Advancing Cancer Care and Women’s Health
The focus of the 2017 Highmark Foundation Giving Report is cancer and women’s health. On the following pages you will read interviews from several notable cancer and women’s health experts. These physicians and researchers dispel myths while giving hope to effective treatments and, in some cases, cures for cancers and conditions that were once thought to be incurable.

Contents

Board Members, Officers, and Staff Members 6
Introduction to the Highmark Foundation 7
Interviews 8
Cancer Past, Present and Future
#1: Update on Cancer: How Well We are Doing — Edith Mitchell, MD, FACP, Jefferson University Hospital
#2: Disparities and Myths Regarding Human Papillomavirus, HPV — Pamela Murray, MD, MPH, West Virginia University
#3: Technological Approaches to Cancer Using Robotics — Richard Chang, MD, Lehigh Valley Hospital
A Look at Women’s Health
#4: Common Myths — B.J. Leber, Executive Director, Adagio Health
#5: Pittsburgh Post-Gazette/Highmark Foundation Women’s Health Forum: A Healthier You at Every Age
Grant Listing 20
2017 Publications 26
In the News 26

Mission

The Highmark Foundation is a 501 (c)(3) private, charitable organization dedicated to improving the health, well-being, and quality of life for individuals who reside in the communities served by Highmark Inc. and its subsidiaries and affiliates. We fulfill our mission by awarding high-impact grants to charitable organizations that implement evidence-based programs aimed at improving community health. Central to the Foundation’s mission are identifying and continuously re-evaluating our region’s prevailing health care needs. By doing so, the Foundation remains at the forefront of those needs, well equipped to pinpoint issues that most urgently need support.

For more information, visit www.highmarkfoundation.org.
Welcome to the 2017 Highmark Foundation Annual Report

For nearly two decades, the Highmark Foundation has been dedicated to improving the health, well-being, and quality of life for individuals and communities throughout Pennsylvania and West Virginia. We fulfill our mission by awarding high-impact grants to charitable organizations that implement evidence-based programs aimed at improving community health.

In 2017, we gave more than $2.9 million through 145 grants to support charitable organizations, hospitals, and schools that develop programs to combat chronic disease, reduce barriers, and increase access to care in sustainable and innovative ways.

Central to our mission are identifying and continuously evaluating our region’s most urgent health care needs. Aligned with Highmark Health’s key priorities, two of our top areas of focus in 2017 were, and remain, women’s health and cancer.

In 2017, we gave $300,000 toward programs and organizations which supported women’s health education, resources, and family needs. We are also proud to have been the leading sponsor of some of the region’s most important women’s health events over the past year, including Adagio Health’s Transforming Women’s Health Symposium, Pittsburgh Post-Gazette’s Women’s Health Forum, and Allegheny Health Network’s Saint Vincent Hospital Women’s Health Forum.

When it comes to cancer, we know that there are a number of risks and environmental factors that can affect individuals and communities in unique ways. Through our support of dozens of organizations dedicated to improving environmental equity and sustainability, providing resources and education for healthy lifestyles, and reducing health disparities among diverse populations, we know we are creating positive changes in the communities we serve to help reduce these risk factors.

Within this report, we highlight our grants and giving from 2017, as well as interviews from several notable cancer and women’s health experts. These experts discuss today’s most advanced treatments and the ways in which the organizations we support in our communities can improve health care outcomes and reduce risk factors for some of our country’s most prevalent diseases and conditions.

Through these priorities, the Highmark Foundation will continue to lead the way in community health and partnerships, reducing health care disparities, increasing access to care, and improving the quality of health care for all.

We thank our community partners who have joined us in our mission of getting health care right, and we look forward to continuing to share our success with you.

Daniel Onorato
Chairman of the Board
Highmark Foundation

Yonne Cook
President
Highmark Foundation

Throughout the Highmark Health enterprise we share a joint mission – to deliver high quality, accessible, understandable, and affordable experiences, outcomes, and solutions for our customers. We also have a shared vision to reinvent the health care model that delivers differentiated value to our customers across the full spectrum of their needs.

The Highmark Foundation is a key component in realizing that vision. Since it was established in 2000, the Foundation has identified and continuously re-evaluated our communities’ prevailing health care needs, becoming much more agile in its ability to support strategic and evidence-based health care initiatives that educate, protect, and ultimately improve the overall well-being of the large population it serves.

In 2017, aligning with Highmark Health’s transformation strategy, the Foundation focused on some of the most critical public health concerns we face today, specifically cancer and women’s health. In this report, community and medical experts share their insights and experiences to address the most pressing issues in these areas in partnership with the Foundation. Dr. Richard Chang, Lehigh Valley Hospital, contributed a review of Technological Approaches to Cancer Using Robotics, while Dr. Pamela Murray of West Virginia University, and B.J. Leber, Executive Director, Adagio Health, address HPV and myths about women’s health.

It is worth noting that the Foundation also funded innovative health prevention and education programs for the underserved and vulnerable populations throughout its footprint.

As the nation’s health care industry continues to undergo significant change and challenges, the work of organizations such as the Highmark Foundation takes on even more urgency and significance. We are proud of the Foundation’s reputation as a trusted industry partner and resource, whose experience and close ties with the communities we serve enable the organization to make a true impact.

On behalf of the entire Highmark Health enterprise, we thank the Highmark Foundation for its commitment and dedication to our communities.

David Holmberg
President and Chief Executive Officer
Highmark Health

Daniel Onorato
Chairman of the Board
Highmark Foundation

Yonne Cook
President
Highmark Foundation

2017 Highmark Foundation Giving Report
About the Highmark Foundation’s Grantmaking

Foundation Funding Priority Areas — 2017

- **4%** Service Delivery Systems (6 grants)
- **10%** Chronic Disease (14 grants)
- **86%** Family Health (125 grants including school grants)

**Foundation Giving 2016**

- Education: $27,460
- Contracts: $0
- Total: $2,812,193

**Foundation Giving 2017**

- Education: $259,919
- Contracts: $34,761
- Total: $2,936,070

In 2017, the Highmark Foundation awarded 145 grants in three funding priority areas:

**Chronic Disease**

Programs that focus on interventions to improve quality of life, such as community paramedicine initiative, diabetes, and chronic disease self-management for underserved populations, lung cancer education, lupus awareness and education, development of head and neck cancer multidisciplinary clinic, and health education for EMS providers.

