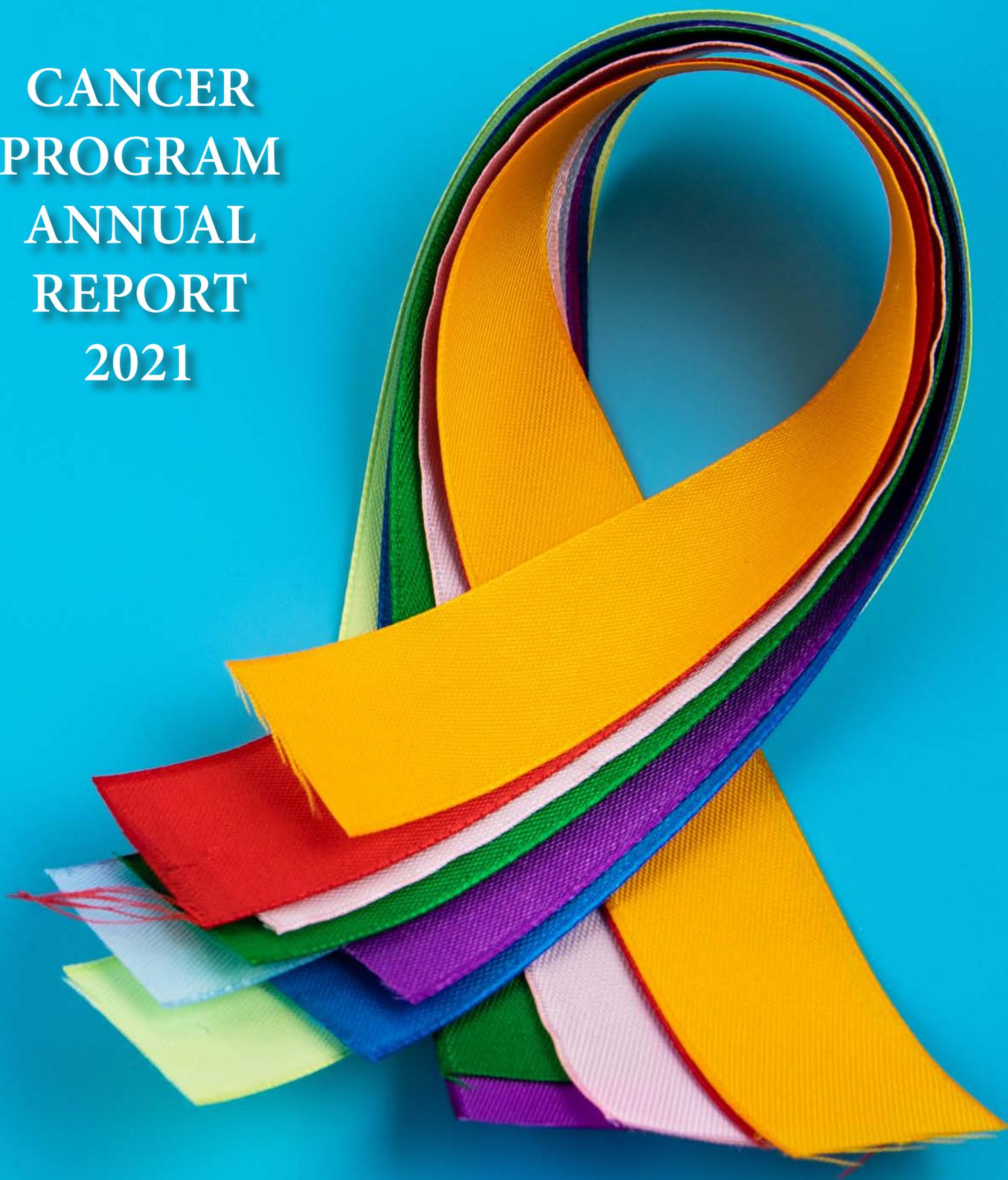


CANCER
PROGRAM
ANNUAL
REPORT
2021





CONTENTS

2	A Year in Review
4	Cancer Registrar's Report
5	Cancer Committee Members
6	Cancer Treatment at HMC
8	Cancer Frequency & Studies
12	Accreditations and References

CANCER PROGRAM ANNUAL REPORT 2021

Prepared by Lynn M. Downey, MPH, RHIT, CTR
Cancer Registrar/Clinical Trials Coordinator

Holyoke Medical Center is committed to providing high quality, personalized healthcare in the prevention, diagnosis and treatment of cancer. This annual report highlights the work, progress and achievements of our Cancer Program in 2021, and our impact on care and the community.

