



2019 ANNUAL REPORT

Table of Contents

2	Cancer Liaison Physician Report	25	Cancer Committee
4	CoC's Five Elements of Success	26	Community Outreach Activity Report
5	Clinical & Programmatic Goals	45	Marketing Campaign
6	Studies & Improvements	52	Palliative Care
8	Physicians/Providers	55	Cases Diagnosed
11	Nurse Navigation	56	Site Distribution Data Illustration
14	Patient Story	57	National Comparison of Top Cancer Sites
16	CP ³ R Report	58	Site of Focus: Breast Cancer
18	Cancer Registry Report	71	Additional Cancer Statistics
22	Financial Assistance		



Commitment to Community

It is with great pleasure that we present the 2019 Holzer Health System Annual Report of cancer activities and programs. This report includes a summary of the advancements accomplished from all entities of the cancer center.

Since 1937, Holzer has been accredited with the Commission on Cancer (CoC), a quality program of the American College of Surgeons,

the only national accreditation program that recognizes cancer centers for their commitment to providing comprehensive, high-quality, and multidisciplinary patient-centered care. This accreditation ensures that our cancer program provides comprehensive care from a knowledgeable, committed staff with superior services and state-of-the-art technology.

ACoS-CoC Cancer Liaison Physician



Alice Dachowski MD, FACS

General Surgery

Holzer's successful CoC accreditation is possible through the Holzer Cancer Committee, a diverse group of highly trained physicians and staff dedicated to continually improving our cancer program.

We are very pleased to announce another successful Commission on Cancer Accreditation Survey this year, with an accreditation status for 3 years. A total of four commendation standards were recognized. These four commendation standards included Clinical Research Accrual reporting, Public Reporting of Outcomes, Rapid Quality Reporting System Participation, and Data Submission/Accuracy of Data.

Throughout 2019, the staff of the cancer center made noteworthy accomplishments toward improving the health and wellness of our community.



We look forward to the future as Holzer Center for Cancer Care continues to focus on proficiency, compassion, and program development. Friendly Visits, Excellent Care; Every Patient, Every Time.

2019 Accomplishments

- ✔ Community cancer screenings
- ✔ Enhancing quality care and refining processes to improve our patients' experience
- ✔ Striving to increase clinical research
- ✔ Survivorship support group to focus on enduring the well-being of survivors and their families
- ✔ Providing palliative care to patients
- ✔ Providing educational opportunities to physicians

The Holzer Center for Cancer Care's commitment to improving care models the CoC's five elements of success.



1

The clinical services provide state-of-the-art pretreatment evaluation, staging, treatment, and clinical follow-up for cancer patients seen at the facility for primary, secondary, tertiary, or end-of-life care.

2

The cancer committee leads the program through setting goals, monitoring activity, evaluating patient outcomes, and improving care.

3

The cancer conferences provide a forum for patient consultation and contribute to physician education.

4

The cancer committee leads the program through setting goals, monitoring activity, evaluating patient outcomes, and improving care.

5

The cancer committee leads the program through setting goals, monitoring activity, evaluating patient outcomes, and improving care.

GOALS »

Specific clinical and programmatic goals were established by the Cancer Committee in order to improve our cancer program.

2019 Clinical Goal

(Specific) Improve provider recruitment to provide additional oncology providers to increase access and enhance care to cancer patients in 2019.

(Measurable) Identify projected increase that would occur with new hires.

(Achievable) Collaboration with physician recruitment department and provider relations.

(Relevant) This will offer variety of locations within Holzer Health System to keep patients within the system.

(Time-Based) Projected completion date: end of 2019.

2019 Programmatic Goal

(Specific) Implementation of a case management program to improve the delivery of comprehensive holistic care to cancer patients from diagnosis through survivorship.

(Measurable) Numerically measure increase in patient visits.

(Achievable) Administrative approval; Budget for increase in staff as well as budget for on-call pay.

(Relevant) This will provide continued quality care/support and keep migration in.

(Time-Based) Projected completion date: end of 2019.

1

HPV vaccination status in relation to head and neck cancer.

Due to the increase in head and neck cancer, these cases were studied and reviewed to identify common factors among the patients. Distinguishing common denominators will assist primary care physicians to increase prevention for head and neck cancer patients.

Recommendations for Improvement

- Increase Tobacco and Alcohol counseling, education and cessation intervention/referral.
- Improve documentation regarding oral care and other risk factors
- Education Primary Care on risk factors, documentation of assessment and risk factors (including sexual history and high risk behaviors) education/counseling, referrals where appropriate, and HPV vaccination
- Continue to have community-based free head and neck screenings
- Monitor HPV vaccination rates

2

Advanced (Stage IV) Lung Cancer at Diagnosis.

Due to the majority of lung cancer patients being Stage IV at diagnosis, these cases were studied and reviewed to identify risk factors to raise awareness for earlier lung cancer screening.

Recommendations for Improvement

- Increase Tobacco and Alcohol counseling, education and cessation intervention/referral.
- Improve documentation regarding risk factors, especially environmental
- Educate Primary Care Providers on risk factors, documentation of assessment and risk factors, and use of the Electronic Medical Record
- Improve specific tobacco documentation for better identification of possible candidates for Low-Dose CT Screening
- Monitor tobacco cessation intervention rates

Our oncologists treat all major adult cancers and hematological disorders. The Medical Oncologists are proficient in the delivery of routine intravenous chemotherapy and oral chemotherapies, as well as having extensive knowledge in immunotherapy, targeted therapies, and combined chemotherapy and radiation. Our radiation oncologist is competent in the delivery of stereotactic radiation surgery, and works closely with a dosimetrist and medical physicist in order to provide precise radiation therapy. All oncologists also refer qualifying patients for clinical trials to optimize care and treatments.



Divya Arora, MD | *Radiation Oncology*

MEDICAL EDUCATION

» University of South Florida College of Medicine, Morsani College of Medicine - Tampa, Florida

RESIDENCY

» *Radiation Oncology*: Baylor Scott and White, Texas A&M - Temple, Texas

BOARD CERTIFICATION

» American Board of Radiology, Radiation Oncology - Specialty



Khawaja Hamid, MD | *Hematology / Oncology*

MEDICAL EDUCATION

» Sind Medical College - Karachi, Pakistan

RESIDENCY

» St. Vincent's Medical Center - Bridgeport, Connecticut

» St. Elizabeth's Hospital - Utica, New York

FELLOWSHIP

» *Medical Oncology*: Providence Medical Center - Southfield, Michigan

BOARD CERTIFICATION

» American Board of Internal Medicine

» American Board of Medical Oncology

» American Board of Medical Specialties



Wendi Hanna, C-FNP | *Cancer Care*

MEDICAL EDUCATION

» Master of Science in Nursing: Kaplan University

BOARD CERTIFICATION

» American Nurses Credentialing Center



Alice Dachowski, MD | *General Surgery*

ACoS-CoC Cancer Liaison Physician

MEDICAL EDUCATION

» Washington University School of Medicine - St. Louis, Missouri

RESIDENCY

» University of Cincinnati Medical Center - Cincinnati, Ohio

INTERNSHIP

» University of Cincinnati Medical Center - Cincinnati, Ohio

BOARD CERTIFICATION

- » American Board of Surgery
- » National Board of Medical Examiners
- » American College of Surgeons



Subhash Khosla, MD | *Radiation Oncology*

MEDICAL EDUCATION

» Lady Hardinge Medical School, University of Delhi - New Delhi, India

RESIDENCY

» Grant Hospital, Rush Presbyterian, St. Luke Hospital - Chicago, Illinois

BOARD CERTIFICATION

» American Board of Radiology

Nurse Navigation



Patient navigators are trained, culturally sensitive healthcare workers who provide support and guidance throughout the cancer care continuum. They help people “navigate” through the maze of doctors’ offices, clinics, hospitals, outpatient centers, insurance and payment systems, patient-support organizations, and other components of the health care system. Services are designed to support timely delivery of quality standard cancer care and ensure that patients, survivors, and families are satisfied with their encounters with the cancer care system.

I Referrals

A. Provides Access to Resources and Assesses Patients' Current and Future Needs, and

Financial Referrals

- Makes referrals for services based on patient/family needs — education, finances, psychosocial, survivorship, transportation, child care, lodging.
- Assesses for and assists with patient/family resources.
- Facilitates access to physicians and services.
- Assists with education, including disease state and treatment.
- Assesses for and mitigates barriers to care.
- Assists patients with access concerns (for screening, diagnosis, or treatment) and assists with paperwork and addressing access barriers as indicated.
- Facilitates appropriate medical record availability at scheduled appointments as needed.
- Facilitates transportation, lodging, and/or child/elder care and addresses any other practical needs.
- Facilitates linkages to follow-up services.
- Facilitates access to clinical trials.
- Creates and reviews Survivorship Care Plan with patients.

B. Coordination of Patient Care (coordinating/facilitating appointments)

- Coordinates patient care from diagnosis through survivorship or palliative care/hospice.
- Assists with coordinating appointments.
- Meets with patient by phone or in person prior to, during, and after treatment.
- Facilitates timely coordination of services between diagnosis and treatment.
- Provides telephone triage services (e.g., symptom management, emotional support, education, resource referral) for patients/families
- Coordinates appointments for diagnostic testing, services, and with providers to ensure timely delivery of diagnostic and treatment services, providing clarification and literacy-level-appropriate education related to the visit.

II Collaboration

A. Develops Physician/Cancer Care Team Relationships

- Facilitates communication between cancer care disciplines.
- Communicates and collaborates with involved physicians and staff members to facilitate individualized, holistic patient care plan.
- Maintains communication with patients, survivors, families, and the health care providers to monitor patient satisfaction with the cancer care experience.
- Ensures that navigator functions are meeting physician expectations and that navigator activities remain within scope of defined role.

III Tracking & Documentation

A. Tracks Metrics, Quality Indicators; Documents Patient Interactions, Progression

- Ensure timely documentation of all patient interactions into navigation tracking and documentation system(s).
- Assists with tracking, documentation and outcome reporting for navigation services.
- Assists with ongoing navigation program assessment and identification of process improvement opportunities.
- Assists with annual CoC Standard 3.1 activities related to community needs assessment and resulting program modifications related to needs; assists with program reporting to the Cancer Committee.

IV Education

A. Provides Patient Education, Provides Symptom Management Support

- Discusses physician visits with patients and families and answer questions.
- Provides and reinforces education, treatment, care plan, symptom management and survivorship concerns.
- Empowers patients with education and knowledge to help improve patient outcomes and satisfaction.

B. Community Outreach

- Conducts health promotion and awareness programs in community as appropriate.
- Provides community education presentations as appropriate.



Mike Conkle Shares His Cancer Treatment Journey

“When you receive the news that you have cancer, you feel like your world is crumbling. To have this level of care here is amazing. We are so fortunate to have Holzer Center for Cancer Care and its wonderful team of care providers.”

“I am fortunate to have received such wonderful care at Holzer Center for Cancer Care,” shared Mike Conkle, recent Holzer patient.

In February 2019, Conkle was diagnosed with prostate cancer. His provider, Dr. Nicolette Jones, Holzer Urology, referred him to a specialist. He met with Dr. Divya Arora, Radiation Oncologist, Holzer Center for Cancer Care, to discuss treatment options. There he learned about Holzer’s TrueBeam system, the latest in non-invasive radiation treatment from Varian Medical Systems.

“Dr. Arora and her staff were very professional,” he shared. “I have no complaints. They took time for any questions, always asked how I was doing, and made me feel comfortable. I was treated like family and greeted every time with a smile. They were wonderful to me and my family. It means the world to me to feel this level of confidence in my healthcare providers.”

TrueBeam is a powerful cancer treatment that eliminates cancer cells with increased precision and accuracy while sparing healthy tissue. TrueBeam introduces new possibilities for the treatment of cancers in the lung, breast, prostate, brain, head and neck, and more. With enhanced delivery of radiation, TrueBeam can personalize each patient’s cancer treatment.

Best of all, this machine offers state-of-the-art Stereotactic Body Radiation (SBRT) and Radiosurgery (SRS) treatments, delivering pinpoint radiation. These treatments are similar to surgery but without cutting or hospital recovery time. Patients can now receive the best and fastest cancer treatment close to home.

Conkle finished his treatments in June.

“When you receive the news that you have cancer, you feel like your world is crumbling. To have this level of care here is amazing. We are so fortunate to have Holzer Center for Cancer Care and its wonderful team of care providers. It was awesome to receive care this close to home.”

Conkle is an active Cheshire Township Trustee, where he has served for the past 42 years, and retired from Gavin Power Plant and MPW Industrial. He and his wife, Deborah, reside in Cheshire and have three grown children: Michelle (Rob) Gilmore, Heather (Joey) Edwards, and Michael (Melissa) Conkle, and eight grandchildren. He enjoys racing, participating in outdoor activities (hunting/fishing/etc), and spending time with his family, especially watching his grandchildren in various sports activities.

Holzer Center for Cancer Care (HCCC) is dedicated to providing state-of-the-art treatment for all cancer sites with gentle, competent, and individualized care. Medical oncology services include an infusion area for chemotherapy with 12 bays and 2 private bays for treatment. Radiation Oncology services are provided with advance technology in a relaxed and friendly setting.