**Family Health**

Initiatives to address innovative models for maternal opiate support, bullying prevention strategies, grants to improve health in schools, reducing childhood obesity through lifestyle changes and nutrition education, expansion of eye care services at a federally-qualified health center, maternal morbidity and mortality, women’s health through the lifespan, and environmental equity in schools, homes and communities.

**Service Delivery Systems**

Support to health-related organizations that provide availability and greater access, such as basic CPR and first-aid training for transportation personnel, expanding delivery of case management services to high-risk families, health screening and follow-up referrals, vision examinations for blind and visually-impaired rural residents, and a community health navigator program.
Advancing Cancer Care and Women’s Health

The Highmark Foundation’s 2017 annual giving report will focus on women’s health and cancer, two of the most pressing public health challenges today. Although preventive, medical, educational, and technological advances have been able to reduce the incidence and prevalence of certain cancers, racial and gender disparities continue to exist. Programs and services provide opportunities for women to experience better health outcomes, however, women’s health care still lags behind their male counterparts.

The Highmark Foundation has an extensive history of supporting programs with a strong focus on addressing critical issues affecting chronic disease and family health. The following five interviews with leading experts in the field of cancer and women’s health will discuss population-based efforts to improve cancer treatment and advancements in women’s health. Each interview consists of questions and answers to address issues that people may have around cancer and women’s health.

Cancer Past, Present and Future

Interview #1: Update on Cancer — How Well We are Doing.

Dr. Edith P. Mitchell, MD, FACP

Dr. Mitchell is an oncologist with Jefferson University Hospital, Sidney Kimmel Cancer Center.

Dr. Mitchell has a successful 40-year career as a medical oncologist working to reduce disparities. Dr. Mitchell was a panelist at the Pittsburgh Post-Gazette/Highmark Foundation Health Forum held on October 30, 2017. Her interview will help to dispel some of the myths around cancer in addition to discussing strides made in cancer care, including lifestyle changes, new discoveries, and early detection.

Question: The words good news and cancer don’t always appear in the same sentence, but what is good news to report about cancer right now?

We know that one out of four individuals develop cancer over a lifetime. But there are some exciting things that have happened over the last two decades. The American Cancer Society in 2017 indicated that there has been a 25% decline in cancer death rates in this country over the last 20 years. That means at least 2.1 million individuals did not die from cancer. There are some tumors that, when I was a resident, were uniformly fatal within a few weeks to a few months, and now we are curing patients even though they have widely metastatic diseases. There are some types of leukemia that were universally fatal 35 years ago, and now we are curing them, even the cancer that is very common such as colon cancer. When I was training, the average life span of a patient with metastatic colon cancer was six months. Now that time is close to 40 months, and for many individuals, even though the cancer has spread to other parts of the body, patients can be cured. Same thing can be said for breast cancer, prostate cancer, and others that are very common. Testicular cancer is one of those that was fatal many years ago, and it is almost universally curable at this time. Lance Armstrong had metastatic stage 4 testicular cancer, and he is cured.

Individuals that have faith have a better success rate with cancer, and there have been multiple studies. It may be related to the immune system, we don’t know. Individuals who interact with others have lots of close relationships with people and are happier, do better, and live longer with cancer.

What we can say now is that we have made a lot of strides over the years and it’s not just the doctors and new technology. It’s patients coming in and getting mammograms, colonoscopies, and other screening tests done. So really it is everyone working together: the patients, the families, the primary care physicians, the cancer doctors, and surgeons. We have made lots of strides and cures.

Question: What about cancer prevention?

We actually have made some strides in terms of prevention and we have to look at the whole picture. For example, the greatest contributing factor to a decrease in the cancer rate in this country has been smoking cessation. We often think of smoking as related to lung cancer, but smoking is a contributing factor to a number of other cancers such as pancreatic cancer. Smoking cessation has definitely contributed to the decline in some of the serious cancers we see in the pancreas. On the other hand, we are getting better at treating pancreatic cancer, which shows improvement. One of the greatest factors contributing to bladder cancer is cigarette smoking. We have seen a decline and have been getting better at preventing bladder cancer, but prevention studies fall way behind that of treatment. However, for breast cancer, with mammography over the last 30 years and since the invention of the mammography in 1975, there has been a decline in the death rate of breast cancer. Not so much the decline in the number of cases, but we are finding cases earlier, and the earlier we find the case, the better the outcome for the patient. So more cancer is found, but they are more of the early tiny cancers that we wouldn’t have seen 50 years ago.

For cervical cancer, with the advent of the Pap smear and HPV information, we are diagnosing cervical cancer at a much earlier stage. We suspect that with utilization of the HPV vaccine, we will see a decline of cervical cancer. However, the understanding is that the HPV vaccine is usually given to teenagers, so it is going to take some time. We are also seeing a tremendous decline in colon cancer which is attributed to colonoscopies. With colonoscopies, we are finding cancer earlier and finding...
From studies that have been done, if you compare racial groups, for many years the U.S. only collected and reported information on African Americans and Caucasians. So if you look at overall cancer rates in this country. It is roughly about 30% higher in African Americans and Caucasians. So if you look at overall cancer rates, the disparity in cancer rates and death rates for African American and white Americans?

In rural areas there is a higher incidence rate of cancer for all individuals (which may have to do with the distance from major medical centers). We also know that socioeconomic status plays a role. Individuals with lower incomes have higher death rates than individuals with higher incomes.

Question: How do we reduce the disparity in cancer rates and in treatment between African Americans and white Americans?

We know that for different populations, early detection, screening and treatment, education and awareness, and lifestyle management are factors that lead to decreased incidence and prevalence in cancer rates. We have extended that information over the years, such that now we know that there are other racial and ethnic groups that have higher incidence rates and higher death rates. We also know that not all disparities are racial. In rural areas there is a higher incidence rate of cancer for all individuals (which may have to do with the distance from major medical centers). We also know that socioeconomic status plays a role. Individuals with lower incomes have higher death rates than individuals with higher incomes.

