

St. Vincent's East

Cancer Program

*A Body, Mind & Spirit
Approach to*

Healing

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St. Vincent's East Cancer Program

Call to Action

Healthcare that Works

Healthcare That Is Safe

Healthcare That Leaves

No One Behind For Life

Core Values

Service of the Poor

Reverence

Integrity

Wisdom

Creativity

Dedication

Enabling Strengths

Inspired People

Trusted Partnership

Empowering Knowledge

Vital Presence

Stewardship

"We must love our neighbor as being made in the image of God and as an object of His Love."

Saint Vincent de Paul

Director's Letter

The cancer program at St. Vincent's East, which is a part of Ascension, is committed to the delivery of excellent and compassionate care for all our patients. In 2016 the Cancer Treatment Center at East added the latest cancer-fighting technology with the Varian TrueBeam. The TrueBeam is an advanced radiology system from Varian that dynamically synchronizes imaging, patient positioning, motion management and treatment delivery. This new technology will go a long way to consistently improve patient outcomes and increase our patient satisfaction.

Since early detection of cancer saves lives, the Cancer Program continues to focus on community events that promote cancer awareness, screening, early detection, and prevention. St. Vincent's East is also designated by the American College of Radiology as a Lung Cancer Screening Site.

We appreciate the support of the St. Vincent's Foundation, St. Vincent's East Auxiliary, physicians, and associates who continue to work together to ensure we are able to meet the needs of our patients and their families during their diagnosis, treatment, and recovery. As always we look forward to a very successful year for our patients and for the Cancer Program at St. Vincent's East.

Best regards,

Johnny Karr BS, (R) ARRT

Administrative Director of Clinical Services

Earlier Diagnosis and Treatment of Lung Cancer Is Cost Effective for Our Health Care System

Lung Cancer Statistics by the American Cancer Society

Lung cancer is the second most common cancer in both men and women.

For 2017 the ACS estimated 222,500 new cases.

Majority of patients are 65 or older with only 2% diagnosed younger than the age of 45.

Statistics on survival vary depending on stage and extent of disease with earlier stage cancers cured.

More than 430,000 people alive today have been diagnosed with lung cancer during their life time.

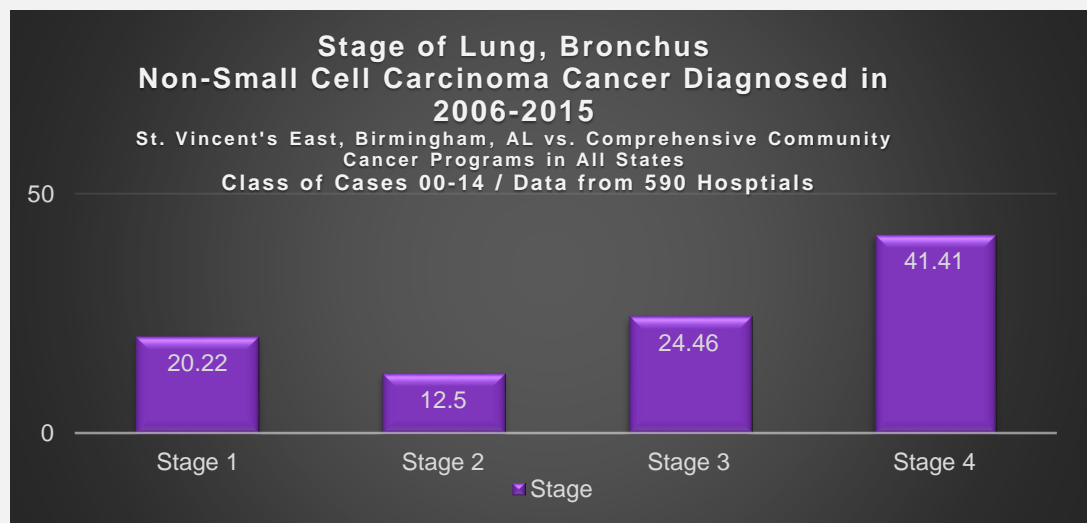
Earlier Diagnosis and Treatment of Lung Cancer Is Cost Effective for Our Health Care System

