Prevention of Gynecologic Ca Is Advancing

Although the mortality rate associated with a gynecologic cancer diagnosis is lower than several other cancer diagnoses, according to the American Cancer Society an estimated 33,100 women in the United States will die from these cancers this year.

Screening and prevention are likely the best ways for clinicians to exert a major impact on patients.

Bariatric Surgery Brings Metabolic Improvements

The CDC has reported that 32% of white women and 53% of black women are obese. In addition to increasing the risk for cardiovascular disease, obesity is also the leading risk factor for type 2 diabetes. In fact, women whose body mass index is 30 kg/m² or higher have 28 times the risk for developing diabetes than women of normal weight.

Just being overweight (BMI, 25-29 kg/m²) is also associated with an increased risk for diabetes. In general, the greater a person’s excess weight, the greater the increased risk for diabetes.

Collaborative Structural Heart Team Combats Low Procedural Rates

Traditionally, women have undergone lower rates of heart health tests and procedures—such as percutaneous coronary intervention, cardiac catheterization and coronary artery bypass grafting—than men (Can J Cardiol 2004;20[4]:391-397), despite the fact that about one of every five female deaths each year in the United States is attributable to heart disease, according to the CDC.

“Women have a higher death rate from coronary artery disease [CAD] than men,” said Molly Schultheis, MD, a cardiothoracic surgeon at Englewood Health. “Actually, research has shown that women do not receive as thorough medical care for CAD as men do, for example, with cardiac catheterizations or coronary artery bypass grafting (CABG).”

One reason procedure rates are lower in women, she said, is because they don’t usually experience symptoms traditionally associated with myocardial infarction, such as chest pain and pressure. “Two out of three women with heart disease don’t have any warning signs before they have a heart attack,” she said. “This puts them at a much higher risk of fatal heart attack than their male counterparts.”

Because of these differences, provider education is vital. Women need to be aware of the dangers of heart disease and the symptoms they may experience. Providers also need to communicate effectively with their patients to ensure that they receive appropriate care.

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How Englewood Health Is Expanding Access to High-Quality Health Care

A letter from Alexandra Gottdiener, MD, and James McGinty, MD

It was not so long ago that the concept of “women’s health” largely meant gynecologic care, but we now understand that many diseases present differently depending on gender.

Furthermore, women’s health care requires expertise across the full range of specialties and primary care. Actively collaborating with community physicians is a hallmark of the Englewood Health approach, designed to give our patients the best chance of recovery and the means to stay healthy.

According to the American Heart Association, 90% of women in the United States have at least one risk factor for heart disease, and cardiovascular disease manifests itself in women differently from men. For instance, women with coronary heart disease (CHD) are often older than men with CHD; smoking history has an even greater effect on women than men; and the comorbidity of diabetes presents greater risks for women with CHD than men.

Understanding these differences is key. That’s why Englewood Health is proud to have assembled frontline clinical expertise, advanced medical technology, and state-of-the-art facilities that together provide the highest quality of care for women.

We are continually innovating. For example, Englewood Health now has a dedicated Maternal–Fetal Medicine Center offering specialized testing and medical services for pregnant women with comorbidities or who are at high risk for health problems during pregnancy. In addition, we are engaged in an ongoing effort to recruit new gynecologists to address the growing needs of our community.

Education is an important part of our strategy. Englewood Health supports outreach programs to heighten community awareness—for instance, to explain the benefits of newer vaccines like the one to protect against the human papillomavirus. Educating our patients helps them make better decisions, both in health care and in life.

Englewood Health participates in research to identify therapeutic approaches of the future. One example is our participation in the COMET (Comparison of Operative to Monitoring and Endocrine Therapy) trial, which is working to elucidate the best treatment options for ductal carcinoma in situ (DCIS), an early-stage breast cancer. DCIS now accounts for about one in five breast cancers diagnosed in the United States annually, according to the American Cancer Society.

Englewood Health also provides the latest diagnostic and therapeutic techniques to improve outcomes and the patient experience, such as low-dose CT scans for lung cancer detection. Innovation is never-ending in the world of health care, and we embrace new approaches that make our patients’ lives better.

Our expertise has made Englewood Health a leader in advanced women’s health care, and our goal is to work closely with referring physicians to provide excellent care for women at every stage of life. We invite you to collaborate with us!
CT Screening for Lung Cancer Beneficial, But Criteria Miss Some Women

Low-dose CT screening in people at high risk for lung cancer is critical, but current screening criteria miss a fair number of women who are diagnosed with non–smoking-related cancers.

“The problem essentially is that we are seeing patients that don’t have any smoking history, and they are being diagnosed when they have symptoms,” said Mark Shapiro, MD, the chief of radiology at Englewood Health. “Males can also present without a smoking history, but it seems to be with females that we are seeing numerous cases not associated with smoking, and that is very significant.”

As cancer is now the No. 1 cause of death in high- and upper-middle-income countries (Lancet 2019 Sep 3. [Epub ahead of print]. doi: 10.1016/S0140-6736[19]32007-0), screenings have advanced to keep up with the need to spot and treat early-stage disease. Englewood Health has provided low-dose CT screening for patients who meet specific criteria since 2014, and the Lung Cancer Alliance recognized it as a screening center of excellence in 2017. Low-dose CT screening has demonstrated a 20% reduction in mortality from lung cancer, and several clinical guidelines recommend it in high-risk populations (Front Med 2018;12[1]:116-121).

But women with non–smoking-related cancers wouldn’t be included under the high-risk screening criteria (Table) unless they have a family history, Dr. Shapiro said. “They don’t fall into this criteria, and therefore they would not be eligible for lung cancer screening, and that is a problem,” Dr. Shapiro said. “In females, a significant percentage of patients present without a smoking history.”

Lung cancer is increasingly affecting women, mostly driven by an increase in non–smoking-related cancers (Thorax 2011;66[4]:301-307). An estimated 228,150 new cases of lung cancer are expected in 2019, with roughly half (48%) developing in women, according to the American Cancer Society. Approximately 20% of the lung cancer cases in American women occur in nonsmokers, Dr. Shapiro said. After tobacco, the second-leading cause is believed to be radon gas exposure; following that, secondhand smoke, asbestos, metals such as cadmium, organic chemicals, radiation and air pollution are all linked to lung cancer.

For those nonsmoker patients who end up developing cancer, providers need to look out for carcinogen exposure or other factors outside of the norm, Dr. Shapiro said. “What we are trying to do is be more cognizant of alternative risks,” he said. “The main issue to consider is if there is a strong family history. For those individuals, we can screen.”

Living with secondhand smoke or other environmental toxins is also very important to note when considering risks, he continued. “Again, that doesn’t fit into the criteria, but we can screen.”

Adenocarcinoma is the most common histology of lung cancer in never-smokers, and compared with lung cancer in smokers, it appears less complex, with a higher likelihood of having targetable driver mutations (Adv Exp Med Biol 2016;893:43-57). It is also more common in women (Lung Cancer [Auckl] 2012;3:79-89).

Additionally, adenocarcinoma produces fewer symptoms than squamous cell carcinoma, the most common type of lung cancer in men, and thus adenocarcinoma is harder to detect. Dr. Shapiro said women are also more prone to cell damage from secondhand smoke than men.

“We need to be vigilant about the smoking history and exposure, personal history and family history, but the anecdotal cases of lung cancer not related to smoking are becoming more common and are scary,” —Mark Shapiro, MD

<table>
<thead>
<tr>
<th>Table. Lung Cancer Screening Criteria</th>
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<tbody>
<tr>
<td>Age range: 55-77 years</td>
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<tr>
<td>30-pack-year history of smoking</td>
</tr>
<tr>
<td>Smoking within past 15 years</td>
</tr>
<tr>
<td><strong>Alternatives:</strong> Strong family history; exposure to second-hand smoke or other toxins</td>
</tr>
</tbody>
</table>

From: National Cancer Institute Guidelines.

- Mark Shapiro, MD

Chief, Radiology

“We need to be vigilant about the smoking history and exposure, personal history and family history, but the anecdotal cases of lung cancer not related to smoking are becoming more common and are scary.” —Mark Shapiro, MD

Women’s Health ADVISOR
Trial Aspires to Clarify Treatment For an Early-Stage Breast Cancer

Ductal carcinoma in situ (DCIS) is a subject of near-constant debate, to the point that some wonder whether it even should be considered a cancer at all. By itself, the disease is not life-threatening, and most patients with low-grade DCIS will never progress to invasive cancer.

The COMET (Comparison of Operative to Monitoring and Endocrine Therapy) trial, currently underway at Englewood Health and multiple other institutions, aims to someday identify patients who can safely forgo treatment for low-risk DCIS. “We need answers for our low- and intermediate-grade patients. I’m hoping that with the right number of patients randomized, we can get enough good data to comfortably offer patients an option of surveillance over surgery,” said Violet M. McIntosh, MD, the chief of breast surgery at Englewood Health and site principal investigator in the COMET trial.