Question: You’re a specialist on gastrointestinal, colorectal, pancreatic, breast, and liver cancer—you would seem to be the poster child for stress. How do you manage all of this and live a preventative lifestyle?

I encourage a preventative lifestyle. I live and teach it. As a role model, I promote it with medical students and residents in training. Smoking in African American women, so those women smoked less and had lower cancer rates, but a 16% higher death rate.

We know that for different populations, early detection, screening and treatment, education and awareness, and lifestyle management are factors that lead to decreased incidence and prevalence in cancer rates. We have extended that information over the years, such that now we know that there are other racial and ethnic groups that have higher incidence rates and higher death rates. We also know that not all disparities are racial. In rural areas there is a higher incidence rate of cancer for all individuals (which may have to do with the distance from major medical centers). We also know that socioeconomic status plays a role. Individuals with lower incomes have higher death rates than individuals with higher incomes.

Question: What is HPV?

HPV is the abbreviation for Human Papillomavirus. It is a common virus that comes in many “types.” Some cause skin or genital warts, other types are responsible for development of some cancers that usually develop a few decades after the infection. According to the CDC, HPV is a very common virus; nearly 80 million people—about one in four—are currently infected in the U.S. About 14 million people, including teens, become infected with HPV each year.

Most people with HPV never develop symptoms or health problems and many HPV infections (9 out of 10) go away on their own by themselves within two years. But sometimes HPV infections will last longer and can cause certain cancers and other diseases, such as:

- Cancers of the cervix, vagina, and vulva in women
- Cancers of the penis in men
- Cancers of the anus and back of the throat, including the base of the tongue and tonsils (oropharynx) in both women and men

Every year in the U.S., HPV causes 30,700 cancers in men and women. The HPV vaccination can prevent most of the cancers (about 28,000) from occurring according to the CDC.

Question: How does an infection lead to cancer?

Genital HPV is a common virus that is passed from one person to another through direct skin-to-skin contact during sexual activity. Most sexually active people will get HPV at some time in their lives, though most will never even know it. HPV infection is most common in people in their late teens and early 20s. There are about 40 types of HPV that can infect the genital areas of men and women. Every year, about 12,000 women are diagnosed with cervical cancer and 4,000 women die from this disease in the U.S. About 1% of sexually active adults in the U.S. have visible genital warts at any point in time.

Question: My provider wants to give the vaccine to my 11 year old — why start so young?

There are a few reasons — since there is so much of the virus around, you can give/get it from skin-to-skin contact, kissing, touching, as well as intercourse. But having sex is not the only way, and once you have been infected, the vaccine does not work (against that strain – it may work against others). HPV vaccination is recommended for 11 and 12-year-old girls. It is also recommended for girls and women ages 13 through 26 who have not yet been vaccinated or completed the vaccine series. The vaccine can also be given to girls beginning at age 9. The CDC recommends that 11 to 12 year olds get two doses of the HPV vaccine to protect against cancers caused by HPV.

Question: Are there other reasons to start this young?

When you are young your body responds better to the vaccine; you only need two shots to get the same response that requires three shots after you are 14. And it is best to get the complete series of shots before you start with any dating intimacy (kissing, touching, etc). Girls can start as early as 9 years old to get the immunizations. Most everyone prefers two shots to three! The dose is the same at any age.

All kids who are 11 or 12 years old should get two shots of the HPV vaccine six to 12 months apart. Adolescents who receive their two shots less than five months apart will require a third dose.

Interview #2: Disparities and Myths Regarding Human Papillomavirus - HPV

Pamela J. Murray, MD, MPH
Vice-Chair, Department of Pediatrics/Adolescent Medicine, Professor & Chief, Section of Adolescent Medicine, West Virginia University

Dr. Murray presented information regarding HPV prevention and the importance of vaccinating to reduce the risk at the Highmark Foundation’s HPV Forum held on December 4, 2017 in Charleston, WV.
Question: Can adults get this vaccine?
It is approved for women up to 26 years and men up to 21 years. The HPV vaccine is not effective if you have already been infected with HPV.

Question: I don’t want cancer — is there a way to prevent cancer?
We have been preventing liver cancer by immunizing people against hepatitis B virus (HBV) for about 40 years. Many cases of liver cancer occur after hepatitis B infections. By treating mothers, babies, health care workers, and high risk individuals, and now, everyone, we have much less liver cancer — which was frequently fatal.
Now we can prevent many HPV-associated cancers by immunizing against it. There are several HPV vaccines. The one most available in the U.S. protects against nine types of HPV. Two prevent genital warts (not cancerous, not desirable); the other seven prevent infection with HPV types associated with cancer.

Question: If your teen hasn’t gotten the HPV vaccine yet, talk to their doctor about getting it as soon as possible.
HPV vaccine is recommended for young women through age 26, and young men through age 21. The HPV vaccine is also recommended for the following people, if they did not get vaccinated when they were younger:

• Young men who have sex with men, including young men who identify as gay or bisexual or who intend to have sex with men through age 26
• Young adults who are transgender through age 26
• Young adults with certain immunocompromising conditions (including HIV) through age 26

Question: Lots of parents ask if it is ok to wait until their teenager is older.
There is no benefit to waiting longer. You need three shots instead of two. You may have been infected by some of the strains (by any intimate activity) and then the vaccine is less helpful. Younger children may be more likely to show up for their appointments, and older adolescents may be less likely to complete their series, once they begin. There are many teens and young adults who have started, but not completed the series. They will not be protected.

Ideally females should get the vaccine before they become sexually active and exposed to HPV. Females who are sexually active may also benefit from the vaccination, but they may get less benefit because they may have already been exposed to one or more of the HPV types targeted by the vaccines. However, few sexually active young women are infected with all HPV types prevented by the vaccines, so most young women could still get protection by getting vaccinated.

