The Cancer Center
at Roger Williams Medical Center

2017 ANNUAL PATIENT OUTCOMES REPORT

Roger Williams
CANCER CENTER

An affiliate of CharterCARE Health Partners

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Cancer Committee Membership

Cancer Committee Members – 2017

John Coen, MD – Radiation Oncology / Chairman
James Koness, MD – Surgical Oncology & Physician Liaison
Steven Katz, MD – Surgical Oncology
David Neumann, MD – Diagnostic Radiology
Bharti Rathore, MD – Hematology Oncology
Ritesh Rathore, MD – Hematology Oncology
Abdul Saied-Calvino, MD – Surgical Oncology
Maria Aileen Soriano-Pisaturo, MD – Palliative Care
Mirela Stancu, MD – Pathology

Elizabeth Angell, LCSW – Oncology Social Worker
Billie Baker – Tumor Board / Cancer Conference Coordinator
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Jennifer Parker, RN – Manager, Oncology Inpatient Units / BMT Unit
Kathy Perry, RN, MBA – Cancer Program Administrator
Cheryl Raffel, RHIA, CTR – Cancer Registry Manager
Karin Rondeau, N.P. – Nurse Practitioner, Palliative Care
Michelle Solitro-Fitzgerald, RN – Quality Improvement
Jim Willsey – Chaplain / Pastoral Care

From the Cancer Committee Chairperson

I am pleased to share with you the 2017 Cancer program Annual Patient Outcomes Report from Roger Williams Medical Center. This document provides a snapshot of our efforts to bring new and creative ways to care for cancer patients in Rhode Island and beyond. Information includes quality measures and other metrics from our Cancer Center, as well as studies and findings regarding our breast cancer program. It also addresses our quality improvement activities and our efforts to provide cancer screening and prevention to our community.

On behalf of the Cancer Committee members, as well as our countless colleagues who are providing exceptional patient care and support on a daily basis, thank you for taking the time to review this important annual report.

John Coen, MD
Committee Chairman

CoC Cancer Program Practice Profile Reports (CP3R) Quality Measures – 2017 Review of 2015 Cases

The Commission on Cancer (CoC) has defined several quality measures for hospitals with accreditation status. Tracking these measures provides an opportunity for continuous practice improvement to achieve high quality care for our patients.

Quality Measure	RWMC 2012	RWMC 2013	RWMC 2014	RWMC 2015	CoC / NCDB Required Performance Rate
Breast Cancer					
BCS - Breast conservation surgery rate for women with AJCC clinical stage 0, I or II breast cancer (Surveillance).	80.0% (16/20)	70.0% (7/10)	46.2% (6/13)	69.6% (16/23)	***Not Yet Established***
nBx - Image or palpation-guided needle biopsy (core or FNA) of the primary site performed to establish diagnosis of breast cancer (Quality Improvement).	88.2% (15/17)	92.3% (12/13)	88.9% (8/9)	88.9% (8/9)	***>=80%***
HT - Tamoxifen or other third generation aromatase inhibitor is recommended or administered within 1 year (365 days) of diagnosis for women with AJCC T1c or Stage IB-III hormone receptor positive breast cancer (Accountability).	81.8% (18/22)	100% (9/9)	100% (20/20)	87.5% (14/16)	***>= 90%***
MASTRT - Radiation therapy is considered or administered following any mastectomy within 1 year (365 days) of diagnosis of breast cancer for women with >= 4 positive regional lymph nodes (Accountability).	50% (1/2)	100% (1/1)	No Cases	100% (3/3)	***>= 90%***
BCSRT - Radiation is administered within 1 year (365 days) of diagnosis for women under the age of 70 receiving breast conservation surgery for cancer (Accountability).	100% (13/13)	81.8% (9/11)	100% (25/25)	80.0% (8/10)	***>= 90%***
MAC - Combination chemotherapy is recommended or administered within 4 months (120 days) of diagnosis for women under 70 with AJCC T1c N0 or Stage IB-III hormone receptor negative breast cancer (Accountability).	100% (2/2)	100% (2/2)	80.0% (4/5)	50% (1/2)	***Not Established***
Colorectal Cancer					
ACT- Adjuvant chemotherapy recommended/administered within 4 months (120 days) of diagnosis for patients under age 80 with AJCC Stage III (lymph node positive) colon cancer(Accountability)	100% (7/7)	100% (5/5)	100% (3/3)	100% (6/6)	***Not Established***
12RLN - At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer (Quality Improvement).	100% (19/19)	94.4% (17/18)	66.7% (8/12)	95.2% (20/21)	***>= 85%***
RECRTCT - Pre-op chemo & radiation are administered for clinical AJCC T3N0, T4N0 or Stage III or postoperative chemo & radiation administered within 180 days of diagnosis for clinical AJCC T1-2N0 with pathologic AJCC T3N0, T4N0 or Stage III, or treatment is considered for patients under age 80 with resection for rectal cancer (Quality Improvement).	100% (3/3)	100% (2/2)	100% (5/5)	100% (4/4)	***>= 85%***