DCIS, a stage 0 breast cancer or a non-obligate precursor to invasive breast cancer, now accounts for about one of five breast cancers diagnosed in the United States annually, a figure expected to reach or exceed 60,000 new cases in 2019, according to the American Cancer Society. This number continues to rise, partly due to more frequent and better-quality screening.

“Patients are better educated about the prevalence of breast cancer, so I think they’re getting more consistent screening,” said Faith Goldman, MD, a breast surgeon with Englewood Health. “Also, with MRI we’re able to pick up more than we were used to.”

The downside of this is the possibility of overtreatment. Although surgical treatment for DCIS is generally safe, patients can experience persistent pain after lumpectomy or mastectomy, which, sometimes along with radiation therapy, is the standard treatment for DCIS.

“This standard of care has been shown to markedly reduce risk for recurrence, which after DCIS could either be more DCIS or invasive cancer. But right now it’s a one-size-fits-all approach whether the patient has low-, intermediate- or high-grade disease,” said Faith Goldman, MD, a breast surgeon with Englewood Health.

“The beauty of the COMET trial is that we’re looking at our lower-risk DCIS patients to see whether they need surgery, radiation and endocrine therapy.”

The COMET trial, along with the LORD

Treatment Effects in Long-Term Survivorship

Thankfully, cancer survivors are a growing demographic. For instance, in patients with breast cancer, the death rate has decreased dramatically, declining 40% from the late 1980s to 2017. With the growth of long-term survivorship has come a greater understanding of the importance of addressing the multiple comorbidities that these patients may face—such as arthritis, diabetes and heart disease—in addition to the complications that can develop from the cancer treatment. The best care for these patients requires attentive oncologic care and also informed primary care—treating survivorship as a chronic disease outcome that needs management.

As an example, patients who have chemotherapy or radiation to the chest in cancer treatment are more likely to develop heart and lung problems than other patients. Specifically, those individuals who received medicines such as trastuzumab or doxorubicin or just received higher doses of chemotherapy can develop congestive heart failure or coronary artery disease, while problems with breathing and inflammation of the lungs can result from exposure to bleomycin or methotrexate.

Treatments can also affect the endocrine system, sometimes causing menopausal symptoms in women (and similar androgen deprivation effects in men) or infertility. Breast cancer specialist Jill S. Morrison, MD, the co-chairperson of the Breast Cancer Disease Management Team and medical director of the Infusion Center at Englewood Health, has personally seen these iatrogenic consequences. Specifically when treating patients who have stage 0 breast cancer, which usually is treated successfully with long survivorship, she prescribes antiestrogenic medications to her patients while in remission.

“We have the ability to work with many of the side effects, using techniques that are not always [traditional] medicine,” she said. Acupuncture, for instance, has been found to be particularly effective for treating hot flashes (J Cancer Res Ther 2016;12[2]:535-542), said Dr. Morrison, a medical oncologist.

However, from the start of therapy, Dr. Morrison said, physicians are utilizing precision medicine to narrowly treat cancer while minimizing harm to surrounding organs and the whole body.

“Can we do less without compromising the care of the patient so there are fewer long-term complications? We are trying to do less, while still keeping our disease rates low,” Dr. Morrison said.
Low-Risk DCIS) and LORIS (surgery versus active monitoring for low-risk DCIS) trials in Europe and the LORETTA (endocrine therapy alone for estrogen receptor-positive, low-risk ductal carcinoma in situ of the breast) trial in Japan, build on what is already known about patients with DCIS who do not undergo treatment. An evaluation of data from the National Institute of Health’s SEER (Surveillance, Epidemiology and End Results) Program of 57,000 patients collected from 1988 to 2011, in which 2% did not undergo surgery, found a slightly lower breast cancer–specific survival rate in those patients. But the study included all grades; in grade 1 DCIS there was no difference in disease-free survival between those who did and those who did not undergo surgery (JAMA Surg 2015;150[8]:739-745).

A subsequent trial looking at risk factors for ipsilateral invasive cancer found the risk was 5.9% at five years, or about 1% per year in patients with low-grade DCIS, which helped to develop the criteria for surveillance trials in DCIS (J Natl Cancer Inst 2019;111[9]:952-960).

The COMET trial is open to women aged 40 years and older with hormone receptor–positive low- or intermediate-grade DCIS. The patients will be randomly assigned to either standard care (surgery and radiation) or active surveillance (AS), consisting of clinical breast exams and a mammogram every six months. Patients in the AS arm who progress to cancer will undergo standard treatment. Both arms have a choice of endocrine therapy.

Researchers hypothesize there will be no difference between the two arms in the primary end point, which is the diagnosis of invasive breast cancer at two years. Secondary end points include overall survival, quality-of-life measures, and mastectomy and lumpectomy rates, among others.

The accrual goal for the trial is 1,200 patients. “When I discuss treatment options with patients with low- or intermediate DCIS we go over lumpectomy, mastectomy and participation in the COMET trial,” Dr. McIntosh said.

Dr. McIntosh estimates it will take at least 10 years for the COMET trial to yield the data for which they’re looking.
Health Care Disparities a Complex, Multifactorial Problem

Racial and ethnic disparities have deep, complex roots in our society and extend into the health care sphere. Studies have shown differences in communities of color: everything from opioid prescribing—often lower in minorities (JAMA 2008;299[1]:70-78), even in pediatric cases (Pain 2018;159[10]:2050-2057)—to cancer mortality, which is higher in some minority groups (J Environ Public Health 2017;2017:2819372).

Hospitals and providers are addressing health care inequalities to provide access to quality care for all people, especially in women’s health care, where discrepancies can be stark. In 2018, the American College of Obstetricians and Gynecologists reaffirmed its commitment to the elimination of racial and ethnic disparities in health care (Obstet Gynecol 2015;126[6]:1325). In support of this goal, the committee outlined two categories of inequality (Table): of health conditions and outcomes, and of health care services.

Nicole Tully, MD, a family medicine practitioner at the Hoboken office of Brescia and Migliaccio Women’s Health, has seen the impact of race and ethnicity on health care outcomes. “I think one important piece to work out is why there is a discrepancy. Why there are these differences that we see again and again repeated, even adjusting for socioeconomic factors, language and access to care. Rates of morbidity and mortality are much higher in minority populations.”

—I Nicole Tully, MD

<table>
<thead>
<tr>
<th>Disparities in Health Outcomes</th>
<th>AI/AN</th>
<th>Asian</th>
<th>Black</th>
<th>Hispanic</th>
<th>White</th>
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<tr>
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<td>Cervical cancer (/100,000 population)</td>
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<td>10</td>
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<td>Breast cancer deaths (/100,000 population)</td>
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<td>31</td>
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<tr>
<td>Diabetes-related deaths (/100,000 population)</td>
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<td>Birth control provided in past year (% of women aged 15-44 years)</td>
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<td>Pap testing within 3 years (% of women aged 21-65 years)</td>
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<td>75</td>
<td>85</td>
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<td>Mammography within 2 years (% of women aged 50-74 years)</td>
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<td>Ever received infertility treatment (% of women)</td>
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<td>16</td>
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<td>Prenatal care in first trimester (% of births)</td>
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<tr>
<td>Cesarean delivery (% of births)</td>
<td>29</td>
<td>34</td>
<td>36</td>
<td>32</td>
<td>32</td>
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</tbody>
</table>

AI, American Indian; AN, Alaska Native; NA, Not Available.

Innovative Prenatal Genetic Evaluation Strategies Individualized for Risk

All pregnant women are candidates for prenatal testing to determine their risk for genetic diseases, but when genetic markers identify an increased risk for these conditions, highly sophisticated tests such as chorionic villus sampling and amniocentesis are available to fully evaluate and confirm various conditions.

But even in pregnant women with no risk factors, simple blood tests permit screening for gene mutations linked to the conditions that most commonly lead to abnormal fetal development. Women with a family history that raises concern have a clear indication for genetic testing, but there can and should be a low threshold for referring even low-risk patients seeking reassurance, said Simi Gupta, MD, a specialist in maternal fetal medicine at Englewood Health.

“Fetal genetic testing can identify disease risk when neither parent has anything remarkable in their family history,” Dr. Gupta said. “We think clinicians should discuss the potential value of fetal genetic testing with every pregnant woman or refer them to specialists who can.”

For prospective parents with a positive family history of congenital defects or inheritable diseases, the greater risk for an adverse outcome provides a strong argument for sophisticated screening. There is a 25% risk for an affected offspring if both parents are known carriers of an autosomal recessive condition, explained Andrei Rebarber, MD, also a maternal fetal medicine specialist at Englewood Health.

“Clearly, we would encourage prenatal testing in any pregnancy where an increased risk of a fetal abnormality has been identified by history,” Dr. Rebarber said. Prenatal testing is still not a universal component of antepartum care, and opportunities for obstetricians to discuss testing options and results can be limited by time or lack of provider expertise in the subject area (J Perinat Neonatal Nurs 2019;33[1]:12-25).

