Summa Health Cancer Institute

2023 OUTCOMES

REPORT













A message from leadership

We are pleased to present to you the 2023 Annual Outcomes report for the Summa Health Cancer Institute. As we look back over 2023, we continue to see Summa Health Cancer Institute develop and progress the care and support we provide cancer patients.

The landscape of radiation oncology is evolving rapidly, driven by technological advancements, personalized medicine and a greater emphasis on patient outcomes and quality of life. Our Varian Edge Linear Accelerator with Hyper Arc system for radiation therapy treatment is an example of this growth. Read more about this innovative solution in the following pages.

In addition, in 2023 we had a heightened focus on our research efforts as showcased by the 233% increase in new trials opened. We also continued to expand our footprint of services available to our community by adding additional breast services at our Barberton Campus. More details of these exciting developments are found within this report.

With our strong commitment to excellence, our entire team of oncology providers remains relentless in our pursuit of delivering the best cancer care possible in the region. We stand with our cancer patients and their families to improve the patient experience and to work toward a cancer-free future.

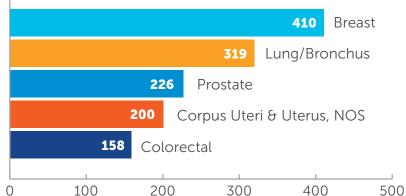
Sameer Mahesh, M.D.

Medical Director, Summa Health Cancer Institute
The Vincent and Nancy DiGirolamo Chair in Oncology



2023 Key Statistics





Primary Cancer Sites

Primary Site	Total	Class		Sex	
		Analytic	Non-Analytic	Male	Female
All sites	2,364	2,240	124	1,037	1,327
Oral Cavity & Pharynx	54	53	1	41	13
Lip	1	1	0	1	0
Tongue	20	20	0	16	4
Salivary Glands	5	5	0	2	4
Floor of Mouth			-		1
Gum & Other Mouth	6	5	1	4	2
Tonsil	12	12	0	10	2
Oropharynx	2	2	0	2	0
Hypopharynx	1	1	0	1	0
Other Oral Cavity & Pharynx	1	1	0	1	0
Digestive System	351	339	12	180	171
Esophagus	33	32	1	26	7
Stomach	24	24	0	14	10
Small Intestine	11	11	0	6	5
Colon	106	105	1	42	64
Rectum/Rectosigmoid	54	53	1	34	20
Anus/Anal Canal/Anorectum	24	22	2	8	16
Liver/Intrahepatic Bile Duct	21	19	2	13	8
Gallbladder	5	5	0	1	4
Other Biliary	5	5	0	2	3
Pancreas	65	60	5	33	32
Retroperitoneum	1	1	0	1	0
Peritoneum, Omentum & Mesentery	2	2	0	0	2
Respiratory System	350	346	4	199	151
Nose, Nasal Cavity & Middle Ear	2	2	0	0	2
Larynx	24	24	0	23	1
Lung/Bronchus	323	319	4	175	148
Trachea, Mediastinum & Other	1	1	0	1	0
Bones/Joints	7	7	0	3	4
Soft Tissue	26	26	0	15	11
Skin	71	47	24	38	33
Melanoma	67	44	23	35	32
Other Non-Epithelial Skin	4	3	1	3	1
Breast	424	410	14	7	417
Female Genital System	342	312	30	0	342
Cervix Uteri	41	29	12	0	41
Corpus & Uterus, NOS	200	200	0	0	200
Ovary	52	52	0	0	52
Vagina	6	5	1	0	6
Vulva	39	22	17	0	39
Other Female Genital Organs	4	4	0	0	4
Male Genital System	260	237	23	260	0
Prostate	249	226	23	249	0
Testis	7	7	0	7	0
Penis	3	3	0	3	0
Other Male Genital Organs	1	1	0	1	0
Urinary System	208	198	10	155	53
Urinary Bladder	103	96	7	85	18
Kidney/Renal Pelvis	95	92	3	62	33
Ureter	3	3	0	2	1
Other Urinary Organs	7	7	0	6	1
Brain & CNS	33	33	0	19	14
Brain	13	13	0	10	3
Cranial Nerves Other Nervous System	20	20	0	9	11
Endocrine System	64	64	0	20	44
Thyroid	52	52	0	16	36
Other Endocrine	12	12	0	4	8
	77	73	4		3 6
Lymphoma				41	
Hodgkin Lymphoma	6	6	0	3	3
Non-Hodgkin Lymphoma	71	67	4	38	33
Blood & Bone Marrow	68	67	1	42	26
Leukemia	25	25	0	15	10
Myeloma	21	21	0	14	7
Other Blood & Bone Marrow	22	21	1	13	9
Mesothelioma	7	7	0	5	2
Unknown Primary	22	21	1	12	10