Quality Measure	RWMC 2012	RWMC 2013	RWMC 2014	RWMC 2015	CoC / NCDB Required Performance Rate
Gastric Cancer					
G15RLN - At least 15 regional nodes are removed & pathologically examined for resected gastric cancer (Quality Improvement).	100% (2/2)	50% (1/2)	66.7% (2/3)	75.0% (3/4)	***Not Yet Established***
Lung Cancer					
10RLN - At least 10 regional nodes are removed & pathologically examined for AJCC Stage IA, IB, IIA & IIB resected NSCLC (Surveillance).	50.0% (1/2)	50.0% (1/2)	85.7% (6/7)	18.2% (2/11)	***Not Yet Established***
LNoSurg - Surgery is not the first course of treatment for cN2, M0 lung cancer cases (Quality Improvement).	100% (4/4)	100% (4/4)	100% (5/5)	100% (3/3)	***>= 85%***
LCT - Systemic chemotherapy is administered within 4 months preoperatively or day of surgery to 6 months postoperatively, or it is considered for surgically resected cases with pathologic node-positive (pN1) and (pN2) NSCLC (Quality Improvement).	66.7% (2/3)	No Cases	100% (2/2)	100% (3/3)	***>= 85%***
Cervical Cancer					
CERRT - Radiation completed within 60 days of radiation start for women diagnosed with any stage cervical cancer (Surveillance).	No Cases	No Cases	No Cases	No Cases	***Not Yet Established***
CBRRT-Brachytherapy use in patients treated w/primary radiation with curative intent in any stage of cervical cancer (Surveillance).	No Cases	No Cases	No Cases	No Cases	***Not Yet Established***
CERCT – Chemotherapy administered to cervical cancer patients who received radiation for Stages 1B2-IV cancer (group 1) or with positive pelvic nodes, positive surgical margins and/or positive parametrium (group 2) (Surveillance).	No Cases	No Cases	No Cases	No Cases	***Not Yet Established***
Endometrial Cancer					
ENDCTRT - Chemotherapy and/or radiation administered to patients w/Stage IIIC-Stage IV Endometrial cancer (Surveillance).	100% (2/2)	No Cases	No Cases	No Cases	***Not Yet Established***
ENDLRC - Endoscopic, laparoscopic or robotic performed for all Endometrial cancer (excluding sarcoma & lymphoma) for all stages except Stage IV (Surveillance).	0% (0/2)	0% (0/1)	0% (0/1)	No Cases	***Not Yet Established***
Ovarian Cancer					
OVSAL - Salpingo-oophorectomy with omentectomy, debulking/cytoreductive surgery or pelvic exenteration in Stages I-IIIC Ovarian cancer (Surveillance).	No Cases	No Cases	100% (1/1)	No Cases	***Not Yet Established***
Bladder Cancer					
BL2RLN - At least 2 lymph nodes are removed in patients undergoing partial or radical cystectomy (Surveillance).	No Cases	No Cases	No Cases	No Cases	***Not Yet Established***