Even when a history is taken, research has found that up to half of genetic information is missed in counseling, with about 40% of that information being meaningful for clinical care planning (Am J Perinatol 2019 Feb 22. [Epub] 2019;10:511). “Every practitioner has to look at biological differences,” she said. “Whether it’s ancestral or cultural, aspects absolutely manifest in the patients I’m seeing. Social issues within families will manifest as disease in the family practice.”

Inequality in health care services can result when physicians have difficulty communicating with their patients. Dr. Tully explained, “The language barrier can be quite significant. It affects patients’ understanding of instructions, directions and side effects that they’re having, and their doctors don’t understand why they’re not taking their medicine.” Recognizing this, Englewood Health and its network physicians provide interpreters for their patients at no charge, and faculty are available who speak multiple languages.

Swirling around in this confluence of factors, racial bias cannot be excluded as a factor, especially when studies, such as the Duke University report on infant mortality, control for outside factors. “There is a common perception that racial disparities in infant mortality rates are driven primarily by risky behaviors,” the authors wrote.

“However, the best available evidence does not support this assertion and indicates that systemic barriers to positive birth outcomes merit further investigation.”

Health care providers are taking steps to bridge health care gaps in minority populations despite these challenges. For example, Englewood Health provides community screening and educational programs that are free of charge.

“There are several different programs that they have in place,” Dr. Tully said. “The more we do and the more we encourage individuals to take advantage of these programs, the better we’ll all be.”
Sophisticated Genetics Program Places Cancer Risk Into Meaningful Context

Cancer genetics is a rapidly evolving field due to the enormous progress in identifying specific gene mutations associated with the risk for developing cancer. At the same time, gene profiling in those who already have cancer is playing an increasingly pivotal role in individualizing therapy.

“In some cases, we can be testing up to 46 genes to evaluate cancer risk,” said Rosalyn Stahl, MD, an associate chief of pathology at Englewood Health, who was instrumental in creating its cancer genetics program more than 15 years ago.

As multigene panel testing has become more complex, expertise becomes more critical for appropriate interpretation.

Assessing breast cancer risk through multigene panels is an apt example. Most clinicians and many patients are familiar with the risks associated with the BRCA gene mutations, but patients concerned about breast cancer risk can be considered for panels that include dozens of genes, including those related to hereditary cancer syndromes beyond breast cancer.

That worry may not be unfounded. Two recent studies reported that the number of pathogenic or likely pathogenic mutations was comparable in patients who met the National Comprehensive Cancer Network criteria (Table) for genetic testing and those who did not (J Clin Oncol 2018;37[6]:453-460; Ann Surg Oncol 2018;25[10]:2925-2931).

Genetic tests do not typically yield yes or no answers for patients. The interpretation of the results is personalized and understood in the context of clinical variables.

“We have an advanced genetics testing program across a broad array of cancer types using the most sophisticated tests currently available, but there is an art as well as a science to interpreting and applying this information appropriately,” Dr. Stahl said.

It’s not just complex to decipher the results of testing. It takes time and care to explain the process to patients.

“Before any screening, patients are first counseled about the goals of genetic testing and prepared for the implications of positive or negative findings,” said Patricia K. Mazzola, APNG, who is credentialed in genetics counseling and joined Dr. Stahl in 2006 to expand the program.

“Once we have results, we are very specific in discussing options and recommendations with the patient. For patients referred to our program, we summarize the findings and collaborate on appropriate risk management with the clinician who referred,” Mazzola added.

For patients who are already diagnosed with cancer, characterizing the genetic profile of the malignancy can have an immediate role in selecting the most appropriate therapy.

Whether patients are being screened for cancer risk or are undergoing genetic testing for an existing malignancy, the first step is eliciting a comprehensive family history. This is the role of Mazzola and the other advanced practice genetics nurses, Lisa Sonzogni and Leah Sandhaus, who perform this work.

“The initial interviews are comprehensive and therefore time-consuming, but the information obtained is needed in order to personalize cancer risk and interpret test results,” Mazzola explained.

In the absence of this history, “genetic susceptibility variants have much less value when screening for risk.” Family history is critical to interpretation of genetic testing.

But even before that, getting patients into testing requires a program to be fully integrated throughout specialties and departments, Dr. Stahl said.

“We capture a very high proportion of patients who have the potential to benefit from this information. The specialists know we are here, and the call to our center is one of the first ones they make in a newly diagnosed patient or when a high-risk profile suggests we can help.”

Participating regularly in the tumor boards that collaborate on identifying best possible treatment options on a case-by-case basis for cancer patients, Englewood Health advanced practice genetics nurses work directly with oncologists, radiologists, pathologists and other team members.

“I cannot overstress the importance of our team approach. The advanced practice genetics nurses work together with the referring specialties and the patients in order to provide personalized medicine,” Dr. Stahl said.

Table. Genetic Screening Criteria

<table>
<thead>
<tr>
<th>In order to pursue genetic cancer risk assessment, patients usually have:</th>
</tr>
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<tbody>
<tr>
<td>A personal diagnosis of cancer younger than 50 years of age</td>
</tr>
<tr>
<td>Multiple close family members diagnosed with cancer younger than 50 years of age</td>
</tr>
<tr>
<td>More than one cancer diagnosed in the same person</td>
</tr>
<tr>
<td>Three or more close family members with different types of cancer</td>
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Based on the National Comprehensive Cancer Network.
Fine Needle Aspiration Brings Quick, Accurate Results to Tumor Diagnostics

A woman diagnosed with thyroid lymphoma who had a groin mass was recently referred to Miguel Sanchez, MD, for a core biopsy. Dr. Sanchez, Englewood Health’s chief of pathology, studied the area carefully and opted instead to use fine needle aspiration (FNA) to test the mass. The technique uses a slim needle to extract small tissue fragments and cells for study, sparing the patient the trauma of being injected with an anesthetic and use of thick needles in a sensitive area.

Within three minutes, Dr. Sanchez extracted two samples, one for diagnosis and the other for immunohistochemistry and flow cytometry testing. This is just one example of how pathologists at Englewood Health’s Leslie Simon Breast Care and Cytodiagnosis Center use FNA to test lumps in soft tissues such as the breast, thyroid gland, lymph nodes and salivary glands.

The pathologists at Englewood Health work in an integrated service with radiologists, breast surgeons and oncologists, as well as mammographers, nurse practitioners and laboratory assistants.

“Our pathologists see the patients,” said pathologist Ana Burga, MD. “We meet the patient, take a history, and take the biopsy or FNA ourselves. If it’s a palpable mass, patients get results, usually within five to 10 minutes. If we need additional diagnostic material, we can get that in the same setting without patients going home and then having to return to the clinic.”

All palpable breast masses are referred directly to the pathologists, who perform FNA after visualizing the mass under ultrasound. Smears are made in the exam room where the biopsy is performed, then air-dried, stained immediately and examined under the microscope. In the case of cancers, pathologists may take a second aspiration to be studied for hormone receptors or with other immunostains. Nonpalpable masses usually are aspirated under ultrasound guidance by a radiologist. Then, the pathologists prepare the smears immediately in the procedure room and examine them under the microscope.

In recent years, many hospitals have shifted to using core needle biopsies to study breast lumps, partly because they are easier to perform, Dr. Sanchez said. These biopsies use a thicker needle (a difference of 1.25-3 mm vs. 0.5-0.7 mm for FNA) to acquire a small cylinder of tissue for study. However, he said, these tests tend to be more expensive and more painful for patients. A recent study (Cancer Cytopathol 2017;125[10]:748-756) suggested that the percentage of distant metastases seen in patients undergoing core needle biopsies five to 15 years after the procedure was significantly higher than in those undergoing FNA. The thought is that when a needle is inserted into the mass, it can dislodge some tumor cells into the bloodstream, Dr. Sanchez said.

In some cases, Dr. Sanchez added, a tumor’s location or other factors may necessitate a core biopsy, “but in many cases it is not necessary.” He and his colleagues have expertise in performing FNA in a variety of settings.

The multidisciplinary setting allows for full-service treatment for patients, Dr. Burga said. If a cancer is detected, an expert navigator is available immediately to work with the patient to schedule a mammogram or other recommended radiological exams, or set up meetings with surgeons or medical oncologists, so the patient goes home with a personalized care plan. If anything is detected that would put the patient at risk for a later cancer, the patient can be added to a high-risk program for monitoring by a physician and genetic counselor, who will take a family history and order any recommended genetic tests and explain the results.

At Englewood Health, pathologists also examine head and neck masses. FNAs are performed on palpable thyroid masses directly by a pathologist (after ultrasound examination) or on nonpalpable thyroid masses by a radiologist under ultrasound guidance. Smears are prepared and examined immediately. The endocrinologist receives a report on whether the nodule is benign, malignant or indeterminate, which would need to be further examined through genetic testing, explained Adriana Katz, MD, the chief of endocrinology at Englewood Health.