Our patient data is reported to the American College of Radiology Lung Cancer Screening Registry, and rescreening and follow up is determined by the American College of Radiology Lungs-RADS system, which assigns findings on the chest CT into categories by imaging criteria and is standardized system for follow up and additional testing when necessary when a nodule is detected on a patient's CT based on size and other imaging characteristics we know when it is more likely to be cancer and when it is more likely to be benign. This system allows us to follow nodules that are benign when appropriate and refer patients who have nodules with more worrisome characteristics for earlier biopsy and treatment.

We feel that our Low Dose Screening CT program will help our patient's and will find more lung cancers sooner when the prognosis is better and the outcomes for our patients are better. Patients who wish to participate in our program should discuss this with their physician and can be scheduled for the test by contacting the St. Vincent's East Cancer Treatment Center.

Please contact our Nurse Navigator Rhoda Reese at 205-383-3657 for more information.

Reference: Christiansen, Jared, Laroia, ARchanan et al. [Lung Cancer Screening Education From Science to Practice](http://www.acr.org/Education/e-learning/lung-cancer-Screening-Education), 2015, Kanne, Jeffery, Online Course, American College of Radiology



2017 National Cancer Data Base (NCDB)/ Commission on Cancer (CoC)/ Friday, November 29, 2017

Chairman's Report

Chairman's Report

On behalf of the multidisciplinary Cancer Committee of St Vincent East Hospital, which is part of Ascension, I am pleased to present the 2017 Annual Report. This report reflects our goals, studies of quality and quality improvements, screening and prevention activities and incidence data, for the calendar year 2016. Our comprehensive cancer program provides a network of oncology services specializing in the prevention, diagnosis, treatment, and management of patients with cancer. The experienced and caring staff of the Cancer Program offers a multidisciplinary approach to the diagnosis and treatment of each individual cancer patient. I am happy to report that our cancer program has been granted a full three year accreditation by the American College of Surgeons which attests to our ability to offer the highest quality cancer care that is close to home.

St. Vincent East now offers cutting edge technology with the recent acquisition of a Varian TrueBeam linear accelerator which offers the latest techniques in radiotherapy particularly radiosurgery. This technology combined with our lung cancer screening program with low dose CT scans affords the ability to diagnose as well as treat lung cancer at its earliest stage with a significant chance of cure. Lung cancer continues to be a significant cause of cancer deaths but has an 88 percent survival rate when caught in early stages.

St Vincent East continues to be involved in its support of community cancer screenings, cancer prevention activities and education. We are truly fortunate to be able to offer such programs as Bosom Buddies, TOUCH, Camp Bluebird, and "Look Good Feel Better"* for emotional support of our patients.

The Tumor Registry is involved in collecting data on cancer type, stage of disease, first course of treatments, and offers lifelong patient follow-up. A total of new 640 analytic cancer cases diagnosed in 2016 were added to the Cancer Registry's database. We are truly fortunate to have the particular specialists here at St Vincent East to manage these challenging cases.

I would also like to congratulate each Cancer Committee member, Cancer Leadership member, all medical staff physicians, nurses, ancillary departments and other support personnel for another job well done. It is through these cooperative efforts that make our Cancer Program successful. We will continue to improve and advance the level of care and service we provide to patients and families in our community.