A Year in Review

The Cancer Committee is responsible for developing and implementing programs that evaluate cancer care at Holyoke Medical Center with respect to quality improvement and patient care. The committee organizes cancer screening sessions for various cancer sites, such as breast, colon and lung. The committee institutes programs to meet the standards of the American College of Surgeons Commission on Cancer.

This year, Holyoke Medical Center's cancer program was still experiencing its greatest challenge in history due to the Covid 19 pandemic. While departments that provide services were beginning to open for elective procedures, many patients still had to speak to their doctors through telemedicine for a few months during 2021. Services such as screening mammograms and colonoscopies were back on track again in 2021. Outpatient rehabilitation areas of the hospital that were shut down slowly reopened. There were still great challenges in community outreach events. Facebook was utilized for educational programs, but in person events such as screenings and the survivorship and holiday celebrations were put on hold again in 2021. Lung cancer screening did resume in 2021.

Cancer committee and conference meetings were still being done remotely.

Radiation services at our neighboring facilities which were closed in 2020, were back on track again in 2021.

The medical oncology department at Holyoke Medical Center remained open and patients were able to get their chemotherapy during and after the pandemic. Follow up patients participated in telemedicine. The cancer registrar worked through the pandemic and submitted cancer data to the Department of Public Health (DPH), along with data on Covid 19 test results for cancer patients. Delays in treatment or change in modality sequence were also noted to DPH.

Hospice and visiting nurses continued to visit terminally ill patients in their homes and at nursing homes during and after the pandemic.

During 2020, the hospital implemented a facility wide new electronic medical record, Meditech Expanse. This will bring together all departments, including hospital-owned physician offices to better communicate the patient's medical record. The cancer committee's goal during 2021 was to utilize this new tool to analyze referrals from within the facility to the medical oncology department using the SMART (Specific, Measurable, Achievable, Realistic, Timely) technique. Much training was needed by departmental staff to facilitate the electronic referrals and eliminate the paper, telephone and fax process which was being utilized before. Two departments were identified as lagging behind in this process and by the end of the year every department was utilizing the process. Referrals were noted to be widely distributed, but most came from the internal medicine areas.

Dr. Francis Martinez has been appointed liaison to the American College of Surgeons for a three year term. To meet the standards set forth by the Commission on Cancer, the hospital must review data submitted to the National Cancer Database and use benchmark reports. During 2021, the liaison reported on this data three times. Committee meetings were shortened to every other month omitting July and August as per recommendations of the 2020 American College of Surgeons site reviewer.

In 2021, quality improvement studies were done on:

1. Increased appointment times in medical oncology for chemotherapy infusions
2. Compliance with quality indicator of 12 regional lymph nodes removed in colon cancer resections
3. Compliance with NCCN guidelines in DCIS cases

The breast center participates in breast cancer clinical trials in cooperation with the University of Nebraska Medical Center's Breast Cancer Collaborative Registry (BCCR) which uses DNA in the hopes of the discovery of a breast cancer vaccine. This has been an ongoing effort for ten years. This year, patients were also entered into clinical trials at Dana Farber Cancer Institute.

The committee identified financial constraints, including health insurance issues, as barriers of care for patient navigation to address. Patient navigation and psychosocial distress monitoring is done in the oncology department to address this barrier of care and other issues. Referrals are made to the pain management program, social work, hospice, visiting nurses association and to primary care physicians. Much time was spent by staff in addressing insurance issues such as pre-authorization or denials of payments. There are also efforts made to obtain help from pharmaceutical companies if medications are not covered. Patient navigation was delayed due to Covid-19, but the social worker did work through the pandemic and after to address needs. Barriers were based on the Holyoke Medical Center 2020-2023 Community Benefit Implementation Strategy.

The committee reviewed the policies for psychosocial distress, hospice, rehabilitation, nutrition and chemotherapy safety in 2021. The committee reports to the Patient Care Assessment Committee of the hospital on five indicators, time between abnormal mammogram and biopsy; time between biopsy to surgery in breast cancer, outmigration of breast cancer patients; DVT/PE in patients with ports in oncology and no show rate in oncology. This year, two of those were noted to be increasing, so were explored further, with newer strategies for no show patients with automated reminder calls now available through the new electronic medical record software Meditech.