Teen boys and girls who did not start or finish the HPV vaccine series when they were younger should get it now. If your teen hasn’t gotten the HPV vaccine yet, talk to their doctor about getting it as soon as possible.

HPV vaccine is recommended for women up to 26 years and men up to 21 years. The HPV vaccine is also recommended for people with men through age 26.

If your teen hasn’t gotten the vaccine yet, talk to their doctor about getting it as soon as possible.

Young adults who are transgender through age 26
Young adults with certain immunocompromising conditions (including HIV) through age 26

Interview #3: Technological Approaches to Cancer: Using Robotics
Richard S. Chang, MD
Chief, Section of Thoracic Surgery
Heart Institute, Cardiothoracic Surgery, Lehigh Valley Health Network

Question: Can adults get this vaccine?
It is approved for women up to 26 years and men up to 21 years. The HPV vaccine is not effective if you have already been infected with HPV.

Question: I don’t want cancer — is there a way to prevent cancer?
We have been preventing liver cancer by immunizing people against hepatitis B virus (HBV) for about 40 years. Many cases of liver cancer occur after hepatitis B infections. By treating mothers, babies, health care workers, and high-risk individuals, and now, everyone, we have much less liver cancer — which was frequently fatal.

Now we can prevent many HPV-associated cancers by immunizing against it. There are several HPV vaccines. The one most available in the U.S. protects against nine types of HPV. Two prevent genital warts (not cancerous, not desirable); the other seven prevent infection with HPV types associated with cancer.

Question: Lots of parents ask if it is ok to wait until their teenager is older.
There is no benefit to waiting longer. You need three shots instead of two. You may have been infected by some of the strains (by any intimate activity) and then the vaccine is less helpful. Younger children may be more likely to show up for their appointments, and older adolescents may be less likely to complete their series, once they begin. There are many teens and young adults who have started, but not completed the series. They will not be protected.

Ideally females should get the vaccine before they become sexually active and exposed to HPV. Females who are sexually active may also benefit from the vaccination, but they may get less benefit because they may have already been exposed to one or more of the HPV types targeted by the vaccines. However, few sexually active young women are infected with all HPV types prevented by the vaccines, so most young women could still get protection by getting vaccinated.

Teen boys and girls who did not start or finish the HPV vaccine series when they were younger should get it now. If your teen hasn’t gotten the HPV vaccine yet, talk to their doctor about getting it as soon as possible.

HPV vaccine is recommended for young women through age 26, and young men through age 21. The HPV vaccine is also recommended for the following people, if they did not get vaccinated when they were younger:

• Young men who have sex with men, including young men who identify as gay or bisexual or who intend to have sex with men through age 26
• Young adults who are transgender through age 26
• Young adults with certain immunocompromising conditions (including HIV) through age 26

Question: How did I get lung cancer?
I never even smoked before.

Lung cancer can develop in anyone. It is when normal cells that regenerate become unregulated and become invasive. Although not completely understood, lung cancer is caused by many different factors. These include genetic predisposition, age, and environmental factors such as smoking, asbestos exposures, radon gas, and others. You don’t have to be a smoker to get lung cancer but if you do, it does increase the risk. In fact, the fastest growing population that is developing lung cancer is younger non-smokers that do not have any apparent risk factors.

Question: How is lung cancer treated?
I heard it is incurable.

Certainly, while lung cancer ranks as the number one cause of cancer death in the U.S., cancer treatment has changed dramatically over the past few years, and we have made great strides in controlling and curing this deadly disease. Treating lung cancer depends on stage, genetic markers such as EGFR, ALK, and ROS-1, and newer markers such as PD-1 inhibitors for immunotherapy.

In general, stage I is the earliest stage and best treated by surgery or lobectomy of the lung. Stage II, is treated with lobectomy and chemotherapy. In stage III, which is more locally-advanced cancer, treatment may involve surgery, chemotherapy, and radiation therapy, or just chemo and radiation therapy. In stage IV, which is more widely spread cancer, while chemotherapy is still the mainstay of therapy, immunotherapy has made dramatic inroads in the quest for a cure in these late stage cancers. We also test for genetic markers that allow us to use biological therapy, which is very well tolerated.

Treatment is changing rapidly and the treatment today is very different from even just two to three years ago.

Question: How do you stage lung cancer? What does it entail?
Staging lung cancer entails both radiographic as well as pathological methods. Radiographically, an MRI of the brain, CT scan of the chest, and PET-CT scan of the body are obtained. A PET-CT scan looks for any area of metabolic activity that is suggestive of a spread of cancer. An MRI of the brain looks for any spread of cancer to the brain. After these are obtained, if there is any abnormal activity in the lymph nodes or other parts of the body, we use specialized techniques to obtain tissue to confirm spread. Traditionally, a mediastinoscopy is performed to biopsy the lymph nodes in the chest, which is a surgical procedure. Today, newer, less invasive techniques to pathologically stage a cancer include endoscopic techniques such as navigational bronchoscopy, endoscopic bronchial ultrasound, and endoscopic esophageal ultrasound. This offers a more complete picture without the risks of surgery.

Question: What happens if I am an early stage cancer but my doctor says I am not a candidate for surgery?
First of all you should ask why, and if it is not clear then you should obtain a second opinion. Presumably, you may not be a candidate for surgery because of poor lung or heart function. If this is the case, you will be a candidate for SBRT or stereotactic body radiation therapy. Commonly used terms are Truebeam, Trilogy, and Cyberknife therapies. They all focus high energy beams to the cancer cells without destroying any surrounding healthy lung tissue. Early studies show great promise in obtaining similar cure rates to that of surgery.

Question: If I am a candidate for surgery, I heard it is with a large chest incision and very painful? I also heard that some people have it done robotically? Is this an option?
Traditionally, a lobectomy, which is the detachment of that part of the lung from the heart, involves a thoracotomy. This involves a large incision in the back, cutting through the large back muscle called the latissimus dorsi and spreading the ribs wide open. It is the standard operation which offers the best chance for a cure. More recently, video-assisted thoracic surgery or VATS has offered advantages over open with smaller incisions and quicker recovery. Robotic thoracic surgery is an evolution over VATS surgery with even smaller incisions, better precision, and quicker recovery. It is approved by the FDA for early stage cancer but if you do, it does increase the risk. In fact, the fastest growing population that is developing lung cancer is younger non-smokers that do not have any apparent risk factors.
and visualization. No muscles are cut and the ribs are not spread, therefore the pain is generally significantly less with a quicker return to full function since the muscles do not have to heal. Minimally-invasive robotic thoracic surgery is slowly becoming the new standard of care and will soon be widespread, but is presently only offered in very specialized centers.