For more information call 1-855-4-HOLZER or visit www.holzer.org



Quality Measures for Lung, Breast, and Colon Cancers

The Commission on Cancer (CoC) tracks each case submitted by our hospital. Those cases that meet the criteria for the described measures are reviewed to ensure quality treatment is met. With the new rapid quality reporting system, cases are sent to the CoC on a monthly basis, with results of the measures given each month. This proactive system confirms that the most valuable treatment is being given on a timely basis.

CoC Measure

Standard to Meet

HCCC Rate

LUNG

Systemic chemotherapy is administered within 4 months to day preoperatively or day of surgery to 6 months postoperatively, or it is recommended for surgically resected cases with pathologic lymph node-positive (pN1) and (pN2) NSCLC (Quality Improvement)

85%

100%

BREAST

Radiation is administered within 1 year (365 days) of diagnosis for women under the age of 70 receiving breast conservation surgery for breast cancer (Accountability)

90%

100%

Radiation therapy is recommended or administered following any mastectomy within 1 year (365 days) of diagnosis of breast cancer for women with > = 4 positive regional lymph nodes (Accountability)

90%

100%

Tamoxifen or third generation aromatase inhibitor is recommended or administered within 1 year (365 days) of diagnosis for women with AJCC T1c or stage IB-III hormone receptor positive breast cancer (Accountability)

90%

95.2%

COLON

Adjuvant chemotherapy is recommended, or administered within 4 months (120 days) of diagnosis for patients under the age of 80 with AJCC stage III (lymph node positive) colon cancer (Accountability)

Not Applicable

100%



Cancer is a reportable disease in every state in the United States. For every patient diagnosed with this disease, all physicians, dentists, laboratories, and other health care providers must collect, process, and report each malignant case through a certified tumor registrar (CTR). The Holzer Center for Cancer Care CTR operates under the direction and guidance of Holzer's Cancer Committee.

Oncology Quality/ Data Specialist



**Sarah
Ramsburg
CTR**

● What is the Cancer Registry used for?

Cancer Registry data is used by the Department of Health, county and local health departments, patient and public interest groups, researchers, and the public for health planning and evaluation, as well as for research, incidence patterns, and trends for southeast Ohio.

The Cancer Registry plays an important role in research to identify the causes of cancer. Researchers often use the data collected by the registry to identify higher incidences of cancer with specific exposures and/or particular geographical areas.

● How does the registry protect privacy?

All information reported to the Ohio Department of Health and the National Cancer Data Base is confidential and strict procedures are enforced to protect patient privacy. For all records sent to the state and national organizations, all patient indicators have been removed.

● What is a cancer conference?

HCCC offers a cancer conference each month at Holzer Health System, allowing multidisciplinary physicians to determine the most effective care for the most challenging cancer cases, as well as providing education for all in attendance. It is monitored by one of our clinical pathologists and Cancer Conference Coordinator, Dr. Sohail Qayyum, to ensure these conferences meet the CoC goals. All in attendance receive 1 CME for each conference.

● What information is collected about patients with cancer?

The cancer registry collects data on the demographics, anatomic sites and sizes of tumors, the stages at diagnosis, the cell types of cancer, treatment information, and annual follow up. All malignant cancers are reported except Squamous and Basal Cell Carcinomas and in situ malignant tumors from the cervix, prostate, vulva, vagina, and anus. All brain and nervous system tumors are also collected, even those that are benign.

● How long has Holzer's Cancer Registry been collecting and reporting cancer data?

Holzer Center for Cancer Care has been accredited with the CoC every three-year survey cycle since 1937 and the registry has 12,600 cases on file. Holzer Medical Center established the cancer registry in 1977 and has been collecting all required data since that time.



Cancer Registry Responsibilities

A. The Cancer Registrar’s responsibilities are as follows:

- Identifies all patients having the diagnosis and/or treatment of cancer within Holzer Health System and enters each case into the cancer software system.
- Assigns codes for cancer diagnoses utilizing ICD-9, ICD-10, and ICD-O coding and enters diagnostic, demographic, and registry data into the cancer registry software program.
- Prepares the agenda and records minutes for the monthly Tumor Board conferences and quarterly Cancer Committee meetings.
- Performs TNM staging classifications.
- Compiles registry reports utilizing the hospital’s database and national and state statistics.
- Provides patient care evaluation studies each year and presents to the Committee.
- Assists oncology leadership in the development, measurement, and reporting of quality cancer data.
- Participates in educational events annually to maintain certification status, including attendance at regional and national conferences.
- Follows cancer patients treated at HCCC for their lifetime.

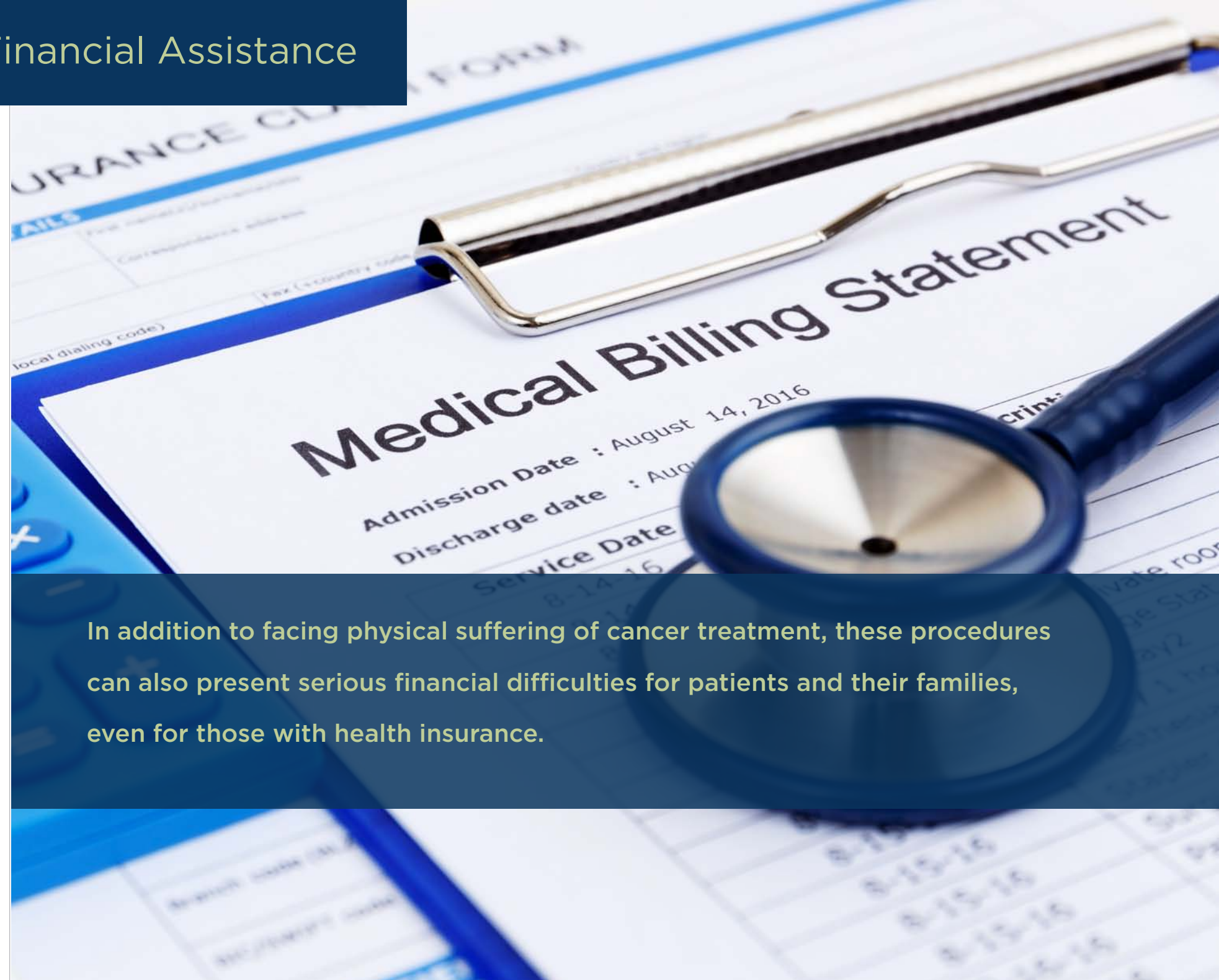
B. Other aspects of this position include duties as the Quality/Data Specialist, such as:

- Coordination and management of the Cancer Committee meetings, including review of the 34 CoC standards for accreditation.
- Working closely with all 6 CoC coordinators to originate and implement services and write annual summaries.
- Submission and maintenance of all documentation for the CoC and upload of completed information.
- Performing research studies, workload statistics, and projects, including solution proposals and actions for resolution.
- Identifying methods of utilizing registry data through patient care evaluation audits and special research studies.
- Assistance in the development of the annual reports.
- Responsible for all aspects of maintaining the system’s oncology program in compliance with the CoC.
- Participating in marketing initiatives, including cancer prevention programs, screenings, and wellness fairs.
- Advising Cancer Committee on changes in cancer patient population, referral patterns, trends in treatment modalities, evaluation of patient care, and other topics of interest to the Committee.

Follow-Up Rates for 2019

	Since 2001	The Last 5 Years
Total New Patients in the Registry (Analytic Cases)	3832	1317
Less Deceased	2221	512
Number Living	1611	805
Patients Lost to Follow-Up	322	98
Percentage of Successful Follow-Up Rate	At Least 80%	At Least 90%
Holzer Rate as of December 31, 2019	91.60%	92.56%

The Commission on Cancer requires that registrars follow all cancer patients in their registry that have received first-course treatment for their lifetime. This information assists physicians when accessing patients who may return for check-ups, aids in early identification of recurrences, and helps to determine treatment. The overall successful follow-up rate since 2001 at Holzer Center for Cancer Care for 2019 was 91.60% (required minimum is 80%). The successful follow-up rate for the last 5 years was 92.56% (required minimum is 90%).



In addition to facing physical suffering of cancer treatment, these procedures can also present serious financial difficulties for patients and their families, even for those with health insurance.

With the costs of cancer care clearly increasing and cancer patients now living longer than ever before, many insurance companies transfer more and more of the costs to the patients. These additional burdens can have negative effects on healing, both mentally and physically.

Today there are many support services available for patients with cancer. However, the majority of patients and even the healthcare providers are unaware of these services. To help patients pay for their cancer care, many drug companies, as well as nonprofit organizations and foundations, have developed financial assistance programs to offset the high cost of cancer care for patients. These financial assistance programs are designed specifically to help patients pay for medications,

medical bills, and other expenses related to cancer care, such as travel to a cancer facility and hotel stays during treatment.

Eligible patients are assisted in finding alternate funding to ease this financial burden prior to a patient starting cancer treatment. The revenue cycle specialist verifies insurance benefits and determines an estimated out-of-pocket cost for the planned cancer treatment. Based on the diagnosis and medications ordered, available assistance programs, grants, or foundations that the patient would qualify for are found, and assistance is provided for the application process. Once approved, HCCC will continue to work with the programs to ensure payment is received for each treatment, taking a huge financial burden off of our patients.



Our strongest asset at Holzer Center for Cancer Care is our staff. Our specialists blend their expertise together to provide a unified approach to optimal treatment and provide the very best comprehensive cancer care available anywhere.

Cancer Committee

NAME	MEMBER STATUS	DEPARTMENT
Alice Dachowski, MD	Appointee	Surgery/Committee Chair/CLP
Steven Conley, MD	Appointee	Diagnostic Radiology
Khawaja Hamid, MD	Appointee	Medical Oncology
Divya Arora, MD	Appointee	Radiation Oncology
Sohail Qayyum, MD	Appointee	Pathology/Cancer Conference Coordinator
Sarah Harrigan, MSN, MA, RN, OCN	Appointee	Cancer Program Administrator
Sarah Ramsburg, CTR	Appointee	Tumor Registrar/Registry Quality Coordinator
Amity Wamsley, RN	Appointee	Clinical Research Coordinator/Genetics Assistant/ Navigator/Nursing Clinical Coordinator
MarJean Kennedy, MBA, PCM	Appointee	Community Wellness/Community Outreach Coordinator
Michelle Rankin, MSN, RN	Appointee	Quality Improvement/Management Coordinator
Teresa Stewart, RN, CHPN	Appointee	Palliative Care Nurse/Psychological Services Coordinator
Stella Barrett, OTR/L	Additional Member	Rehabilitation
Fred Williams, PhD	Additional Member	Pastoral Care
Jared Vernon, RPh	Additional Member	Pharmacy



As a Commission on Cancer accredited facility, the Holzer Center for Cancer Care is committed to community outreach and support services for cancer care. Community outreach services increase the public awareness of prevention activities, promote the benefits of early detection and encourage participation in screening programs.

Population Health Screenings & Outreach Events

Holzer Health System, a not-for-profit entity, conducts a comprehensive Community Health Needs Assessment (CHNA) and Implementation Strategy in cooperation with local health departments and regional health partners every three years. Holzer completed its most recent assessment on June 30, 2019, and subsequent implementation strategy on October 23, 2019.

Assessment results of the seven-county area studied indicate that access to care, substance abuse and mental health, access to opportunities for recreation and fitness, health promotion and chronic disease prevention, and maternal and infant health are the region's most important health issues leading to chronic disease states including increased incidence of cancer.

The Cancer Committee is actively participating in the implementation plan for the 2019 Community Health Needs Assessment.