Cancer Conferences were held during 2021, to assemble a multidisciplinary group, including medical oncologists, radiologists, surgeons, radiation oncologists, pathologists, primary care physicians, oncology nurses, the cancer registrar and other specialists, to discuss the diagnosis and treatment of patients with malignancies. Over the course of the year, an attempt was made to include a wide variety of anatomic sites and to discuss both the frequent cancer types as well as unusual malignancies.

Cancer Conferences provide an important interdisciplinary forum for arriving at decisions regarding patient diagnosis and treatment and also serve as a source of education for the medical staff and other members of the hospital team.

The hospital achieved a renewal of their 3-year accreditation by American College of Surgeons in 2021. The hospital is also accredited by the National Accreditation Program for Breast Centers.



Zubeena Mateen, MD
*Director, Hematology/Oncology
Chairman, Cancer Committee*

Cancer Registrar's Report

The Holyoke Medical Center Cancer Registry continues to report close to 300 new diagnoses of malignancy each year. Rapid quality reporting continues in 2021 for all cancer cases.

A current follow up rate of 96% is maintained on all cases, with a 96% follow up rate for cases diagnosed within the past five years. Cooperation of physicians and their office staff is of vital importance to the success of cancer follow-up and continuity of care. Their efforts are greatly appreciated.

The Cancer Registry utilizes the Metriq software system to provide a broad range of cancer data, representing patients, diagnoses, treatment methods and outcome. With the advent of the electronic medical record and Webex sessions, learning software updates has been made easier, along with the retrieval of cancer data. The registrar coordinates the breast cancer center program and breast cancer clinical trials in conjunction with the University of Nebraska's Breast Cancer Cooperative Registry (BCCR) which seeks to develop a breast cancer registry to include biological material which may be used in the future for the development of a breast cancer vaccine.

The Registry saw many requests for information in 2021. These requests were from staff physicians, as well as external groups requesting participation in different studies. Registry information was utilized by administration in their efforts to assess patient care for improvements. Physicians and staff are urged to utilize the Registry's information for studies of their own interest at any time.

The cancer registrar participated in the North American Association of Cancer Registrars lecture on Pancreatic Cancer, Laryngeal Cancer, Lymphoma and Updates in 2021 Treatment.

A current follow up rate of **96%** is maintained on all cases, with a 96% follow up rate for cases diagnosed within the past five years.



Lynn M. Downey, MPH, RHIT, CTR
*Cancer Registrar/Clinical Trials
Coordinator*

2021 Cancer Committee

The Cancer Committee provides leadership for the Holyoke Medical Center Cancer Program. Individuals committed to the care, education and support of the cancer patient strive to provide optimal cancer care.

- *Zubeena Mateen, MD, Chairman, Medical Oncology
- *Renuka Dulala, MD, Medical Oncology
- *Lynn Downey, MPH, RHIT, CTR, Cancer Registrar/Clinical Trials Coordinator
- Nancy Almeyda, CN-BA, Social Work/Case Management
- *Thomas Buck, MD, Pathology
- *Geraldine Cloutier, RN, Oncology
- Karen Crevier-Estes, RN, Quality Improvement
- Frances Fallon, RN, Quality Improvement
- *Mrinal Mali, MD, Radiology
- *Francis Martinez, MD, General Surgery, ACOS Cancer Liaison
- *John Mazzucco, MD, General Surgery, ACOS Cancer Liaison
- *Marcel Moniz, MBA, Administration
- *Laura O'Connor, LSW, Social Work/Case Management
- *Nancy Price, RN, Oncology
- Rebecca MacGregor, Marketing
- *Elizabeth Rinehart, MD, Pathology
- *Marjorie Spitz, MBA, Administration
- *Steve Urbanski, MD, Radiology
- * Holyoke VNA Hospice Life Care Management and Representatives

*indicates Breast Cancer Committee members

Additional members of the Breast Cancer Committee include:

- *Dianne Walsh, R.T.R.M., Women's Center

Cancer Treatment at HMC

The Cancer Program Annual Report is a summary of the cancer experience at Holyoke Medical Center for 2021. The information used in this report is gathered from the Cancer Registry and activities of the Cancer Committee, which serve to improve the quality of cancer care. This report is provided as a source of reference to the hospital and its medical staff.

CANCER PROGRAM

Holyoke Medical Center has maintained a cancer program since 1977 and currently utilizes a reference date of January 1, 2005 for its database. This has been managed according to the requirements set forth by the American College of Surgeons' Commission on Cancer for a community hospital. Approval status affirms that the hospital provides a full range of services for the diagnosis and treatment of cancer.

