

2012 Lung Carcinoma Site Specific Report

***Barnabas Health – Community Medical Center
J. Phillip Citta Regional Cancer Center***

A statistical report of lung carcinoma seen at Barnabas Health - Community Medical Center (CMC) in 2012. This data is benchmarked against the National Cancer Data Base. Some of the graphical representations include a breakdown of cases by Age, Gender, Race, Primary Payor at Diagnosis as well as more specific site specific data.

Class of Case

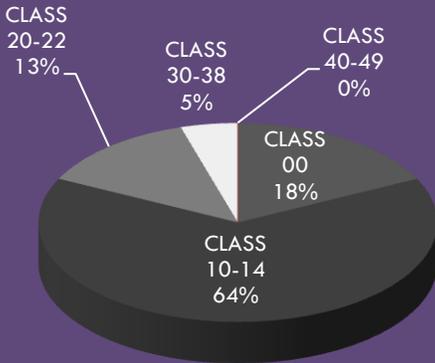


Figure 1

Gender

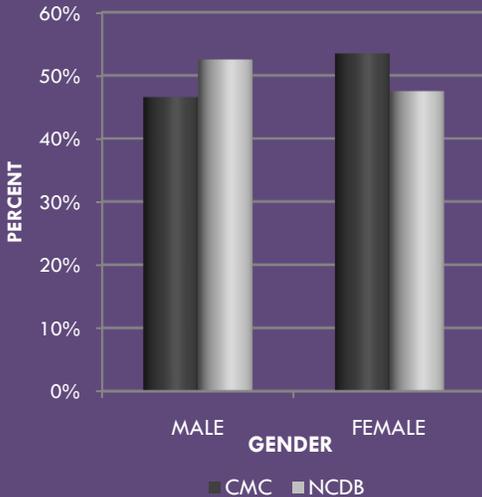


Figure 2

Race

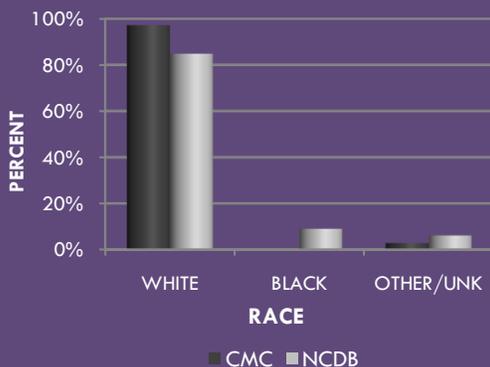


Figure 3

SUMMARY OF LUNG CARCINOMA CASES AT CMC

There were a total of 259 new lung carcinoma cases accessioned at CMC in 2012. This comprised 18.1% of the total cases accessioned at CMC in 2012. *Table 1* is a summary of the total lung carcinoma cases accessioned at CMC including a breakdown by class and stage.

Lung Cancer Summary Table									
by Class and Best CS/AJCC Stage									
Primary Site	Total	A	NA	Stage 0	Stage I	Stage II	Stage III	Stage IV	Unk/NA
Lung	259	247	12	2	53	15	73	90	14

Table 1

Of the 259 cases, the non-analytic cases include 12 that were seen for recurrent or progressive disease (Classes 30-38). The following statistical report is based on the remaining 247 analytic cases, of which, 46 were diagnosed at CMC and went elsewhere for treatment (Class 00), 167 were diagnosed and treated at CMC (Classes 10-14) and 34 were diagnosed at another facility and referred to CMC for treatment (Classes 20-22). The following statistical report is based on these 247 cases. *Figure 1* represents a breakdown by class of case.

DEMOGRAPHICS

Of the 247 CMC cases, 115 (47%) patients were male and 132 (53%) were female. Gender breakdown at NCDB revealed 53% male and 47% female. *Figure 2* reflects the gender breakdown of the lung carcinoma cases.

Ninety-seven percent (97%) of the patients were Caucasian, 0% were African American and the remaining 3% comprised other races at CMC. NCDB revealed 85% Caucasian, 9% African American, and 6% Other. *Figure 3* is a representation of the racial breakdown.