EVENT	DATE
Buckeye Rural Electric Company Health Fair	1/21
Wellston City Schools Employee Health Fair	1/28
Heart Month Kickoff (Blessing/Lunch) at HMC-G	2/1
Knit-A-Thon & Screenings for Heart Month - Artisan Shoppe	2/2
YMCA Jackson Sober Bowl	2/3
Torski/Hopewell Dinner @ Cutlers	2/4
Good News Baptist Church Health Fair	2/8
Orthopedics Seminar - Dr. Cox - Athens	1/12
Hug Your Heart - YMCA - Jackson	2/14
Red Dress Heart Event	2/21
Southern High School Career Fair - Racine	2/22
Heart Month Luncheon with Dr. Chandra - HMC-J	2/25

EVENT	DATE
South Gallia Health Fair - ESC	2/28
Gallia Academy Middle School Career Fair	3/8
Cable Channel 15 - Dr. Scurti	3/8
River Valley Career Fair	3/11
Discover Appalachia Travel Expo - GAMS	3/16
Colon Cancer Awareness Event - Dr. Torski	3/18
URG Nursing Students/Vinton Co. School Health Fair	3/19
Carlton School Health Fair	3/20
Spring Showcase - Jackson	3/22
Mason Co. Chamber Luncheon - Cancer Center Presentation	3/26

Events continued on page 28 >>

EVENT	DATE
Jackson (Pattonsville Rd) Open House Event - ASC Only	3/27
Athens Live Healthy Appalachia Hike - Dr. Cox	3/30
Wound Care Center Gallipolis - Groundbreaking	4/4
Out of the Darkness Walk - URG	4/6
Walk With a Doc - Dr. Quach	4/13
Buckeye Hills Expo	4/13
Kidsfest - Athens	4/13
Science Awards	4/15
Cable Channel 15 - Norma Ellcessor (Surgery)	4/19
URG "Get Carried Away" Health Fair	4/25
Birth Circle Event - Athens	4/27
Joint Replacement Seminar - Jackson	4/30
Vinton School Physicals	5/2
Cable Ch. 15 - Dr. Bentley (Cancer Screening Event)	5/9
Walk With a Doc - Dr. Bryant	5/11
Lawrence County Senior Citizens Event	5/14
John Boy Radio Show with Dr. Bentley	5/14
Rocky Boots Health Fair	5/17
Skin Cancer Screening - Jackson	5/18
Mela-no-more 5k Melanoma Run - Athens	5/18
Gallipolis in Lights - Glow Run	5/18
Jackson Sports Physicals	5/23
Moms Everyday WSAZ - Swing Bed	5/28
Ohio Valley Bank - Main - Health Fair	5/30
Ohio Valley Bank - Wellston	6/4
General Mills Annual Health Fair	6/5
Walk with a Doc - Dr. Efaw	6/8
ESC - Healthy Eating and Exercise / GAHS and Gallia Co Local	6/10
Ohio Valley Bank - South Point	6/12
Ohio Valley Bank - Mt. Sterling and New Holland Banks	6/13

EVENT	DATE
Superior Marine Health Fair - South Point	6/24
ESC - Healthy Eating & Exercise GAHS and Gallia Co Local School	6/24
Superior Marine - Charleston, West Virginia	6/26
River Rec 4th of July Parade	7/3
County Fairs (Gallia, Meigs, Mason, Jackson, Athens)	July-Aug. 2019
Camp Courage	7/12
Pediatrics Back to School Bash - Gallipolis	7/13
Meigs Co. Commissioners Health Fair - Farmers Bank	7/16
Hike It Out - Athens Physical Therapy	7/20
Hoop Project	7/20 - 21
Occupational Medicine BAC - Gallipolis	7/25
Pediatrics Back to School Bash & Open House - Jackson	7/27
Pediatrics Back to School Bash - Meigs	8/3
Federal Hocking (Coolville) Project Kickoff - Donation	8/3
Athens 16th Annual Safety and Wellness Fair	8/7
CHNA/CHA Regional Planning Session No. 1	8/8
Ohio Valley Bank - Jackson Office - Health Fair	8/9
Boogie on the Bricks - Athens	8/10
Walk With a Doc - Dr. Kelly Roush	8/10
Gallia County Health Department - Healthy Kickstart Event	8/10
Buckeye Rural Electric Annual Meeting	8/10
CPR Committee Meeting	8/12
Hospice Car Show	8/17
Alexander School District - Elementary Orientation	8/19
Ohio Valley Bank - Pomeroy Branch - Health Fair	8/19
Alexander School District - High School Orientation	8/20
WSAZ Moms Everyday (Therapy Services - Stella Barrett)	8/22
Annual Sports Med Coaches Luncheon	8/24
WSAZ Moms Everyday (Audiology - Kristin Stump)	8/27
CHNA/CHA Regional Planning Meeting No. 2	8/28

EVENT	DATE
WSAZ Moms Everyday (Plastics - Dr. Triggs)	9/3
Wellston Ohillco Festival	9/3-7
Business Advisory Council Meeting Jackson	9/5
Meigs County Cancer Event Rutland Civic Center	9/8
Power Plant Health Fair - Mountaineer - Kyger - Amos	9/11
Walk With a Doc	9/14
BBQ Fest - Gallipolis	9/14
Apple Festival	9/17
WSAZ Moms Everyday (Pediatrics - Dr. Davis)	9/18
Girl Scouts of America Holzer event	9/19
Apple Festival 5K (VIP Sponsor)	9/21
Rocky Boots Flu Shots - Community Wellness (Nelsonville)	9/25
Survivor's Picnic	9/27
Rocky Boots Flu Shots - Community Wellness (Haydenville)	10/2
Kyger Creek Electric Co. Health Fair	10/3
Jenkins Nursing Home Employees - Health Fair	10/4
Walk With a Doc - Build-A-Buddy Pediatric Event	10/5
River Rat Festival	10/5
More than Pink Event - Athens	10/6
COC Legislative Town Hall - HMC-G	10/11
Gallia County Senior Citizens Dinner	10/14
Cancer Center Health Fair	10/15

EVENT	DATE
Pikeon Health Fair	10/16
Jackson City Schools - Welloween Health Fair event	10/17
Health Screening Event - Cancer Center	10/15
Respiratory Symposium	10/18
Oak Hill School District Employees Health Fair	10/18
University of Rio Grande - Intergenerational Event	10/18
Wound Care Center Ribbon Cutting Ceremony	10/21
Rocky Boots Flu Shots - Community Wellness (Airport Marriott)	10/21
Athens Lowes Kids' Safety Day	10/26
Drug Take Back Day in collaboration with Gallia County Sheriff's Department	10/26
Cable Channel 15 - Dr. Triggs	10/29
General Mills Visit - Dr. Cox	10/29
Athens Open House	11/7
WSAZ Segment on Studio 3 (Post-Acute Care)	11/11
Ohio Public Health Improvement eXchange Presentation	11/20
Illumination of Hope - Cancer Tree Lighting	11/26
WSAZ Moms Everyday (Dr. Bishop)	12/11
Wellston City Schools Health Fair	12/11



The Ohio State University/Holzer Collaboration Research Study

Colorectal Screening Study Using Audio and Video Brochures in a Mail-Based FIT Outreach Intervention

*Funded by the NIH National Institute on Aging. Dr. Mira Katz is the lead investigator.
Participation with two healthcare systems.*

A. First Year Activities to Develop the Program (2019):

1. Conducting focus groups/interviews with community members:
 - a) 50-64 years old
 - b) live in an Appalachian County
 - c) average-risk for CRC (no history of CRC, polyps, inflammatory bowel disease, family history of CRC or hereditary CRC syndromes),
 - d) read and speak English, and
 - e) provide consent
2. Conduct focus groups with healthcare providers (individuals who order CRC screening tests on average-risk adults).
3. Having program development sessions with community members and recording the audio and video components; and
4. Conducting review sessions with community members and healthcare providers.

Holzer:

- Identification of financial person for contact about invoicing OSU.
- Identification of what primary clinics to hang flyers about the community member focus groups in the clinics and where to hang flyers (April - May)
- Help arrange for focus groups with healthcare professionals (April - May) and a review of the developed materials (estimation: August - October 2019)
- Help arrange for space to conduct focus groups and development sessions
- Identify what FIT used in healthcare system and process for completed test return

B. Second Year Activities: Pilot Study of 160 Adults (2020):

Holzer:

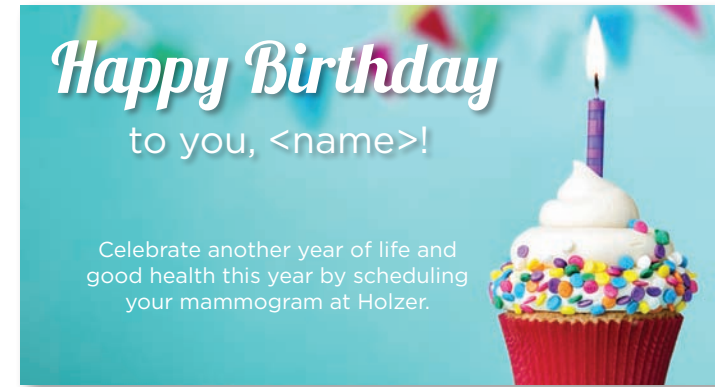
- Identification of 100 potential participants (50 men and 50 women) for the pilot study: same criteria listed for focus groups and not within CRC screening guidelines.
- Notification letters signed by potential participants' physicians
- Normal FIT: letter with explanation of test results and importance of annual screening
- Abnormal FIT: called by healthcare provider to discuss results and referral for colonoscopy (if no answer... mail a letter)
- If participant signs medical record release form... assist with getting FIT results

Mammography Outreach Overview

Two Ongoing Trigger Campaigns (in-home):

1. Reminders - Last mammogram over two years
2. Birthday reminders - 40 years

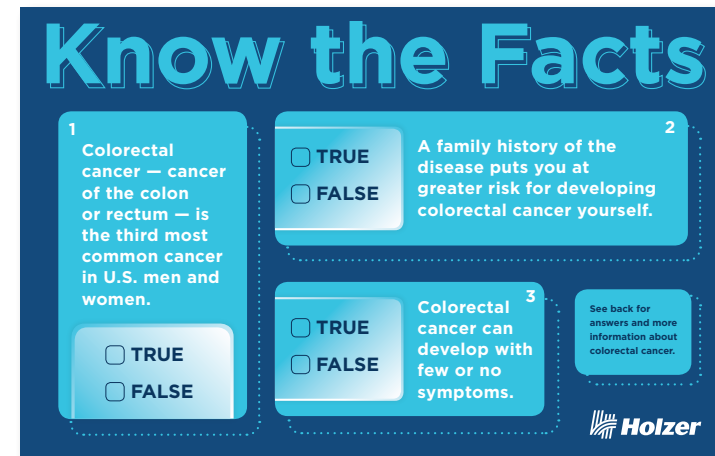
- Target Audience
 - Patients, Friends and Family, and Pure Prospects
 - Age Range: 39-74
 - Service Area: Primary Service Area and Secondary Service Area
- Start Date: February 28, 2017 (monthly drop)
- Total Reach to Date - Calendar Year 2019: **38,389**
- Response - Calendar Year 2019 (mammography encounters): **837 individuals (70 new patients)**



Colonoscopy Outreach Overview

Trigger Campaign (in-home)

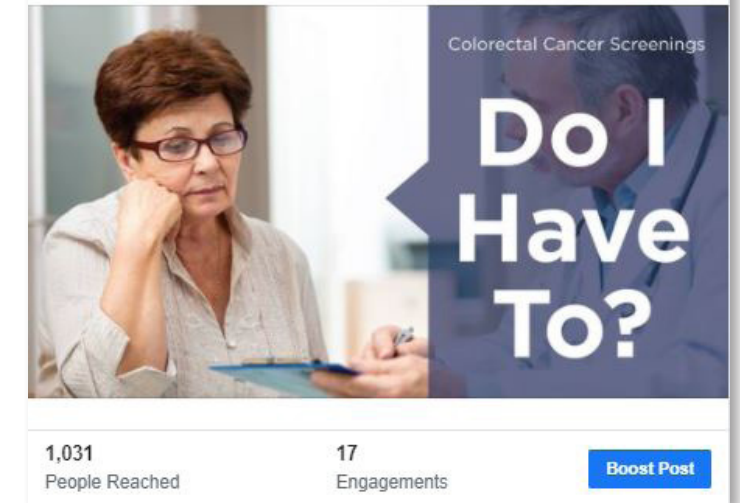
- Target Audience
 - Patients, Friends and Family, and Pure Prospects
 - Age Range: 50-75
 - Oncology: Colorectal - Extreme Risk, High Risk
 - Service Area: Primary Service Area and Secondary Service Area
- Start Date: October 30, 2017 (monthly drop)
- Total Reach to Date - Calendar Year 2019: **4,172**
- Screening Response - Calendar Year 2019: **123 (18 new patients)**



Colon Cancer Educational Face-to-Face Event

Event

- Date: March 18, 2019
- Location: Ohio University Inn & Conference Center - Athens, Ohio
- Audience:
 - Advertising Outreach: 20 Mile Radius; ages 25-80
 - Targeted Diagnosis or Self-reported
- Targeted Media:
 - Direct, in-home: 4,300
 - Social Media Invitation: 3,582 reached; 30 engaged
 - Social Media Event Recap: 2,027 reached; 126 engaged
 - News Release: Athens area
- Attendance: 18
- Pre- and Post-test given to measure increased awareness
 - 100% of attendees gained knowledge
 - Knowledge was gained in the following areas:
 1. How common is colon cancer?: **22.2% increased knowledge**
 2. A family history of the disease puts you at a greater risk?: **5.5% increased knowledge**
 3. A colonoscopy is the only test available for colorectal cancer?: **11.1% increased knowledge**
 4. A regular exercise routine can help reduce your risk of developing colorectal cancer?: **16.6% increased knowledge**



Free Skin Cancer Screening Event

- Date: May 18, 2019
- Audience: Open to the public, ages 18+
- Location: Jackson, Ohio
- Total Screened: 36
- Appointments Scheduled: 6
- Surgical Procedures Performed: 2



free SKIN CANCER screening

SATURDAY, MAY 18 • 9 AM - NOON
HOLZER CLINIC JACKSON
 280 Pattonsville Road • Jackson, OH
OPEN TO THE PUBLIC
 For additional information or questions, please call Susan Cummons at 740.446.5739.