**Question:** What are some of the new technological advances in cancer care and treatment?

Expertise in advanced comprehensive head and neck surgical oncology includes minimally invasive robotic surgery as well as microvascular reconstruction. To help reduce pain and boost recovery time, surgeons can offer minimally-invasive robotic esophagectomies using the daVinci® Si HD Surgical System. This technology lets surgeons perform the complicated procedure with unmatched precision using a robotic arm and camera inserted through tiny incisions. There is less pain and patients get back to normal quicker.

**Question:** What is the advantage of using robotics during surgery?

Each robotic system offers high-definition 3-D views of the surgery site coupled with precise instrument control. Using this tool, surgeons can perform complex and delicate surgeries such as gynecologic and fertility sparing surgery, urologic, thoracic, and colon-rectal.

**Question:** What does robotic surgery involve?

Robotic surgery usually involves three to five small incisions. For some conditions, daVinci® Single Site® Surgery is offered where the surgeon operates through a single incision of less than 1 inch long.

**Myth One:** “I don’t need a mammogram because there’s no history of cancer in my family.”

The reality is that only 8-15% of cancers are inherited, the rest are bad luck, so it’s important to have a periodic mammogram.

**Myth Two:** “Pap smears cause infections.”

There is no evidence that Pap smears cause infections. A Pap smear takes a sample of the cells on your cervix using a soft brush.

**Myth Three:** “If you have ANY pelvic exam, you are getting a Pap smear test.”

We hear, “the emergency room did my Pap smear (Pap) already.” There are many reasons to have a pelvic exam. A Pap test is a screening tool to check for cervical cell changes. This test is not typically done in the emergency room but is usually part of a preventive health exam.

**Myth Four:** “You must have a palpable lump to have breast cancer.”

All lumps are not cancer and all cancer does not cause a lump. Mammograms can detect breast cancer without a palpable lump. Lumps can also be benign cysts or fibroadenomas, which are not cancerous.

**Myth Five:** “You don’t need a mammogram if the provider doesn’t feel a breast lump.”

Mammograms can detect breast cancer even without a palpable lump.

**Myth Six:** “Cervical cancer is genetic.”

Cervical cancer is caused by high-risk strains of a virus called Human Papillomavirus (HPV), which is common in men and women. You can contract HPV by having sex with someone who has a high-risk HPV type.

**Myth Seven:** “All abnormal Paps mean you have cervical cancer.”

Paps are meant to detect early cell changes so they can be treated prior to developing cervical cancer. The majority of abnormal Paps are not cancer.

**Myth Eight:** “If you have a hysterectomy, all of your female parts are gone.”

A hysterectomy typically involves removing the uterus. The ovaries may or may not be removed during the surgery. Often times, the ovaries remain to produce hormones through menopause and prevent osteoporosis from estrogen withdrawal.

---

**Focus On Women’s Health**

**Interview #4: Common Myths about Cancer Disease in Women**

**B.J. Leber**

Executive Director

Adagio Health, Pittsburgh, PA

---

**Myth Four:** “You must have a palpable lump to have breast cancer.”

All lumps are not cancer and all cancer does not cause a lump. Mammograms can detect breast cancer without a palpable lump. Lumps can also be benign cysts or fibroadenomas, which are not cancerous.

**Myth Five:** “You don’t need a mammogram if the provider doesn’t feel a breast lump.”

Mammograms can detect breast cancer even without a palpable lump.

**Myth Six:** “Cervical cancer is genetic.”

Cervical cancer is caused by high-risk strains of a virus called Human Papillomavirus (HPV), which is common in men and women. You can contract HPV by having sex with someone who has a high-risk HPV type.

**Myth Seven:** “All abnormal Paps mean you have cervical cancer.”

Paps are meant to detect early cell changes so they can be treated prior to developing cervical cancer. The majority of abnormal Paps are not cancer.

**Myth Eight:** “If you have a hysterectomy, all of your female parts are gone.”

A hysterectomy typically involves removing the uterus. The ovaries may or may not be removed during the surgery. Often times, the ovaries remain to produce hormones through menopause and prevent osteoporosis from estrogen withdrawal.
Myth Nine: “If it happened to your friend, it will happen to everyone.”
Everyone is different and should seek medical treatment and advice from a professional. They can help you identify not only what could happen, but also how likely it is to happen, so you can weigh risks and benefits.

Myth Ten: “Dr. Google and WebMD are always right.”
There is a lot of good information available on the internet, however this information can be easily misinterpreted. It is best to rely on your medical provider to interpret the information. Adagiohealth.org has a resources page and medically-accurate information.

Myth Eleven: “Pap smears test for all gynecological cancers including uterine, ovarian, and cervical.”
Although these types of cancers are sometimes interrelated, the Pap test is only for cervical cancer.

Interview #5: Pittsburgh Post-Gazette/Highmark Foundation Women’s Health Forum: A Healthier You at Every Age

This discussion brings leading health care experts together to talk to the community about women’s health care needs. The topics discussed included chronic disease, reproductive health, hormones, nutrition, mental health, and aging well.

Question: What is the biggest challenge in women’s health right now?
The biggest challenge in women’s health is coordinating care. Women need to work in partnership with their doctors by finding out their family medical history, educating themselves on health issues, and paying attention to their bodies. These challenges include:

• Achieving individual wellness on your own and helping patients achieve individual wellness.
• Funding and research to close the gaps in unanswered questions in women’s health - men are most often subjects of medical students.
• Publishing findings in medical journals, which are not easily accessible to individuals.
• Lack of trust in traditional medicine which leads to a search for wellness in alternative sources, sometimes dangerous and costly alternatives.