CLINICAL PROGRAM

All cancer patients admitted to Holyoke Medical Center have access to consultative services by a member of the medical staff. This represents a variety of medical and surgical specialties, radiology, laboratory and other ancillary services, which provide optimal diagnostic and staging techniques. Inpatient and outpatient oncology services at Holyoke Medical Center are directed by oncologist, Zubeena Mateen, MD. Oncology referrals are made to other areas for experimental or newer types of cancer treatment. The hospital's breast cancer center was the first center in western Massachusetts accredited by the National Accreditation Program for Breast Centers (NAPBC).

CLINICAL TRIALS

The Adjuvant Online software program provides current information on cancer management, including treatment advances, clinical trials on each cancer, as well as physicians and organizations that provide care to cancer patients. The latest patient management guidelines are available for physicians on the National Comprehensive Cancer Network. The American Cancer Society provides a clinical trials matching program brochure in the information resource library located in the oncology department. The hospital participates in breast cancer clinical trials in cooperation with the University of Nebraska Medical Center.

CANCER CONFERENCES

Cancer Conferences are generally held on the last Thursday of the month. Cancer Conferences provide continuing medical education and are available as a consultative service. Open discussions are encouraged among primary care physicians, pathologists, surgeons, radiation oncologists, radiologists and medical oncologists. A lung conference is held weekly in the Pulmonology Department on Fridays.

PROFESSIONAL DEVELOPMENT

Programs are offered each year for continuing medical education and other related benefits to all members of the Medical Staff and other health care professionals. This ensures the constant access to new developments and updates in cancer care. This year's professional development included a lecture on the following subject:

- Karyotyping

*Other in person professional development lectures were cancelled in 2021 due to Covid-19

Physicians are encouraged to obtain online professional education.

COMMUNITY EDUCATION

Cancer screenings allow for early detection of some types of cancer. Holyoke Medical Center is dedicated to this early detection.

*Facebook educational sessions were done on Colon Cancer in March and Breast Cancer in October.

Lung cancer screening in the pulmonary department was re-established in 2021 after Covid 19 delays.

A Quit Smoking Workshop and Weight Management Information Sessions in Spanish and English were held online. Zumba exercise classes were offered online.

Health Fairs/Community Events

In 2021, community in person events promoting healthy lifestyle habits were for the most part postponed. The hospital Facebook site was utilized to promote educational PowerPoint presentations on cancer prevention and screening.

The results of the 2019 Community Health Needs Assessment (CHNA) are available on the hospital website. The information available includes conclusions from interviews and surveys including participation of hospital patients and employees, as well as community members and key stakeholders within the hospital's primary service area. State and national data is also available in the interactive platform, including information from public data sources, such as the U.S. Census Bureau, the Centers for Disease Control and Prevention and the U.S. Department of Agriculture. This site is continuously updated and is user friendly so that the public can easily assess it. The Community Benefits Department of the hospital oversees this program and will be tailoring community events to meet the needs established. The hospital used this data to develop the 2020-2023 Community Benefit Implementation Strategy, which was used by navigation to identify barriers to care.

In 2021, the community benefits department started preparations for the next CHNA. The community survey, community discussions, and key stakeholder meetings will run through the fall of 2021 - spring 2022.

Breast Cancer Awareness

Each October, Holyoke Medical Center promotes Breast Cancer Awareness month. A breast cancer education video was completed by the Oncology Department and shared on the hospital website and social media outlets, including Facebook. Breast cancer awareness is recognized at HMC throughout the month of October with visibility on computer screensavers throughout the hospital. Clinical breast exams were offered to the community and a Webex on breast cancer prevention was presented to Job Corps students by Dr. Zubeena Mateen.

Awareness Through Media

Holyoke Medical Center is dedicated to providing information to the community and making the community aware of healthcare news that may help or affect its members. For this reason, multiple physicians provide interviews with the media on cancer whenever requested which appeared on television or in a written format. These interviews are then shared through social media outlets, such as Facebook.

CANCER SUPPORT GROUPS*

Spanish Support Group

This support group is geared toward Latina women recently diagnosed with breast cancer and for survivors of breast cancer. The group is bilingual.

Cancer Support Group

This support program is open to all cancer patients and their families and caregivers. Sponsored through Holyoke Medical Center's Oncology Department, this group meets monthly. The support groups offer many different topics during the year.