Awards and Accreditations

2023 Care Beyond Awards



Maria Braucher, RN



Alicia Brindel, BSN, RN, OCN



Morgan Shafer, RN

Not Pictured: Tara Donaldson, RN, Jenna Golden, BSN, RN, OCN, Hannah Logan, RN

2023 Daisy Award Winners



Maria Braucher, RN



Kari Kovach, RN, BSN, CBCN



Susan Stanford, RN. OCN

Not Pictured: Tara Donaldson, RN

Acts of Excellence Caring Award



Lisa Lanham, BSN, RN, OCN, CRNI

Sigma Theta Tau Excellence in Nursing Practice Award, Delta Omega Chapter



John Dolence, BSN, RN, OCN

Cancer Program

American College of Surgeons Commission on Cancer

The Oncology Program at Summa Health is fully accredited by the American College of Surgeons Commission on Cancer (CoC). The program includes our three cancer centers – located on our Akron, Barberton and Medina campuses.



AMERICAN COLLEG

Radiation Oncology

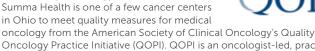
American College of Radiology

Summa Health has earned the prestigious American College of Radiology (ACR) accreditation in radiation oncology. This places Summa Health amongst a select group of cancer care providers nationwide.



Medical Oncology

The Quality Oncology Practice Initiative



Oncology Practice Initiative (QOPI). QOPI is an oncologist-led, practice-based quality improvement program, whose goal is to promote excellence in cancer care by helping practices create a culture of self-examination and improvement.

Breast Imaging

American College of Radiology





Breast Cancer Program

National Accreditation Program for Breast Cancers

Cancers

The Summa Health Breast Program at Summa
Health System – Akron and Barberton Campuses
has been granted a three-year/full accreditation designation by the
National Accreditation Program for Breast Centers (NAPBC), a program
administered by the American College of Surgeons.



Lung Cancer Screening Center of Excellence Summa Health Lung Imaging Center was named a Screening Center of Excellence by the Lung





Rectal Cancer Program

National Accreditation Program for Rectal Cancer



In November 2021, Summa Health Cancer

Institute earned a three-year accreditation from the National Accreditation Program for Rectal Cancer (NAPRC), a quality program of the American College of Surgeons. Summa Health is just one of five accredited programs in Ohio, and one of only 101 accredited programs nationwide.

Membership

NRG Oncology NRG Oncology is a non-profit research organization



Advancing Research. Improving Lives.™

formed to conduct oncologic clinical research and to broadly disseminate study results for informing clinical decision-making and healthcare policy. NRG Oncology seeks to improve the lives of cancer patients by conducting practice-changing multi-institutional clinical and translational research with emphases on gender-specific malignancies including gynecologic, breast and prostate cancers and on localized or locally advanced cancers of all types.

