

John Stoddard Cancer Center

Colorectal Analysis

Adequate Lymph Node Sampling in Colorectal Cancer Surgery

IMMC vs. NCDB | 2004-2010 Data

By: Kathleen Hansen, M.D.

The removal of adequate lymph nodes in colorectal surgery is an important key in lowering risk of recurrence of colorectal cancers. Based on research, twelve or more lymph nodes removed at the time of colorectal resections allows for more accurate staging, therefore, setting the basis for appropriate adjuvant treatment. In recent reviews of trending over the past years at John Stoddard Cancer Center, the numbers had fallen below this threshold of 12 lymph nodes removed. Several improvements had been put into place including education of surgeons and pathologists.

John Stoddard Cancer Center compared the rates of compliance with adequate lymph node removal in colorectal surgeries as a trend of seven years (2004-2010). JSCC started well below the national comparison in 2004, with only 27.8% of patients having 12 or more lymph nodes reviewed. The national average in 2004 was 57%. Over the next six years, the percentage both nationally and with JSCC continued to increase. It is determined this is due to increase of education of the importance of this quality measure. The pathology department at Iowa Methodist Medical Center put compliance measures in place to assure adequate number of lymph nodes are sampled whenever possible. The compliance rate for JSCC continues to rise and has now surpassed the national average by almost 10%.

In conclusion, the lymph node removal for colorectal resections is no longer a problematic area of JSCC, but will continue to be monitored through the NCDB data for any trend going downward.

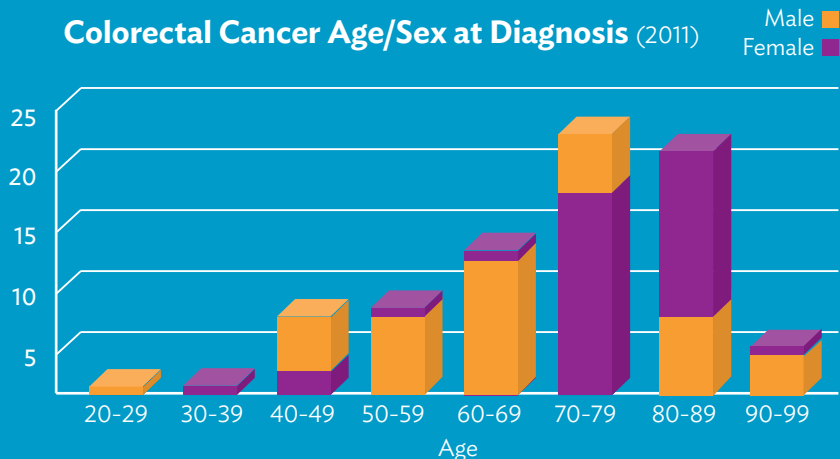
PATIENT VOLUMES BY CANCER SITE (2011)

Primary Site	Total	Male	Female
Breast	218	1	217
Lung/Respiratory	180	98	82
Prostate	169	169	0
Colorectal	154	86	68
Urinary System	86	63	23
Leukemia/Lymphoma	134	67	67
Female Genital	65	0	65
Other Digestive	70	49	21
Skin	30	19	11
Thyroid/Endocrine	27	10	17
Brain/CNS	33	20	13
Oral Cavity	25	19	6
Other/III-Defined	14	8	6
Unknown Primary	13	8	5
TOTAL	1,218	617	601



UnityPoint Health
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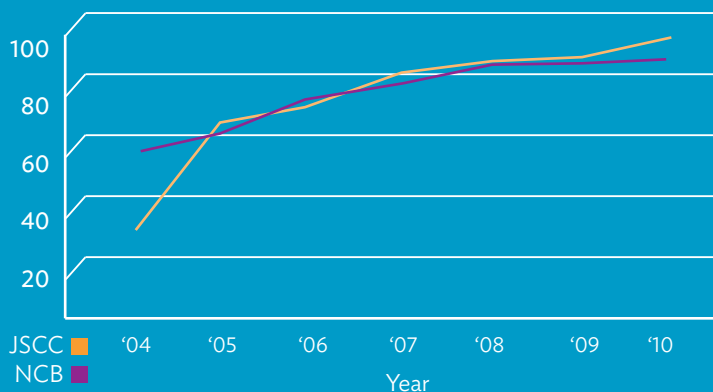
Colorectal Cancer Age/Sex at Diagnosis (2011)



Iowa Methodist Medical Center Stage by Gender of Colon Cancer Diagnosed in 2010						
Stage	Male	%	Female	%	Total	%
0	2	50%	2	50%	4	4.21%
I	6	35.3%	11	64.7%	17	17.89%
II	11	42.3%	15	57.7%	26	27.37%
III	12	36.4%	21	63.6%	33	34.74%
IV	1	9.1%	10	90.9%	11	11.58%
UNK	2	50%	2	50%	4	4.21%
TOTAL	34	35.8%	61	64.2%	95	100%

Performance Rate of Colorectal Lymph Node Removal

National Cancer Database VS John Stoddard Cancer Center (2002-2012)



NCDB Quality Measure Study

Comparing progress of number of lymph nodes removed in colorectal resections. Comparison of first year of measurement to most recent year of measurement.

Diagnosis Year: 2004				
At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer.				
	Perf. Rate	95% CI	Cases	#Prog
Iowa Methodist Medical Center	27.8	15.9 - 39.7	54	
Iowa COC Approved Programs	49.4%	44.2 - 54.6	358	15
Midwest ACS Division	63%	61.1 - 64.9	2,416	74
Midwest Census Division	60.6%	59 - 62.2	3,457	104
COC Comprehensive Cancer Programs	56.6%	56 - 57.2	23,074	564
All COC Approved Programs	57%	56.5 - 57.5	42,677	1397

Diagnosis Year: 2010				
At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer.				
	Perf. Rate	95% CI	Cases	#Prog
Iowa Methodist Medical Center	95.1%	89.7 - 100.5	61	
Iowa COC Approved Programs	90.5%	87.5 - 93.5	357	15
Midwest ACS Division	90.2%	88.9 - 91.5	1,888	77
Midwest Census Division	88.2%	87 - 89.4	2,711	100
COC Comprehensive Cancer Programs	86.6%	86.1 - 87.1	18,056	566
All COC Approved Programs	86.6%	86.2 - 87	33,979	1374