*Attempts were made during the Covid 19 pandemic to do online support group meetings but was not successful due to the patients' choice. Referrals were made to the nearby Cancer Connection which did have an online group. Plans were underway at the end of 2021 to resume the in person groups.

Hospice Support Group

This group started in 2015 and includes a bereavement counselor who discusses the many different responses to grief and handling unfamiliar or new responsibilities. Members are able to share stories about coping skills with each other.

HOSPICE

Holyoke Medical Center has an affiliation with Holyoke VNA Hospice Life Care. Physicians are encouraged to recommend hospice services which can be initiated in as much as a six month time frame. There are also patients who go on and off hospice periodically.

BREAST CANCER CENTER

The hospital is accredited by the National Accreditation Program for Breast Centers. Accreditation ensures that a multidisciplinary, integrated and comprehensive breast care service is maintained at the hospital. This will provide internal and external assessment of the breast center performance based on recognized standards to demonstrate a commitment to quality care. The hospital was re-accredited for three years in 2019 for its breast cancer program.

Cancer Frequency & Studies

Total cancer frequency at Holyoke Medical Center usually averages close to 300 new cases annually. The delay in cancer diagnosis due to Covid-19 experienced nationally was noted. The most common malignancy seen in 2020 was breast cancer at 20%, followed by prostate cancer at 15% and lung cancer at 14%.

2020 FREQUENCY OF CANCER BY PRIMARY SITE

(235 Analytic cases)

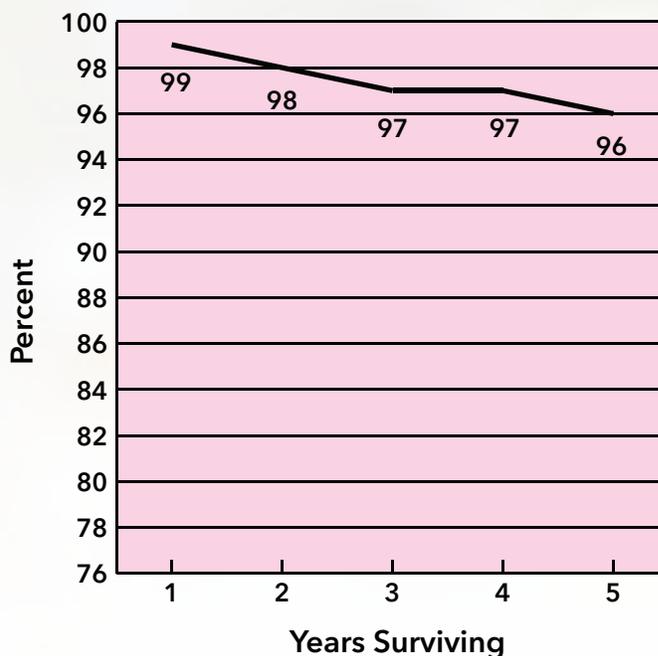
PRIMARY SITE	# OF CASES	PERCENTAGE
Breast	48	20%
Prostate	35	15%
Lung	34	14%
Colorectal/Anus	25	11%
Bladder	16	7%
Hematological	14	6%
Esophagus/Stomach/ Small Intestine	13	6%
Liver/Gallbladder/Bile Duct	8	3%
Lymphoma	8	3%
Pancreas	7	3%
Unknown Primary	6	2%
Thyroid	6	2%
Kidney	3	1%
Endometrium/Cervix	2	<1%
Melanoma	2	<1%
Mesothelioma	2	<1%
Ovary/Vagina	2	<1%
Testis	2	<1%
Head/Neck	1	<1%
Sarcoma	1	<1%
Total Cases	235	100%

BREAST CANCER STUDY

According to the American Cancer Society an estimated 276,480 new cases of breast cancer will be diagnosed in the United States in 2020. Of those cases, 6,690 will be diagnosed in Massachusetts. Deaths from breast cancer in 2020 are estimated to be 780 in Massachusetts. Breast cancer is the most common cancer diagnosed in women in the United States.

The relative 5-year survival rate at Holyoke Medical Center for cases of breast cancer diagnosed between 2010-2015 is 96%. The national relative 5-year survival rate for breast cancer according to the American Cancer Society is 91%.

**Breast Cancer Relative 5-Year Survival
(269 Cases Dx. 2010-2015)**



Localized stage of disease (Stage 0, I, II) was noted to be 92% of cases. Nationally, 62% of cases present at diagnosis with a localized stage.