James M. Kamplain, M.D. FACR

Radiation Oncologist

Community Outreach Annual Report

Prevention / Awareness Program

Program/ Community Need Addressed	Activities	Date Discussed	Date Program Held	# of Participants	Guideline Used	Summary of Effectiveness
Cross Point – women's group Presentation CNA – 78% unaware of importance of self-exam to be familiar with their body	Breast Cancer Awareness. Supplied printed material: How to check your breast. Breast model to learn how to perform self-breast exams.	8/9/2016 at Cancer Committee	8/31/2016	23	American College of Obstetricians and Gynecologists American Cancer Society (recommends)	83% stated they learned something new. 3 women stated they would schedule a mammogram. Follow up – all 3 negative
SVE hospital auxiliary breast presentation. CNA – over ¼ all cancers reported were breast 78% seldom or never perform SBE (avg. age 55-70)	Breast Cancer Awareness. Printed educational material: How to check your breast. Breast model to learn how to perform self-breast examinations.	8/9/2016 at Cancer Committee	9/19/2016	33	American College of Obstetricians and Gynecologists American Cancer Society (recommends)	100% reported presentation informative and learned something new.
Oktoberfest – Trussville Educational presentation based on community needs of knowledge related to cancer	Informational booth for breast cancer awareness. Printed material available related to prevention, early detection, and mammograms. A breast model to practice self-exams	8/9/2016	10/8/2016	112	American Cancer Society	59 people took printed material related to breast cancer/mammograms. 79 people practiced on the breast model. 88% stated they were not aware of the amount of pressure needed for breast exams

Community Outreach Annual Report

Screening Program

Program/ Community Need Addressed	Activities	Date Discussed	Date Program Held	# of Participants	Guideline Used	Summary of Effectiveness
Cross Point – women's group Presentation CNA – 78% unaware of importance of self-exam to be familiar with their body	Breast Cancer Awareness. Supplied printed material: How to check your breast. Breast model to learn how to perform self-breast exams.	8/9/2016 at Cancer Committee	8/31/2016	23	American College of Obstetricians and Gynecologists American Cancer Society (recommends)	83% stated they learned something new. 3 women stated they would schedule a mammogram. Follow up – all 3 negative
SVE hospital auxiliary breast presentation. CNA – over 25% all cancers reported were breast 78% seldom or never perform SBE (avg. age 55-70)	Breast Cancer Awareness. Printed educational material: How to check your breast. Breast model to learn how to perform self-breast examinations.	8/9/2016 at Cancer Committee	9/19/2016	33	American College of Obstetricians and Gynecologists American Cancer Society (recommends)	100% reported presentation informative and learned something new.
Oktoberfest – Trussville Educational presentation based on community needs of knowledge related to cancer	Informational booth for breast cancer awareness. Printed material available related to prevention, early detection, and mammograms. A breast model to practice self-exams	8/9/2016	10/8/2016	112	American Cancer Society	59 people took printed material related to breast cancer/mammograms. 79 people practiced on the breast model. 88% stated they were not aware of the amount of pressure needed for breast exams

Cancer Screening for 2018, featuring Colorectal Cancer

March is Colorectal Cancer Awareness Month, let's support the American Cancer Society by reaching their 2018 goal of 80% screened for colorectal cancer by 2018.

According to U.S. Preventive Services Task Force (USPSTF), colorectal cancer is the second leading cause of death from cancer. The key to reducing the mortality rate from colorectal cancer is early detection and prevention. While colonoscopy is considered the first choice for screening, the fecal immunochemical test (FIT) is an alternative method for detecting colorectal cancer.

2018 Schedule of Educational and Cancer Support Programs

Bosom Buddies

Bosom Buddies is a breast cancer support group that meets once per month to give women the opportunity to talk with others who have been through similar experiences. The group is usually comprised of 15-20 women, some recently diagnosed and other who are long-term survivors of breast cancer. Bosom Buddies meets on the third Wednesday of every month from 12-1 p.m. Pre-registration is required.

Look Good...Feel better

This program is for any woman undergoing cancer treatment. A certified professional teaches women how to cope with the appearance-related side effects of cancer treatment which may include hair loss and changes in complexion. Free make-up kits loss a changes in complexion. Free make-up kits valued at \$300 are provided. Look Good... Fell Better is scheduled quarterly. Registration is required to ensure availability of make-up kits. For more information call Support Services at 205-838-3519 or the American Cancer Society at 205-930-8876.