MAY 18 Free Skin Cancer Screening
 Public - Hosted by Holzer Health System

★ Interested ✓ Going Share ...

Saturday at 9 AM - 12 PM
 2 days from now - 64-88°F Scattered Clouds

Holzer Health System
 100 Jackson Pike, Gallipolis, Ohio Show Map

Televised Promotion on Facebook for Event

- Date: May 9, 2019
- Audience: Jackson County, Ohio
- People Reached: 1,418
- Engagements: 52



Holzer Health System
 Published by Maria King [?] · May 9 at 9:17 AM · 🌐

Tune into Jackson Cable Channel 15! Dr. Elizabeth Bentley is discussing the upcoming FREE Skin Cancer Screenings at Holzer Jackson next Saturday, May 18.

1,418 People Reached 52 Engagements Boost Post



Cancer Survivor Picnic

Cancer Survivors, friends, and family from throughout the community gathered for the annual Cancer Survivor Picnic hosted by the Holzer Center for Cancer Care at the Gallipolis Campus.

“It was a wonderful day and we were so blessed with many cancer survivors attending and enjoying the afternoon,” shared Sarah Harrigan, RN, MSN, OCN, Director, Holzer Center for Cancer Care. “Our facility is proud to be able to offer this type of event and looks forward to future activities with our communities.”

Leslie Shoecraft, Music Therapist, provided special music for the event, and cancer center staff served everyone in attendance.



Donations for prize giveaways were provided by a number of businesses within Gallia and surrounding counties.

“We are so honored to provide this type of event,” commented Amity Wamsley, Clinical Coordinator, Holzer Center for Cancer Care. “Our staff truly enjoys supporting our current patients and reconnecting with past patients to celebrate their accomplishments.”

Health Screening Event

- Date: October 15, 2019
- Screenings included: Skin Screenings, Breast Exams and Education, Bone Density Testing, and Blood Pressure Checks
- Location: Holzer Center for Cancer Care - Gallipolis, Ohio
- Total People Reached on Social Media: 2,466
- Total Engagements on Social Media: 135
- Total Screened: ?
- Appointments Scheduled: ?

Holzer Health System
Published by [Karrie Davison](#) · October 15, 2019 · 🌐

Join us tonight for Free Health Screenings at Holzer Center for Cancer Care from 5pm to 7pm!

1,390 People Reached 108 Engagements [Boost Post](#)

Holzer Health System
Published by [Ashton Cale](#) · October 9, 2019 · 🌐

Join us for a free cancer screening event on Tuesday, October 15 from 5pm-7pm at the Holzer Center for Cancer Care, located at 170 Jackson Pike, Gallipolis, OH 45631.

- >> Skin Screenings
- >> Breast Exams and Education
- >> Bone Density Testing... [See More](#)

FREE Cancer Screenings

Tuesday, October 15
5PM - 7PM
Holzer Center for Cancer Care
• 170 Jackson Pike, Gallipolis, OH 45631 •

- >> Skin Screenings
- >> Breast Exams and Education
- >> Bone Density Testing
- >> Blood Pressure Checks

Refreshments available!

For more information, call the Holzer Center for Cancer Care at 740-446-3572

1,076 People Reached 27 Engagements [Boost Post](#)



Illumination of Hope

Holzer Center for Cancer Care is kicked off the holiday season with an “Illumination of Hope” Christmas Tree Lighting on November 26. The event provided individuals the opportunity to honor a special person during the holiday season.

The event was designed to raise money for the Holzer Center for Cancer Care Patient Donation fund, which is used to purchase gift cards for gas, food items, etc. for those cancer patients and their families who may need an extra hand during treatments.

The 2019 personalized ornament carried the name of the honoree and was placed on a Christmas tree that remained in the Center’s healing garden throughout the Holiday season. A reading of the names recognized all the honorees during the special ceremony. Musical entertainment was provided by Leslie Shoecraft, Music Therapist.

Colon Cancer Screening Quiz

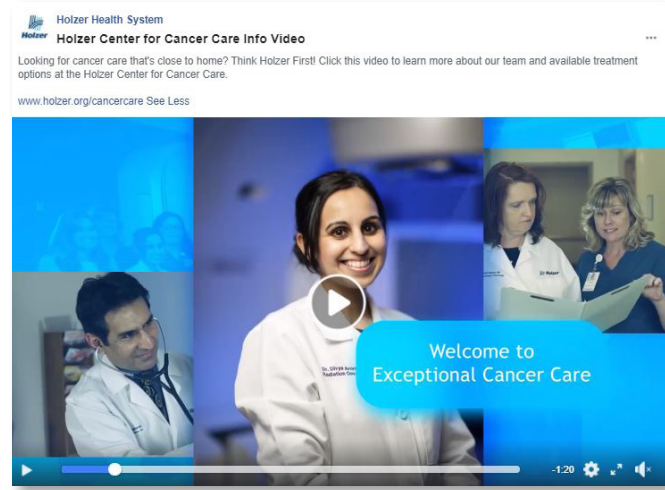
Social Media Post



- Date: March 16, 2019
- Total People Reached: **727**
- Total Engagements: **33**

Informational Video

Social Media Post



- Date: March 23, 2019
- Total People Reached: **2,700**
- Total Engagements: **54**
- Total Clicks: **109**

Colon Cancer Screening Quiz

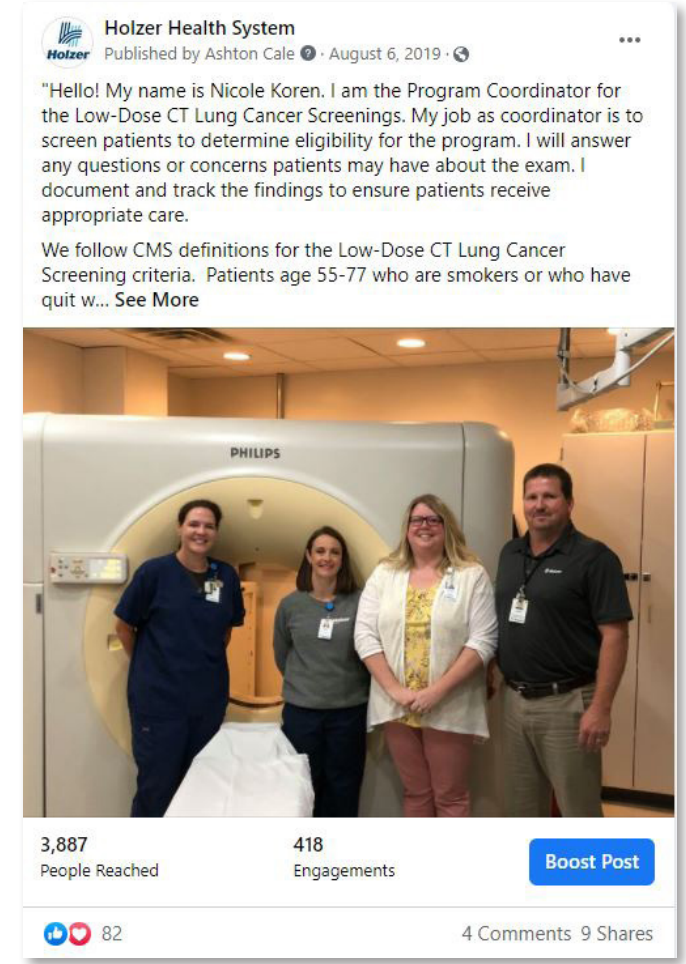
Social Media Post



- Date: June 2, 2019
- Total People Reached: **829**
- Total Engagements: **13**

Low-Dose CT - Takeover

Social Media Post



- Date: August 6, 2019
- Total People Reached: **3,887**
- Total Engagements: **418**

Ovarian Cancer Quiz

Social Media Post

Holzer Health System
Published by Alyssa Simon · September 2, 2019

September is Ovarian Cancer Month. Would you know if you had Ovarian Cancer? Take this important quiz now.
<https://web.goodhealthcontent.com/shareContent?src=www.holzer.org/health-wellness/healthyliving&uri=article/quiz-would-you-know-if-you-had-ovarian-cancer>

WEB.GOODHEALTHCONTENT.COM
Quiz: Would You Know If You Had Ovarian Cancer?
Take this quiz to uncover some important facts about this disease.

1,150 People Reached 31 Engagements **Boost Post**

- Date: September 2, 2019
- Total People Reached: **1,150**
- Total Engagements: **31**

Prostate Health Month

Social Media Post

Holzer Health System
Published by Alyssa Simon · September 4, 2019

This month is known as Prostate Health Month! Learn more about cancer screenings men need now!
<https://web.goodhealthcontent.com/shareContent?src=www.holzer.org/health-wellness/healthyliving&uri=article/infographic-cancer-screenings-men-need>

WEB.GOODHEALTHCONTENT.COM
Infographic: Cancer Screenings Men Need
These are 3 of the most common cancers affecting men and the scr...

907 People Reached 17 Engagements

- Date: September 2, 2019
- Total People Reached: **907**
- Total Engagements: **17**

Colon Cancer Screening Quiz

Social Media Post

Holzer Health System
Published by Ashton Cale · October 2, 2019

Holzer was proud to support Southern Local Schools with their middle school Volley for the Cure game on Tuesday, October 1.

WEB.GOODHEALTHCONTENT.COM
Quiz: Would You Know If You Had Ovarian Cancer?
Take this quiz to uncover some important facts about this disease.

1,150 People Reached 31 Engagements **Boost Post**

- Date: October 2, 2019
- Total People Reached: **2,354**
- Total Engagements: **157**

Breast Cancer Awareness

Social Media Post

Holzer Health System
Published by Kayla McNeal · October 3, 2019

It's Breast Cancer Awareness Month! Click to learn more about how a low-fat diet can reduce your risk of Breast Cancer.
<https://web.goodhealthcontent.com/shareContent?src=www.holzer.org/health-wellness/healthyliving&uri=article/can-this-lower-your-risk-of-dying-from-breast-cancer>

WEB.GOODHEALTHCONTENT.COM
Can This Lower Your Risk of Dying from Breast Cancer?
Here's why you'll want to follow a low-fat diet rich in plant-based f...

789 People Reached 12 Engagements **Boost Post**

- Date: October 3, 2019
- Total People Reached: **789**
- Total Engagements: **12**

Breast Cancer Awareness

Social Media Post



- Date: October 3, 2019
- Total People Reached: **1,688**
- Total Engagements: **95**

Komen More Than Pink

Social Media Post/Event



- Date: October 6, 2019
- Total People Reached: **2,726**
- Total Engagements: **293**

National Mammography Day

Social Media Post



- Date: October 18, 2019
- Total People Reached: **1,335**
- Total Engagements: **50**

Lung Cancer Awareness

Social Media Post



- Date: November 7, 2019
- Total People Reached: **711**
- Total Engagements: **9**

"No Shave November" Contest Social Media Posts and Contest Submissions

1 Winner Chosen, 11 Submissions Total



"[I] lost my mother to colon cancer, and I am a cancer survivor."

- Fredrick Dorse



"My fiancée, Michael, always participate in 'No Shave November' for support of cancer patients."

- Amber Horne



"Promoting Men's health has been a great team building exercise for the men in Security, Communications Center, and Facilities."

- Morgan Saunders

Holzer Health System
Published by Ashton Cale · December 5, 2019 ·

Congratulations to our No Shave November prize winner, Gary Phillips! When asked why he participates in No Shave November, he stated:

"This is my small way to bring attention to cancer education, research, and prevention. If my facial hair can encourage just one person to get a cancer screening who hadn't previously, it'll make this itchy gray beard worth the effort."

Thank you to all who participated in our competition, and for supporting the cause! For more information o... See More

**No Shave November
Prize Winner: Gary Phillips**

"This is my small way to bring attention to cancer education, research, and prevention. If my facial hair can encourage just one person to get a cancer screening who hadn't previously, it'll make this itchy gray beard worth the effort." - Gary Phillips

1,775 People Reached 94 Engagements Boost Post

Promotions posted separately on November 1, 14, & 30; Winner posted December 5, 2019.

- Total People Reached: **5,006**
- Total Engagements: **247**
- Total Contest Submissions: **11**

Marketing Campaign



The major marketing campaign for Holzer Center for Cancer Care featuring TrueBeam debuted in January 2019. The campaign comprised of a full range of multimedia, including a television commercial, traditional and internet radio spots, video and print patient testimonials, print ads, print newsletter, print brochure, outdoor billboards, social media, digital advertising, and a campaign website landing page.

