommended laboratory studies and immunizations offer a magnificent opportunity to maintain or improve your health. Screening for colorectal cancer is yet another. Consider discussing these issues with your primary care provider and working with them to take advantage of these opportunities.

## overview

### Women's Health Overview

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**Carl V. Smith, MD, FACOG**

Chairman

Department of Obstetrics and Gynecology

College of Medicine

University of Nebraska Medical Center



# research news

## What's Up With Labs?

The first medical laboratory test was urine analysis, in which urine properties were analyzed for determining health. Urine analysis is now a routine lab test that has been improved over time with the development of new sampling and test methods. Lab tests have existed since the 17th century, and research using patient blood began in the 18th century. Today, routine lab tests like the complete blood count (CBC) measures numbers of red and white blood cells and platelets. The comprehensive metabolic panel measures 14 substances (called biomarkers), for example, glucose levels, electrolyte and fluid balance, kidney function, and liver function. In addition, many specialized lab tests are available that measure biomarkers that help determine the presence of disease or your response to a treatment.

The process of getting new lab tests into everyday use is difficult and expensive. Development of new tests requires the cooperation between laboratory and clinical scientists, and a company to make or manufacture the test. As you might

expect, the driving force for a company to participate in this process is usually the potential sale of the new test or biomarker. All new tests require approval of the US Food and Drug Administration (FDA). This process usually involves evaluating the test at many hospitals and health care clinics. The process can take 2-3 years, with a cost of \$5-10 million.

The term "Precision Medicine" refers to medical care designed to provide the best results for a certain group of patients, for example, patients with breast cancer. This requires the development of good biomarkers that can be used to group patients by their disease and response to treatment. The rapid pace of scientific advances has spurred faster identification of biomarkers for many conditions. This includes new approaches to screen and identify genes, proteins, and metabolites. The identification of good biomarkers for a specific condition or disease will help to identify the condition at an early stage of disease development. Use of biomarkers can assist your health care team in making timely suggestions for

further testing and treatment, and to control the condition from progressing to a more severe stage. A biomarker may also inform your health care team that a treatment is working or indicate that you no longer need treatment. However, the use of a single biomarker for a given condition is often hampered by poor reproducibility of results. The use of multiple biomarkers in a lab test, along with other patient data, is the future of precision medicine.

Historically, lab results were reviewed by the doctors and were only minimally discussed with patients and families. But today, it's becoming more common for patients to access publicly available testing information, ask questions about their results, and otherwise become more knowledgeable about this aspect of their health.

**Contributed by John S. Davis, PhD**  
*UNMC Department of OB-GYN*



**Scan here to become a Nebraska Center for Women's Health Research member!** The NCWHR promotes multidisciplinary women's health research activities at the University of Nebraska to prevent, diagnose and treat the following women's health issues: Infertility, preterm birth, osteoporosis, menopause and health disparities.

# Brief Summary of Common “Labs”

| Common Lab Tests                                | What it Measures   | What it is Used For   |
|---|--|---|
| Complete blood count (CBC)                      | Numbers of red and white blood cells and platelets as well as hemoglobin and hematocrit                    | To diagnose anemia (low red blood cells), infections (elevated white blood cells), or problems making blood cells |
| Basic metabolic panel (basic electrolyte panel) | Measurement of a panel of 7 or 8 common electrolytes and metabolic components                              | To diagnose side effects of medications, kidney function, diabetes  |
| Comprehensive metabolic panel                   | Measures 14 substances: glucose levels, electrolyte and fluid balance, kidney function, and liver function | To diagnose kidney, liver, and bone function  |
| Lipid (cholesterol) panel                       | Different types of cholesterol and related fats in the bloodstream   | To evaluate cardiovascular risk and the effectiveness of cholesterol-lowering treatments                          |
| Thyroid function                                | Levels of thyroid stimulating hormone (TSH) and free thyroxine (“free T4” or FT4)                          | To evaluate thyroid disorders and calibrate the dosage of thyroid hormone replacement                             |
| Hemoglobin A1C                                  | Glycated hemoglobin, blood sugar attached to hemoglobin in red blood cells                                 | To evaluate possible diabetes and to monitor the blood sugar control of people with diabetes                      |

Contributed by John S. Davis, PhD  
UNMC Department of OB-GYN

*Save the Date: August 30, 2023*  
*Breastfeeding: Baby’s Natural Choice Conference*  
*LaVista Conference Center*



**Featuring Keynote speakers:**

**Katrina Mitchell, MD, IBCLC, PMH-C**, Sansum Clinic, Santa Barbara, CA  
**Kristen Choi, PhD, RN, FAAN**, UCLA College of Nursing, Los Angeles, CA