Varian Edge Linear Accelerator Allows Rapidly Precise Targeting of Brain Tumors



In late 2022, Summa Health installed the Varian Edge Linear Accelerator with HyperArc to meet the growing need for high-quality and complex radiation therapy services in our community. The technology may be used to treat both extracranial tumors (lung, prostate, liver, spine) and intracranial tumors (brain). It allows for targeting tumors when surgery may not be feasible or may be debilitating, but it can also be used synergistically with both surgery and drug therapy.

The Edge system offers patients a fast, effective option for treating tumors without incisions or the need for overnight hospital stays. Using precise beam sculpting and a real-time tracking system, radiation oncologists can deliver high radiation doses to destroy the tumor while minimizing exposure to surrounding healthy tissue. Normally an outpatient procedure, Edge treatments can be completed within the same week, taking only one to five sessions. The quicker treatments and reduced time in a doctor's office minimize interruptions in a patient's life, leading to a better quality of life.

By 2023, Summa Health had integrated this innovative technology seamlessly into the clinic. Looking specifically at intracranial tumors, Summa Health was able to take a multidisciplinary approach with radiation oncologists collaborating with neurosurgeons to develop a plan of care for patients tailored to their specific diseases and goals. The program has expanded to treat both malignant and benign tumors in the brain, allowing patients options in their care.

Many technologies exist to approach brain tumors with radiation, and Gamma Knife is a well-known option. However, the traditional Gamma Knife procedure often requires the invasive attachment of a stereotactic head frame to ensure precise targeting, which can be painful and uncomfortable. Because of this, the adaptability of Gamma Knife treatments is limited because of this fixed system. On the other hand, the Varian Edge involves a custom-fitted thermoplastic mask that fixes the patient's head in place without any screws or frames. This non-invasive mask is much more comfortable while still delivering highly precise treatments.

Summa Health chose to purchase the Edge system because it represents an evolution in how radiosurgery is delivered, enabling clinics to perform non-invasive, ablative intracranial and extracranial radiosurgery treatments in addition to highly precise radiotherapy treatments across a range of clinical indications. Advanced imaging capabilities and treatment delivery tools allow Summa Health's radiation oncologists to treat a wider array of cancers and clinical cases, opening the door to more treatment options for our patients who may not otherwise have many. As the program continues to grow and expand in the coming years, our community will continue to benefit tremendously.

First Full Year of Program

Stereotactic Radiosurgery (SRS) Fractions
Stereotactic Radiation Therapy (SRT) Fractions

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"The treatment has been excellent. Dr. Desai is outstanding in letting us know what is going on with each tumor. The mask that needs to be worn maps out exactly where the radiation beam is heading. It's a small encumbrance for the results it produces."

Paul Lucchesi, a patient whose kidney cancer has metastasized, has successfully treated six metastases in the past year.



Anand Desai, M.D. Interim Medical Director, Radiation Oncology

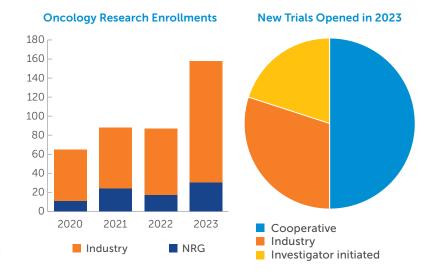
Focus on Research

After facing several challenging years due to the COVID-19 pandemic, the Clinical Research Center-Oncology flourished in 2023.

The Clinical Research Center-Oncology had a 233% increase in new trials opened in 2023 compared to 2022. On average, 14 trials were open to enrollment each month. With the increase in new trials came a 71% increase in patient enrollments. In 2023, 162 patients were enrolled, exceeding the Commission on Cancer requirements for accreditation. Of these 162 patients, 30 of them enrolled on cooperative group trials which is double the requirement for Main Member status with NRG Oncology and a 76% increase from 2022.

In addition to opening new trials and enrolling new patients, the research staff and investigators continued to follow 287 patients already enrolled in over 75 trials. The success of the program can be attributed to the dedication of the research staff and investigators and their commitment to providing Summa Health's patients with the highest quality and compassionate care.