Reach to Recovery

Reach to Recovery is an American Cancer Society volunteer visitation program that helps breast cancer survivors meet the emotional, physical, and cosmetic needs related to breast cancer. Call the American Cancer Society for a referral to the Reach to Recovery program.

Us Too

Us Too is a prostate cancer survivors support group that meets once per month to give men the opportunity to discuss symptoms and side effects group meets the second Wednesday of every month from 12-1 p.m.

TOUCH (Today Our Understanding of Cancer Is Hope)

TOUCH is a general support group that provides information, understanding, caring, and hope for cancer survivors and their families. Touch meets the first Wednesday of every month from 12-1 p.m.

Comparison of Breast Pathology and Imaging Mass Sizes

This was presented on November 14, 2017 to the Cancer Committee as Commission on Cancer Standard 4.7.

Introduction

Breast cancer is the second most common cancer among women in the United States next to skin cancer affecting about one in eight women. Breast imaging, including mammography and breast ultrasound, play an integral role in both the diagnosis of breast cancer as well as the prognosis and treatment strategy planning. Prognosis and treatment are currently determined largely on the basis of breast cancer stage. TNM staging includes information about tumor size and degree of locoregional invasion by the primary tumor (T), extent of regional lymph node involvement (N), and presence or absence of distant metastases (M).

When reporting mammographic and ultrasound findings, radiologist utilize the Breast imaging Reporting Data System (BI-RADS) classification as a risk assessment and quality assurance tool in the mammography. BI-RADS reporting should include the size of the mass in the report along with other important descriptors to evaluate level or risk for malignancy.

For evaluation of tumor (T) stage, the largest dimension of the primary tumor is used for staging purposes. The T1 category includes all the invasive tumors that are 20 mm or less in their greatest dimension. T2 category include tumors greater than 20 mm or less than or equal to 50 mm. T3 tumors are greater than 50 mm. Tumor size is then incorporated into staging of the disease. These tumor stages have important preoperative clinical implications based on the National Comprehensive Cancer Network (NCCN) Guidelines. Clinical decisions include preoperative systemic therapy guidelines for stage II and III disease among other.

In the present study, mammography and ultrasound exam reports are reviewed to assess the proper inclusion of size of suspected lesion in the report according to BI-RADS standards. Tumor size by imaging is then compared with pathologic results assess accuracy given the importance of tumor staging.

Materials and Methods

In the initial data collection termed phase one in the below results, twenty-two patients were selected who underwent biopsy for suspicious mammographic findings from June 2016 to August 2017. Of those patient, eight were biopsied for calcifications and were excluded from the study. Mammography and ultrasound reports were evaluated on the remaining fourteen

Comparison of Breast Pathology and Imaging Mass Sizes

patients to identify if size results were provided in the final report. Final pathology was unavailable for three patients and three additional patients had benign findings which were felt to be outside the scope of the study. Final pathologic reports with diagnosis of breast carcinoma was found in eight patients. Two carcinoma were found in one of these patients. Final pathology results included the actual size of the mass were then compared with mammography and ultrasound findings in eight patients.

In order to further investigate the initial results, a second data collection was performed investigating imaging and pathologic size measurements for thirty patients with suspicious mammographic findings from 2013 to 2015. Patient sample was initially collected for the study evaluating preoperative systemic therapy for operable breast cancer workup Mammography and ultrasound reports were evaluated to identify if size results were provided in the report. Pathology reports for twelve of these patients were for stereotactic/core biopsy and did not include entire size of the breast cancer. Biopsy was performed for calcifications on one patient with no measureable mass son imaging. Final pathology reports included the actual size of the mass were then compared with mammography and ultrasound findings in seventeen patients.