Primary Payor At Diagnosis

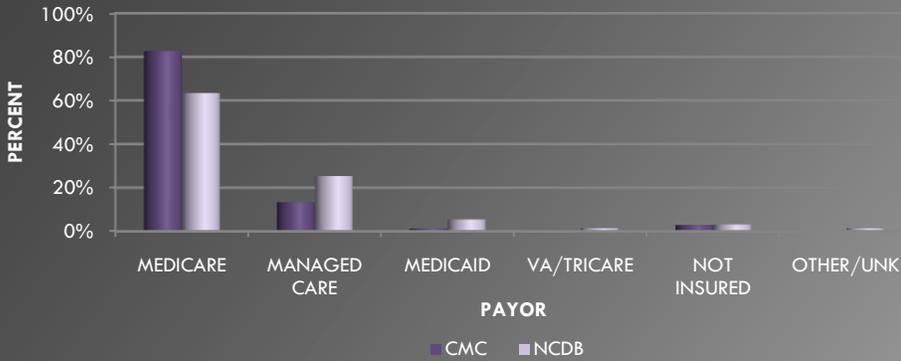


Figure 4

Figure 4 depicts primary payor at diagnosis for CMC cases. Eighty-three percent (83%) of patients at CMC had Medicare while 63% at NCDB had Medicare. Thirteen percent (13%) of patients at CMC had Managed Care compared to 25% at NCDB.

Figure 5 represents age at diagnosis. Thirty-seven percent (37%) of the patients at CMC were diagnosed between the ages of 70-79 compared to 33% at NCDB. Twenty-five percent (25%) at CMC were diagnosed between the ages of 80-89 versus 17% at NCDB. The age at diagnosis at CMC ranges from 0 to 98 with a mean age of 59.

Age at Diagnosis

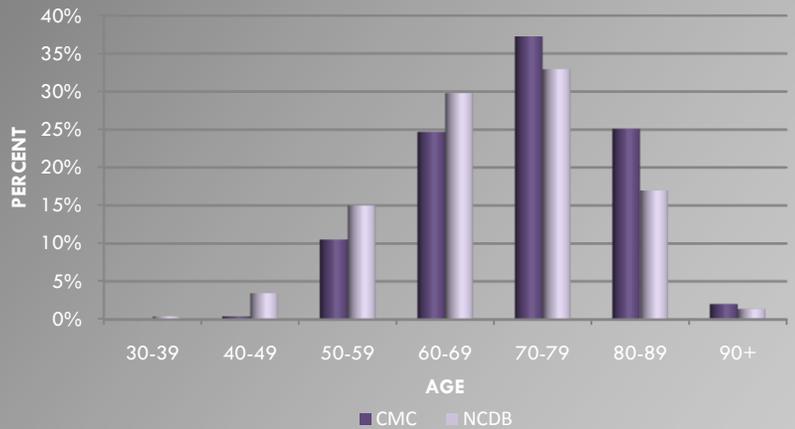


Figure 5

Ninety-nine percent (99%) of the new analytic lung carcinoma cases were residents of New Jersey. The breakdown by County at Diagnosis is represented in Figure 6 and Table 2. Ninety-eight percent (98%) were from Ocean County.

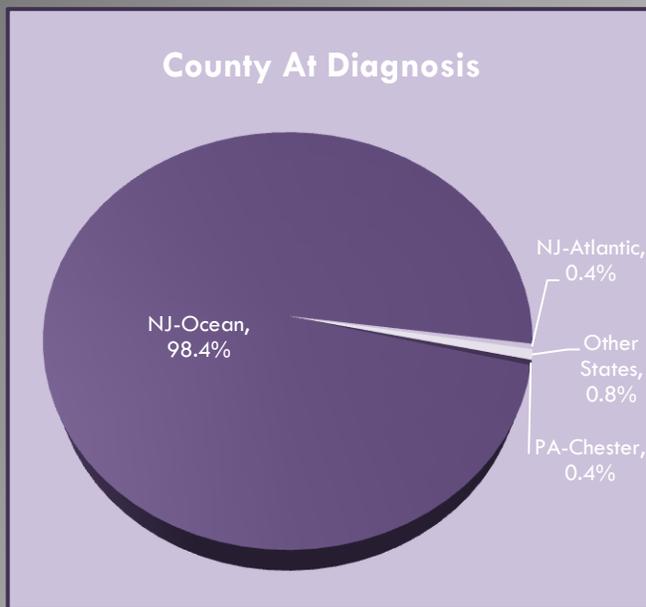


Figure 6

County at Diagnosis		
County	Number	Percent
PA-Chester	1	0.4%
NJ-Ocean	243	98.4%
NJ-Atlantic	1	0.4%
Other States	2	0.8%
Total	247	100%

Table 2

TUMOR INFORMATION

Forty-eight percent (48%) of the lung cases were diagnosed in the upper lobe and 28% in the lower lobe. *Figure 7* represents a breakdown of the sub-sites.