HMC BREAST CANCER -STAGE OF DISEASE

(269 cases diagnosed 2010-2015)

Stage 0	31%
Stage I.....	47%
Stage II	14%
Stage III.....	5%
Stage IV	3%

HMC BREAST CANCER-INITIAL TREATMENT

(269 cases diagnosed 2010-2015)

Surgery/Radiation/Hormonal.....	102
Surgery/Hormonal	44
Surgery alone	38
Surgery/Radiation/Chemotherapy/Hormonal...	26
Surgery/Radiation/Chemotherapy.....	17
Surgery/Radiation	15
Surgery/Chemotherapy	9
Surgery/Chemotherapy/Hormonal.....	6
Hormonal alone.....	5
No treatment	3
Chemotherapy alone.....	2
Chemotherapy/Hormonal.....	1
Chemotherapy/Immunotherapy	1

The largest treatment group for breast cancer at Holyoke Medical Center is combination of surgery/radiation/hormonal therapy.

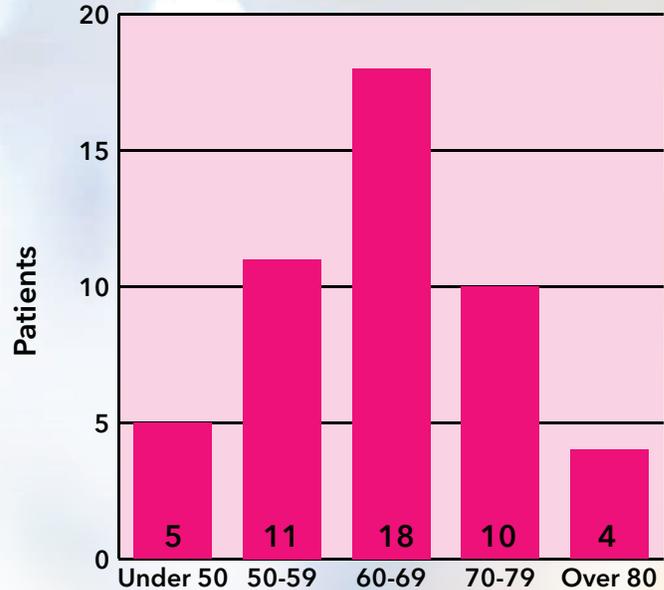


Renuka Dulala, MD
Hematologist/Oncologist

2020 BREAST CANCER (48 cases)

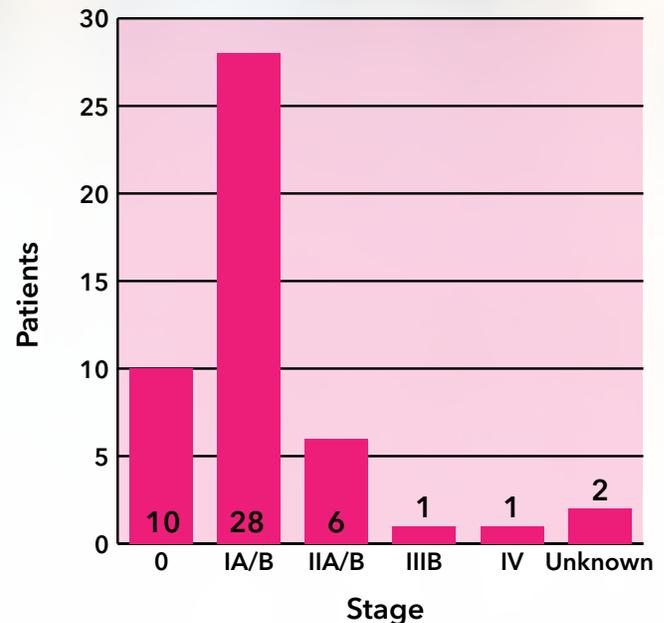
In 2020, there were 48 new cases of breast cancer diagnosed. The largest age group was the 60-69 years of age.