TV Commercial

Broadcast on WSAZ, local cinemas, social media, and as digital advertising



Digital Advertising

- Digital Display
 - Clicks: 4,480
 - Click Through Rate: 0.26%
 - Impressions: 1.7 million
- Digital Video
 - Clicks: 120
 - Impressions: 36,500
 - Views: 11,500
 - View Rate: 31.65%
- Digital Search
 - Clicks: 725
 - Click Through Rate: 3.39%
 - Impressions: 21,400
 - Conversions: 110.33



Print Advertising

Ads placed in local newspapers in all market area

Ads featured patient testimonials and information about TrueBeam

ADVANCING THE FIGHT AGAINST CANCER

HIGH-PRECISION TREATMENT in 2 Minutes or Less

At the Holzer Center for Cancer Care, you can expect the highest level of advanced individualized care available.

The TrueBeam™ Radiotherapy System offers new possibilities for the treatment of cancers in the lung, breast, prostate, brain, head and neck, and more.

- Treatments may now be completed in less than 2 minutes
- Treatments are delivered with pin-point accuracy and less radiation exposure
- TrueBeam™ offers state-of-the-art Stereotactic Body Radiation (SBRT) and Radiosurgery (SRS) treatments
- Just like the Cyberknife®, TrueBeam™ delivers pinpoint radiation in 1-5 treatments instead of 30-40 treatments

TrueBeam™ Radiotherapy System

Holzer
Center for Cancer Care

Think Holzer first.

1-855-4HOLZER (1-855-446-5937) www.holzer.org/cancercare

"I was able to complete my treatments close to home. Holzer has always been there for me."

Rick Howell, Holzer Center for Cancer Care Patient

Rick Howell was diagnosed with prostate cancer in March 2018. Thankfully, the cancer was detected in an early stage and treatment prognosis was optimistic. Howell met with Dr. Divya Arora, Radiation Oncologist, to begin his treatment.

"I was informed that I had cancer and could receive my radiation treatments at Holzer Center for Cancer Care," Howell said. "I had great faith in Dr. Arora. She is always concerned about her patients, and listens to truly understand what is happening."

"Throughout the entire process I had a positive experience," he said. "The staff were helpful from the very beginning. I am indebted to each of them."

Holzer
Center for Cancer Care

Adding Life to Your Years.
Think Holzer First.

1-855-4HOLZER (1-855-446-5937) www.holzer.org

Billboards

Billboards were placed throughout all market area

High-Precision Treatment in 2 minutes or less

Holzer
Center for Cancer Care

ADVANCING THE FIGHT AGAINST CANCER

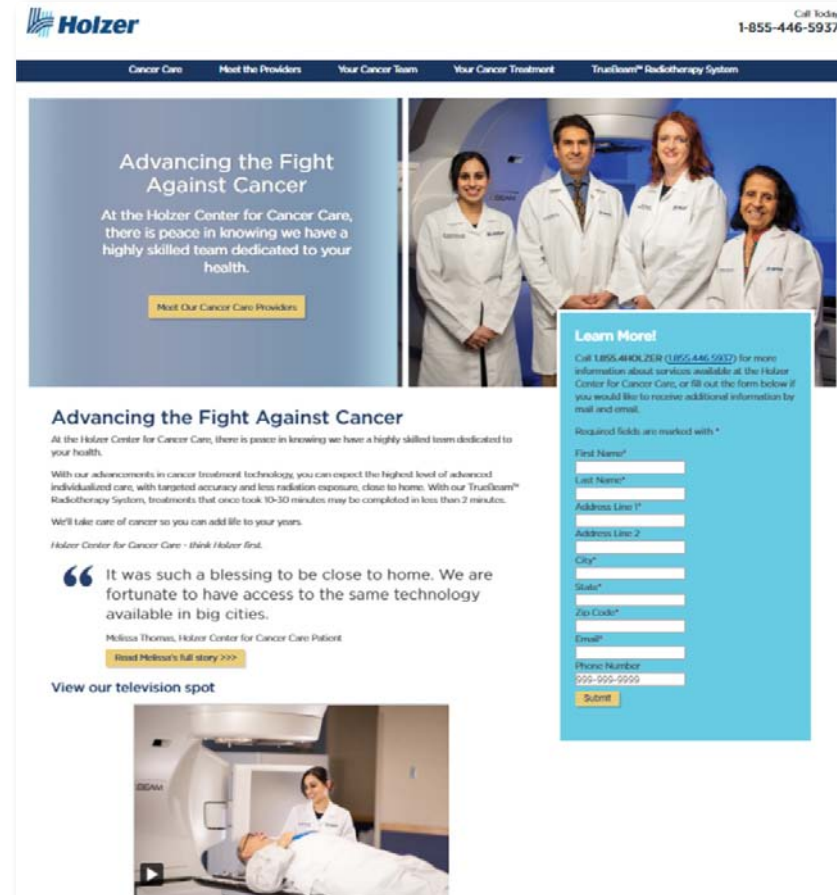
Holzer
Center for Cancer Care

Website Landing Page

Campaign landing page created to enhance web presence; Digital ads click through to campaign landing page

- Pageviews: Increased 613.79%
 - Time measured: January 1 - August 20, 2019 compared to May 14, 2018 - December 31, 2018
 - Total: 9,629 pageviews (Jan. 1 - Aug. 20, 2019) vs. 1,349 pageviews (May 14 - Dec. 31, 2018)
- Unique Page Views: Increased 721.90%
 - Time measured: January 1 - August 20, 2019 compared to May 14, 2018 - December 31, 2018
 - Total: 8,819 pageviews (Jan. 1 - Aug. 20, 2019) vs. 1,073 pageviews (May 14 - Dec. 31, 2018)
- Average Time on Page: Increased 42.52%
 - Time measured: January 1 - August 20, 2019 compared to May 14, 2018 - December 31, 2018
 - Total: 00:01:34 (Jan. 1 - Aug. 20, 2019) vs. 00:01:06 pageviews (May 14 - Dec. 31, 2018)
- Entrances: Increased 1,484.38%
 - Time measured: January 1 - August 20, 2019 compared to May 14, 2018 - December 31, 2018
 - Total: 7,605 (Jan. 1 - Aug. 20, 2019) vs. 480 (May 14 - Dec. 31, 2018)

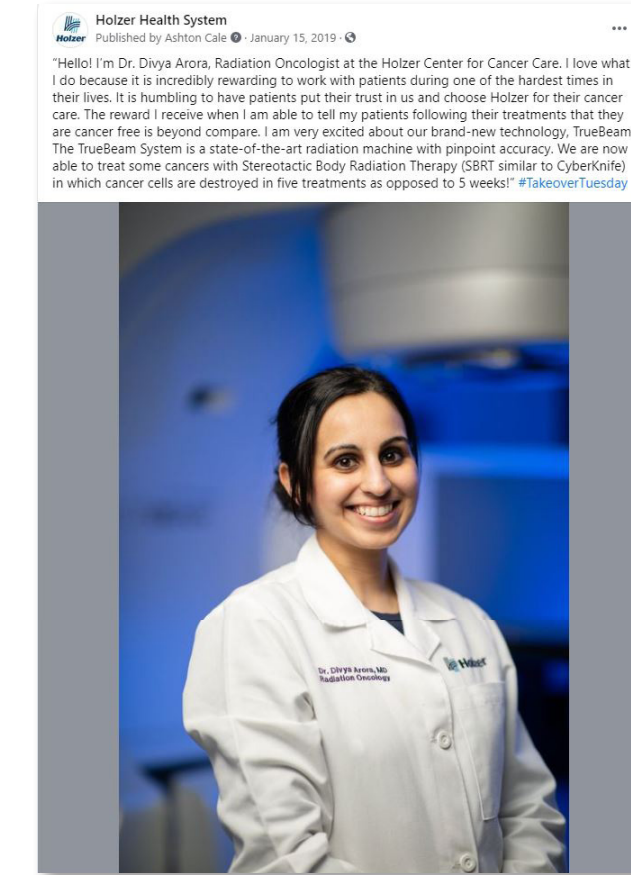
The Holzer Center for Cancer Care landing and web pages were the No. 1 visited services pages during Calendar Year 2019.



Takeover Tuesday

Social Media Posts

- Date: January 15, 2019
- Total People Reached: **21,768**
- Total Engagements: **4,313**




Video Testimonials

Social Media Posts

Holzer Health System
Published by Ryan Bloomfield [?] · July 1 ·


When Michael Conkle was diagnosed with prostate cancer, he trusted the team at the Holzer Center for Cancer Care with his treatment. Hear Michael tell his story and find out how he's feeling today. Think Holzer First!



9,865 People Reached 1,579 Engagements **Boost Again**

Holzer Health System
Published by Ryan Bloomfield [?] · January 24 ·

When Rick Howell discovered he had prostate cancer, he trusted the Holzer Center for Cancer Care with his treatment. Hear Rick tell his story and the special news he received in December.




21,102 People Reached 2,950 Engagements **Boost Again**

- Date: January 24, 2019 and July 1, 2019
- Total People Reached: **30,967**
- Total Engagements: **4,529**


Brochure

Print

HOLZER CENTER FOR CANCER CARE



ADVANCING THE FIGHT AGAINST CANCER



Holzer
Center for Cancer Care


www.holzer.org/cancercare
1.855.4HOLZER (1.855.446.5937)

HIGH-PRECISION TREATMENT in 2 Minutes or Less

The TrueBeam™ Radiotherapy System is a non-invasive state-of-the-art radiation machine that delivers powerful cancer treatment that eliminates cancer cells with increased precision and accuracy while sparing healthy tissue.

TrueBeam™ offers new possibilities for the treatment of cancers in the lung, breast, prostate, brain, head and neck, and more.

- Treatments may now be completed in less than 2 minutes
- Treatments are delivered with pinpoint accuracy and less radiation exposure
- TrueBeam™ offers Stereotactic Body Radiation (SBRT) and Radiosurgery (SRS) treatments
- Just like the Cyberknife®, TrueBeam™ delivers pinpoint radiation in 1-5 treatments instead of 30-40 treatments



TrueBeam™ Radiotherapy System

Cancer Survivor Rick Howell Shares His Story

Rick Howell was diagnosed with prostate cancer in March 2018. Thankfully, the cancer was detected in an early stage and treatment prognosis was optimistic. Howell met with Dr. Divya Arora, Radiation Oncologist, to begin his treatment.

"I was informed that I had cancer and could receive my radiation treatments at Holzer Center for Cancer Care," Howell said. "I had great faith in Dr. Arora. She is always concerned about her patients, and listens to truly understand what is happening. I know she would be right there with me and my family if there was a problem."

"Throughout the entire process I had a positive experience," he said. "The staff were helpful from the very beginning. I am indebted to each of them."

"I feel fortunate that I was able to complete my treatments close to home. Holzer has been there for me."

Additional Resources

CANCER SURVIVOR SUPPORT GROUP: Holzer Center for Cancer Care sponsors a monthly Cancer Survivor Support Group at Holzer Gallipolis. The group is designed to help individuals, who either have cancer or are cancer survivors, and their loved ones, understand cancer, manage treatment and recover, and find the emotional support they need. The group meets monthly and features guest speakers to discuss topics of interest for those in attendance.

AMERICAN CANCER SOCIETY RESOURCE CENTER: The American Cancer Society provides a library of educational information and videos to support individuals who have cancer and their loved ones.

HEALING GARDEN: Our contemporary chemotherapy treatment area overlooks the lovely Healing Garden, reminding us of not only the medical aspects, but also the natural and spiritual components so important to the healing process. Many people choose to walk the path of a labyrinth as a tool for meditation, reflection, prayer, and comfort.

Commission on Cancer

The Holzer Center for Cancer Care is accredited by the Commission on Cancer (CoC). As a CoC-Accredited Cancer Program, Holzer Center for Cancer Care demonstrates an important commitment to providing all patients with access to services they need from diagnosis through treatment, rehabilitation, and survivorship care.

The Commission on Cancer is a consortium of professional organizations dedicated to improving survival and quality of life of patients with cancer through standards setting, prevention, research, education, and the monitoring of comprehensive care.

SKILLED MEDICAL PROFESSIONALS

At the Holzer Center for Cancer Care, there is peace in knowing we have a highly skilled team dedicated to your health.

We believe successful treatment is a combination of skilled medical professionals and the latest cancer-fighting technology. With our advancements in cancer treatment technology, you can expect the highest level of advanced individualized care available in larger cities, closer to home.

Medical Oncology services include an infusion area for chemotherapy with 12 bays and two private bays for treatment. Radiation Oncology services are provided with our state-of-the-art TrueBeam™ Radiotherapy System with targeted accuracy and less radiation exposure.

Our Healing Garden provides a peaceful area for patients and their families, including a walking labyrinth, a reflecting pool and waterfall, and benches for rest and meditation.

One of the preparations for treatment at Holzer is assembling your team. You can be assured that the board certified medical professionals working with you are among the most highly trained anywhere. Our specialists blend their expertise together to provide a unified approach to optimal treatment and provide the very best comprehensive cancer care available.

They will work with you to:

- Educate, inform, and explain your care
- Respect your wishes about treatment
- Respond to your needs
- Provide information to help you make informed decisions about your care
- Respect your privacy and maintain confidentiality

Your team will likely consist of a combination of the following professionals:

- Medical Oncologist
- Radiation Oncologist
- Diagnostic Radiologist
- Pathologist
- Surgeon, general or specialist in cancer care
- Radiation Physicist
- Dietitian
- Radiation Therapist
- Palliative Care provider
- Oncology Nurses
- Chemotherapy Nurses
- Oncology Nurse Navigators

MEET OUR PROVIDERS

Our oncologists treat all major adult cancers as well as adult hematological disorders. Our medical oncologists provide the delivery of medical therapy, and also have extensive knowledge in immunotherapy, targeted therapies, and combined chemo and radiation therapy. Our radiation oncologist provides delivery of stereotactic body radiation therapy and stereotactic radiation surgery, and works closely with a dermatologist and medical physicist in order to provide precise radiation therapy.