Thyroid cancer rates are increasing, Dr. Katz said, with thyroid nodule disease found at the rate of 10:1 for women versus men. “Because of that, we want to be proactive and find nodules when they are on the small side.”

The team also commonly uses FNA to study masses in lymph nodes, salivary glands and other soft tissues. In addition, they have employed FNA for less common masses seen in the perianal area, vagina or other sites. “Anything that is palpable on the body, we can aspirate it,” Dr. Burga said.

The department has an additional emphasis on precision medicine, Dr. Burga added. “We do molecular testing on patients’ individual tumors to pinpoint exactly what their molecular changes are, so that the treating physicians know how to treat patients precisely based on their tumor type.”
Modern Reduction Mammoplasty Benefits Without Loss of Sensation, Breastfeeding

Reduction mammoplasty plays a vital role in pain management for many women who suffer from back and neck pain or muscle numbness/weakness due to large breasts.

While at one time patients may have avoided reduction mammoplasty, the operative procedure has evolved from mere reduction of breast mass to enhanced aesthetic appeal with a minimum of scar load, while retaining nipple sensation and the ability to breastfeed.

Also, some research has found that reduction mammoplasty might reduce the risk for future breast cancer. Consistently reported as one of the highest patient satisfaction procedures—due to improvements in pain management, aesthetics and psychosocial concerns—the success of reduction mammoplasty has led to a growing number of the procedures being performed annually, with an 11% increase last year, according to statistics from the American Society of Plastic Surgeons. Breast augmentation remains the most widely performed plastic surgery.

The growing demand for breast reduction for cosmetic and functional purposes has led to a wide array of techniques, including peri-areolar mastopexy, inferior pedicle reduction and free nipple graft reduction, among others. Each technique is designed to meet the individual needs of the patient and equip surgeons with a large arsenal of tools to address a wide range of preoperative statuses and anatomic deformities, from gigan-tomastia to mild ptosis.

David Abramson, MD, the chief of plastic surgery at Englewood Health, performs over 100 breast reduction surgeries every year, almost entirely using a medial pedicle technique with a Wise pattern skin resection that he helped create with colleagues (Plast Reconstr Surg 2005;115[7]:1937-1943).

“It’s a technique that continues to have remarkable results, both functionally and cosmetically,” Dr. Abramson said. “And I keep hearing from plastic surgeons who did a fellowship with me that it’s the technique they use most frequently because it produces the best long-term results.”

His medial pedicle technique is safe and reliable. It takes less time than other mammoplasties and maintains the shape and contour of the breasts with minimal scarring. The technique also shows less long-term pseudo-ptosis, or bottoming out, than an inferior pedicle mammoplasty.

It also has minimal complications and provides better vascular and nerve supply to the nipple-areola complex without any damage to the lactiferous ducts.

In fact, surgery minimizes damage to the lactiferous ducts and infrequently causes innervation injury.

A 2017 systematic review published in PLoS One (2017;12[10]:e0186591) found that techniques preserving the column of the sub-areolar parenchyma including inferior, medial and superior pedicle mammoplasty, as well as horizontal bipedicled reduction mammoplasty, are highly successful at retaining breastfeeding function. Another review published in the Journal of Plastic, Reconstructive & Aesthetic Surgery (2010;63[10]:1688-1693) analyzed 58 years of peer-reviewed studies and found no difference in breastfeeding capacity after reduction mammoplasty.

“People think there’s a higher inability to breastfeed than there actually is,” Dr. Abramson said. “It’s unfortunate for women in their 20s and 30s not to live their best lives and to suffer needlessly because they are clinging to a misconception.”

“It’s unfortunate for women in their 20s and 30s not to live their best lives and to suffer needlessly because they are clinging to a misconception.”

—David Abramson, MD
HEART HEALTH
CONTINUED FROM PAGE 1

pivotal in order to get women the care they need, Dr. Schultheis said. “Women are generally busy taking care of everyone else, and their own health and well-being seem to fall in importance,” she said. “What we need to do is make sure we’re not underestimating the significance of their symptoms.”

Dr. Schultheis said Englewood offers traditional heart surgeries, such as CABG, aortic and mitral valve repair/replacement, as well as recently innovated procedures, such as transcatheter aortic valve replacement (TAVR). Englewood’s structural heart team is one of the busiest in New Jersey performing TAVR, a minimally invasive procedure treating aortic valve stenosis that allows patients to leave the hospital the day after surgery.

“Aortic stenosis was originally treated with open heart surgery, but there were very high-risk patients that were not doing well with open heart surgery. TAVR was designed as a way to avoid open heart surgery and replace the aortic valve percutaneously, in a minimally invasive fashion. The outcomes with TAVR have been measured in high-, intermediate- and low-risk patients and have revealed results equal to or better than open heart surgery,” Dr. Schultheis said. Indeed, TAVR has recently been approved for low-risk patients.

The team also offers minimally invasive therapy, known as MitraClip, for patients with leaky heart valves who are not candidates for surgery. “The clip is a great option for patients with severe mitral regurgitation who cannot tolerate open heart surgery,” she said, “and it has also been shown to improve outcomes in heart failure patients.”

In addition to TAVR and MitraClip, Englewood’s interventional cardiologists offer the Watchman device. This device reduces the risk for blood clots, stroke and death in patients with irregular heartbeats—without long-term blood-thinning medications.

“The Watchman device is ideal for patients with atrial fibrillation who are at high risk of bleeding, falls or strokes,” Dr. Schultheis said. Englewood is one of the first hospitals in North Jersey to complete its 100th implant of the Watchman device.

Englewood’s structural heart team is a multidisciplinary collaboration of cardiologists, interventional cardiologists and cardiac surgeons. “This comprehensive partnership allows us to perform contemporary, state-of-the-art procedures with great results,” she said. “It’s one of the many reasons patients choose Englewood Health for cardiovascular care.”

PREGNATAL EVALUATION
CONTINUED FROM PAGE 7

ahead of print]. doi: 10.1055/s-0039-1678533.). However, Dr. Rebarber pointed out that he and his colleagues often help obstetricians by taking a detailed family history for genetic risk assessment or counseling patients about their options.

Individualized, Noninvasive Testing

Both of the most common invasive tests for tissue sampling—chorionic villus sampling and amniocentesis—present small risks to the pregnancy, so the first step is to educate and counsel patients about these risks within the context of the benefits of genetic screening. Couples with no family history suggesting risk and a normal blood test might reasonably decline further screening, but it is important to be clear about the goals of testing.

“These can be very personal decisions, so we help patients work through the potential concerns. It is important to help them consider their specific risks in terms that they find meaningful to allow them to reach a decision they feel is best for them,” Dr. Gupta said.

Once tissue samples are obtained, whether from the placenta in the case of chorionic villus sampling or the amniotic fluid in the case of amniocentesis, there is an array of options for genetic evaluation. Each test assesses for different potential defects, with various turn-around times for results. For example, results from fluorescence in situ hybridization (FISH) analysis, which is an effective method of confirming a normal number of select chromosomes, can be returned within 24 hours. Results from chromosome microarray analysis, which can identify genetic microdeletions missed on karyotype analysis, can take up to three weeks.

“There has been an increasing number of options for genetic analysis, but it is essential to understand how these are best applied. We can offer the most sophisticated tests available, but our expertise in selecting the appropriate tests is another critical strength,” Dr. Rebarber explained.

In pregnancies determined to be at risk, fetal imaging is an additional, essential and final part of risk assessment. Consistent with Englewood’s commitment to excellence in maternal fetal medicine, ultrasounds are performed with the most advanced technology by certified sonographers with specific skills in fetal imaging.

“The images are read at our center, not remotely, so we can walk patients through the results immediately,” Dr. Gupta said.

Beyond comprehensive prenatal genetic screening—the maternal fetal program is a resource for patients referred by either primary care physicians or obstetricians. Dr. Rebarber said it is common to work with referring physicians to manage complicated pregnancies up to the delivery.
Supporting Vaginal Birth Can Bring Better Outcomes for Mother and Baby

Clinically indicated cesarean deliveries are lifesaving procedures, but cesarean delivery overuse presents unnecessary risks. Physicians and hospitals are reducing cesarean delivery rates to better safeguard the health of mothers and infants.

“All the literature points to the [best] thing for a woman and her baby being a normal vaginal delivery if it can safely be accomplished,” explained Natasha Chinn, MD, an obstetrician-gynecologist with the Brescia and Migliaccio Women’s Health Group and member of the Englewood Health Physician Network.

According to the World Health Organization, 10% to 15% of births medically require a cesarean delivery. However, 32% of births in the United States in 2017 were cesarean deliveries, according to the CDC, indicating that the procedure is overused.