HMC Breast Cancer Age at Diagnosis 2020 (48 Cases)



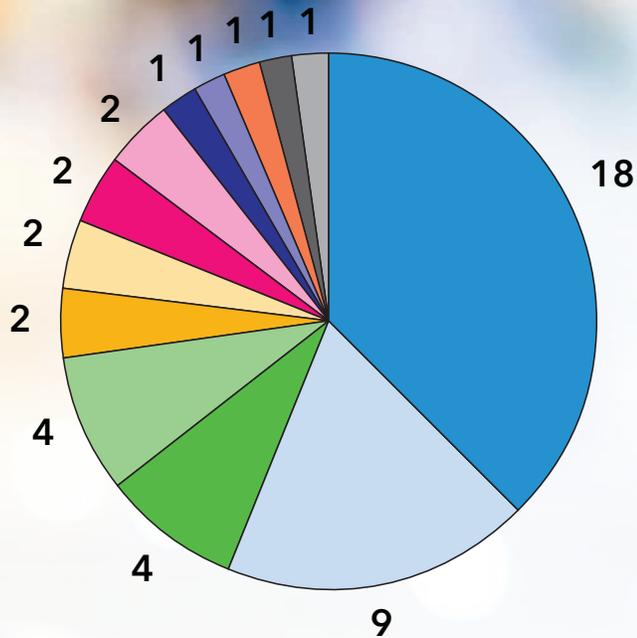
The largest stage group was Stage IA/B.

HMC Breast Cancer Stage at Diagnosis 2020 (48 Cases)



The largest treatment group is Surgery/Radiation/
Hormonal Therapy

HMC Breast Cancer 2020 Treatment (48 Cases)



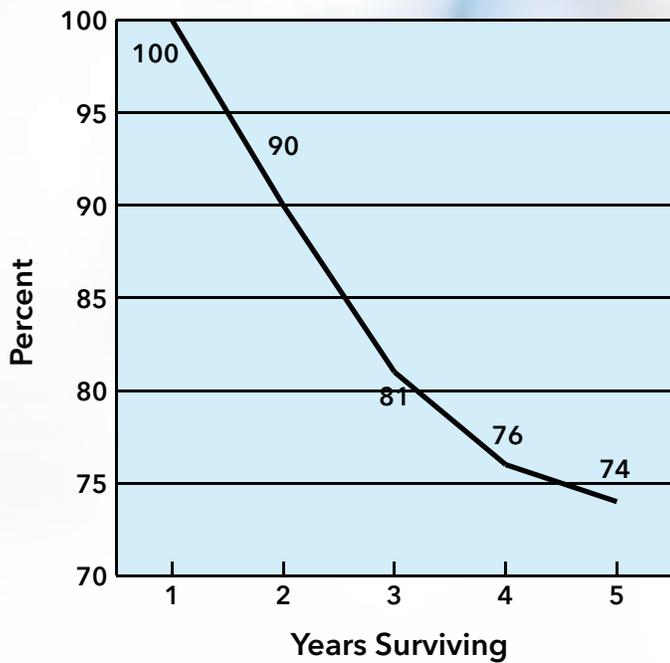
- S/C/H/I Surgery/Chemotherapy/Hormonal/Immunotherapy
- S/C/I Surgery/Chemotherapy/Immunotherapy
- C/I Chemotherapy/Immunotherapy
- No Tx No Treatment
- S/C Surgery/Chemotherapy
- S/R/C/I Surgery/Radiation/Chemotherapy/Immunotherapy
- S/R/C Surgery/Radiation/Chemotherapy
- S/R Surgery/Radiation
- S/C/H Surgery/Chemotherapy/Hormonal
- S/R/C/H Surgery/Radiation/Chemotherapy/Hormonal
- S Surgery
- S/H Surgery/Hormonal
- S/R/H Surgery/Radiation/Hormonal



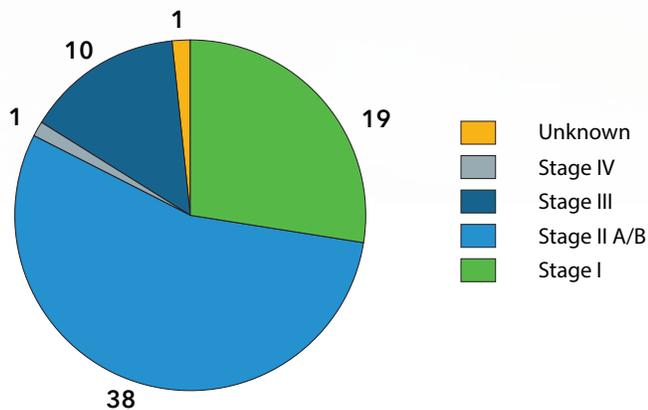
PROSTATE CANCER

The relative 5-year survival rate for 60 prostate cancer cases diagnosed between 2010 to 2015 at Holyoke Medical Center is 74%. The national relative 5-year survival rate for colon cancer as per the American Cancer Society is 99%. Stage IIA/B is the largest stage group noted at Holyoke Medical Center.