Divya Arora, MD
RADIATION ONCOLOGY
MEDICAL EDUCATION
University of South Florida College of Medicine, Morsani College of Medicine
Tampa, Florida
RESIDENCY - Radiation Oncology
Baylor Scott and White, Texas A&M
Temple, Texas

Khawaja Hamid, MD
RADIATION ONCOLOGY / ONCOLOGY
MEDICAL EDUCATION
Sindh Medical College - Karachi, Pakistan
FELLOWSHIP - Medical Oncology
Protona Medical Center
Southfield, Michigan
RESIDENCY
• St. Vincent's Medical Center
Bridgeport, Connecticut
• St. Elizabeth's Hospital - Utica, New York

Wendi Hanna, C-FNP
CANCER CARE
MEDICAL EDUCATION
Master of Science in Nursing
Kaplan University
BOARD CERTIFICATION: American Nurses
Credentialing Center



Palliative Care focuses on relieving and preventing the suffering of patients. Palliative care specializes in the relief of the pain, symptoms and stress of serious illness. Palliative care is given to improve the quality of life of patients who have a serious or life-threatening disease, such as cancer.

Palliative Care



**Teresa Stewart,
RN, CHPN**

The goal of palliative care is to prevent or treat, as early as possible, the symptoms and side effects of the disease and its treatment, in addition to the related psychological, social, and spiritual problems. The goal is not to cure. Palliative care is also called comfort care, supportive care, and symptom management.

Palliative medicine is appropriate for patients in all disease stages, including those undergoing treatment for curable illnesses and those living with chronic diseases, as well as patients nearing the end of life.

This can include treating nausea related to chemotherapy, morphine to treat the pain of broken leg, or ibuprofen to treat aching related to an influenza (flu) infection.

Palliative medicine at Holzer utilizes a multidisciplinary approach to patient care, relying

on input throughout our healthcare system, including physicians, pharmacists, nurses, chaplains, social workers, and Hospice to create a plan of care to relieve suffering in all areas of life. This multidisciplinary approach allows the palliative care team to address physical, emotional, spiritual and social concerns that arise with advanced illness.

The Palliative Care Team plans to provide both effective inpatient and outpatient management of patients with serious, potentially life threatening illness independent of curative or life-prolonging care. The primary focus is placed on pain and symptom control, psychosocial distress, spiritual issues and practical needs. Additionally, our desire is to be very informative so that patients and their families can fully understand the illness, prognosis and treatment options and then work from that knowledge in establishing goals of care. Knowledge, understanding and compassion are key foundational concepts for the success of Palliative Care.

● How do I know if Palliative Care is Right for Me?

Palliative care may be right for you if you suffer from pain or other symptoms due to a serious illness. Serious illnesses include but are not limited to:

- Cancer
- Cardiac disease
- Respiratory disease
- Kidney failure
- Alzheimer's
- AIDS
- Amyotrophic Lateral Sclerosis (ALS)
- Multiple Sclerosis

Palliative care can be utilized at any stage of illness and alongside curative treatment.

● What Can I Expect from Palliative Care?

When you receive palliative care you can expect relief from distressing symptoms such as pain, shortness of breath, fatigue, constipation, nausea, loss of appetite and difficulty sleeping. Palliative care improves your ability to carry on with your daily life. It improves your ability to tolerate medical treatments and helps you to better understand your condition and your choices for medical care. In short, you can expect the best possible quality of life.

● Common Indications for Palliative Care

Some of the more common indications for palliative care consultation include:

- Intractable symptom (pain, nausea, depression, etc.) management associated with end stage or serious illness,

- Discussing goals of treatment/care and prognosis, and assistance with coordination of care,
- Patients who have frequent readmissions to the acute care setting can often benefit from palliative care consultation especially when a progressing illness such as COPD, CHF or advanced renal disease are the culprit. Complex family system dynamics often create situations in which palliative care can be beneficial as well.

● Palliative Care & Cancer

Palliative care is given throughout a patient's experience with cancer. Our palliative care nurse, Teresa Stewart, RN, CHPN, meets with each patient at diagnosis and continues through treatment, follow-up care, and the end of life.

Palliative care is provided in addition to cancer treatment. However, when a patient reaches a point at which treatment to destroy the cancer is no longer warranted, palliative care becomes the total focus of care. Palliative care will be continued to alleviate the symptoms and emotional issues of cancer. Palliative care providers can help ease the transition to end-of-life care.

● Palliative Care & Cancer Family Care

It's common for family members to become overwhelmed by the extra responsibilities placed upon them.

Palliative care can help families and friends cope with these issues and provide the support needed.

Cases Diagnosed in 2019 » Description of Top Sites Compared to Ohio & National

An estimated 1,762,450 new cancer cases have occurred nationally in 2019. The state of Ohio is estimated at 67,150. Holzer Center for Cancer Care (HCCC) had 284 analytic cases for the year. The incidence rate for men and women nationally is 870,970 and 891,480 respectively. Holzer was 10 percent above the national level for lung, our top site, and approximately the same as the national level for breast, our second-highest site. Leukemia is 3.9 percent and 4.3 percent above the national and state average respectively. Prostate is below national average by 2.9 percent and 1 percent below state average. Colorectal incidence is similar to last year at 11.6 percent (compared to 12.1% in 2018) and is 3.3 percent above the national average.

	HCCC	PERCENTAGE	OHIO	PERCENTAGE	NATIONAL	PERCENTAGE
Lung/Bronchus	65	22.9%	9,680	14.4%	228,150	12.9%
Breast	45	15.9%	10,240	15.2%	271,270	15.4%
Colorectal	33	11.6%	6,200	9.2%	145,600	8.3%
Leukemia	21	7.4%	2,100	3.1%	61,780	3.5%
Prostate	20	7.0%	5,340	8.0%	174,650	9.9%
Skin	10	3.5%	3,750	5.6%	96,480	5.5%
Bladder	10	3.5%	3,210	4.8%	80,470	4.6%
Pancreas	9	3.2%	1,880	2.8%	56,770	3.2%
Corpus Uteri	8	2.8%	2,600	3.9%	61,880	3.5%
All Others	63	22.2%	22,150	33.0%	585,400	33.2%
TOTALS:	284	100.0%	67,150	100.0%	1,762,450	100.0%

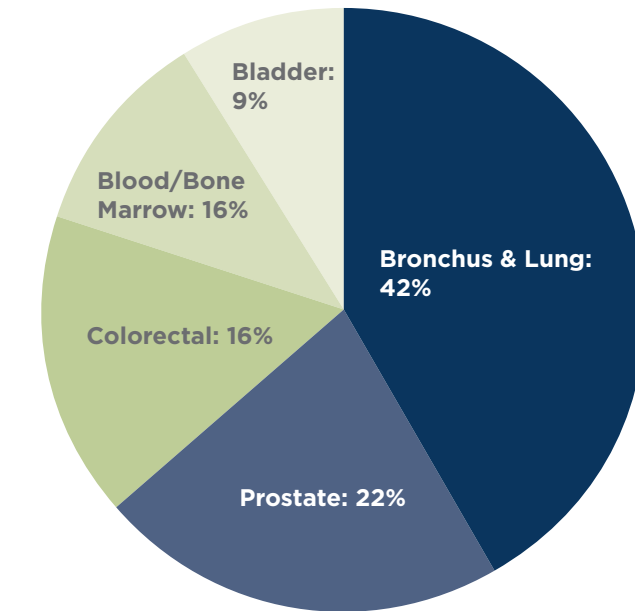
2019 HCCC Site Distribution Data Illustration for Diagnosis



2019 National Comparison of Estimated Top Cancer Sites

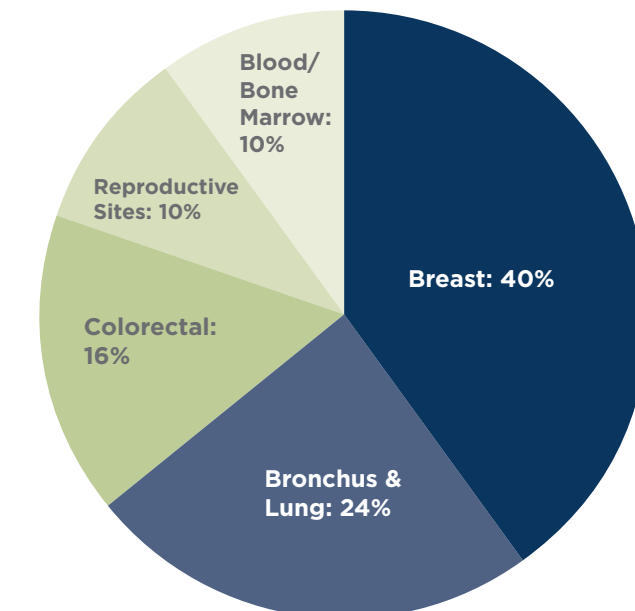
Top Sites for Men

PRIMARY SITE	CASES	PERCENT
Bronchus & Lung	38	42%
Prostate	20	22%
Colorectal	15	16%
Blood/ Bone Marrow	10	9%
Bladder	8	9%
Total	91	100%



Top Sites for Women

PRIMARY SITE	CASES	PERCENT
Breast	45	40%
Bronchus & Lung	27	24%
Colorectal	18	16%
Reproductive Sites	11	10%
Blood / Bone Marrow	11	10%
Total	112	100%





According to the American Cancer Society, breast cancer is the most common cancer in American women, except for skin cancers. Currently, the average risk of a woman in the United States developing breast cancer sometime in her life is about 13%. This means there is a 1 in 8 chance she will develop breast cancer. This also means there is a 7 in 8 chance she will never have the disease.

Current year estimates for breast cancer The American Cancer Society's estimates for breast cancer in the United States for 2020 are:

- About 276,480 new cases of invasive breast cancer will be diagnosed in women.
- About 48,530 new cases of carcinoma in situ (CIS) will be diagnosed (CIS is noninvasive and is the earliest form of breast cancer).
- About 42,170 women will die from breast cancer.

Trends in breast cancer incidence in recent years:

- Incidence rates have increased slightly (by 0.3% per year).

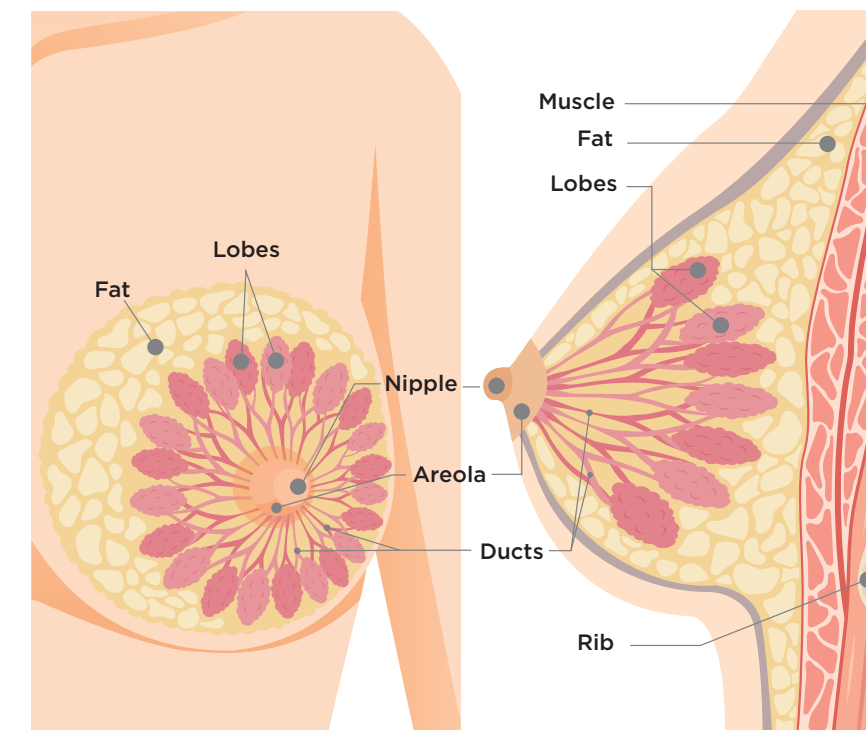
Breast cancer is a disease in which cells in the breast grow out of control. There are different kinds of breast cancer. The kind of breast cancer depends on which cells in the breast turn into cancer.

Breast cancer can begin in different parts of the breast. A breast is made up of three main parts: lobules, ducts, and connective tissue. The lobules are the glands that produce milk. The ducts are tubes that carry milk to the nipple. The connective tissue (which consists of fibrous and fatty tissue) surrounds and holds everything together. Most breast cancers begin in the ducts or lobules.

Breast cancer can spread outside the breast through blood vessels and lymph vessels. When breast cancer spreads to other parts of the body, it is said to have metastasized.

Trends in breast cancer deaths:

- Breast cancer is the second leading cause of cancer death in women (only lung cancer kills more women each year). The chance that a woman will die from breast cancer is about 1 in 38 (about 2.6%). Since 2007, breast cancer death rates have been steady in women younger than 50, but have continued to decrease in older women. From 2013 to 2017, the death rate decreased by 1.3% per year. These decreases are believed to be the result of finding breast cancer earlier through screening and increased awareness, as well as better treatments.