Percentages are rounded to the nearest 1%. Boetes et al. report mammography and US underestimate actual tumor size by 14% and 18% respectively. For the sake of this exam, a measured size above or below these parameters compared to the pathologic size will be considered outside the expect range. However, these ranges are bound to vary given size. Given the importance of differentiating a T1 and T2 lesion, for evaluation of tumors less than 2 cm, 15% of 20 mm, or 3 mm, was selected as a range of normal above or below the pathologic size.

Results

Phase One Date:

Of the twenty two patients initially selected, twenty one of these had a reported size for suspicious abnormality (SA) on either mammographic or ultrasound. Fifteen suspicious abnormalities were assessed in fourteen patients and identified as either BI-RADS category IV or V. Mammography and ultrasound were reported in 7/15 (47%). Size measurement on mammography alone was reported in 3/15 (20%). Size measurement on ultrasound alone was reported in 4/15 (27%). Size measurement on neither mammography nor ultrasound reported in 1/15 (7%).

Comparison of Breast Pathology and Imaging Mass Sizes

Comparison of imaging and available pathologic size is as follows. Mammography significantly underestimate the size of the tumor in 1/6 (17%) cases when utilized and overestimates the size in 3/6 (50%) with an expected size result on 2/6. Ultrasound significantly underestimates the size of the tumor 0/6 cases when utilized and overestimates size in 2/6 (33%) cases with an expected result on 4/6.

Phase Two Data:

Seventeen suspicious abnormalities were assessed and identified as either BI-RADS category IV or V. 16/17 cases reported size of SA on mammography and/ or ultrasound. Mammography was utilized in 16-17 (94%) of SAs. Ultrasound was utilized for 12/7 (71%) Size measurement on both mammography and ultrasound were reported in 7/17 (41%). Size measurements on mammography alone was reported in 5/17 (29%). Size measurements on ultrasound alone was reported in 4/17 (24%). Size measurements on neither mammography nor ultrasound reported in 1/17 (6%).

Comparison of imaging and available pathologic size is as follows. Mammography significantly underestimates the size of the tumor in 3/12 (65%) of cases when utilized and overestimates the size in 2/12 (16%) with an expected results on 7/12. Ultrasound significantly underestimates the size of the tumor in 3/11 (27%) cases when utilized and overestimates size in 2/11 (18%) cases with an expected result on 6/11.

Overall Data Evaluation

By taking an average of the error range on both modalities after excluded in the highest and lowest variables, mammography demonstrates an average error range of +/- 27% while ultrasound demonstrates an average error range of +/- 19%.

An expected result of size measurement compared to pathologic size on mammography was demonstrated in 9/18 (50%) cases. An expected result on ultrasound was demonstrated in 10/17 (59%) of cases. Overall an accurate measure of size was reported on 16-25 (64%) cases suggesting an improvement when both modalities are combined.

Discussion

Of the thirty-seven cases reviewed, tumor size on either mammography or ultrasound was included in 94% of the reports in accordance with BI-RADS recommendations for inclusions of

Comparison of Breast Pathology and Imaging Mass Sizes

tumor size. No national standard is known to the author at this time; however, a goal of 100% reporting of measurements may be considered as a group standard which could be evaluated in the follow up study.

In the initial evaluation which contained a very limited sample size, overestimation of tumor size as opposed to underestimation was more prevalent on both mammography and ultrasound by a small margin. A similar trend was again demonstrated upon review of additional cases. The overall trend of this small sample does seem to indicate that ultrasound measurements fall within an expected range more frequently than with mammography by a small margin. However, rate of expected result are also shown to improve when size measurements are assessed with both modalities within this group of radiologists.

Multiple limitations for this study are recognized. 1) Despite increasing the number of studies reviewed by performing a second phase in addition to the preliminary investigation, overall sample size remains limited. 2) There is likely a selection bias especially in Phase Two as the patient population contains only pathologically proven malignancies. 3) Tumor histologic types can present differently on various imaging modalities. For example, invasive lobular carcinoma has a mammographic sensitivity of 57-81%. 4) In addition, true pathologic size at the time of imaging may be underestimated in multiple cases if there has been pre-operative therapy.