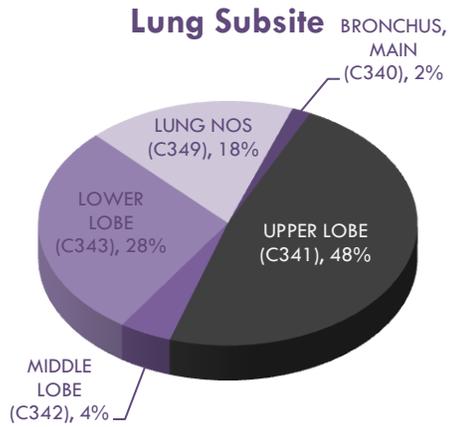
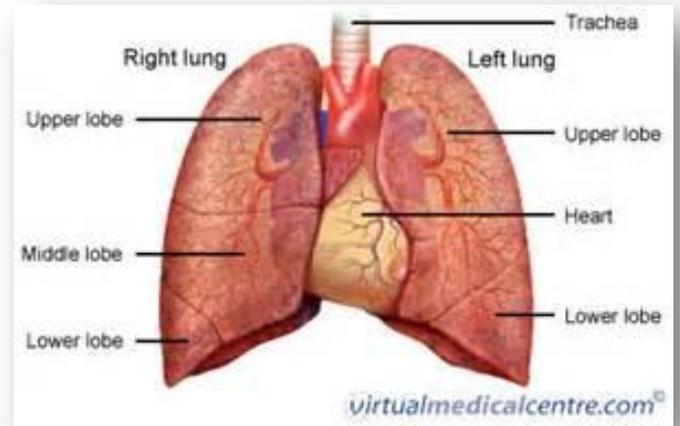


Figure 7



Histology

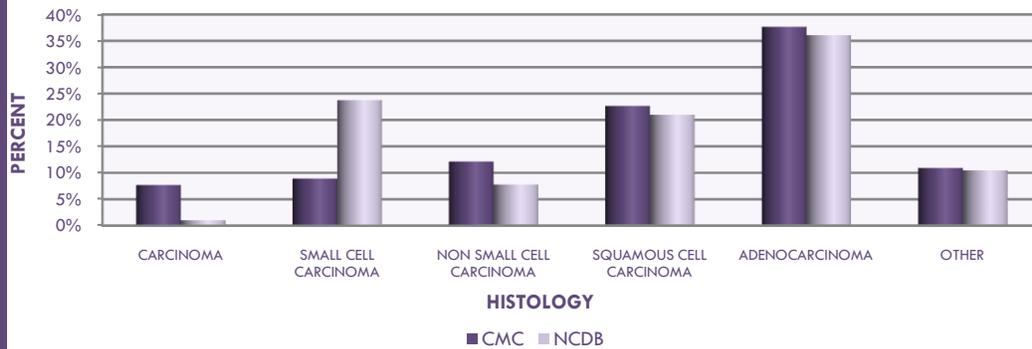


Figure 8

Thirty-eight percent (38%) of tumors were adenocarcinoma at CMC, compared to 36% at NCDB. Twelve percent (12%) were non small cell carcinomas at CMC compared to 8% at NCDB. *Figure 8* is a breakdown of histology.

The breakdown of stage at diagnosis shows 36% of patients diagnosed with Stage IV versus 40% at NCDB. More Stage III patients were seen at CMC than NCDB, 30% versus 20%.

Stage At Diagnosis

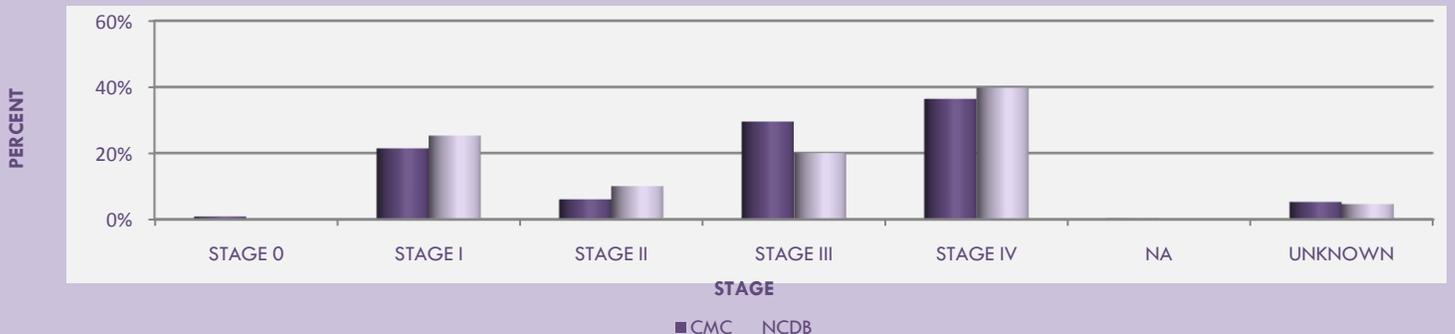


Figure 9

Table 3 illustrates the breakdown treatment by stage.