“Over the past couple of decades, cesarean deliveries have become sensationalized,” Dr. Chinn said. Societal pressure and the fear of labor pain all contribute to the desire to have a cesarean delivery, she explained, but these sources often misrepresent the procedure as easy and comfortable. Recovery time is often longer for cesarean delivery patients, and scar tissue can complicate future pregnancies (Table). Babies born via cesarean delivery have an increased risk for respiratory distress (J Matern Fetal Neonatal Med 2019;32[7]:1160-1166), and the procedure may affect the newborn gut microbiome (Neonatology 2008;93[4]:236-240), which could alter immune system development.

“With cesarean delivery,” Dr. Chinn said, “there is a higher risk of infection, bleeding, and damage to the bowel, bladder and other surrounding organs. In addition to that, your risk of having anesthesia complications, as well as having a pulmonary embolism or amniotic fluid embolism, are much higher than with having vaginal birth.

“A lot of times, when a woman has a cesarean delivery, she’s not expecting it. Then, she has limited mobility and has to heal from the surgery while trying to now learn about motherhood and take care of the baby.”

Physicians can help manage patient expectations by discussing detailed birth plans.

“When women come in with their birth plans,” Dr. Chinn said, “I go through them...
Treatment Approach Reduces Fertility Concerns in Women With IBD

For women with inflammatory bowel disease (IBD), choosing the right medications and following a strategic surgical approach can increase their ability to conceive and progress to full-term with a healthy child.

“Overall, when managing IBD in men and women, the main difference is that medications and surgery should be carefully chosen in women who want to become pregnant,” said Anna Serur, MD, the chief of colon and rectal surgery at Englewood Health.

To be sure, she emphasized, patients with IBD who have not had pelvic surgery and who avoid certain medications have “fertility rates that are basically the same as patients that don’t have IBD” (Int J Gynaecol Obstet 1997;58[2]:229-237).

Medications, Surgery and Fertility

However, physicians should think twice about some medications, such as methotrexate, an immunosuppressant that can increase the risk for teratogenic effects and should be discontinued for at least three months prior to conception. Corticosteroids are associated with a higher risk for both gestational diabetes and adverse pregnancy outcomes when used during pregnancy.

“In women of childbearing age and those who want to have children, selecting IBD medications wisely is an important clinical consideration,” Dr. Serur emphasized.

Surgery, too, should be approached thoughtfully in these patients, she said.

“Although most women with IBD are able to conceive and carry pregnancy to term without a problem after undergoing surgery for IBD, surgery performed on the rectum as well as pouch surgery can lead to adhesions and damage the reproductive organs, and can potentially decrease fecundity,” Dr. Serur explained.

In one large retrospective Scottish study spanning 20 years, for example, the rate of unresolved infertility among patients with Crohn’s disease who had undergone IBD surgery was 12%, compared with 5% among similar patients who had not. Similarly, 25% of patients with ulcerative colitis who had undergone surgery experienced unresolved infertility, compared with 7% of similar patients who had not (Int J Gynaecol Obstet 1997;58[2]:229-237).

The prospect of loss of fecundity can change Dr. Serur’s surgical plan for patients with IBD.

“If I’m managing a 25-year-old woman with IBD who wants to get pregnant and is undergoing ileoanal anastomosis, which is sometimes done in two or three stages, when appropriate I will try and hold off on the second or third stages until she gets pregnant so that we avoid the pelvic component of the surgery,” Dr. Serur said.

Another concern unique to women with IBD includes a higher risk for anemia due to the combined impact of IBD and menstruation (Gut 2004;53[8]:1190-1197). Although closely monitoring female patients for anemia is important, “you treat anyone with anemia with iron, and this isn’t different in women versus men,” Dr. Serur noted.

Importance of Disease Control

While the wrong medical and surgical IBD options can pose a threat to successful conception and pregnancy, perhaps the most important clinical variable to keep in mind for female patients with IBD who are planning a family is that the disease needs to be managed effectively, Dr. Serur said.

Among women who experience IBD relapse during pregnancy, 30% to 35% have pregnancy complications (Gut 2006;55[suppl 1]:i36-i58), while those with active IBD during pregnancy are at risk for not achieving adequate gestational weight gain, subsequently placing them at a twofold higher risk for preterm birth (Dig Dis Sci 2017;62[8]:2063-2069).

“For both Crohn’s disease and ulcerative colitis, if the disease is under control and quiet, it actually improves fertility rates and is shown to lead to more favorable pregnancy outcomes,” Dr. Serur said.
Vaccines protect against the threat of preventable diseases. Immunization saves 2 to 3 million lives globally each year, as estimated by the CDC. “Vaccines are an important part of basic health care,” explained Aileen Tlamsa, MD, an infectious disease physician at Leonia Medical Associates, part of the Englewood Health Physician Network.

While immunizations are a core component of primary health care for children and adolescents, vaccines are just as important for the adult population. All adult patients should receive vaccinations as part of routine health care visits.

Although early fall marks the start of influenza season, vaccinations can be given well into the new year. “To help prevent influenza and its serious complications, an annual flu vaccine is recommended for all adult patients,” Dr. Tlamsa advised. Each year researchers predict the most likely strains. The trivalent flu vaccine includes predicted H3N2, H1N1 and influenza type B strains, and the quadrivalent vaccine includes an additional type B strain. For patients aged 65 years and older, a high-dose or an adjuvanted flu vaccine may be beneficial to help improve the immune response. However, the CDC recommends getting any flu vaccine. Since 2016, the Advisory Committee on Immunization Practices (ACIP) has recommended that patients with a history of egg allergy can be vaccinated safely for the flu; patients with a severe egg allergy should have the flu vaccine administered by a health care provider who can recognize any reactions. The flu vaccine is only contraindicated in patients who have had anaphylaxis or a prior severe reaction to flu vaccination.

Aside from influenza, “all persons the age of 65 or older should be immunized against pneumonia,” she noted, but earlier vaccination is recommended for “higher-risk groups including patients with chronic illnesses [like] diabetes, COPD [chronic obstructive pulmonary disease], renal or heart failure,” as well as those with HIV or who are immunocompromised, have cochlear implants or cerebrospinal leaks, or a history of cigarette smoking. For adults 65 or older, pneumococcal conjugate vaccine (PCV13) is typically recommended, followed by the pneumococcal polysaccharide vaccine (PPSV23) one year later. A second PPSV23 booster is recommended in certain immunocompromised patients five years after the initial dose.

Although measles was considered to be eliminated from the United States in 2000, there have been increasing numbers of measles outbreaks over the past few decades leading to an unfortunate resurgence of cases in unvaccinated populations. The recent outbreaks in New York City and Rockland County were declared over Sept. 3, 2019, but vaccination for measles remains a key tool in preventing this dangerous disease. Currently, two doses of measles, mumps and rubella (MMR) separated by 28 days are recommended in patients aged 12 months or older, or in patients born during or after 1957 who do not have evidence

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Table. Routine Adult Vaccinations

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Population</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza</td>
<td>All adults</td>
<td>One dose (IIV or RIV) annually</td>
</tr>
<tr>
<td>Tdap or Td</td>
<td>All adults</td>
<td>One dose of Tdap, then Tdap booster every 10 years</td>
</tr>
<tr>
<td>Zoster (shingles)</td>
<td>Adults aged &gt;65 years</td>
<td>Two doses of RZV</td>
</tr>
<tr>
<td>Pneumococcal</td>
<td>Adults aged &gt;65 years</td>
<td>One dose PCV13, one dose of PPSV23</td>
</tr>
<tr>
<td>HPV</td>
<td>All adults &lt;26 years, adults 27-45 years who may benefit</td>
<td>Three doses HPV</td>
</tr>
</tbody>
</table>

HPV, human papillomavirus; IIV, influenza inactivated; PCV13, pneumococcal conjugate; PPSV23, pneumococcal polysaccharide; RIV, influenza recombinant; RZV, zoster recombinant; Td, tetanus, diphtheria; Tdap, tetanus, diphtheria, acellular pertussis

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“It’s helpful for providers to keep vaccines on the radar in terms of what they discuss at every visit. Vaccines are a safe and easy way to prevent serious diseases.”

—Aileen Tlamsa, MD
Plastic May Prove Best Material for Knee Replacement, Particularly for Women

Asit K. Shah, MD, PhD, chief of orthopedic surgery at Englewood Health, part of the Englewood Health Physician Network, and an engineer at heart, is fusing his two passions to create what he hopes is the next generation in total knee arthroplasty (TKA). That future, in a word, is polyetheretherketone (PEEK), commonly known as plastic.

Dr. Shah believes that PEEK would be advantageous in arthroplasty, especially for female patients, who make up 60% of TKA procedures that he sees at the hospital. It’s lighter, it helps the implant fit better, it creates fewer obstructions during imaging, and it leaves the patient less susceptible to inflammation and metal allergies.

The number of TKA procedures has risen steadily in the United States since modern ones were introduced in 1971. More than 5 million Americans live with an artificial knee, and another 1.26 million new procedures are expected by 2030. Although traditional cobalt–chromium implants have seen many advances and have been largely successful, about 30% of patients are dissatisfied.

“We’ve reached the limitations in working with metal,” he said. “Unless we can change the basic material, we can’t make advancements.”