RWMC 2017 BREAST CANCER QA STUDY
DAYS FROM BIOPSY TO SURGERY
Cases Diagnosed 2015-2016

A review of the breast cancer slides from the 2017 Commission on Cancer CQIP report (with cases from 2014) showed a possible delay in treatment for our breast cancer patients. The CQIP slides reviewing the "Days to First Treatment Quartiles" showed that a large percentage of our cases had the number of days to first treatment of between 30 and 45 days. This then triggered a review by the Breast Health Subcommittee into a possible cause of this delay. After an initial data review by the Cancer Registry, it was recommended to do a QA study looking at the interval of days between the biopsy and surgery for our analytic breast cancer cases with either all or part of their treatment at our hospital.

We looked at our analytic 2015-2016 breast cancer cases and reviewed the time interval between the date of biopsy and the date of first surgical resection. Cases were separated out into two groups, to differentiate cases diagnosed at our hospital from those that had their biopsy elsewhere and then came to our hospital for surgery. The rationale behind separating the cases this way was due to the fact that patients who had their biopsy elsewhere may have had a delay from the biopsy date until an initial surgical consult at RWMC. In some of these cases, the delay may have been due to a delay from another facility or another physician and perhaps out of our control. Cases were grouped into Class of Case 13-14 and Class of Case 21-22, since to account for this difference. A total of 65 cases were reviewed, 32 from 2015 and 33 from 2016. There were 27 patients who had their biopsy at RWMC (Class 13-14) and 38 patients who had their biopsy elsewhere (Class 21-22) (see Figure 1).

Class of Case Definitions:

13 – Initial diagnosis at our hospital and PART of first course of treatment was done at our hospital.

14 – Initial diagnosis at our hospital and ALL of first course of treatment was done at our hospital.

21 – Initial diagnosis elsewhere and PART of first course of treatment was done at our hospital.

22 – Initial diagnosis elsewhere and ALL of first course of treatment was done at our hospital.

RWMC BREAST CANCER CASES 2015 – 2016
BIOPSY AND / OR SURGERY AT RWMC

	TOTAL CASES PER YEAR		CLASS 13-14 (Dx & Tx At RWMC)	CLASS 21-22 (Dx Else & Tx at RWMC)
2015 CASES	32		13	19
2016 CASES	33		14	19
Total	65		27	38

Figure 1

A Total of 65 cases of patients with either their biopsy or surgery or both at RWMC in 2015 -2016 were reviewed. The number of days between biopsy and surgery was tabulated for all patients. For applicable patients, the number of days between their first surgical consult at RWMC and the first surgery date was also tabulated, if these patients were seen for their initial surgical consult AFTER the date of initial biopsy (ie. patients with biopsies done or ordered by a physician other than the surgeon).

Several cases were excluded due to one of the following reasons: not having any surgery done, no diagnostic biopsy done (either diagnosed clinically or an excisional biopsy was done), neoadjuvant treatment was given, or any long delay was due to the patient's request. Looking at results from the Class 13-14 cases, the average number of days from biopsy to surgery for 2015 cases was 34.6 days and average number of days from initial Cancer Center consult to surgery was 29.2 days. For the 2016 Class 13-14 cases the average number of days from biopsy to surgery was 39.7 days, but when one very complicated case of 79 days was excluded, the average was 26.7 days. There was no difference in the number of days from consult to surgery for the 2016 cases. During case review, if there was a reason for a delay in timely surgery done it was noted, and is listed below next to the number of days (see figure 2).