**Also presenting:**

Becky Baruth, PLMHP, PMH-C, CPD  
Adrienne Connor, MSPT, PT  
Megan Falke, DNP, APRN, NNP-BC  
Dana Raml, MD  
Jacque Schwartz, MHA, RDN, LMNT, LD  
Giuseppe (Joe) Siracusano, DPT, PT  
Ann Smith, BSN, RN, IBCLC  
Laura Wilwerding, MD, IBCLC, FAAP, FABM

For questions about the conference and the continuing education offered, please call 402.559.6345

# Colon Cancer Screening: Why Are They Needed?

Colorectal cancer is a common and lethal disease. **It is estimated that approximately 151,030 new cases of colon cancer are diagnosed annually in the United States.** About 52,580 Americans are expected to die of colon cancer each year. Although deaths from colon cancer have been progressively declining since 1990, it remains the third most common cause of cancer death in the United States in women and the second leading cause of death in men. Colorectal screening is the process of detecting early-stage colon cancer and precancerous lesions in asymptomatic people with no prior history of cancer or precancerous lesions. The United States has achieved the world's highest rate of colorectal screening compliance at 60%.

## Screening modalities:

Multiple screening tests are available to detect colon cancer and polyps. Colonoscopy every 10 years and an annual fecal immunochemical test (FIT) which directly measures hemoglobin in the stool are recommended as the primary screening modalities for colorectal screening. Colonoscopy is the most commonly performed gastrointestinal procedure in the United States. It allows for not only the detection of early-stage cancers but also the detection and removal of polyps. It allows long intervals between examinations in subjects with normal examinations. Patients who value the highest level of sensitivity in detection of precancerous lesions and are willing to undergo invasive screening should consider choosing colonoscopy. We suggest consideration of the following screening tests for individuals unable or unwilling to undergo colonoscopy or FIT: flexible sigmoidoscopy every five to 10 years, multitarget stool DNA test every three years, CT colonography or colon capsule every five years. A common statement made regarding colorectal screening is that "the best test is the one that gets done."

## How to prepare for a colonoscopy

The main purpose for bowel preparation before your colonoscopy is to completely empty and cleanse the entire colon for clear visualization of the mucosal surface. The effectiveness of bowel preparation is a critical factor related to the safety, diagnostic accuracy, and quality of the examination. Still, the prep is inadequate in up to 25% of examinations. Some patient-related risk factors for inadequate bowel preparation include a history of constipation, use of medications associated with constipation (i.e., opioids), dementia, low patient engagement, and obesity. Patients are provided with verbal and written instructions that are simple, easy to follow, and in a language that the patient understands. Multiple bowel preparations exist, with the ideal preparation being effective, safe and palatable. The most commonly prescribed bowel prep formulas use a polymer-based laxative known as polyethylene glycol 3350 or PEG. PEG formulas are typically in powder form designed to be mixed with large volumes of water or taken with a sports drink. The PEG molecule doesn't disturb the intestinal mucosa, making it the gentler choice for people with symptoms of irritable bowel syndrome. They are also considered the safer option for people who are especially at risk of complications from fluid and electrolyte depletion, such as those with kidney, liver or

heart disease. PEG-based colonoscopy prep drink names include GoLYTELY, NuLYTELY, TriLyte, MiraLAX, Halflytely, and MoviPrep.

Administering the preparation as a split dose is suggested. Split-dose preparation refers to the administration of half of the colon cleansing agent the evening before the colonoscopy and the second half the morning of the colonoscopy. Adequate oral hydration during the bowel preparation process results in better preparation and fewer adverse events (i.e., nausea) related to the prep. Eating low-fiber foods for several days before your colonoscopy can make the process easier for you while ensuring no fiber residues are left in the colon. Most medications may be continued immediately before the colonoscopy, although some patients, including those with diabetes or those on anticoagulant medication, may require modification to their medication regimen.

## Age for screening: Why is 45 years now the recommended age to start screening colonoscopy?

Previously colorectal screening was recommended to begin at age 50 in asymptomatic persons. Although colorectal cancer incidence has continued to decline in those aged 50 years and older, the incidence rates have doubled in 20 to 49 year olds. **Approximately 10.5% of new colorectal cancer cases occur in persons younger than 50.** The incidence of colorectal cancer (specifically adenocarcinoma) in adults aged 40 to 49 increased by almost 15% from 2000-2002 to 2014-2016. On Oct. 27, 2020, the United States Preventive Services Task Force (USPSTF) released guidelines recommending that colorectal screening begins at age 45 for average-risk individuals, a shift from the previous guidelines. This was in direct response to the increase in the incidence of early-stage onset colorectal cancer and aligned with the American Cancer Society's 2018 recommendation that screening begins at age 45. An advantage of initiating screening at 45 years instead of 50 years includes reduced colorectal cancer risk due to early detection of colon cancer in this age group. Over time, the detection and removal of polyps in individuals 45 to 49 would reduce the incidence of colorectal cancer in those 50 years and older. In addition, preventing young colorectal cancer is a desirable goal because the societal impact of colon cancer death at an early age is particularly devastating.