Question: How can you alleviate the shame/stigma associated with women’s health?
Researchers believe that the psychological distress associated with internalized stigma and especially isolation leads to an increase in physical health symptoms. Shame and stigma predict worse health and health outcomes for women. As a result, physicians and women patients can:

• Normalize the conversation about certain health topics or break the ice with questionnaires.
• Use electronic health records and standardized questions to manage patient care.
• Help women understand how much is lost when questions are not asked.
Question: What can we do as community members to assure women’s health needs are being recognized in today’s political climate?

Women around the world are still largely absent from national and local decision-making bodies, and face countless challenges to participation in the civic and political life. Women are also often excluded from health care legislation on local and national levels. A goal is to advance and improve women’s health and eliminate barriers by:

- Investing in women’s health care to improve health outcomes, failing to invest is costly.
- Strengthening policies. Think about where the policies that are in place address the needs of women and where they fall short. After all, women are the care givers in our society.
- Through philanthropy, donating to women’s health issues and giving financially to continue to building the capacity to serve more women, including teens and young adults.

Question: Why is maternal morbidity and mortality on the rise?

Every day, approximately 830 women die from preventable causes related to pregnancy and childbirth. We are learning a lot more about the factors that contribute to maternal mortality and morbidity. These deaths can be prevented if we invest in a few key safe and affordable health services and best practices. Maternal mortality can be reduced by:

- Misdiagnosis in pregnancy is a problem, however, correct diagnosis would reduce complications.
- Be systematic in providing preventative care to women when they are not pregnant to ensure that when they do become pregnant, the result is a healthy pregnancy.
- To improve maternal health, identify and address barriers that limit access to quality maternal health services at all levels of the health system.

Women’s Health Grants

Women’s health is an uncoordinated system with gaps in care. As a thought leader, the Highmark Foundation’s efforts to address women’s health resulted in significant opportunities to focus on issues impacting women. These efforts are critical as they heighten awareness and provide access to new programming and services created especially for women.

Following are other grants and sponsorships that were awarded to support women’s health. The Foundation funding supported opportunities to discuss disparities in women’s health, and educate health care professionals and the general public through forums, conferences, and symposia. Approximately $300,000 was awarded for women’s health services in 2017.

Healthy Start: Cheryl Squire Flint Cultural Sensitivity Symposium entitled, This Woman’s Work: Exploring Maternal Mortality and Morbidity. The goal of the symposium was to promote education and awareness, and focused on women’s health to health care professionals, social workers, policy makers, and the general public.

Adagio Health: Transforming Women’s Health Symposium featured former U.S. Senator, Barbara Boxer. The symposium was designed to increase understanding of current issues affecting women’s health throughout the lifespan, and addressed topics such as the environment and women’s health, health care advocacy, policy making, reproductive health, breast and cervical cancer, and nutrition.

Allegheny Health Network/St. Vincent Women’s Health Forum: Included a morning professional development session for health care providers that featured presentations by clinicians on genetics and cancer, perinatal depression and obstetric trauma, and urogynecology. The public session offered massages, and vascular, dermatology, blood pressure, dietary, and bone density health screenings.

Other Notable Women’s Health Grants

Cabell Huntington Hospital Foundation: To support the MOMS (Maternal Opiate Medical Support) Program, this comprehensive integrated care and treatment model serves pregnant women in West Virginia struggling with intravenous drug use and caring for their babies.

Maternal and Family Health Services, Inc.: Expands service delivery of intensive case management services to high-risk clients using a licensed clinical social worker at Circle of Care Family Health Center in northeastern Pennsylvania.
Grant Listing

Chronic Disease

Allegheny Health Network, Lupus Center of Excellence $90,000
To support a coordinated approach to reaching and caring for underserved and underrepresented patients with lupus in the Pittsburgh region.

Allegheny Health Network, Prehospital Services $50,000
To support the Healthy Lifestyle Health and Wellness Program for emergency medical services (EMS) providers.

American Heart Association $92,000
To support Check. Change. Control: a community-based blood pressure management program.

Bluefield State College Research and Development Corporation $92,000
To support the implementation of the West Virginia Tri-county Diabetes Management and Prevention program, a comprehensive community-based diabetes awareness and prevention programming for African-American and under-served populations in Mercer, McDowell, and Raleigh counties.

Diakon Child Family & Community Ministries $109,900
To support the expansion of Diakon’s diabetes and chronic disease self-management programs by implementing the evidenced-based Stanford Chronic Disease Self-Management Program (CDSMP) and Diabetes Self-Management Program (DSMP).

Hamilton Health Center, Inc. $125,000
To support an RN patient educator and supportive health programming in Perry County.

Healthy Start, Inc. $65,000
A planning grant to support development of the Comprehensive Women’s Health Program Partnership.

Lancaster Family YMCA $73,400
To support the implementation of the CDC’s nationally-recognized Diabetes Prevention Program which will increase weight loss and increase physical activity in prediabetic adults.

Lebanon Valley Volunteers in Medicine $50,000
To build capacity and expand services by increasing the hours of the current part-time CRNP and part-time medical assistant position.

Lehigh Valley Health Network $100,000
To support the development of a Head and Neck Multidisciplinary Clinic and certified nurse navigator position.

Sheep Inc. Health Care Center $20,000
To support chronic disease management and prevention programming to reduce the incidence and prevalence of diabetes.

Family Health

Cabell Huntington Hospital Foundation $75,000
To support the MOMS (Maternal Opiate Medical Support) Program.

Central Susquehanna Intermediate Unit $200,000
To continue the Highmark Foundation’s bullying prevention strategies in Pennsylvania, and support schools and community systems by strengthening informed and collaborative practices.

Service Delivery Systems

Cabell Wayne Association of the Blind and Visually Impaired $10,000
To support no-cost vision examinations and eyeglasses for underserved blind and visually-impaired residents of southern West Virginia.

Center for Health Promotion and Disease Prevention (CHPDP) $200,000
To implement effective statewide bullying prevention strategies that support parents, students, and schools.