BREAST CANCER 2015-2016
Class of Case 13-14 (Diagnosed & Part or All Treatment at RWMC)
Number of Days from Biopsy / Surgical Consult to 1st Surgical Resection

2015 Cases – 13 total		2016 Cases – 14 total	
4 cases = N/A (3 no surgery, 1 dx at excision due to biopsy results negative)		(10 cases = N/A (3 neoadjuvant chemo, 6 no surgery, 1 no Bx due to clinical diagnosis only)	
Remaining 9 cases #days Bx to Surgery	#days Consult to Surgery	Remaining 4 cases #days Bx to Surgery	#days Consult to Surgery
17	17	24	(none different for 2016)
13	13	34	
54	45 (MRI, 2nd opinion)	22	
49	20	79 (metastatic workup, PET, lung bx to r/o mets)	
24	24		
37	37 (genetic testing, MRI, 2nd biopsy & coordinate plastic surgery)		
27	27		
33	33		
57	47 (metastatic workup, MRI, PET, consult w/plastic surgery)		
2015 Average #Days Biopsy to Surgery=34.6 days Average #Days 1st Consult to Surgery = 29.2 days		2016 Average #Days Biopsy to Surgery=39.7 days (Excluding 79-day case Average #days = 26.7 days)	

Figure 2

In review of the Class 21-22 2015 cases the average number of days from biopsy (elsewhere) to surgery at RWMC was 34.8 days and the average from first consult at RWMC to surgery was 27.1 days. For 2016 cases the average days from biopsy (elsewhere) to surgery at RWMC was 37.2 days and from first consult at RWMC to surgery was 27.3 days.

BREAST CANCER 2015-2016 Class of Case 21-22 (Diagnosed Elsewhere, with Surgical Treatment at RWMC) Number of Days from Biopsy to 1st Surgical Resection			
2015 Cases – 19 total		2016 Cases – 19 total	
3 cases = N/A (1 due to neoadjuvant chemo, 1 delayed til summer due to patient request, 1 pt not at RWMC until 2nd surgical excision)		3 cases = N/A (all due to neoadjuvant chemo)	
Remaining 16 cases #days Bx to Surgery	#days Consult to Surgery	Remaining 16 cases # of days: #days Bx to Surgery	#days Consult to Surgery
44	44 (requested delay-work)	28	21
37	37 (holidays / pt request)	30	23
22	13	28	17
29	20	30	30
42	28	66	66 (difficult patient)
59	52 (hematoma after bx)	43	26
13	1	28	28
22	22	35	22
42	42 (MRI,arrange translator)	25	25
69	23	29	29
42	42 (eval for brachytherapy)	86	25
30	30	47	25
20	17	15	8
30	30	37	37 (mgmt of Coumadin)
25	16	31	31
30	16	37	24
2015 Average #Days Biopsy to Surgery=34.8 days Average #Days 1st Consult to Surgery = 27.1 days		2016 Average #Days Biopsy to Surgery=37.2 days Average #Days 1st Consult to Surgery = 27.3 days	

Figure 3

It was found quite interesting that there did not seem to be much difference in the number of days between biopsy to surgery and the number of days from consult to surgery when comparing the Class 13-14 cases and the Class 21-22 cases. It was thought that cases diagnosed at our facility would have had a better likelihood of getting to surgery sooner than cases diagnosed elsewhere, but this did not prove to be a factor for the cases in our review, as shown in figure 4.

