

### Outcomes Report: Accountability Measures and Quality Improvements

The FH Deland Cancer Committee ensures that patients with cancer are treated according to the nationally accepted measures. Because we are an accredited cancer program through the Commission on Cancer of the American College of Surgeons, we have the opportunity to participate in the quality reporting systems called Cancer Program Practice Profile Report (CP3R) and Rapid Quality Reporting System (RQRS). These quality measures are standards of care based on evidence-based clinical trials.

ACCOUNTABILITY MEASURE: 2015 BREAS	ST				
Radiation is administered within 1 year of diagnosis for women under the	e age of 70				
receiving breast conservation surgery for breast cancer					
	% Cases				
FH DELAND	95.5%				
State of Florida	86.0%				
Similar COC Accredited Program	89.5%				
ALL COC Accredited Programs	91.4%				
ACCOUNTABILITY MEASURE: 2015 BREAS	ST				
Tamoxifen or third generation aromatase inhibitor is recommended or a	dminis te re d				
within 1 years of diagnosis for women with AJCC T1c or Stage IB-III ho	rmone				
receptor positive breast cancer					
	% Cases				
FH DELAND	95.2%				
State of Florida	84.8%				
Similar COC Accredited Program	90.5%				
ALL COC Accredited Programs	91.9%				
ACCOUNTABILITY MEASURE: 2015 BREAS	ST				
Combination chemotherapy is recommended or administered within 45 r	months (120				
	1101111113 (120				
days) of diagnosis for women under 70 with AJCC T1c N0 or stage 1B-3	•				
days) of diagnosis for women under 70 with AJCC T1c N0 or stage 1B-3 receptor negative breast cancer	•				
	•				
	hormone				
receptor negative breast cancer	% Cases				
receptor negative breast cancer  FH DELAND	% Cases				
receptor negative breast cancer  FH DELAND State of Florida	% Cases 100.0% 88.1%				
FH DELAND State of Florida Similar COC Accredited Program	% Cases 100.0% 88.1% 93.0% 92.9%				
FH DELAND State of Florida Similar COC Accredited Program ALL COC Accredited Programs	% Cases 100.0% 88.1% 93.0% 92.9% N				
receptor negative breast cancer  FH DELAND  State of Florida Similar COC Accredited Program  ALL COC Accredited Programs  ACCOUNTABILITY MEASURE: 2015 COLO	% Cases 100.0% 88.1% 93.0% 92.9% N days) of				
FH DELAND State of Florida Similar COC Accredited Program ALL COC Accredited Programs  ACCOUNTABILITY MEASURE: 2015 COLO Adjuvant chemo is recommended, or administered within 4 months (120)	% Cases 100.0% 88.1% 93.0% 92.9% N days) of				
FH DELAND State of Florida Similar COC Accredited Program ALL COC Accredited Programs  ACCOUNTABILITY MEASURE: 2015 COLO Adjuvant chemo is recommended, or administered within 4 months (120)	% Cases  100.0% 88.1% 93.0% 92.9%  N days) of tive) colon				
FH DELAND State of Florida Similar COC Accredited Program ALL COC Accredited Programs  ACCOUNTABILITY MEASURE: 2015 COLO Adjuvant chemo is recommended, or administered within 4 months (120 diagnosis for patients under the age of 80 with AJCC stage III (LN posit	% Cases  100.0% 88.1% 93.0% 92.9%  N days) of tive) colon % Cases				
FH DELAND State of Florida Similar COC Accredited Program ALL COC Accredited Programs  ACCOUNTABILITY MEASURE: 2015 COLO Adjuvant chemo is recommended, or administered within 4 months (120 diagnosis for patients under the age of 80 with AJCC stage III (LN positive programs)  FH DELAND	% Cases  100.0% 88.1% 93.0% 92.9%  N days) of tive) colon % Cases 80.0%				

QUALITY IMPROVEMENT MEASURE: 20	15 BREAST				
Image- or palpation -guided needle biopsy to the primary site is peformed to					
establish diagnosis of breast cancer (Expected performance >80%)					
	% Cases				
FH DELAND	91.9%				
State of Florida	86.7%				
Similar COC Accredited Program	91.2%				
ALL COC Accredited Programs	91.5%				
QUALITY IMPROVEMENT MEASURE: 20	15 COLON				
Fewer than 12 LNS are removed and pathologically examined for resected colon					
	% Cases				
FH DELAND	94.7%				
State of Florida	90.7%				
Similar COC Accredited Program	89.3%				
ALL COC Accredited Programs	92.0%				
QUALITY IMPROVEMENT MEASURE: 2	015 LUNG				
Surgery is not the first course of treatment for cN2 M0 lung cases					
	% Cases				
FH DELAND	100.0%				
State of Florida	86.0%				
Similar COC Accredited Program	93.8%				
ALL COC Accredited Programs	92.2%				

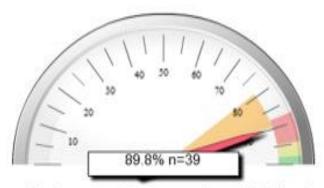
The Rapid Quality Reporting System (RQRS) is a quality reporting tool that outlines our current measures of standards within 3 months of diagnosis. Here are some examples of our quality measures. Expected performance is >90%, unless otherwise noted.

