Truman Medical Center – Hospital Hill Cancer Registry 2015 Statistical Summary

Incidence

In 2015, Truman Medical Center diagnosed and/or treated 406 new cancer cases. Four patients were treated for recurrent or metastatic cancer after receiving initial treatment elsewhere. Figure 1 depicts the annual new cancers since January 1, 2011. These numbers include patients with more than one primary cancer diagnosed 2011 - 2015.



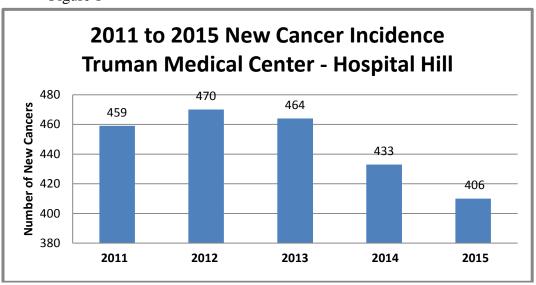
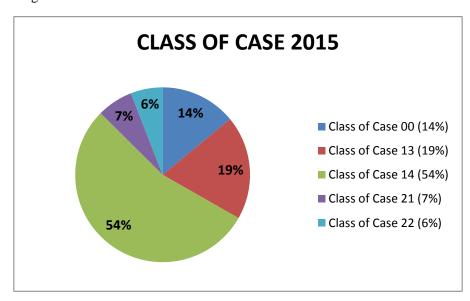


Figure 2 demonstrates the Class of Case. Class 00 cases are diagnosed at TMC-HH and go elsewhere for treatment. Class 13 cases are diagnosed and part of first course treatment is done at TMC-HH; Class 14 is diagnosed and receives all first course treatment at TMC-HH. Class 21 is diagnosed elsewhere, and receives part of first course treatment at TMC-HH; and Class 22 is diagnosed elsewhere, but receives all first course treatment at TMC-HH.

Figure 2



The table below summarizes the primary sites by gender for 2015. The top five occurring cancers at Truman Medical Centers in 2015 are: Breast, Lung, Prostate, Colon, and Kidney.

2015 Primary Site	Male	Female	Total #	Total %
ORAL CAVITY & PHARYNX	16	5	21	5.2
-Lip	1	0	1	
-Tongue	5	2	7	
-Salivary Glands	1	1	2	
-Floor of Mouth	1	0	1	
-Gum & Other Mouth	0	1	1	
-Nasopharynx	2	0	2	
-Tonsil	5	1	6	
-Hypopharynx	1	0	1	
DIGESTIVE SYSTEM	37	33	70	17.2
-Esophagus	4	2	6	1,,2
-Stomach	4	3	7	
-Small Intestine	0	1	1	
-Colon Excluding Rectum	10	13	23	
-Cecum	0	2	2	
-Ascending Colon	3	4	7	
-Hepatic Flexure	0	1	1	
-Transverse Colon	0	1	1	
-Descending Colon	4	5	9	
-Sigmoid Colon	2	0	2	
-Large Intestine, NOS	1	0	1	
-Rectum & Rectosigmoid	12	2	14	
-Rectosigmoid Junction	3	1	4	
-Rectum	9	1	10	
-Anus, Anal Canal & Anorectum	1	2	3	
-Liver & Intrahepatic Bile Duct	3	4	7	
-Liver	2	3	5	
-Intrahepatic Bile Duct	1	1	2	
-Other Biliary	0	1	1	
-Pancreas	3	4	7	
-Peritoneum, Omentum & Mesentery	0	1	1	
RESPIRATORY SYSTEM	39	38	77	19.0
-Larynx	5	2	7	
-Lung & Bronchus	34	36	70	
SOFT TISSUE	1	2	3	0.7
-Soft Tissue (including Heart)	1	2	3	
SKIN (EXCLUDING BCC/SCC)	1	1	2	0.5
-Melanoma Skin	1	1	2	
BREAST	0	72	72	17.7
-Breast	0	72	72	<u> </u>
FEMALE GENITAL SYSTEM	0	32	32	7.9
-Cervix Uteri	0	11	11	
-Corpus & Uterus, NOS	0	13	13	
-Ovary	0	4	4	