To learn more about clinical trials at Summa Health visit summahealth.org/clinicaltrial, email research@summahealth.org or call 330.375.4221.



Addressing Barriers to Care

Sehar Mahesh, Western Reserve Academy '25

Study Topic: Perform an analysis of the Summa Health Cancer Institute Radiation Oncology patients who missed three or more of their radiation therapy treatment appointments.

Team Members: Anand Desai, M.D., Oscar Streeter, M.D., Melissa Smith, RHIT, ODS, Sehar Mahesh, Sue Newbrough, BSN, RN, Kara Morgan, RT, Lisa Clark, BSN, RN, Scarlett Semprini, BSN, RN, OCN, Christina White, MBA

Radiation therapy is an important modality of cancer treatment. Compliance with Radiation Therapy is important to achieve the best outcomes. The American College of Surgeons (ACS) Commission on Cancer (CoC) sponsored a Quality Improvement (QI) Project: Addressing Barriers to Care for patients undergoing Radiation Therapy. Addressing Barriers to Care aims to understand and find solutions for the issues that may lead to patients missing treatment. Some of those reasons could be socioeconomic, treatment toxicity or hospitalization. The first year of the project consists of evaluating patient charts to delineate reasons for missed treatments. The QI Team evaluated the patients' radiation therapy treatment schedule as well as the list of "no shows" and documented how many therapy sessions patients had missed along with the reason for missing them. Every three months, the QI team reported their findings to the ACS to keep track of their progress.

Patients with lung cancer, head and neck cancer and rectal cancer treated with curative intent were included. For a patient to be classified as a "no show", they had to miss three or more radiation treatments. The results of the first year of the project are shown in the table below.

Type of Cancer	Lung	Head and Neck	Rectum
Number of Patients	101	66	29
Patients who Missed Three or More Appointments	24	12	3
Patients with Treatment Toxicity	7	4	2
Patient Death	0	1	0
Patient Hospitalized	10	8	0
Transportation Issues	6	2	0
Patient with Illness Unrelated to Treatment	3	1	1

Based on the results, the QI team concluded that at the Summa Health Cancer Institute, the main barriers for patients missing their treatment were treatment toxicity and hospitalization. Social determinants of health were not contributing factors for patients missing treatments for these cancer types. This data provides insight where resources can be prioritized to increase treatment adherence.

Expanded Breast Services in Barberton





In spring 2023, the Summa Health Cancer Institute completed renovations at the Dr. Gary B. and Pamela S. Williams Center for Breast Health—Barberton Campus that supported new capabilities. The goal was to offer comprehensive breast services to patients in the local area.



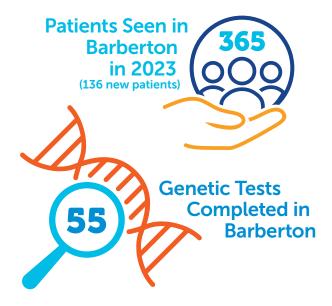
With this expansion, in addition to breast surgery consultations, patients also have access to high risk provider consultations and appointments with **Elizabeth Andrew, MSN, APRN, CNP** as part of the High Risk Breast Clinic. This clinic provides

cancer risk evaluation, high risk screening and preventive options for individuals at increased risk of breast cancer.

As part of a high risk appointment, patients complete a hereditary cancer risk assessment, genetic evaluation and testing and receive education on lifestyle modifications to lower cancer risk. Patients also discuss with the provider preventive options including surgery and risk-reduction medication.

Along with the High Risk Clinic, patients can complete many imaging tests at the Barberton facility, including 3D mammography and diagnostic ultrasound. Ultrasound-guided core biopsies also can be performed in the facility.

Finally, survivorship support is available for all patients, including nutrition and psychosocial support, integrative therapies, education and financial counseling.



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