COMPARISON OF THE NUMBER OF DAYS FROM BIOPSY TO SURGERY
CASES DIAGNOSED AT OUR HOSPITAL VS DIAGNOSED ELSEWHERE

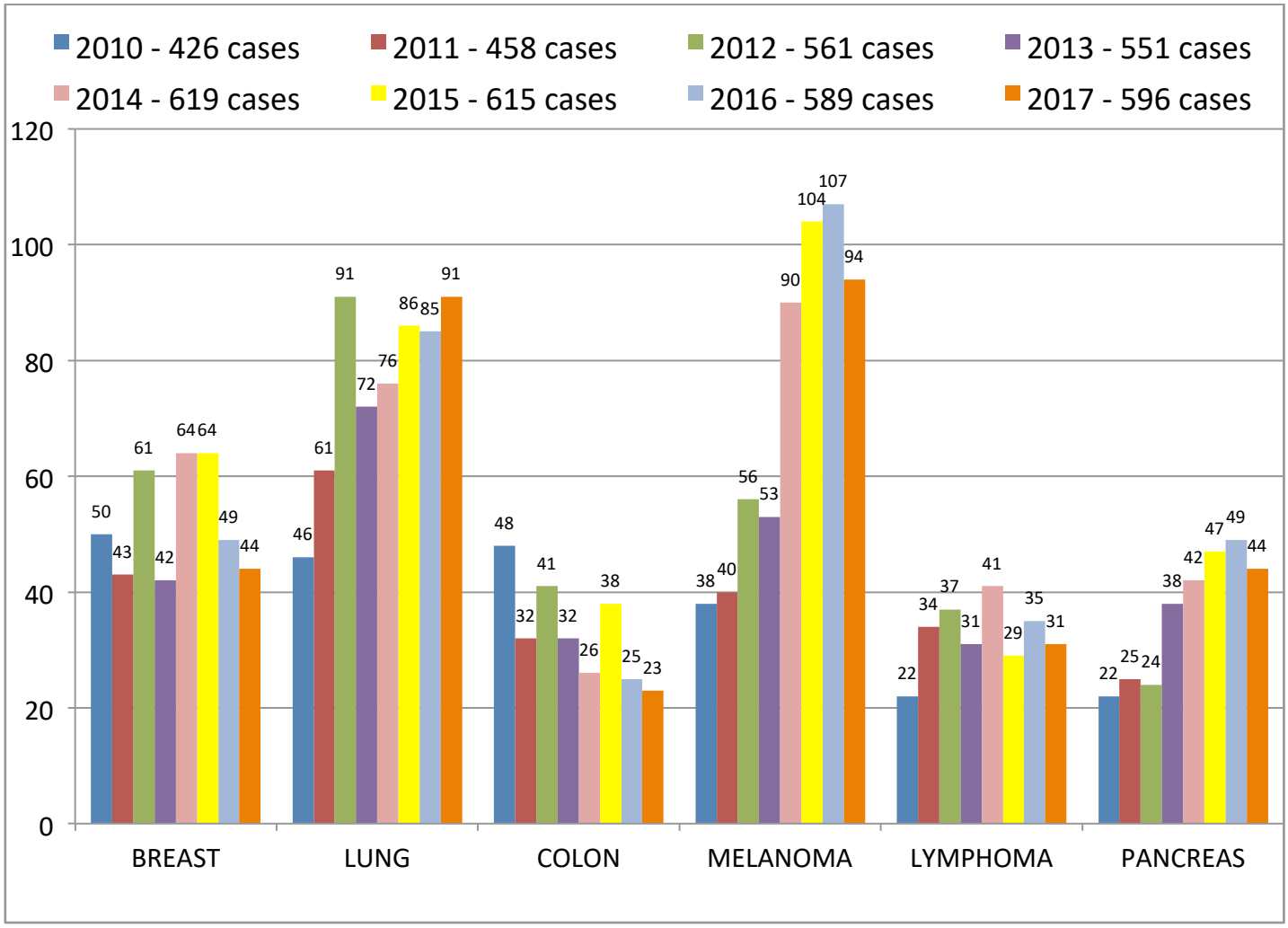
	Average Days From Biopsy to Surgery 2015	Average Days From Biopsy to Surgery 2016	Average Days From 1st Consult to Surgery 2015	Average Days From 1st Consult to Surgery 2016
Class 13-14 (Diagnosed at RWMC & Treated at RWMC)	34.6	39.7	29.2	26.7
Class 21-22 (Diagnosed (Elsewhere, Treated at RWMC	34.8	37.2	27.1	27.3

Figure 4

CONCLUSION

A journal article from JAMA Oncology (12/10/15) concluded that survival outcomes for early stage breast cancer are affected by the time to surgery and that efforts should be made to reduce the time to surgery when possible. After looking over our results and discussion of the findings, it was felt that the time between biopsy and surgery at our hospital could be improved upon in some cases and that we would monitor this over the next year or two, to see if we can have an effect on this. Greater attention will be paid to the prompt scheduling of the patient's initial surgical procedure by the Breast Health Center at our hospital. Efforts will be made to schedule patients for initial surgery within 30 days when possible, and when doing so will not compromise the workup of complicated cases.