Charleston Area Medical Center Education and Research Institute, Inc. $55,000
To support the Southern Obesity Summit in West Virginia.

Mt. Ararat Community Activity Center $135,000
To support Kids on the G.R.O.W. (Gaining Rewards for Overall Wellness).

Northside Leadership Conference Inc. $100,000
To support the pilot of Northside Health Angels, a model for community health navigation and support.

North Huntington EMS/Rescue $50,000
To support the Community Paramedicine Initiative.

Operation Better Block, Inc. $100,000
To support Operation Better Block Homewood Health Initiative: A multifaceted approach to improving health and community outcomes.

Pennsylvania District Attorneys Institute $50,000
To support the Pennsylvania Department of Drug and Alcohol Programs (DDAP) effort to establish a naloxone administration program to assist municipal police departments in western Pennsylvania, reducing the incidence of opioid drug overdoses by purchasing naloxone kits.

Primary Care Health Services, Inc. $40,000
To support the expansion of eye care services at Alina Illery Medical Center.

Total $2,304,700

In Touch and Concerned, Inc. $2,400
To support basic CPR and first-aid training for transportation personnel.

Jewish Healthcare Foundation of Pittsburgh $25,000
To support health literacy efforts for marketplace consumers and assist with navigating the health system.

Maternal and Family Health Services, Inc. $115,000
To expand service delivery of intensive case management services to target populations through a full-time Licensed Clinical Social Worker.

Operation Better Block, Inc. $100,000
To support Operation Better Block Homewood Health Initiative: A multifaceted approach to improving health and community outcomes.

Pennsylvania District Attorneys Institute $50,000
To support the Pennsylvania Department of Drug and Alcohol Programs (DDAP) effort to establish a naloxone administration program to assist municipal police departments in western Pennsylvania, reducing the incidence of opioid drug overdoses by purchasing naloxone kits.

Primary Care Health Services, Inc. $40,000
To support the expansion of eye care services at Alina Illery Medical Center.

Total $2,304,700
### Healthy School Environment Grant Listing

School grants are awarded to schools in Pennsylvania and West Virginia to implement programs that improve access to quality school-based health and wellness programs in four areas: bullying prevention, child injury prevention, environmental health, and healthy eating and physical activity.

#### Bullying Prevention

<table>
<thead>
<tr>
<th>School Name</th>
<th>Program</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Elementary School</td>
<td>Bullying Prevention</td>
<td>$7,500</td>
</tr>
<tr>
<td>Clendenin Elementary School</td>
<td>New PATHS Forward</td>
<td>$5,000</td>
</tr>
<tr>
<td>Foster Elementary School</td>
<td>Olweus Reboot</td>
<td>$1,667</td>
</tr>
<tr>
<td>Hoover Elementary School</td>
<td>Olweus Reboot</td>
<td>$1,667</td>
</tr>
<tr>
<td>Howe Elementary School</td>
<td>Olweus Reboot</td>
<td>$1,667</td>
</tr>
<tr>
<td>Jefferson Elementary School</td>
<td>Olweus Reboot</td>
<td>$1,667</td>
</tr>
</tbody>
</table>

#### Environmental Health

<table>
<thead>
<tr>
<th>School Name</th>
<th>Program</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blairsville Middle/High School</td>
<td>Life Skills Support</td>
<td>$7,500</td>
</tr>
<tr>
<td>Clarion-Limestone Elementary School</td>
<td>Wellness Program</td>
<td>$4,235</td>
</tr>
<tr>
<td>Ritchie County Middle/High School</td>
<td>Waste Reduction: Refilling Station</td>
<td>$1,800</td>
</tr>
<tr>
<td>St. Joseph School</td>
<td>School Garden Program</td>
<td>$5,000</td>
</tr>
<tr>
<td>St. Michael Parish School</td>
<td>Waste Reduction: Going Green</td>
<td>$5,000</td>
</tr>
</tbody>
</table>

#### Healthy Eating and Physical Activity

<table>
<thead>
<tr>
<th>School Name</th>
<th>Program</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACLD Tillotson School</td>
<td>$7,500</td>
<td></td>
</tr>
<tr>
<td>Allegheny Intermediate Unit</td>
<td>The Pathfinder School</td>
<td>$865</td>
</tr>
<tr>
<td>Apollo-Ridge High School</td>
<td>Choice-Based Functional Fitness</td>
<td>$7,393</td>
</tr>
<tr>
<td>Apollo-Ridge Middle School</td>
<td>Functional Fitness Foundations</td>
<td>$7,327</td>
</tr>
<tr>
<td>Blackhawk High School</td>
<td>Cougar Cross Fit</td>
<td>$7,462</td>
</tr>
<tr>
<td>Blue Ridge Middle School/High School</td>
<td>SPARK Physical Education MS/HS</td>
<td>$7,500</td>
</tr>
<tr>
<td>Bridge Street Middle School</td>
<td>Water is KEY</td>
<td>$3,380</td>
</tr>
<tr>
<td>Butler Area Intermediate High School</td>
<td>Personalized Fitness Program</td>
<td>$7,385</td>
</tr>
<tr>
<td>Butler Area Senior High School</td>
<td>Personalized Fitness Pathways</td>
<td>$7,349</td>
</tr>
<tr>
<td>Central Elementary School</td>
<td>5-2-1-0 Warriors</td>
<td>$6,327</td>
</tr>
</tbody>
</table>
Manchester Academic Charter School  
MACS Educational Garden  
$3,500

McCuggey School District  
Room to GROW  
$7,268

Mill Hall Elementary School  
Wealth of Health Program  
$7,122

Mon Valley School  
Mon Valley on the Move  
$7,400

Montrose Elementary School  
Montrose Mustangs Make Fitness Fun  
$4,000

Moundsville Middle School  
Health and Physical Education Program  
$4,600

Norwin High School  
From Land to Table  
$6,756

Oblock Junior High School District  
Students on Target: Healthy Bodies, Healthy Hearts  
$4,500