Dr. Shah disputed the old notion that women historically have had a tougher time adjusting to TKA than men. Recent studies have found that women do well, he said, and they often arrive in better condition. Although they are more prone to arthritis and hormonal changes, women also tend to be more flexible than men because they do more plyometric exercises and yoga. “They’re pre-habbed much better than a male prior to knee replacement surgery, so their results are better,” he said. “The other thing is that women have better pain control than men.”

TKA experts have learned that the size of a person’s original knee is important, along with realizing that human knees grow in only one direction at a time. This knowledge has led to better custom-fit implants. They’re also 10 times more costly when it comes to fitting them with metal parts, which require casting and dyeing.

“The new wave of health care wants us to be efficient but not expensive,” Dr. Shah said. “You can’t do it with metal, but you might be able to do it with plastic. Our life expectancies are increasing, and women tend to live longer than men.”
Focus on Minimally Invasive Procedures, Opioid Avoidance for Spine Conditions

Women over 50 years of age experience osteoporosis and osteopenia at higher rates than men—up to four times higher—according to a 2017 study in the Journal of Medicine Research (2017;9[5]:382-387). Consequently, even though men and women both experience degenerative spine issues—including spinal stenosis, disk herniation and spondylolisthesis—women are more likely than men to require medical intervention for back pain associated with osteoporosis, said Omar Syed, MD, a neurosurgeon specializing in spine surgery at Englewood Health.

Intervention, however, does not necessarily mean surgery, he said. “I am just one of many people in a team taking care of someone who has these issues,” Dr. Syed said, explaining that anti-inflammatory medication and/or physical therapy prescribed by a primary care physician are typically the first line of defense for a woman with osteoporosis- or osteopenia-related back pain—or anyone among the 16 million adults in the United States who, according to the Georgetown University Health Policy Institute, suffer from chronic back pain.

Another specialist on the clinical team is a physiatrist, who uses advanced medications and sophisticated physical therapy strategies to treat pain. A pain management specialist may also be consulted. Treatment options include epidural injections, muscle relaxants or neuropathic agents such as gabapentin.

“Lastly, if that fails, they are referred to me,” Dr. Syed said.

In cases where surgery is the best option, Dr. Syed prefers to perform minimally invasive procedures whenever possible because spinal fusion surgery is often not necessary, he said. Common surgeries include laminectomy, microdiscectomy, cervical disk replacement and kyphoplasty.

“Surgery can help a considerable amount of people in the right circumstances,” Dr. Syed said. “It just needs to be done with proper treatment and proper planning.”

Most of these types of surgery are conducted on an outpatient basis in a hospital setting, allowing patients to return home the same day. Although they are minimally invasive, sedation or general anesthesia is still required, Dr. Syed said.

Multimodal Pain Management

In terms of postsurgical pain management, narcotics should be avoided whenever possible, said Vinnidhy Dave, DO, a pain management specialist and the director of palliative medicine at the Englewood Health Physician Network.

“We are finding now that in some people who take narcotics, it can actually increase pain,” he said, adding that the drugs can also inhibit the recovery process because they prevent people from recognizing what their body can and can’t handle after surgery.

“If you are taking too many pain medications, you may overdo it and hurt yourself even more,” Dr. Dave said.

He suggests a multimodal approach instead, using a combination of medications that target multiple pain receptors. Usually, this means acetaminophen, gabapentin and sometimes a muscle relaxant. Narcotics can be added in low doses only if the regimen is not successful without them, he said.

As for patients who are on a narcotics-based pain management regimen prior to the surgery, weaning them off before the procedure is recommended.

“We are finding now that in some people who take narcotics, it can actually increase pain.”

—Vinnidhy Dave, DO

“Patients who are on narcotics going into surgery are going to have worse pain after surgery,” Dr. Dave said.

Furthermore, a study published in JAMA last year (2018;319[9]:872-882) found that patients with chronic back pain are more functional on a nonopioid regimen.

“That is just more clinical evidence to back up what we are doing,” he said.

Dr. Dave also supports the use of integrative medicine to complement traditional back pain treatment protocols. He said patients are often referred to Englewood Health’s Graf Center for Integrative Medicine for therapies such as acupuncture, massage, Reiki and holistic nutrition counseling. Many patients find these treatments very beneficial, he said.
Osteoporosis: Importance of Testing and Understanding New Treatment Options

The gold standard test for diagnosing osteoporosis is a bone density test, including dual-energy x-ray absorptiometry. “This is a painless test that is similar to an x-ray, although it has much less radiation than an x-ray,” said osteoporosis specialist Jessica Fleischer, MD, an endocrinologist at Englewood Health and member of the Englewood Health Physician Network.

The scan is performed with the patient lying on the table, during which a bone densitometer measures the density or strength of individual bones. “The goal is to identify people who have fragile bones that might be prone to breaking, so any man or woman who has had a bone fracture should be screened for osteoporosis with a bone density test,” Dr. Fleischer said.

““There are different guidelines, based on different associations,” Dr. Fleischer said. “The National Osteoporosis Foundation recommends that women over 65 and men over 70 years old schedule their first test, or earlier if there are risk factors or a history of a fracture.”

Depending on results, patients are encouraged to repeat the test, typically once every one to two years, and normally one year after beginning treatment.

Nazila Biria, MD, a woman’s health specialist at The Park Medical Group, part of the Physician Network, usually recommends that women have their first bone density test about two or three years after menopause to secure a baseline that can be followed. “We believe the test is very accurate,” Dr. Biria said. “We scan two locations: the lower spine and the femoral neck of the hip.” The actual scan takes less than one minute.

Treatment Options Proliferate

Dr. Biria also often checks vitamin D levels in women with bone disease. “The recommendations for vitamin D supplementation are extremely important, including that patients be checked at least one time for vitamin D levels because many people are vitamin D deficient.” Dr. Biria usually advises 2,000 IU of vitamin D daily.

Older accepted treatments for osteoporosis include oral bisphosphonate pills (alendronate, risedronate). A more convenient treatment option is either denosumab, a twice-yearly subcutaneous injection, or the once-yearly IV infusion zoledronic acid, both of which are offered at Englewood Health.

There are also some potent medications that grow new bone as opposed to preventing ongoing bone loss via daily self-injections, such as teriparatide (Forteo, Lilly), which was approved in 2004, and abaloparatide (Tymlos, Radius Health), approved in 2018.

The Connection Between Nutrition and Osteoporosis in Menopausal Women

Decreasing levels of estrogen after menopause can cause osteoporosis. Fortunately, adhering to targeted nutritional plans can delay or prevent the disease. Calcium is a key dietary component. According to the U.S. Recommended Dietary Allowance, people over 50 years of age should consume 1,200 to 1,500 mg of calcium daily.

The Cleveland Clinic lists milk and dairy products, a variety of seafood, dark green leafy vegetables and calcium-fortified orange juice as excellent sources of calcium.

Menopausal women may also benefit from calcium supplements such as calcium carbonate and calcium citrate. Additionally, vitamin D can bolster bone health, whether it comes from eggs, fatty fish or vitamin D-fortified cereal.

Menopausal women can reduce their risk for developing osteoporosis by using the Mediterranean and anti-inflammatory diets. “These two diets basically consist of eating more whole foods, increasing vegetables and removing processed foods,” said Tracy Scheller, MD, the medical director of the Graf Center for Integrative Medicine at Englewood Health.

Adopting a healthier lifestyle and not thinking they are “on a diet” can also help women achieve weight loss if it is needed to improve overall health outcomes. “Also, understanding that our bodies have changed and we need to change with it can help, instead of trying to eat the same things that we have always eaten and wondering why we can’t lose weight or why we are having worse symptoms,” Dr. Scheller said.

Physicians can educate women about the Mediterranean and anti-inflammatory diets and how they might affect weight and mood. “By sticking to these types of diet, change will occur,” Dr. Scheller said. “But the problem is in persevering and being consistent.”

A wellness coach can be of immense help in achieving positive change by providing continuous motivation and new ideas, such as making better food choices when dining out at restaurants.
the resistance of his/her muscle and tissue cells to insulin. However, when it comes to type 2 diabetes, women have a higher risk than men for complications, including blindness and kidney disease, and while diabetes doubles the risk for cardiovascular disease in men, it quadruples the risk in women. These data highlight the need for behavioral modification and medical intervention to help obese and overweight women achieve sustained weight loss.

Englewood Health bariatric surgeon Celinés Morales-Ribeiro, MD, works with a team of dietitians, psychologists and a nurse practitioner to help assist overweight women in losing weight through exercise, careful attention to diet, and an action plan. In some cases, medications, including recently FDA-approved injectables, can be used to help support weight loss in patients with related medical problems.

For many obese women, including those for whom lifestyle adjustments alone have not worked, bariatric surgery can be highly successful. Bariatric procedures have been shown to be a safe and effective method of achieving sustained weight loss that yields significant health benefits, including improved cardiovascular health, elimination of obstructive sleep apnea, joint pain relief and long-term remission for type 2 diabetes.