**Prostate Cancer Relative 5-Year Survival
(60 Cases Dx. 2010-2015)**

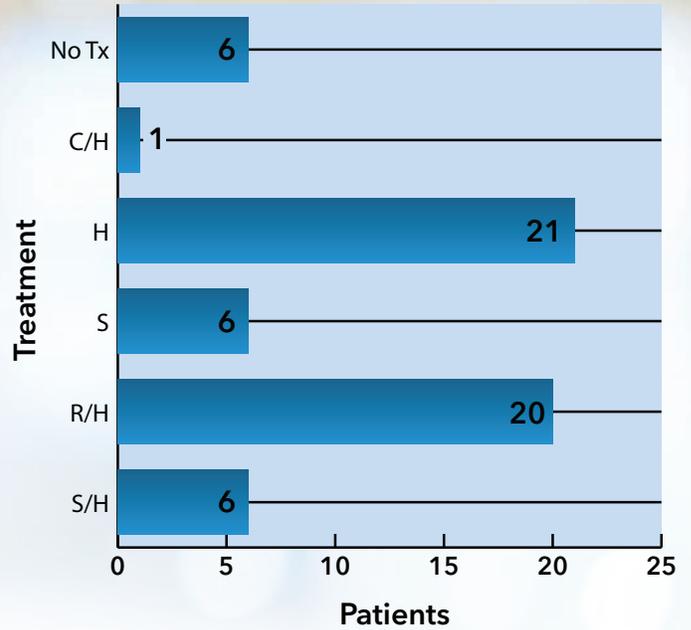


**Prostate Cancer Stage of Disease
(60 Cases Dx. 2010-2015)**



The largest treatment group at Holyoke Medical Center was hormonal therapy alone.

**HMC Prostate Cancer Treatment
(60 Cases Dx. 2010-2015)**



No Tx= No Treatment

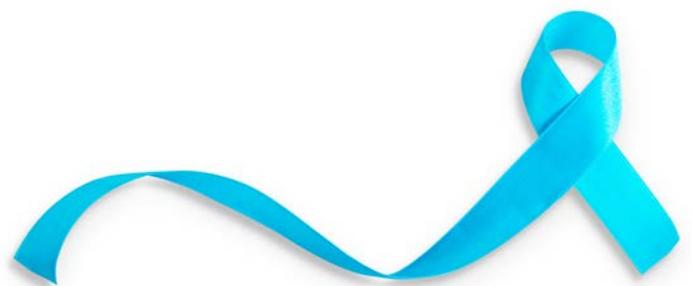
C/H= Chemotherapy/Hormonal Therapy

H= Hormonal Therapy

S= Surgery

R/H= Radiation/Hormonal Therapy

S/H= Surgery/Hormonal Therapy



Cancer Program Accreditations



National Accreditation Program for Breast Centers

Holyoke Medical Center was the first hospital in Western Massachusetts to successfully complete the National Accreditation Program for Breast Centers.



Breast Imaging Center of Excellence

Holyoke Medical Center has accreditation as a Breast Imaging Center of Excellence by the American College of Radiology.



Breast MRI

Holyoke Medical Center has accreditation in breast magnetic resonance imaging (MRI) by the American College of Radiology.



Breast Ultrasound & Ultrasound-Guided Biopsy

Holyoke Medical Center has accreditation in breast ultrasound by the American College of Radiology.



Mammography

Holyoke Medical Center has accreditation in mammography by the American College of Radiology.



Stereotactic Breast Biopsy

Holyoke Medical Center has accreditation in stereotactic breast biopsy by the American College of Radiology.



Lung Cancer Screening Program

Holyoke Medical Center is a designated Lung Cancer Screening Center by the American College of Radiology and a GO₂ Foundation for Lung Cancer Screening Center of Excellence.



Commission on Cancer of the American College of Surgeons

Accreditation with commendation obtained by Holyoke Medical Center ensures our patients will have access to the full scope of services required to diagnose, treat, rehabilitate, and support patients with cancer and their families. This accreditation reaffirms the commitment to provide quality cancer care to our patients.

REFERENCES

American Cancer Society (2020) Cancer Facts & Figures, pgs. 5-6, 10, 11, 18

Holyoke Medical Center Cancer Registry, Reference Date 2005

Manual For Staging of Cancer, American Joint Commission on Cancer, Eighth edition, 2017