Peebles Elementary School  
Health & Physical Education  
$7,500

Pittsburgh Montessori PK-5  
Montessori Pedal Power  
$5,000

Resica Elementary School  
Resica F.I.T (Families in Training)  
$5,950

Sharpsville Area Middle School  
Health and Fitness Project for SMS, Putting a Stop to Obesity  
$7,500

South Buffalo Elementary School  
More Meaningful Movement!  
$5,302

South Fayette Middle School  
F.I.T.S. Project (Fitness Improved Through Swimming)  
$6,200

St. Vincent de Paul Parish School  
Tools for Living a Healthy Lifestyle  
$5,000

Thaddeus Stevens Elementary School  
Harvesting Healthy Habits  
$6,000

Universal Academy of Pittsburgh  
Universal Academy of Pittsburgh Healthy Bodies and Healthy Minds  
$4,300

Urban Pathways Elementary School  
Urban Pathways Proactive Day Starter Smoothie Program  
$5,000

Weirton Madonna Middle School  
Madonna Gets Movin’!  
$5,000

West High School  
West High School Physical Activity Program  
$7,000

Total  
$401,893  
(Total also includes school nurse and supportive services grants.)

Grant Discount Amortization and Canceled Grants  
- $65,203

Total Grants  
$2,641,390

Grant Discount Amortization  
and Canceled Grants  
- $65,203

Total Educational Support  
$259,919

2017 Educational Support

Adagio Health  
Title sponsor of the Transforming Women’s Health Symposium  
$25,000

Allegheny Health Network  
To support St. Vincent Hospital’s Women’s Health Forum  
$25,000

Lehigh Valley Health Network  
To support the 2017 Lehigh Valley Health Network Lung Cancer Forum  
$10,000

National Association for County and City Health Officials (NACCHO)  
Sponsorship of an educational learning session during NACCHO’s annual conference held in Pittsburgh from July 11-13, 2017  
$3,500

Pittsburgh Post-Gazette/PG Charities  
Presenting sponsor of the 2017 Pittsburgh Post-Gazette Health Care Forum Series  
$180,000

Other  
Forums to educate the public on women’s health, cancer, social determinants of health, and HPV  
$16,419

Total Educational Support  
$259,919

2016 Contracts

AOF Group, Inc.  
$20,886

Cosmitto  
$13,875

Total Contracts  
$34,761

2017 Foundation Funding:  
$2,936,070
2017 Publications

In the News

January
More Erie County officers to be equipped with overdose drug: Erie Times-News
‘LIVESTRONG at the YMCA’ program continues with $16,600 grant from Highmark Foundation: Times-Observer
York health bureau grant to cut paper medical records: WFMZ-TV (York, Pa.)
Berks Visiting Nurse Association Wellness Events: Berks-Mont News
Highmark Foundation accepts applications for ‘Creating a Healthy School Environment’ grant program: Citizens’ Voice
Highmark Foundation Accepting Applications for Creating a Healthy School Environment Grant and Awards Program: West Virginia Executive Magazine

February
Highmark Foundation now accepting applications for grants: The Herald-Dispatch (Huntington, WV.)
Highmark accepting applications for grants: News Sentinel (Parkersburg, WV.)
Allegheny Health Network trying to improve the fitness of EMS providers: Daily American
School grant applications invited: The Lincoln News Sentinel (Hamlin, WV.)
Grants available for school programs: The Martinsburg Journal (Martinsburg, WV.)
Students ‘love’ Towanda School District’s new anti-bullying lessons: The Daily Review

March
Highmark Foundation Now Accepting Applications for Grant Program: The Montgomery Herald
Our view: Cool gym devices combat serious health problem: Erie Times-News
Highmark Foundation Now Accepting Nominations for Advancing Excellence in School Nursing Awards: West Virginia Executive Magazine
Novel Program Provides After-hospital Care for Homeless: Pittsburgh Post-Gazette
Patients at Wheeling Health Right’s Dental Clinic See Health Improve: The Intelligencer / Wheeling News-Register

April
School District of Lancaster’s swimming program gives students with disabilities the chance to learn new skills in the pool: Lancasteronline.com
Bethlehem Health Bureau receives national accreditation: The Morning Call
Mention: Highmark Foundation
Patients at Wheeling Health Right’s Dental Clinic See Health Improve: The Intelligencer / Wheeling News-Register
Business Briefcase, April 9, 2017: Scranton Times-Tribune
Beckley Health Right set to open dental facility in July: The Register-Herald
Highmark Foundation grants nearly $3 million: Pittsburgh Post-Gazette
Highmark report details funding: Standard Speaker
Bullying prevention program receives honors: WHTM-TV

May
Children’s Hospital presents Community Champion Award to Highmark Foundation: Penn State News
Highmark Foundation honored for bullying prevention program: The Sentinel
Highmark Foundation Releases 2016 Annual Giving Report: West Virginia Executive Magazine
Patients flocking to Erie dental clinic: Erie Times-News
Upshur County school nurse earns Spirit award: The Inter-Mountain
Norwin students get moving in kinesthetic classroom: Pittsburgh Tribune-Review
Funds to Improve Health: The Rural Monitor

June
Charleroi School District nurse recognized for service: NorthCentralPA.com
Highmark Foundation honored for bullying prevention program: The Intelligencer / Wheeling News-Register
Highmark Foundation: The Rural Monitor
Charleroi School District nurse recognized for service: NorthCentralPA.com
Highmark Foundation honored for bullying prevention program: The Sentinel

July
Girard school fitness program earns grant: Erie Times-News

September
Grant Brings Smiles to Local Dental Clinics: CBS 59 (Beckley, W. Va.)
Down On The Farm With Susquehanna Waldorf School: Town Lively
ALU schools embrace wellness: Newsbug.info

October
Cabrall-Wayne Association of the Blind receives grant: The Herald-Dispatch (Huntington, WV.)

November
Vintage Gold PROM Gala presented by Allen Place Community Center: Pittsburgh Courier

December
Highmark Foundation hosts educational seminar on HPV Vaccinations: WTAP-TV (Parkersburg, W. Va.)
Highmark Foundation gives $20,000 boost to free clinic in Monroeville: Pittsburgh Tribune-Review

2017 Highmark Foundation Giving Report