Women who may be candidates for bariatric surgery include those with a BMI of 40 kg/m² and above with or without comorbidities, and those with a BMI between 35 and 39 kg/m² with comorbidities of diabetes, hypertension, hyperlipidemia or obstructive sleep apnea.

“In most cases, the resolution of diabetes with bariatric surgery is virtually immediate,” Dr. Morales-Ribeiro said. “Most patients go home without diabetic medication because of the metabolic changes that occur with the procedure. And the sustained weight loss and metabolic changes made possible by the surgery keep the diabetes in remission.”

In recent years researchers have learned that bariatric surgery helps patients achieve more than just significant weight loss. According to a 2018 article in Clinical Chemistry (2018;64[1]:72-81), it also undoes the “deranged metabolic milieu” of an “obesogenic” environment marked by easy access to inexpensive high-calorie foods, in which the result for millions of people is insulin resistance, systemic inflammation and oxidative cellular injury.

Emerging evidence supports the metabolic benefits of bariatric surgery, often now called metabolic surgery, the article stated. The advantages “derive as much from metabolic and cardiovascular gain as from weight reduction.”

The two bariatric procedures most frequently performed at Englewood Health are laparoscopic sleeve gastrectomy and laparoscopic gastric bypass surgery. Both procedures work by reducing the amount of food the patient can eat before feeling full.

Gastric bypass involves the creation of a small pouch of proximal stomach with attachment to the intestine so that food bypasses the distal stomach. Sleeve gastrectomy involves the removal of 70% to 80% of the curvature of the greater portion of the stomach, producing a banana-shaped stomach. It does not involve cutting or rerouting of the intestine, Dr. Morales-Ribeiro noted.

Performed laparoscopically, both procedures usually involve a one-night hospital stay. Keeping with healthy dietary habits and exercise, attending support groups and continuing to follow up closely with the dietitian and surgeon are essential after surgery, Dr. Morales-Ribeiro said.

Although both surgeries are good options, Dr. Morales-Ribeiro generally recommends gastric bypass for patients with diabetes; however, “some patients don’t like the idea of a procedure that interferes with the absorption of nutrients,” she said. “I thoroughly discuss surgical options with each of my patients and together we decide which surgery would be most beneficial to their overall health and well-being.”
The National Council on Aging reports that one in four older Americans experience a behavioral health problem that is not a normal part of aging. In her practice, Terri F. Katz, MD, an internist and geriatrician on the medical staff at Englewood Health, pays particularly close attention to two of the most significant mental health concerns in older women: depression and memory changes.

“I have a special interest in identifying memory problems and finding the root cause because not all memory issues are dementia,” Dr. Katz said. She asks her patients about their memory because many of them are anxious about bringing it up themselves.

Dr. Katz recommends neuropsychiatric testing every 12 to 24 months for certain patients over 60 years old who may have concerns about their memory and/or a family history of memory problems, but who do not show clear signs of dementia. Periodic testing to measure cognitive changes can offer useful information to guide care. What seems like mild memory loss actually could be depression or anxiety. “Testing can help identify the illnesses for which appropriate medications are available,” she said.

More than 2 million of the 34 million Americans aged 65 years and older suffer from some form of depression, according to the National Institute of Mental Health. Older women are at greater risk for depression than older men. In fact, women in general are twice as likely as men to become seriously depressed, according to the National Alliance on Mental Illness.

Biological issues including hormonal changes, the disproportionate burden placed on women to care for others before themselves, loss of a partner, physical illness, and lack of a social support network are among the factors that may make older women vulnerable to depression.

“A lot of the depression that I see in my older female patients revolves around the losses of aging—loss of physical function, a spouse, independence, income and sometimes even a child,” Dr. Katz observed.

The good news is that depression in older adults is highly treatable. The wide range of safe and effective antidepressants, which can be selected with an eye on the side effect profile, makes treatment “one of the most important ways that we can help the geriatric female population,” Dr. Katz said.

Regardless of possible causes of the depression, physicians need to focus more on identifying when older patients are suffering, Dr. Katz said. Research shows that less than 40% of older adults with mental health problems receive treatment.

“Depression is something that’s missed a lot by physicians because...
gynecologic cancers globally, said Nimesh Nagarsheth, MD, the director of gynecologic oncology and director of robotic surgery at Englewood Health, who is also a member of the Englewood Health Physician Network.

Cervical cancer is one of the best examples of this, Dr. Nagarsheth said. “In the United States, the incidence of cervical cancer has been reduced drastically since the implementation of the Pap smear, human papillomavirus [HPV] testing and HPV vaccination,” he said.

However, for other types of gynecologic cancer, screening has yet to prove its efficacy in earlier detection or in a precancerous state in the general population, although screening may be somewhat efficacious in high-risk patients. But new advancements in treatment hold promise for many patients, including targeted chemotherapies for ovarian cancer.

Screening Techniques Better For Some Cancers

Screening for certain cancers has been easier due to a number of factors. It can be easier to access one organ versus another, for instance, or lesions can be more clearly defined.

Integrative Medicine Partners With Primary Care

Integrative medicine can be helpful in providing behavioral health support for patients with cancer, beyond conventional medications or therapies.

Therapies from acupuncture to yoga can aid in stress relief, reduce nausea and relieve pain, according to the National Cancer Institute.

The way physicians think about health, wellness and healing needs changing, said Tracy Scheller, MD, the medical director at the Graf Center for Integrative Medicine at Englewood Health. To help achieve that goal, the Graf Center is forging more and more relationships with primary care physicians and specialists and educating them on this philosophy.

Along with complementary therapies, the Graf Center also provides counseling and education to promote good nutrition, sleep habits and stress management.

Personal life, work life and all manner of relationships can affect stress and anxiety, which get in the way of treatment.

“What are the woman’s physical and emotional surroundings? Does she have a comfortable or healthy space where she works and lives?” Dr. Scheller said. “That may be affecting the woman’s day-to-day life.”

It’s not only beneficial to cancer patients. For instance, a woman who has had a heart attack can easily develop depression. Patients adversely affected by chronic fatigue or fibromyalgia may also benefit.

Some therapies can even help with hormonal fluctuations, she said. “Women go through times of fluctuation in hormones, during puberty, pregnancy and perimenopause,” Dr. Scheller said. “These time intervals can really affect moods. Therefore, it is important that symptoms be addressed. But we also need to consider the whole person.”
The ideal screening model is a cancer that has a precancerous lesion, which is detectable by some sort of testing that is relatively easy to apply,” Dr. Nagarsheth said. “For instance, the cervix is readily available on a pelvic exam.”

Also in its favor, a precancerous cervical lesion will not develop into cancer for typically months to years. But that doesn’t seem to be the case for all cancers. The interval from identifying an ovarian precancerous lesion to developing cancer appears to be much shorter than for cervical cancer.

Dr. Nagarsheth is hopeful that an effective ovarian screening test will be forthcoming. “There is constant research in this area,” he said.

Like his colleagues, Dr. Nagarsheth supports the recommendation of the U.S. Preventive Services Task Force to not screen for ovarian cancer in asymptomatic patients because of the high number of false positives.

For detecting ovarian cancer in high-risk patients, ultrasound and a CA 125 blood test are scheduled every six to 12 months. “A patient with a strong family risk of developing cancer could benefit from this type of intervention,” Dr. Nagarsheth said. “But newer blood tests and tumor markers are being developed that might be more specific and accurate.”

Performing an ultrasound with newer technologies and in a slightly different way may also be able to detect abnormal blood flow to the ovaries, for example, and correlate with a high risk for acquiring a precancerous lesion or cancer.

As with ovarian cancer, there is a lack of a good screening tool for endometrial cancer. Fortunately, however, endometrial cancer typically presents with the symptom of postmenopausal bleeding.

Ovarian cancer often presents with no obvious symptoms, but instead can include abdominal swelling; back, pelvic or abdominal pain; difficulty eating; or urinary urgency.

For Cervical Cancer, a Game Changer

HPV vaccination is highly effective, Dr. Nagarsheth said, and is a major game changer in the ability to manage cervical cancer prevention. “I am a very strong advocate of the vaccination. The vaccination can also help prevent vaginal cancer and vulvar cancers, and can potentially help prevent oral cancers as well.”

The HPV vaccine is recommended for boys and girls between the ages of 9 and 14 years. The vaccine is also suggested for people up to the age of 26 who have not already received the vaccine or completed the series of shots. In addition, although catch-up vaccinations for adults aged 27 to 45 years are not formally recommended, some in this older age group might benefit from vaccination, so consultation with their physician is recommended.

Patient education for preventing HPV, such as promoting the use of condoms or informing about sexually transmitted infections, also is helpful. “Over 90% of cervical cancers are HPV-related at this point, so by preventing HPV you potentially prevent cervical cancer or cervical dysplasia,” Dr. Nagarsheth said.