#### **BREAST CANCER MEASURES**



Radiation therapy is administered within 1 year (365 days) of diagnosis for women under age 70 receiving breast conserving surgery for breast cancer.

#### **BREAST CANCER MEASURES**



Tamoxifen or third generation aromatase inhibitor is considered or administered within 1 year (365 days) of diagnosis for women with AJCC T1cN0M0, or stage IB - III hormone receptor positive breast cancer.



Combination chemotherapy is considered or administered within 4 months (120 days) of diagnosis for women under 70 with AJCC T1cN0M0, or stage IB - III hormone receptor



Radiation therapy is recommended or administered following any mastectomy within 1 year (365 days) of diagnosis of breast cancer for women with >= 4 positive regional lymph nodes

#### **COLON CANCER MEASURES**



Adjuvant chemotherapy is considered or administered within 4 months (120 days) of diagnosis for patients under the age of 80 with AJCC Stage III (lymph node positive) colon cancer.

### **Expected Performance >85%**



At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer.

#### **Top Cancer Sites**

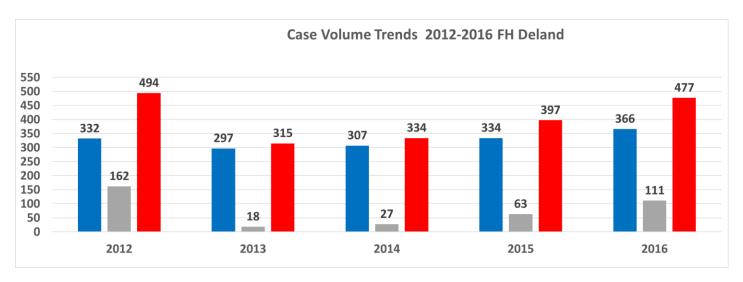
PRIMARY SITE				GENDER		AJCC STAGE						
	TOTAL	Analytic	Non- Analytic	M	F	0	ı	II	III	IV	UNK	N/A
ALL SITES	477	366	111	151	215	28	66	54	51	74	48	45
BREAST	103	95	8	0	95	20	37	24	10	0	4	0
LUNG: Non-small cell	66	50	16	28	22	0	8	4	14	21	3	0
COLON	45	40	5	21	19	2	2	8	12	11	5	0
LEUKEMIA	22	15	7	6	9	0	0	0	0	0	0	15
MELANOMA	16	13	3	8	5	4	4	0	0	0	5	0
PROSTATE	26	12	14	12	0	0	2	5	0	5	0	0
NH LYMPHOMA	13	12	1	8	4	0	3	2	2	4	0	1
PANCREAS	12	10	2	3	7	0	1	1	0	7	1	0
RECTUM	10	9	1	5	4	1	0	1	4	1	2	0
LUNG: Small Cell	10	9	1	3	6	0	2	0	2	4	1	0
KIDNEY/RENAL	13	8	5	4	4	0	1	0	0	3	4	0
LIVER	12	8	4	5	3	0	0	4	1	3	0	0
THYROID	9	8	1	2	6	0	3	1	0	0	4	0
BILIARY	8	8	0	4	4	0	0	1	0	0	4	3
ESOPHAGUS	9	7	2	6	1	0	0	0	0	4	3	0
STOMACH	12	6	6	4	2	0	0	1	0	2	3	0
ORAL CAVITY	8	6	2	6	0	0	0	0	3	2	0	0
MULTIPLE MYELOMA	8	5	3	2	3	0	0	0	0	0	0	5
BRAIN (MALIGNANT)	6	6	0	4	2	0	0	0	0	0	0	6
ALL OTHERS	69	39	30	20	19	1	3	2	3	7	9	15

During 2016, we provided cancer care for 477 new cancer patients. Analytic cases represent patients we provide diagnosis and/or treatment for their cancer. In 2016, we treated 366 analytic patients. Non-analytic cases represent patients who were diagnosed and treated elsewhere for their cancer and we provided care for their progression or recurrence. There were 17% more females representing our 2016 cases. Lung was divided by non-small cell and small cell cancer types for this analysis.