-Vulva	0	4	4	
MALE GENITAL SYSTEM	34	0	34	8.4
-Prostate	31	0	31	
-Testis	2	0	2	
-Penis	1	0	1	
URINARY SYSTEM	13	12	25	6.2
-Urinary Bladder	5	4	9	
-Kidney & Renal Pelvis	8	8	16	
EYE & ORBIT	1	1	2	0.5
-Eye & Orbit	1	1	2	
BRAIN & OTHER CNS	2	5	7	1.7
-Brain	1	1	2	
-Cranial Nerves Other Nervous System	1	4	5	
ENDOCRINE SYSTEM	3	9	12	3.0
-Thyroid	1	8	9	
-Other Endocrine including Thymus	2	1	3	
LYMPHOMA	10	11	21	5.2
-Hodgkin Lymphoma	3	4	7	
-Non-Hodgkin Lymphoma	7	7	14	
MYELOMA	4	1	5	1.2
-Myeloma	4	1	5	
LEUKEMIA	9	5	14	3.4
-Lymphocytic Leukemia	3	1	4	
-Myeloid & Monocytic Leukemia	5	4	9	
-Other Leukemia	1	0	1	
MESOTHELIOMA	1	1	2	0.5
-Mesothelioma	1	1	2	
KAPOSI SARCOMA	2	0	2	0.5
-Kaposi Sarcoma	2	0	2	
MISCELLANEOUS	1	4	5	1.2
-Miscellaneous	1	4	5	
Totals	174	232	406	100%

Patient Demographics

Estimated data from the American Cancer Society: *Cancer Facts & Figures 2015* project over 1.6 million new cancer cases with Missouri diagnosing 34,680 of those cancers. Breast, Lung, Prostate, Colon, and Rectum comprise roughly 48% or 16,730 new cancer cases in Missouri. The American Cancer Society estimates 1,688,780 new cancers to be diagnosed for 2017. This number excludes basal and squamous cell skin cancers and in situ carcinomas except urinary bladder. Missouri is estimated to have 34,400 new cancer diagnoses in 2017.

2009-2013 Data from *SEER program & NCI State Cancer Profiles*, showed that Jackson County, MO ranked 48th in the state with a new cancer rate of 450.5.1 per 100,000 people. Jackson County however is 2nd in the state with reported cases of cancer with 3,269 and St Louis County

had 5,910. The Missouri rate was 452.2 and the US rate was 448.4 per 100,000 based on data from 2009-2013.

The gender distribution of cancer patients for Truman Medical Center in 2015 is 43% males and 57% female.

Race distribution for Truman Medical Center cancer patients in 2015 is: Caucasian 51%; Black 45%; with less than 1% each for American Indian, Chinese, Filipino, Vietnamese, Asian Indian, and Pakistani.

Figure 3 represents the age distribution of new cases at diagnosis. The highest percent of patients were diagnosed between the ages of 60 to 69 at 34%, which is an increase of 7% in this age bracket over 2014 statistics. The age range was 19 to 98 years with the average age being 60 years old.

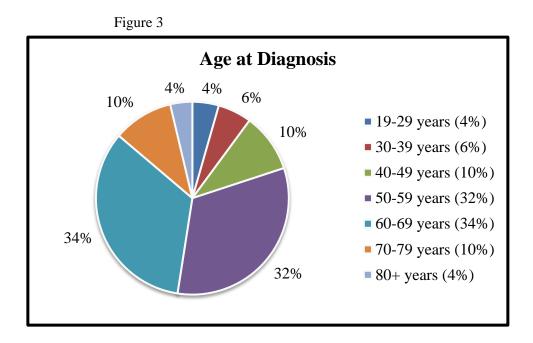
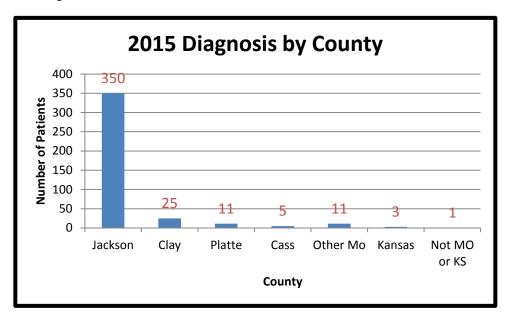


Figure 4 represents County at diagnosis. The majority of patients reside in the counties that make up Kansas City: Jackson County (86%) and Clay County (6%) Additional patients represent other counties in Missouri: Andrew, Buchanan, Cass, Clinton, Johnson, Platte, LaFayette, and Ray. A few resided in either Kansas or other states.