	TREATMENT BY STAGE									
	STAGE 0		STAGE I		STAGE II		STAGE III		STAGE IV	
	CMC	NCDB	CMC	NCDB	CMC	NCDB	CMC	NCDB	CMC	NCDB
	n=2	n=238	n=46	n=17,153	n=14	n=6,805	n=66	n=13,655	n=90	n=27,002
SURGERY	100%	26%	22%	59%	21%	29%	0%	5%	1%	1%
RADIATION	0%	13%	22%	18%	14%	10%	9%	10%	2%	16%
CHEMOTHERAPY	0%	9%	0%	2%	7%	4%	11%	10%	12%	25%
SURG & CHEMO	0%	1%	0%	4%	0%	21%	0%	6%	0%	1%
RADIATION & CHEMO	0%	10%	0%	3%	14%	15%	27%	44%	6%	25%
OTHER	0%	9%	37%	5%	43%	10%	32%	8%	39%	3%
NO 1ST COURSE (D)	0%	31%	20%	9%	0%	12%	21%	17%	40%	29%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 3

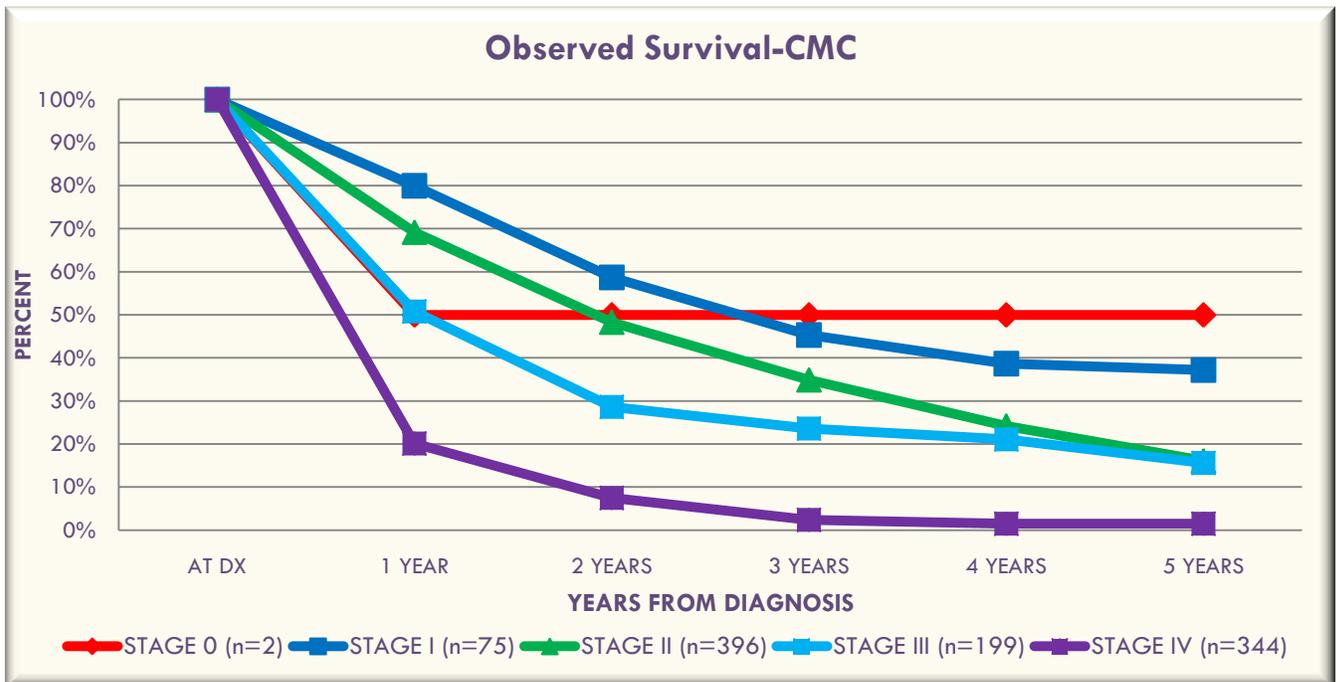


Figure 10

Figures 10 & 11 reflect observed survival rates for CMC and NCDB. The data for NCDB reflects cases diagnosed between 2003 and 2006. CMC survival rates are for cases diagnosed between 2004 and 2008. The five year survival rates by stage are as follows: Stage 0–CMC 50% NCDB 21.7%, Stage I–CMC 37.2% NCDB 44.6%, Stage II–CMC 16.1% NCDB 26.2%, Stage III–CMC 15.6% NCDB 10.2%, Stage IV–CMC 1.5% NCDB 2.4%