Targeted Treatments Close at Hand

Among the new treatments for ovarian, uterine and cervical cancers are immunotherapy and targeted therapies, including poly (ADP-ribose) polymerase (PARP) inhibitors for ovarian cancer. Ongoing research has found that certain cancer tumors seem to rely on PARP-mediated DNA repair, making them sensitive to inhibition (Crit Rev Eukaryot Gene Expr 2014;24[1]:15-28). Studies have also linked germline BRCA mutations and positive PARP inhibitor outcomes (Nat Rev Clin Oncol 2017;14[5]:284-296).

The FDA has approved two PARP inhibitors, olaparib (Lynparza, AstraZeneca) and rucaparib (Rubraca, Clovis Oncology), as mono-therapy for advanced recurrent ovarian cancer. Olaparib and another PARP inhibitor, niraparib (Zejula, Tesaro/GlaxoSmithKline), have been approved for post-ovarian cancer maintenance therapy.

Vaccine trials also are underway to help treat certain types of solid tumors.

“Medicine is constantly changing, and the management of ovarian cancer is constantly changing,” Dr. Nagarsheth said. “Outside of traditional surgery and chemotherapy, there are a lot of new treatment modalities. The field is very dynamic.”
Pelvic Venous Disease Often Misdiagnosed

Nearly 40% of women will suffer from chronic pelvic pain at some point in their lives. It is so physically debilitating that neurofunctional imaging has shown it to trigger changes in the brain that are commensurate with severe depression, including a reduction in gray matter. A 2013 review published in the International Neurology Journal (2013;12[2]:48-58) stated: “Depression and catastrophizing are consistently associated with the reported severity of pain, sensitivity to pain, physical disability, poor treatment outcomes, and inflammatory disease activity, and potentially with early mortality.”

“We need to treat chronic pelvic pain as a real disease that has deleterious physical and psychological effects,” said Steve Elias, MD, the director of the Center for Vein Disease at Englewood Health. “Women are looking for answers.

The various causes of chronic pelvic pain syndrome frequently confound gynecologists and urologists and lead to misdiagnoses or dismissal of symptoms as a psychosocial problem, especially when chronic pelvic pain cannot be explained by laparoscopy, ultrasound or cross-sectional imaging results. Although an obstetrician-gynecologist may easily diagnose endometriosis, inflammatory disease, uterine fibroids or an ovarian remnant, it is common for a specialist to miss a vascular condition that triggers pelvic pain.

Dr. Elias believes that there needs to be a broader look at pelvic pain, and not just what physicians are used to, since about 30% of chronic pelvic pain in women will have a venous component to it.

“Patients may present with some vague lower abdominal pain or upper thigh pain,” Dr. Elias said. “When I examine them they may have varicose veins not in the typical location, such as the inner thigh, posterior thigh or lower abdomen.

“I’ll ask about the symptoms of varicose veins in the pelvic area. ‘Do you feel more pressure on the bladder as the day progresses? Does your period seem to be more painful than others? Do you feel pain not during intercourse, but 15 to 30 minutes afterward?’ Then their eyes light up and they say, ‘Yes! Those are my symptoms exactly!’ Basically what you’re looking for is symptoms that may be due to varicose veins in the pelvic area.

“One of the great aspects of Englewood Health is we have a collaborative environment, so it is easy to talk to other specialists and to put the symptoms of pelvic venous disease on their radar,” Dr. Elias said.

Dr. Elias champions open communication across disciplines. He wants several experts to analyze a patient’s symptoms and to pinpoint the root cause of a patient’s chronic pelvic pain—whether it is a vein issue, a gynecologic issue, a GI issue, a urologic issue or a matter for a pain physiatrist.

A multidisciplinary approach that involves, for example, a gynecologist, a vein specialist and a pain physician is especially beneficial because chronic pelvic pain frequently is multifactorial.

A diagnosis of pelvic venous disease usually is followed by MRI, ultrasound or a venogram. A venogram reveals which veins are not functioning well and is especially useful in treating the causes of pelvic congestion syndrome, which include ovarian vein reflux and common iliac vein compression with pelvic varicosities.

For treating pelvic congestion syndrome, Dr. Elias often uses a percutaneous embolization and sometimes a stent, which is very effective with a high long-term success rate, little chance of complications and a low cost.

Considering the complexities of chronic pelvic pain, Dr. Elias sets clear expectations for each patient when treating pelvic congestion syndrome, so she understands there will likely be a 75% to 80% improvement in her condition. The improvement will happen incrementally, taking a few weeks to as much as four months after the procedure.

“Englewood Health has made a commitment to be a world leader in managing and teaching other physicians about vein disease,” Dr. Elias said. “That means we have almost every available cutting-edge technology to treat every aspect of vein disease, from the smallest spider veins, to varicose veins, to blood clots, to pelvic vein disease. It is an honor to be part of the Englewood Health team.”

—Steve Elias, MD

“We need to treat chronic pelvic pain as a real disease that has deleterious physical and psychological effects.”

Steve Elias, MD
Director, Center for Vein Disease
**CESAREAN**

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line by line, and I tell patients: ‘I’ll tell you everything nicely, but I don’t sugarcoat, because I want you to realistically know what to expect.’”

**Vaginal Birth After Cesarean Delivery**

While cesarean deliveries can present challenges for future pregnancies, vaginal birth after cesarean delivery (VBAC) remains an option for many women. The type of uterine incision and the reason for having the previous cesarean delivery influence whether a woman is a candidate for VBAC. Women who have had a low transverse incision—the most common type of incision—are often good candidates, but, as Dr. Chinn noted, “it’s important that patients are educated that there is a 1% risk of uterine rupture, which can result in severe complications and even death with the newborn and mother.”

**OSTEOPOROSIS**

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The newest medication is romosozumab (Evenity, Amgen), which both grows new bone and stops bone loss.Raloxifene is a less commonly used selective estrogen receptor modulator taken orally once a day. “However, the outcomes are not that great for efficacy,” Dr. Biria cautioned.

Dr. Biria usually starts most patients on an oral medication, the most popular being alendronate, unless they have any contraindications. “The oral medications are associated with a very high incidence of gastrointestinal irritation, especially heartburn and reflux, so if there is any history of heartburn we avoid the oral medications,” she said.

Most of the oral medications are taken either once a week or once a month, so compliance is an issue. For those concerned about compliance, denosumab or zoledronic acid might be a better option. “An infusion of Reclast [zoledronic acid, Novartis] takes about 20 minutes,” Dr. Biria said.

“The ultimate goal of therapy is to strengthen bones to prevent fractures,” Dr. Fleischer said. “All of these approved treatments have their own specific expected improvement in bone density and reduction in fracture.”

“If a woman had a cesarean delivery for ‘something that had to do with the baby—not her pelvic structure—then she is more likely to be successful with a trial of labor after cesarean delivery,” Dr. Chinn said. “Someone who had a cesarean delivery because they had an arrest of labor, or someone who had a narrow pelvis or another maternal reason, is less likely to be successful with a trial of labor after cesarean delivery.”

Women with a classic incision or T-shaped or inverted T-shaped uterine scars are not candidates for VBAC, Dr. Chinn explained. “These women should never undergo a trial of labor after cesarean delivery because their risk of uterine rupture and complications from that are very high.

“There is a 60% to 80% success rate from a trial of labor after cesarean delivery, as long as they go into labor on their own by their due date,” Dr. Chinn said. Women who have successful VBAC are also good candidates for vaginal birth in future pregnancies, she said. Ultimately, clear communication helps manage patient expectations and keeps women aware of their options during labor.

**BEHAVIORAL HEALTH**

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patients want to impress their doctors or they’re afraid they’ll become a burden to their children, so they try to hide it,” Dr. Katz noted.

Older women with depression can benefit from psychotherapy as well as medication, but many are wary of the associated stigma. Locating psychotherapy services in the same place where patients see their internist can help with that concern, said Toby C. Tider, MSW, LCSW, with the Park Medical Group, part of the Englewood Health Physician Network.

Tider, in collaboration with one of the group’s physicians, designed a clinical care model of behavioral health that was integrated into the group’s internal medicine practice.

Among the topics discussed with patients in the initial assessment is the informed consent option of allowing the psychotherapist to speak directly to their internist to support the individual’s care. “It’s entirely the patient’s choice, but most people are comfortable with this option. I assure the patient that if I am going to approach their doctor, I will always ask for their permission first,” Tider said.

The model supports an integrated approach to care for older women, said Tider, whose practice includes a large percentage of female patients between the ages of 60 and 90. “Having a professional who can give good psychological care to their patient in their office allows the physician to spend more of their time focused on their medical work,” she said. The proximity also promotes interaction and dialogue between the therapist and physician for the patient’s benefit.

It’s a collective effort, Dr. Katz said. “Elderly that go into assisted living have support. Those that ‘age in place’ benefit from community services.

“Increasing awareness in the community of these issues is crucial to providing support for your neighbors. Knowing that there are resources for yourself or your loved ones is excellent, too.”