**Annual Case Volumes: 2012-2016** 

Year	Analytic	Non-Analytic	Total
2012	332	162	494
2013	297	18	315
2014	307	27	334
2015	334	63	397
2016	366	111	477

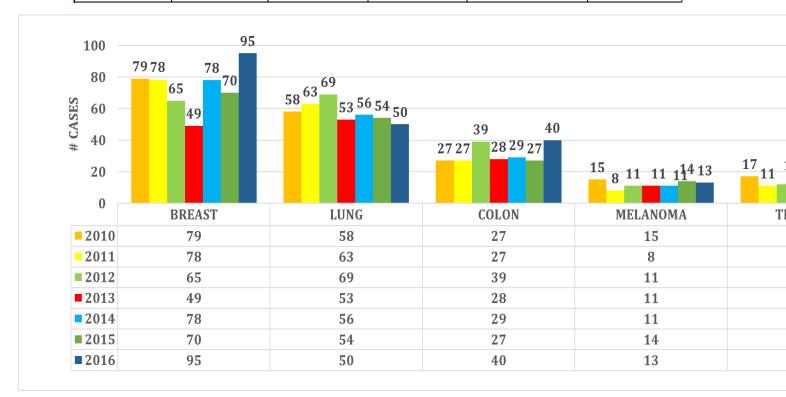
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Since 2013, our case volumes have increased. Our analytic cases in 2016 surpassed those of 2012. Some is this fluctuation is due to challenges identified for years 2013 and 2014. This is strongly reflected in 2013 and 2014.

**Top Cancer Site Trends: 2010-2016** 

YEAR	BREAST	LUNG	COLON	MELANOMA	THYROID
2010	79	58	27	15	17
2011	78	63	27	8	11
2012	65	69	39	11	12
2013	49	53	28	11	5
2014	78	56	29	11	4
2015	70	54	27	14	4
2016	95	50	40	13	8



In 2016, our volumes increased in Breast, Colon and Thyroid cancers compared to the prior years. Lung volumes decreased in 2013 and have remained relatively stable since that time. Melanoma volume has remained stable for many years.

Stage at Diagnosis: Top Sites 2016

60.0% 50.0% 40.0% 30.0% 20.0% 10.0% 0.0%	21.1% 40.0% 26.3% 11.6% 3.2% 0.0%	0.0% 22.0% 10.0% 30.0% 52.0%	5.0% 7.5% 20.0% 30.0% 32.5% 17.5%		
0.070	Breast (n=95)	Lung - Non Small Cell (n=50)	Colon (n=40)		
Stage 0	21.1%	0.0%	5.0%		
■ Stage 1	40.0%	22.0%	7.5%		
Stage 2	26.3%	10.0%	20.0%		
Stage 3	11.6%	30.0%	30.0%		
■ Stage 4	3.2%	52.0%	32.5%		
■ Unk Stage 0.0%		18.0%	17.5%		

During 2016, over 61% of our breast cancer patients were diagnosed at very early stage (Stages 0-1). Just over 87% of our breast cancer patients were diagnosed in early stages 0-2. For our lung patients, nearly 22% were diagnosed as stage 1, however over 52% were also diagnosed as stage 4. We have a significant number of colon cancer patient (32.5%) found with metastatic disease at diagnosis. We will evaluate the high percent of unknown stage.

### **Cancer Incidence with Comparative Data**

2016 Analytic Cases

2016 Analytic Cases

FH DELAND Incidence % (n=151)	MALE: CANCER TYPE	ACS * Incidence % (n=841,390)	FH DELAND Incidence % (n=215)	FEMALE: CANCER TYPE	ACS * Incidence % (n=843,820)
8%	Prostate	21%	44%	Breast	29%
19%	Lung	14%	10%	Lung	13%
14%	Colon & Retum	8%	11%	Colon & Rectum	8%
1%	Bladder	7%	1%	Uterine Corpus	7%
5%	Melanoma - Skin	6%	3%	Thyroid	6%
3%	Kidney & Renal Pelvis	5%	2%	Non-Hodgkin Lymphoma	4%
4%	Non-Hodgkin Lymphoma	5%	2%	Melanoma - Skin	3%
5%	Oral Cavity& Pharynx	4%	2%	Kidney & Renal Pelvis	3%
4%	Leukemia	4%	3%	Pancreas	3%
3%	Liver / Bile Duct	3%	4%	Leukemia	3%

<sup>\*</sup>ACS: American Cancer Society's Cancer Facts and Figures - 2016

For our male population, we have a significantly lower incidence at FH Deland compared to the nation, due to those patients being diagnosed and treated elsewhere in the community. Our incidence of lung, colon and oral cavity all have higher incidence than national data. For our female population, our breast cancer incidence is significantly higher compared to the national data. FH Deland has a higher incidence of colon cancer but lower incidence of lung, uterus, thyroid melanoma and kidney.