Figure 4



The table below breaks down the most common payer at diagnosis for Truman Medical Center patients. For 2015, Medicaid was the most common payer, followed by TMC Discount. Most patients who are Self Pay and TMC Discount often qualify for Medicaid after diagnosis.

Type of Insurance	Total number of Patients	Percentage of Patients
Self-Pay (TMC Discount)	87	21%
Self-Pay (No discount)	40	9%
Commercial Insurance (HMO/PPO)	61	14%
Insurance, Nos	2	0
Medicaid	113	27%
Medicaid managed through Managed Health Plan (MC+)	4	0
Medicare only	77	18%
Medicare managed through Managed Health Plan (Commercial Medicare)	26	6%
Medicare with Private Supplement	1	0
Medicare with Medicaid Supplement	8	1%
TRICARE	0	0
Veterans Affairs	2	0
Public Health	0	0
Unknown	2	0

Alcohol & Tobacco Usage

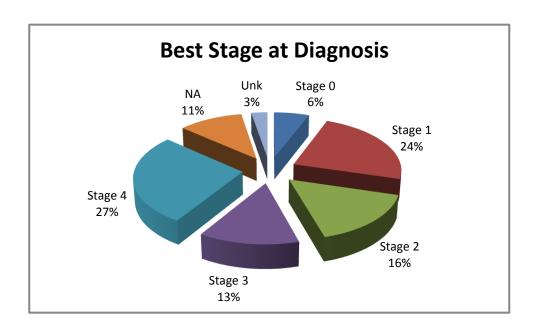
Over 66% of all TMC newly diagnosed cancer patients reported either current or previous tobacco product usage. For the 70 newly diagnosed lung primaries, 63% reported current tobacco use and 33% reported previous use. Only 4% of newly diagnosed lung cancer patients reported no history of tobacco use.

For the 7 newly diagnosed liver cancer patients, 57% reported a history of alcohol use. Over 47% of all newly diagnosed cancer patients reported current or past use of alcohol.

TNM Stage

Forty-six percent (46%) of all new patients had in-situ (noninvasive) involvement of the primary tumor or invasive tumor confined to the primary organ. Twenty-seven percent (27%) of all new patients had distant metastasis at time of diagnosis. Eleven percent (11%) of all new patients had a primary cancer that was not eligible for AJCC group staging, such as Brain/CNS, Bone Marrow & Unknown Primary, just to name a few. Some of the Class 00 cases seen at Truman Medical Center, fall into the "Unknown Stage" category as standard setters do not require Class 00 cases to be staged, but if stage is known, it is recorded.

Figure 5



Top 5 TMC Sites by Best AJCC Stage**

	Stage 0	Stage 1	Stage 2	Stage 3	Stage 4	Unk	Not Eligible for stage
Breast N=72	15%	21%	31%	21%	8%	2%	1%
Lung N=70		17%	9%	20%	53%		1%
Prostate N=31		48%	23%	3%	26%		
Colon N=23	17%	30%	4%	22%	26%		
Kidney N=16		56%	19%	6%	19%		

Follow-up & Survival

With a 1995 Reference Year, the registry followed 6766 patients in 2015. The follow-up rate for all patients was 86% and the follow-up rate for the last five years has been above 90%.

Raw data for newly diagnosed 2015 cancer cases indicates 73% survival rate as of March 22, 2017.

Research Studies

The following studies were conducted during the 2016 calendar year:

Bisphosphonate Study – 2016

Colorectal Adenocarcinomas 2016

Lung Cancer Study – 2016

These studies focused on compliance with evidence-based guidelines of care and quality improvements in standard of care within the Truman Medical Center Oncology program.