ROGER WILLIAMS MEDICAL CENTER NEWLY DIAGNOSED CANCER CASES
2010 TO 2017 - TOP SIX CANCER SITES



CASES BY PRIMARY SITE BY YEAR – 2012 to 2017

Analytic Cases (Newly Diagnosed)

PRIMARY SITE	2012	2013	2014	2015	2016	2017
MELANOMA OF SKIN	56	53	90	104	107	94
LUNG	91	72	76	86	85	91
BREAST	61	42	60	64	49	44
COLON	41	32	26	38	25	23
RECTUM / RECTOSIGMOID	25	20	26	19	22	22
PANCREAS	24	38	42	47	49	44
LYMPHOMA	37	31	41	29	35	31
LEUKEMIA	30	24	17	24	26	22
MYELOMA	13	11	8	8	12	10
MDS/REFRACTORY ANEMIA	7	11	8	7	8	15
LIVER / I.H. BILE DUCT	15	19	21	21	23	27
GALLBLADDER / BILIARY	14	5	9	11	8	9
STOMACH	9	16	17	17	13	22
ESOPHAGUS	9	10	5	10	6	7
OTHER GASTROINTESTINAL	4	8	8	9	4	14
BLADDER	7	16	16	9	17	8
KIDNEY / URETER	15	17	16	8	17	16
PROSTATE / TESTIS	24	21	30	22	16	26
HEAD & NECK SITES	19	32	28	33	12	14
LARYNX	2	9	4	3	5	1
THYROID	14	12	19	15	11	21
FEMALE GENITAL	5	8	7	6	4	4
BRAIN / MENINGIOMA	12	16	18	2	4	7
SOFT TISSUE / SARCOMAS	9	10	12	9	6	6
UNKNOWN PRIMARY	10	10	8	7	16	7
OTHER / MISC SITES	8	8	7	7	9	11
TOTAL	561	551	619	615	589	596

Defining Double-Hit Status in Diffuse Large B Cell Lymphoma Before Chemotherapy: A Quality Improvement Project at Roger Williams Medical Center - 2017

Andre De Souza; Shiva Mukkamalla; Pouyan Changizzadeh; Maria Dominguez

BACKGROUND:

c-Myc translocation at 8q24 with IgH (translocation 14:18) associated with BCL-2 and/or BCL-6 translocation is an important prognostic factor in Diffuse Large B cell Lymphoma and define double hit lymphoma (Blood. 2011;117(8):2319. Gene amplification of C-Myc is only prognostically important when associated with gene amplification of BCL-2 and is defined as double-expressor Lymphoma, with worse overall survival, progression free survival and response when given R-CHOP compared to non expressors (J Clin Oncol. 2012;30(28):3460). Dose adjusted R-EPOCH reduces risk of progression in double-hit lymphomas (median time to progression 22 versus 12 months).

GOAL: to determine if the double-hit status of Diffuse Large B Cell Lymphoma was established before initiating chemotherapy; to assess the current inadequate use of DA-EPOCH-R in double expressors and R-CHOP in double hit lymphomas, respecting clinical indications other than double hit status.

METHODS:

Intervention 1 was composed of 2 educational sessions during the RWMC Hematology/Oncology administrative meetings with attending physicians and fellows. Intervention 2 was the continuous inquiry to the pathology department about new DLBCL diagnoses. Intervention 3 involved a form to be implement in the clinic and filled at the time of a bone marrow biopsy by the Hematologist or by the Surgical Oncologist at the time of the Lymph node biopsy. A list of patients diagnosed with Diffuse Large B Cell Lymphoma in the previous 7 years was obtained from the local Cancer Registry. A retrospective review of pathology, clinic notes and treatment from the electronic medical record was performed. From 85 patients initially enlisted, 2 were excluded due to a diagnosis other than diffuse large B cell lymphoma. We ascertained the presence of FISH for c-MYC/IgH translocation and BCL-2 and BCL-6 rearrangement and/or expression.