Persons with a family history of colon cancer or advanced polyps in a first-degree relative are recommended to undergo screening by colonoscopy every five years, beginning 10 years before the age at diagnosis of the youngest affected relative or at age 40, whichever is earlier. The USPSTF recommends that physicians selectively offer screening for colorectal cancer in adults ages 76 to 85. Evidence indicates that the net benefit of screening all persons in this age group is small. In determining whether this service is appropriate in individual cases, patients and clinicians should consider the patient's overall health, prior screening history and preferences.

Contributed by Sarah Malik, MBBS

UNMC Department of Internal Medicine, Division of Gastroenterology

# Why ADHD Goes Unrecognized in Women

Attention deficit hyperactivity disorder is a neurological condition that affects an individual's ability to pay attention, control impulses, and regulate behavior. When ADHD is mentioned, most people imagine a small child running around a classroom and disrupting a teacher's lesson. Most likely, this imaginary child is a boy. While this image is not wrong, it is incomplete. ADHD is considered a disorder that predominantly affects boys and men, but continuing research is showing that ADHD is represented in women, just in different ways. Some of the symptoms of ADHD do overlap for men and women, however, there are some notable differences in how women experience and express symptoms. This stereotype of a hyperactive child being the definition of ADHD leads many people to believe they know what ADHD looks like. Therefore any other presentation of the illness flies under the radar and is left untreated.

Many studies have shown women with ADHD tend to be diagnosed much later in life than men. To understand why this happens, we must first understand the symptoms that define the diagnosis. ADHD is divided into three categories: hyperactive, inattentive, and combined. In the hyperactive type, a person can have trouble sitting still, may frequently interrupt others, is talkative, and seems to always be on the go. It's easy to see how a person with these symptoms would be noticed quickly by a teacher, parent, or boss and would be encouraged to go to a doctor and seek help. Men with ADHD most commonly experience hyperactive symptoms and therefore get diagnosed sooner. Women, however, tend to experience more internalized symptoms. These symptoms tend to fall in the inattentive category, which includes difficulty maintaining attention, not listening when spoken to, losing or forgetting items, and trouble prioritizing or finishing tasks. These less visible symptoms are a significant reason why girls and women go undiagnosed for years.

In addition to the difference in symptom expression, many cultural forces make women less likely to mention these problems to their doctor. If a woman is forgetful, distracted and disorganized, she can be labeled as flighty or ditzy. It becomes easy for people to think, "that's just how some women are," which leads to women internalizing these traits instead of recognizing that they may be experiencing symptoms that are interfering with their lives. Women are often expected to be highly organized, detail-oriented, and able to multitask effectively. These expectations can be challenging for women with undiagnosed ADHD to meet, leading to feelings of frustration, guilt and shame. In fact, I have had many women make appointments in clinic to discuss these feelings of depression and anxiety. Ultimately, when we got to the root of their concerns, it was symptoms of ADHD resulting in low mood and excessive worry. Once the proper treatment for ADHD was started, their symptoms of anxiety and depression also improved



because they finally understood why they had been working so hard to keep up with everyday life.

When ADHD is thought of as a condition of overactive young boys, this does real harm to women with ADHD that could have their lives improved with treatment. Women with ADHD face unique challenges and struggles. The impact of ADHD in women can be different from that in men, and less likely to be recognized by colleagues or family members. Women with ADHD may also face societal and cultural expectations that can be difficult to meet, leading to feelings of shame and inadequacy. The good news is that ADHD is very treatable and responds to behavioral therapy and medications. It is important for health care providers, educators, and society to recognize the full spectrum of ADHD symptoms, so girls and women can seek the treatment they need sooner rather than later.