Conclusion

In this limited evaluation of breast imaging size comparison with actual pathologic size, it was shown that sizes are being reported on the vast majority of imaging reports according to BI-RADS standards. Results suggest a possible trend of superior accuracy in size assessment with ultrasound compared with mammography. While the majority of tumors are being described within an expected range of accuracy, there is a slight tendency to overestimate size as opposed to underestimate size within this group. There is also suggestion that measuring tumor size with both mammography and ultrasound is superior to assessing tumor size on a single modality. Statistical relevance and effect on tumor staging is uncertain given exam limitations described above; however, these trends should be taken into consideration when applying NCCN guidelines.

Report Presented by Radiologist Dr. Patrick Druhan, M. D.

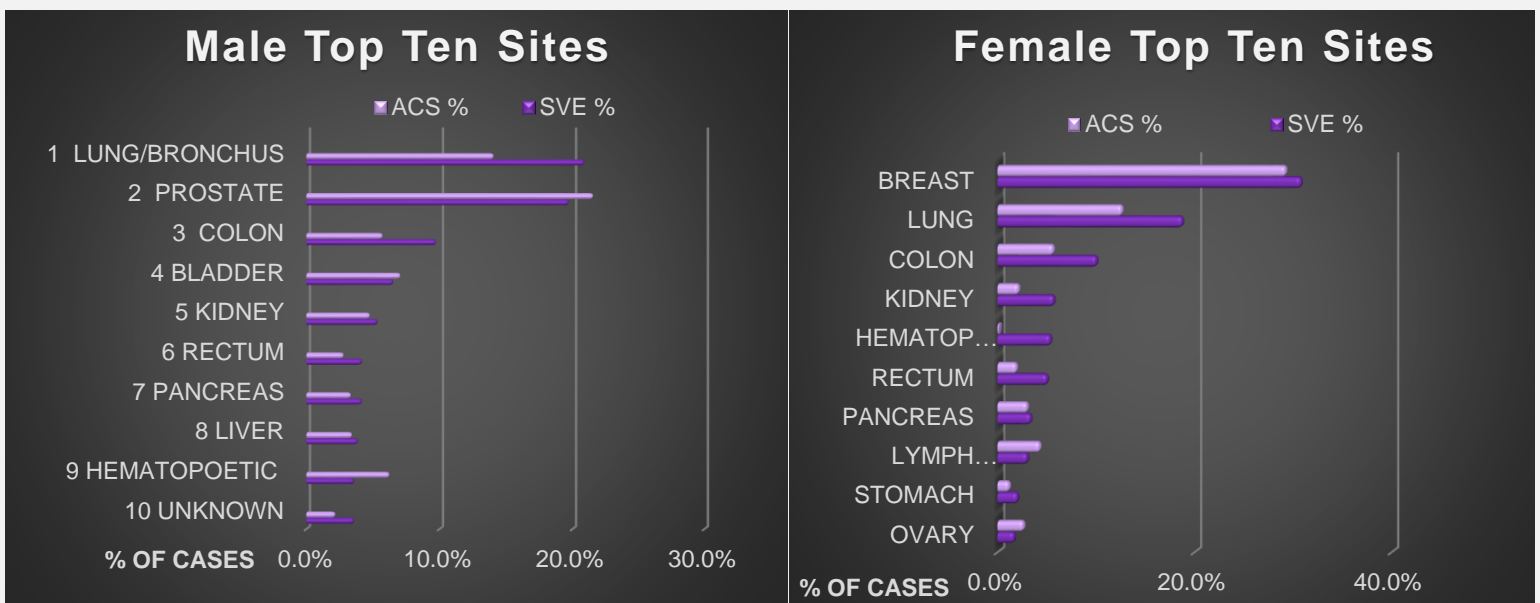
Cancer Registry Report

The Cancer Registry at St. Vincent’s East has collected data for patients diagnosed with and/or treated for cancer since 1989. The collection and analysis of over twenty eight years of cancer diagnoses, along with annual follow-up of cancer survivors, serves as a valuable resource for physicians and