RESULTS:

From 2011 to 2017, 3 double hit lymphomas and 9 double expressor high grade lymphomas were diagnosed. One double hit lymphoma and 2 double expressors received DA-EPOCH-R. Over 7 years, 32 patients did not have a FISH to screen for double hit lymphoma; only 1 of them after our intervention was established. We consider interventions 1 and 2 a success. Intervention 3 failed, in view of most of the diagnoses of double hit to be a result of lymph node biopsies and most of them done as outside referrals instead of clinic referrals.

DISCUSSION:

Recognition of double hit lymphoma and response to DA-EPOCH was enhanced by 2 of our 3 interventions. Involving Surgical Oncologists may be the point-of-care necessary to diagnose more double hit lymphomas. Outside pathology report requests should become a norm considering the prognostic value of double hit lymphoma even after ASCT.

Prevention Programs – 2017

Colorectal Cancer Awareness and Prevention at the Center for Southeast Asians (CSEA), Feb 2017
This presentation on 2/23/17 was hosted by the CSEA and attended by people of multiple different diversity types, including Cambodian, Hmong, Laotian and Vietnamese. It is rare for the Southeast Asian Community in Providence to find health care providers that speak their language, and it is often difficult for patients to get education on health issues. Dr. Calvino presented a slide show to educate the community about colorectal cancer and prevention. There were multiple interpreters available to help translate Dr. Calvino's presentation as he spoke, stopping every few sentences to wait for the interpreters to transfer the message to the attendees.

Colorectal Cancer Education and Screening – Narragansett Indian Health Center, May 2017
An educational presentation was done by Dr. Calvino for this patient population on 5/24/17, during which he focused on the importance of including Colorectal Cancer Screening as part of health maintenance. Many of the attendees were not aware that colorectal screenings are also recommended for woman, not just for men.

Colorectal Cancer Education and Screening at Clinica Esperanza / Hope Clinic, November 2017
Dr. Calvino did a presentation in Spanish for patients of this clinic, 80% of whom are Spanish-speaking. This was the first live cancer educational event available to this patient population. Dr. Calvino was able to communicate with patients in their native language, as well as answer questions, to provide information these patients may not have been aware of due to a language barrier. Our Hispanic Outreach Coordinator was also available at this event to speak with patients about the importance of colorectal screening and coordination of services.

Screening Programs – 2017

Skin Cancer Screening at the Life Expo Health Fair 10/21/17 at Twin River Event Center, Lincoln, RI
Dermatologists were available at this event to provide skin cancer screening and sun-safe education. A total of 29 people were screened during the course of the event. Ten people were recommended for follow-up with whole-body skin exams. Two people were recommended for biopsy of suspicious lesions and provided with information on Roger Williams' dermatology locations. The Dermatology Department followed up with these patients one week after the event to assist in scheduling necessary appointments.

Quality Improvements & Goals Achieved – 2017

The following goals were achieved and quality improvements were noted during 2017:

- Purchased a new InBody Scale system for use in the Cancer Center, that measures both weight and body-fat. This scale system was used to help evaluate changes in body mass for Geriatric Oncology patients.
- Purchased new mammogram equipment with 2D and 3D capabilities. Now stereotactic breast biopsies are able to be performed at our hospital, rather than patients having to go elsewhere for this service.
- Coordinated home infusions of eligible chemotherapy patients through the Cancer Center, eliminating the need to coordinate this service through an outside company.
- Completed plans for expansion of the Cancer Center - to continue moving ahead on this during 2018.
- Started the new Hispanic Colonoscopy Program to assist Spanish-speaking patients in completing screening colonoscopies. Facilitated over 300 patients to complete screening exams during 2017.
- Started a new process to flag Cancer Clinical Trial patients' charts, ensuring that if the patient is seen elsewhere in the hospital, staff is aware that they are on a clinical trial for cancer therapy.

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