**Contributed by Michaelyn Everhart, MD**  
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## Well-Woman Care *continued from page 1*

decision-making to determine how often you should have a routine pelvic exam. Blood work and urine samples may also be indicated for screening for other health conditions. With all screenings, it is important to discuss your personal and family history with your health care provider to make the most appropriate screening. Here is a brief overview of the most common cancer screenings conducted during a well-woman exam:

- **Cervical cancer screening:** Cervical cancer is typically a slow-growing disease. A PAP test is used to detect early signs of cervical cancer. During a PAP, a small brush is used to gently remove cells from the surface of the cervix. This sample is then examined under a microscope to check for cell changes that may lead to cervical cancer. The American College of Obstetricians and Gynecologists recommends PAP tests start at the age of 21 – regardless of when you first start having sex. Depending on your history and age, screening PAP tests should be performed every three to five years. Typically after age 30, an additional test is performed to look for high-risk human papillomavirus.
- **Breast cancer screening:** Breast cancer is the number one cancer among women. A mammogram detects signs of breast cancer. A mammogram takes X-ray images of the breasts to look for changes in the breast tissue that may indicate signs of early breast cancer. The American Cancer Society recommends starting mammograms at the age of 40 and no later than 45. Some women at high risk of breast cancer may also have additional screenings such as breast MRI.
- **Colon cancer screening:** Colon cancer is known as a “silent” disease; therefore screenings are very important. The gold standard to screen for colon cancer is a colonoscopy. During a colonoscopy, a thin, tube-like instrument is used to look at the colon for abnormal areas or polyps that could cause cancer. Alternative screening for colon cancer includes home-collection DNA kits, which may be available for low-risk individuals. The American Cancer Society recommends colon cancer screenings start at the age of 45 in average-risk individuals.

The last part of a well-woman appointment includes a review of the appointment, providing education and making a health care plan tailored to your needs. This includes keeping you up to date on screening recommendations, discussing individual healthy lifestyle choices to minimize health risks and making sure you are up to date on immunizations. Your provider will review safe sex practices and family planning needs during this time as well.

The American College of Obstetricians and Gynecologists recommends a woman should establish care as early as 13 to 15 years old. This is a great opportunity to develop a relationship, and get one-on-one health advice in a safe, non-judgmental environment. Regardless of the need for a PAP or a pelvic exam, it is recommended that women continue yearly well-woman exam appointments.

Most insurance plans cover a well-woman exam under preventive care. This typically includes routine screening for cervical, breast and colon cancers. If you are worried about the cost of your visit, there are many programs available, and the Olson Center has financial counselors to help with any questions. At the Olson Center, we provide team-based care, including obstetricians-gynecologists, nurse practitioners and certified nurse midwives available to meet the needs of your well-woman exam.

We are thankful for opportunities to help patients in all stages of life. We feel strongly that a well-woman appointment is one of the most important opportunities to ensure our female patients of all ages receive the care they need to lead healthy lives. Please contact us at 402.559.4500 with any questions about well-woman exams or to schedule an appointment.

**Contributed by Jessica Gering, APRN-NP**  
*Olson Center for Women's Health*



**OLSON CENTER  
FOR WOMEN'S HEALTH**

### *Mission Statement*

The Mission of the Olson Center for Women's Health is to provide a national comprehensive health science center at the University of Nebraska Medical Center. Based in the Department of Obstetrics and Gynecology, the center enables UNMC to make distinctive strides in education, research, and service through innovative approaches to women's health issues.

### *Want More Information?*

Visit our website: **OlsonCenter.com**

Learn more about our health care providers, services, and programs available at the Olson Center for Women's Health. Our website also offers women's health information. Here are a few topics:

- Breastfeeding
- Breast Health and Disease
- Cardiovascular Health
- Gastrointestinal Health
- Gynecologic Health
- Incontinence
- Reproductive Endocrinology/Infertility
- Pregnancy
- Wellness

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## What's Happening at the Olson Center for Women's Health

Mark your calendars for several opportunities for education, for both personal wellness, and continuing education opportunities for nurses. If you are not available to attend the event, many cases the presentation has been recorded for later viewing. For more information or to register, please call 402.559.6345.

### **Wellness Through Doing: Bird Watching: a Lifetime Hobby**

Tues., April 11, 12 – 1 p.m.

Presenter: Bob Wells (Omaha Audubon Society)

### **April Brown Bag: Comprehensive Approach to Bone Health**

Tues., April 18, 12 – 1 p.m.

Presenters: Laura Bilek, PT, PhD and Lynn Mack, MD (UNMC)

### **Women's Health Week:**

Tues., May 16: **May Brown Bag: Uterine Fibroids**

Presenter: Karen Carlson, MD (UNMC)

Wed., May 17: **Presentation: Living with HIV**

Presenter: Erin Fulton

Thurs., May 18: **Wellness Through Doing: Veggie Gardening 101**

Presenter: John Fech (UNL)

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