other health professionals. The cancer registry is also integral part of providing cancer support services and education recourses to cancer support services and educational resources to cancer patients and their families. Under the direction of the St. Vincent’s East Cancer Committee, the registry participates in the National Cancer Data Base and Rapid Quality Reporting System (RQRS). This reporting system allow registry to not only report breast, colon, and rectal cases at a time when treatment could be affected, but it also provides a method to monitor approaching treatment deadlines to meet nationally accepted guidelines for quality patient care. The St. Vincent’s East Cancer Registry received Gold Standard for reporting data to the Alabama Statewide Cancer Registry for 2017 data submission, as well as commendation for Annual 2017 NCDB Call for Data.

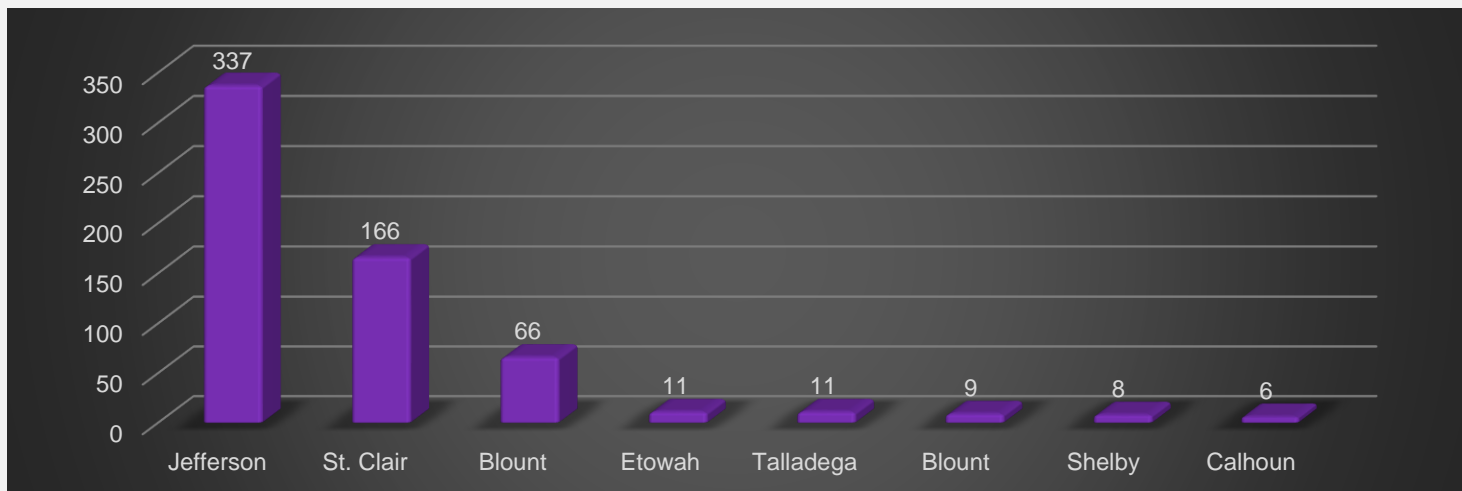
St. Vincent’s East Registry, maintained by Certified Tumor Registrars, serves as the nucleus for documenting cancer program activities, collecting and submitting quality cancer data, facilitating cancer committee meetings, coordinating conference activities that ensure quality patient care, as well as evaluating and promoting the use of ACoS Cancer Program Standards.