● How is Breast Cancer Diagnosed?

- **BREAST ULTRASOUND.** A machine that uses sound waves to make detailed pictures, called sonograms, of areas inside the breast.
- **DIAGNOSTIC MAMMOGRAM.** If you have a problem in your breast, such as lumps, or if an area of the breast looks abnormal on a screening mammogram, doctors may have you get a diagnostic mammogram. This is a more detailed X-ray of the breast.
- **MAGNETIC RESONANCE IMAGING (MRI).** A kind of body scan that uses a magnet linked to a computer. The MRI scan will make detailed pictures of areas inside the breast.
- **BIOPSY.** This is a test that removes tissue or fluid from

the breast to be looked at under a microscope and do more testing. There are different kinds of biopsies (for example, fine-needle aspiration, core biopsy, or open biopsy).

● Staging

If breast cancer is diagnosed, other tests are done to find out if cancer cells have spread within the breast or to other parts of the body. This process is called staging. Whether the cancer is only in the breast, is found in lymph nodes under your arm, or has spread outside the breast determines your stage of breast cancer. The type and stage of breast cancer tells doctors what kind of treatment you need.



Types of Breast Cancer

The type of breast cancer is determined by the specific cells in the breast that are affected. Breast cancers are diagnosed based on a biopsy, where tissue is removed and examined under a microscope.

● Ductal Carcinoma in Situ (DCIS)

DCIS is also called intraductal carcinoma or stage 0 breast cancer. DCIS is a non-invasive or pre-invasive breast cancer. This means the cells that line the ducts have changed to cancer cells but they have not spread through the walls of the ducts into the nearby breast tissue. Because DCIS hasn't spread into the breast tissue around it, it can't spread (metastasize) beyond the breast to other parts of the body. However, DCIS can sometimes become an invasive cancer. At that time, the cancer has spread out of the duct into nearby tissue, and from there, it could metastasize to other parts of the body. Right now, there's no good way to know for sure which will become invasive cancer and which ones won't, so almost all women with DCIS will be treated.

● Lobular Carcinoma in Situ (LCIS)

LCIS is a non-invasive breast cancer. This means that the cancer cells are contained in the lobules of the milk-producing glands of the breast, but they do not grow through the wall of the lobules. Women with LCIS have a higher risk of developing invasive cancer in either breast. LCIS usually does not cause a tumor that can be felt or changes that can be seen on a mammogram. Often, LCIS is found when a biopsy is done for another breast problem.

● Invasive Breast Cancer

Invasive (or infiltrating) breast cancer means that cancer has spread into surrounding breast tissue. The most common types are invasive ductal carcinoma (IDC) and invasive lobular carcinoma (ILC).

- **INVASIVE DUCTAL CARCINOMA** makes up about 70-80 percent of all breast cancers. This is the most common type of breast cancer. About 8 in 10 invasive breast cancers are invasive (or infiltrating) ductal carcinomas (IDC). IDC starts in the cells that line a milk duct in the breast. From there, the cancer breaks through the wall of the duct, and grows into the nearby breast tissues. At this point, it may be able to spread (metastasize) to other parts of the body through the lymph system and bloodstream.
- **INVASIVE LOBULAR CARCINOMA (ILC)** makes up about 1 in 10 invasive breast cancers. ILC starts in the milk-producing glands (lobules). Like IDC, it can spread (metastasize) to other parts of the body. Invasive lobular carcinoma may be harder to detect on physical exam and imaging, like mammograms, than invasive

Types of Breast Cancer
continued on page 62



ductal carcinoma. And compared to other kinds of invasive carcinoma, about 1 in 5 women with ILC might have cancer in both breasts.

● Triple-Negative Breast Cancer

Triple-negative breast cancer (TNBC) accounts for about 10-15% of all breast cancers. The term triple-negative breast cancer refers to the fact that the cancer cells don't have estrogen or progesterone receptors and also don't make too much of the protein called HER2. (The cells test "negative" on all 3 tests.) These cancers tend to be more common in women younger than age 40, who are African-American, or who have a BRCA1 mutation.

Triple-negative breast cancer differs from other types of invasive breast cancer in that they grow and spread faster, have limited treatment options, and a worse prognosis (outcome). It is a difficult cancer to treat.

● Inflammatory Breast Cancer

Inflammatory breast cancer (IBC) is rare and accounts for only 1-5% of all breast cancers. Although it is often a type of invasive ductal carcinoma, it differs from other types of breast cancer in its symptoms, outlook, and treatment. IBC has symptoms of inflammation like swelling and redness, but infection or injury do not cause IBC or the symptoms. IBC symptoms are caused by cancer cells blocking lymph vessels in the skin causing the breast to look "inflamed." Symptoms include breast swelling, purple or red color of the skin, and dimpling or thickening of the skin of the breast so that it may look and feel like an orange peel. Often, you might not feel a lump, even if it is there. If you have any of

these symptoms, it does not mean that you have IBC, but you should see a doctor right away.

● Paget Disease of the Breast

Paget disease of the breast is a rare type of breast cancer involving the skin of the nipple and the areola (the dark circle around the nipple). Paget disease usually affects only one breast. In 80-90% of cases, it's usually found along with either ductal carcinoma in situ (DCIS) or invasive ductal carcinoma.

● Metastatic Breast Cancer

Metastatic breast cancer is also called stage 4 or advanced breast cancer. This is when breast cancer has spread beyond the breast to other organs in the body.

Breast Cancer Signs & Symptoms

Knowing how your breasts normally look and feel is an important part of breast health. Although having regular screening tests for breast cancer is important, mammograms do not find every breast cancer. This means it's also important for you to be aware of changes in your breasts and to know the signs and symptoms of breast cancer.

The most common symptom of breast cancer is a new lump or mass. A painless, hard mass that has irregular edges is more likely to be cancer, but breast cancers can be tender, soft, or round. They can even be painful. For this reason, it's important to have any new breast mass, lump, or breast change checked by an experienced health care professional.

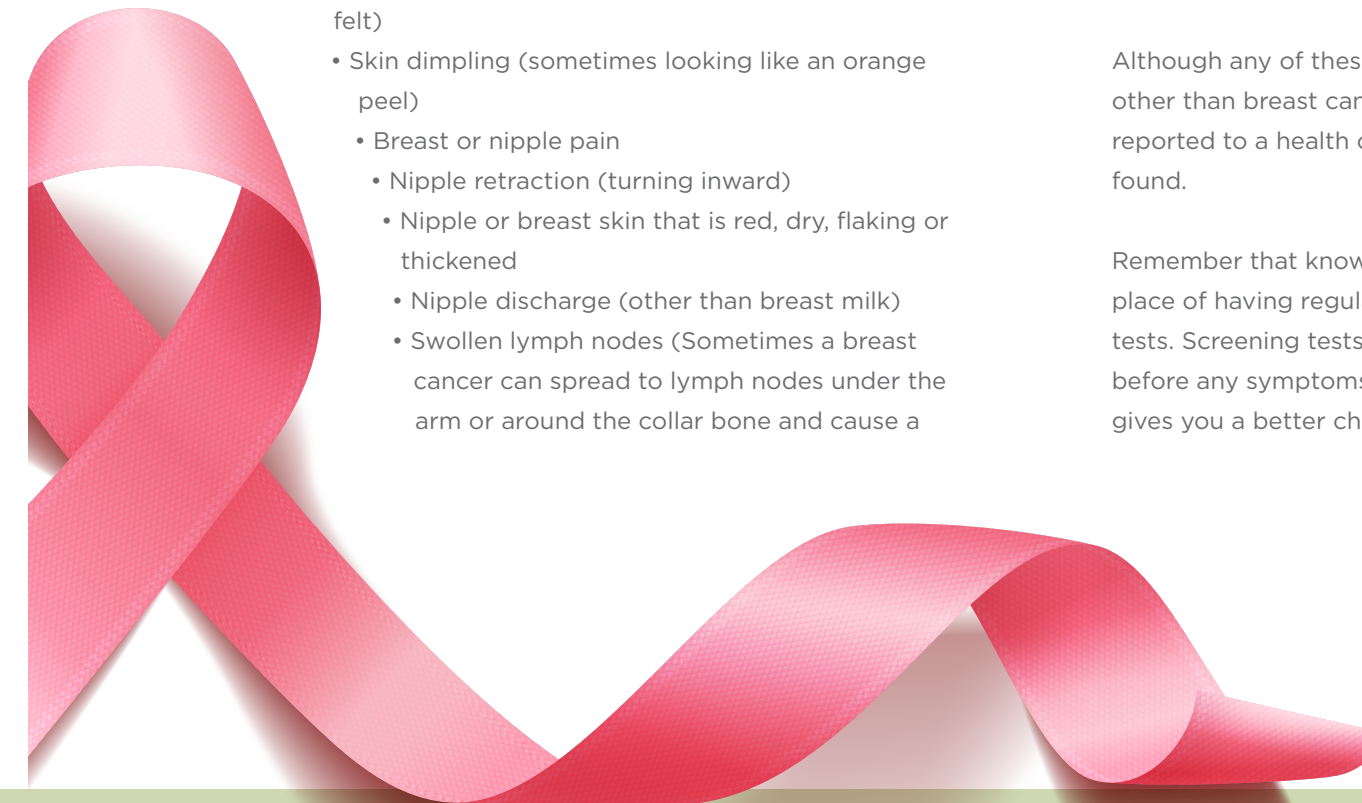
Other possible symptoms of breast cancer include:

- Swelling of all or part of a breast (even if no lump is felt)
- Skin dimpling (sometimes looking like an orange peel)
- Breast or nipple pain
- Nipple retraction (turning inward)
- Nipple or breast skin that is red, dry, flaking or thickened
- Nipple discharge (other than breast milk)
- Swollen lymph nodes (Sometimes a breast cancer can spread to lymph nodes under the arm or around the collar bone and cause a

lump or swelling there, even before the original tumor in the breast is large enough to be felt.)

Although any of these symptoms can be caused by things other than breast cancer, if you have them, they should be reported to a health care professional so the cause can be found.

Remember that knowing what to look for does not take the place of having regular mammograms and other screening tests. Screening tests can help find breast cancer early, before any symptoms appear. Finding breast cancer early gives you a better chance of successful treatment.



American Cancer Society Guidelines for the Early Detection of Cancer

Screening tests are used to find cancer before a person has any symptoms. Here are the American Cancer Society's recommendations to help guide you when you talk to your doctor about screening for breast cancer.

- Women ages 40 to 44 should have the choice to start annual breast cancer screening with mammograms (x-rays of the breast) if they wish to do so.
- Women age 45 to 54 should get mammograms every year.
- Women 55 and older should switch to mammograms every 2 years, or can continue yearly screening.
- Screening should continue as long as a woman is in good health and is expected to live 10 more years or longer.
- All women should be familiar with the known benefits, limitations, and potential harms linked to breast cancer screening.

Women should also know how their breasts normally look and feel and report any breast changes to a health care provider right away.

Some women – because of their family history, a genetic tendency, or certain other factors – should be screened with MRIs along with mammograms. (The number of women who fall into this category is very small.) Talk with a health care provider about your risk for breast cancer and the best screening plan for you.

References used: American Cancer Society (cancer.org); Centers for Disease Control (cdc.gov); Breastcancer.org



Risk Factors

Risk Factors You Cannot Change

- **GETTING OLDER.** The risk for breast cancer increases with age; most breast cancers are diagnosed after age 50.
- **GENETIC MUTATIONS.** Inherited changes (mutations) to certain genes, such as BRCA1 and BRCA2. Women who have inherited these genetic changes are at higher risk of breast and ovarian cancer.
- **REPRODUCTIVE HISTORY.** Early menstrual periods before age 12 and starting menopause after age 55 expose women to hormones longer, raising their risk of getting breast cancer.
- **HAVING DENSE BREASTS.** Dense breasts have more connective tissue than fatty tissue, which can sometimes make it hard to see tumors on a mammogram. Women with dense breasts are more likely to get breast cancer.
- **PERSONAL HISTORY** of breast cancer or certain non-cancerous breast diseases. Women who have had breast cancer are more likely to get breast cancer a second time. Some non-cancerous breast diseases such as atypical hyperplasia or lobular carcinoma in situ are associated with a higher risk of getting breast cancer.
- **FAMILY HISTORY** of breast cancer. A woman's risk for breast cancer is higher if she has a mother, sister, or daughter (first-degree relative) or multiple family members on either her mother's or father's side of the family who have had breast cancer. Having a first-degree male relative with breast cancer also raises a woman's risk.
- **PREVIOUS TREATMENT USING RADIATION THERAPY.** Women who had radiation therapy to the chest or breasts (like for treatment of Hodgkin's lymphoma) before age 30 have a higher risk of getting breast cancer later in life.

Risk Factors You Can Change

- **NOT BEING PHYSICALLY ACTIVE.** Women who are not physically active have a higher risk of getting breast cancer.
- **BEING OVERWEIGHT OR OBESE AFTER MENOPAUSE.** Older women who are overweight or obese have a higher risk of getting breast cancer than those at a normal weight.
- **TAKING HORMONES.** Some forms of hormone replacement therapy (those that include both estrogen and progesterone) taken during menopause can raise risk for breast cancer when taken for more than five years. Certain oral contraceptives (birth control pills) also have been found to raise breast cancer risk.
- **REPRODUCTIVE HISTORY.** Having the first pregnancy after age 30, not breastfeeding, and never having a full-term pregnancy can raise breast cancer risk.
- **DRINKING ALCOHOL.** Studies show that a woman's risk for breast cancer increases with the more alcohol she drinks.