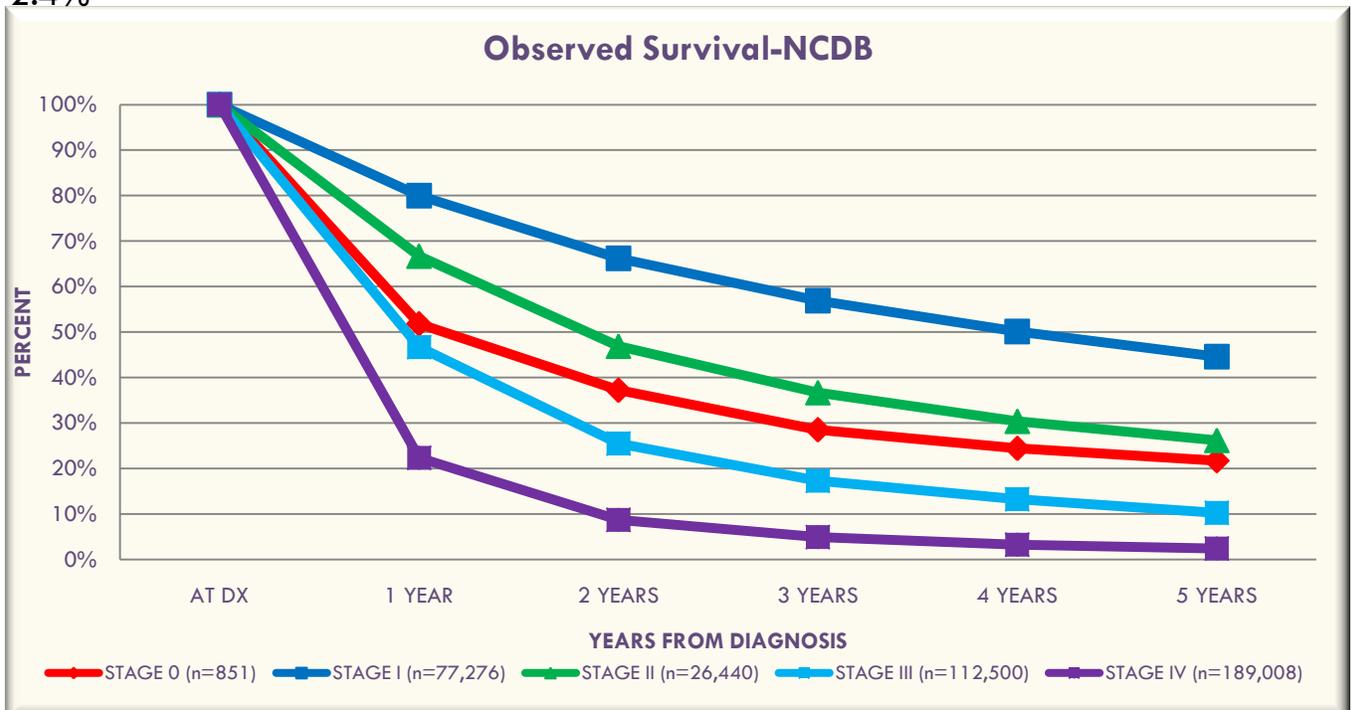


Figure 11

PHYSICIAN CRITIQUE

This lung study shows the demographics and results of patients in the Toms River area treated at Community Medical Center. The racial, age and financial demographics confirm that the majority of the patients are retired elderly patients from Ocean County. The histologies treated are similar to national averages. A higher proportion of patients are seen at Stage III than Stage I or II, which is probably reflective of an elderly population many of whom reside in nursing homes and may not be screened as regularly as national averages. The lower use of chemotherapy at Community Medical Center is also reflective of an older population with a poorer performance status who may not be able to tolerate aggressive therapies.

The outcome analysis by stage shows similar results. While the overall survival of Stage I and II patients was lower than national average, probably due to their lower fitness for surgical resection, the Stage III patients had a higher survival at Community Medical Center. Most Stage III patients, both at Community and nationally, are not surgical candidates, and are treated with radiation therapy or chemotherapy.



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