SVE Top Ten Sites – Newly Diagnosed Cases 2016

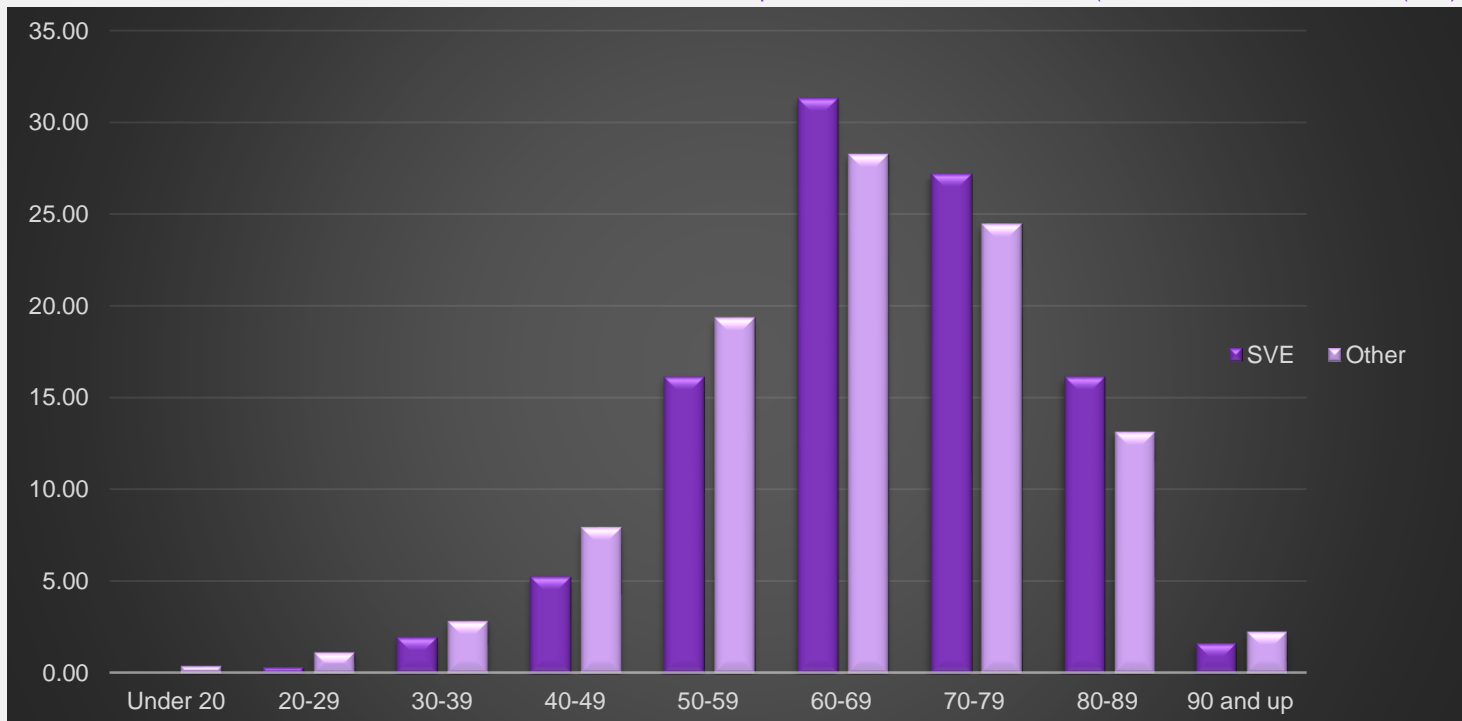
SVE Newly Diagnosed 2016 Cases Compared with American Cancer Society Estimated New Cases
 2016 American Cancer Society, Cancer Facts & Figures



Top 8 Alabama Counties Seen at St. Vincent's East in 2016



Age Comparison All Sites: St. Vincent's East vs. Comprehensive Community Cancer Programs in All States
 Classes of Case 00-14/ Data from 740 Hospitals © National Cancer Database (NCDB/ Commission on Cancer (CoC))



St. Vincent's East

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