Breast Cancer in Men

The American Cancer Society estimates for breast cancer in men in the United States for 2020 are:

- About 2,620 new cases of invasive breast cancer will be diagnosed
- About 520 men will die from breast cancer

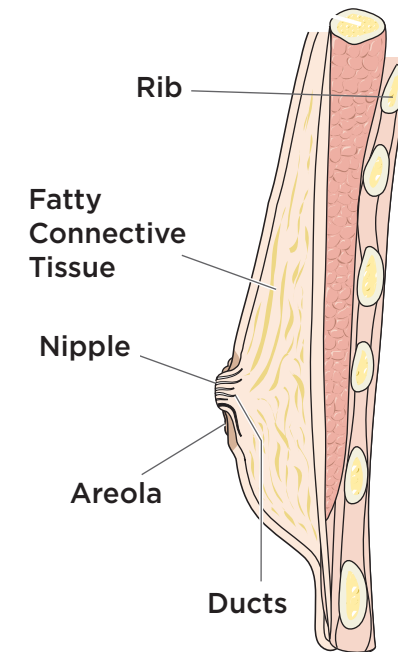
Breast cancer is about 100 times less common among white men than among white women. It is about 70 times less common among Black men than Black women. As in Black women, Black men with breast cancer tend to have a worse prognosis (outlook). For men, the lifetime risk of getting breast cancer is about 1 in 833.

Many people do not realize that men have breast tissue and that they can develop breast cancer. Cells in nearly any part of the body can become cancer and can spread to other areas.

Breast cancer starts when cells in the breast begin to grow out of control. These cells usually form a tumor that can often be seen on an x-ray or felt as a lump. The tumor is malignant (cancer) if the cells can grow into (invade) surrounding tissues or spread (metastasize) to distant areas of the body.

Male Breast Tissue

Until puberty (on average around age 9 or 10), young boys and girls have a small amount of breast tissue consisting of a few ducts located under the nipple and areola (area around the nipple). At puberty, a girl's ovaries make female hormones, causing breast ducts to grow and lobules to form at the ends of ducts. Even after puberty, boys and men normally have low levels of female hormones, and breast tissue doesn't grow much. Men's breast tissue has ducts, but only a few if any lobules.



Breast Cancer Treatment

Breast cancer is treated in several ways. It depends on the kind of breast cancer and how far it has spread. People with breast cancer often get more than one kind of treatment.

● Surgery to Remove Breast Cancer

- **BREAST-CONSERVING SURGERY** (also called a lumpectomy, quadrantectomy, partial mastectomy, or segmental mastectomy) is a surgery in which only the part of the breast containing the cancer is removed. The goal is to remove the cancer as well as some surrounding normal tissue. How much breast is removed depends on where and how big the tumor is, as well as other factors.
- **MASTECTOMY** is a surgery in which the entire breast is removed, including all of the breast tissue and sometimes other nearby tissues. There are several different types of mastectomies. Some women may also get a double mastectomy, in which both breasts are removed.

Breast Cancer Treatment
continued on page 68



Chemotherapy for Breast Cancer

Chemotherapy (chemo) uses anti-cancer drugs that may be given intravenously (injected into your vein) or by mouth. The drugs travel through the bloodstream to reach cancer cells in most parts of the body. Not all women with breast cancer will need chemo, but there are several situations in which chemo may be recommended:

- **AFTER SURGERY:** Chemo might be given to try to kill any cancer cells that might have been left behind or have spread but can't be seen, even on imaging tests. If these cells were allowed to grow, they could form new tumors in other places in the body. This can lower the risk of breast cancer coming back.
- **BEFORE SURGERY:** Chemo might be given to try to shrink the tumor, so it can be removed with less extensive surgery. Chemo is often used to treat cancers that are too big to be removed by surgery when first diagnosed. It should also kill any cancer cells that have spread but can't be seen. This chemo can also lower the risk of breast cancer coming back.
- **FOR ADVANCED BREAST CANCER:** Chemo can be used as the main treatment for women whose cancer has spread outside the breast and underarm area, either when it is diagnosed or after initial treatments. The length of treatment depends on how well the chemo is working and how well you tolerate it.

Hormone Therapy for Breast Cancer

Some types of breast cancer are affected by hormones, like estrogen and progesterone. The breast cancer cells have receptors (proteins) that attach to estrogen and progesterone, which helps them grow. Treatments that stop these hormones from attaching to these receptors are called

hormone or endocrine therapy. Hormone therapy is often used after surgery to help reduce the risk of the cancer coming back. It is usually taken for at least 5 to 10 years.

Immunotherapy for Breast Cancer

Immunotherapy is the use of medicines to stimulate a person's own immune system to recognize and destroy cancer cells more effectively. Immunotherapy can be used to treat some types of breast cancer. An important part of the immune system is its ability to keep itself from attacking normal cells in the body. To do this, it uses "checkpoints" – proteins on immune cells that need to be turned on (or off) to start an immune response. Breast cancer cells sometimes use these checkpoints to avoid being attacked by the immune system. Drugs that target these checkpoints, known as immunotherapy drugs, help to restore the immune response against the breast cancer cells.

Radiation for Breast Cancer

Radiation therapy is treatment with high-energy rays (or particles) that destroy cancer cells. Some women with breast cancer will need radiation, in addition to other treatments. Radiation therapy is used in several situations:

- After breast-conserving surgery (BCS), to help lower the chance that the cancer will come back in the same breast or nearby lymph nodes.
- After a mastectomy, especially if the cancer was larger than 5 cm (about 2 inches), if cancer is found in many lymph nodes, or if certain surgical margins have cancer such as the skin or muscle.
- If cancer has spread to other parts of the body, such as the bones or brain.

Breast Cancer Statistics

At A Glance

Estimated new cases, 2020

279,100

Estimated deaths, 2020

42,690

Incidence rates, 2012-2016

125.3

Average annual rate per 100,000, age adjusted to the 2000 US standard population.

Death rates, 2013-2017

20.3

Average annual rate per 100,000, age adjusted to the 2000 US standard population. Rates for PR are for 2011-2015.

Estimated New Cases, 2020

Breast, By Sex

FEMALE: 276,480

MALE: 2,620

Source: American Cancer Society, 2020

Estimated Deaths, 2020

Breast, By Sex

FEMALE: 42,170

MALE: 520

Source: American Cancer Society, 2020

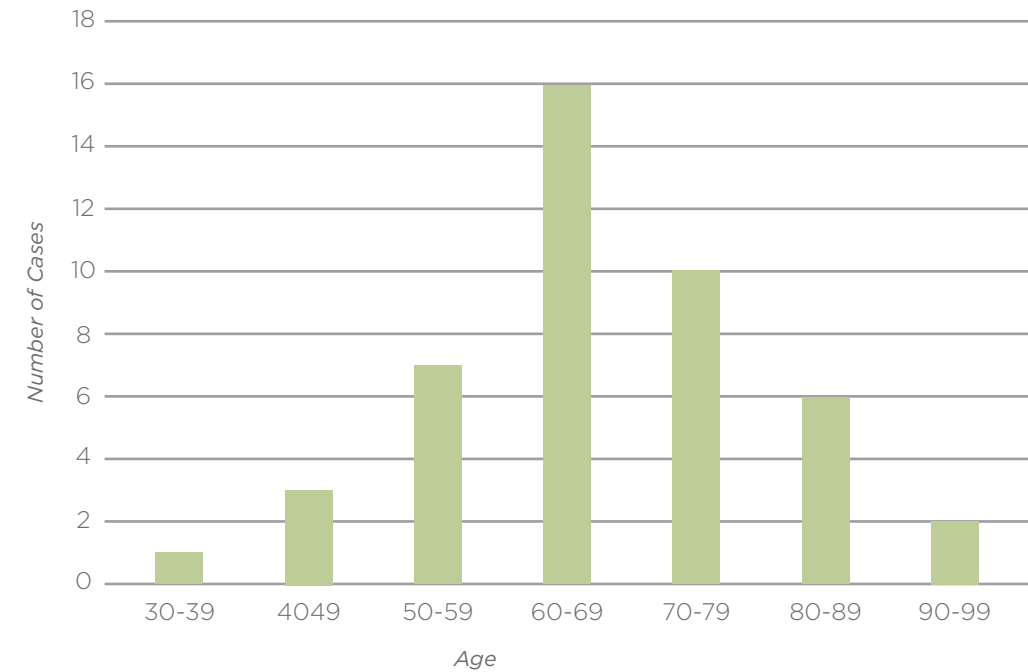
5-Year Relative Survival, 2009-2015

Breast (female), by Stage at Diagnosis



Source: American Cancer Society, 2020

Breast Cases by Age



AGE RANGE	CASES
30-39	1
40-49	3
50-59	7
60-69	16
70-79	10
80-89	6
90-99	2

Probability of Developing Cancer, 2014-2016



Lifetime risk or risk for those who are cancer free at the beginning of selected age interval.

Source: DevCan version 6.7.7, National Cancer Institute, 2019

Probability of Dying from Cancer, 2014-2016



Lifetime risk or risk for those who are cancer free at the beginning of selected age interval.

Source: DevCan version 6.7.7, National Cancer Institute, 2019

Additional Statistics: Men

Estimated New Cancer Cases* in the U.S. in 2020 (Males)

PRIMARY SITE	PERCENT
Prostate	21%
Lung & Bronchus	13%
Colon & Rectum	9%
Urinary Bladder	7%
Melanoma of the Skin	7%
Kidney & Renal Pelvis	5%
Non-Hodgkin Lymphoma	5%
Oral Cavity & Pharynx	4%
Leukemia	4%
Pancreas	3%
All Other Sites	22%

Total: 893,660

*Excludes basal cell and squamous cell skin cancers and in situ carcinoma except urinary bladder.

Source: <https://www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures-2020.html>

The Lifetime Probability of Developing Cancer for Males, 2014-2016

PRIMARY SITE	PERCENT
All Sites*	1 in 2
Prostate	1 in 9
Lung & Bronchus	1 in 15
Colon & Rectum	1 in 23
Urinary Bladder†	1 in 26
Melanoma of the Skin‡	1 in 28
Non-Hodgkin Lymphoma	1 in 41
Kidney & Renal Pelvis	1 in 46
Leukemia	1 in 54
Oral Cavity & Pharynx	1 in 60
Pancreas	1 in 60

*All sites exclude basal cell and squamous cell skin cancers and in situ cancers except urinary bladder.

†Includes invasive and in situ cancer cases.

‡Statistic for non-Hispanic whites.

Source: DevCan: Probability of Developing or Dying of Cancer Software, Version 6.7.7. Statistical Research and Applications Branch, National Cancer Institute, 2019.

Estimated Cancer Deaths in the U.S. in 2020 (Males)

PRIMARY SITE	PERCENT
Lung & Bronchus	23%
Prostate	10%
Colon & Rectum	9%
Pancreas	8%
Liver & Intrahepatic Bile Duct	6%
Leukemia	4%
Esophagus	4%
Urinary Bladder	4%
Non-Hodgkin Lymphoma	4%
Brain & Other Nervous System	3%
All Other Sites	25%

Total: 321,160

Source: <https://www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures-2020.html>

Additional Statistics: Women

Estimated New Cancer Cases* in the U.S. in 2020 (Females)

PRIMARY SITE	PERCENT
Breast	30%
Lung & Bronchus	12%
Colon & Rectum	8%
Uterine Corpus	7%
Thyroid	4%
Melanoma of the Skin	4%
Non-Hodgkin Lymphoma	4%
Kidney & Renal Pelvis	3%
Pancreas	3%
Leukemia	3%
All Other Sites	22%

Total: 912,930

*Excludes basal cell and squamous cell skin cancers and in situ carcinoma except urinary bladder.

Source: <https://www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures-2020.html>

The Lifetime Probability of Developing Cancer for Females, 2014-2016

PRIMARY SITE	PERCENT
All Sites*	1 in 3
Breast	1 in 8
Lung & Bronchus	1 in 17
Colon & Rectum	1 in 25
Uterine Corpus	1 in 33
Melanoma of the Skin†	1 in 41
Non-Hodgkin Lymphoma	1 in 52
Thyroid	1 in 52
Pancreas	1 in 62
Leukemia	1 in 77
Ovary	1 in 80

*All sites exclude basal cell and squamous cell skin cancers and in situ cancers except urinary bladder.

†Statistic for non-Hispanic whites.

Source: DevCan: Probability of Developing or Dying of Cancer Software, Version 6.7.7. Statistical Research and Applications Branch, National Cancer Institute, 2019.

Estimated Cancer Deaths in the U.S. in 2020 (Females)

PRIMARY SITE	PERCENT
Lung & Bronchus	22%
Breast	15%
Colon & Rectum	9%
Pancreas	8%
Ovary	5%
Uterine Corpus	4%
Liver & Intrahepatic Bile Duct	4%
Leukemia	3%
Non-Hodgkin Lymphoma	3%
Brain & Other Nervous System	3%
All Other Sites	24%

Total: 321,160

Source: <https://www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures-2020.html>



170 Jackson Pike • Gallipolis, Ohio
1.855.4HOLZER (1.855.446.5937)
www.holzer.org/cancercare