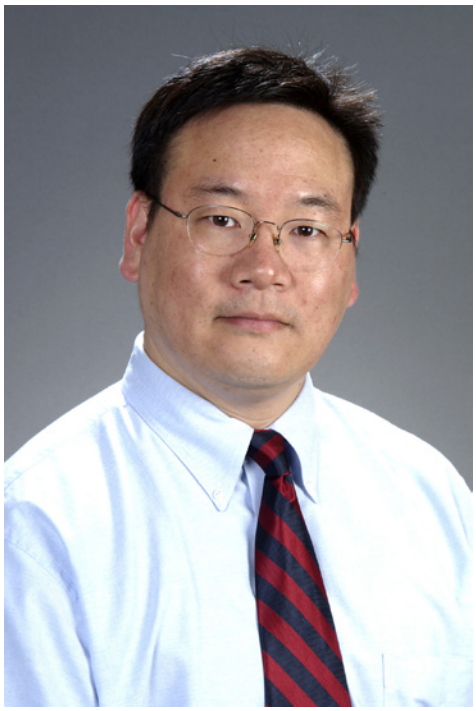
VA Puget Sound Health Care System

Cancer Program

2014 Annual Report

Chairman's Message

Peter C. Wu, M.D., F.A.C.S



The mission of the VA Puget Sound Cancer Care Program is to provide excellent and compassionate care to our Veteran patients diagnosed with cancer. With a 2013 reported caseload of over 1,000 cancer patients, our center continues to rank among the most comprehensive and busiest VA cancer centers in the United States.

There were several noteworthy events this past year. Dr. Daniel Wu, M.D., Ph.D. was appointed Chief of Oncology following the celebrated retirement of Dr. William Schubach, M.D., Ph.D. A new state-of-the-art outpatient Cancer Care Clinic was completed which has increased capacity to 16 infusion chairs and provides veterans a comfortable and supportive environment. The VISN20 Cancer Care Platform Initiative provided the necessary funding to create our Cancer Care Navigator Team (CCNT) led by Tamarind Keating, ARNP who was recruited from the Fred Hutchinson Cancer Research Center. The CCNT will help patients and their families "navigate" their cancer journey with coordination of care and community resources, patient advocacy, cancer survivorship and psychosocial support services. The VA Puget Sound and Durham VA cancer programs share the distinction as the 2 national sites selected to pilot a new online chemotherapy management system designed to enhance outpatient clinic efficiency and increase patient safety. This long-awaited program is scheduled for activation in early 2015.

The 2014 Annual Report highlights the wide-range of services and clinical trials offered within the VA Puget Sound Cancer Program and recognizes the important contributions from all service lines and departments. We thank our local and regional VA leadership for their continued support of the Cancer Care Program and continue to strive to provide the highest quality cancer care for our nation's veterans.

INSIDE THIS REPORT

- Chairman's Message
- Cancer Registry Report
- Cancer Committee
- Tumor Board Activities
- Oncology Clinical Trials
- Hospital &Specialty Medical Care – Oncology Division
- Marrow Transplant Unit
- Head & Neck Cancer Service Oncology Clinical Trials
- Radiation Oncology- Continuous Quality Improvement as a Pillar for Quality, Safety, and Patient Centered Care
- Special Study Report on monitoring compliance with evidence based guidelines- Neo-adjuvant Chemotherapy for muscle invasive Bladder Cancer at the VA Puget Sound Health Care System: a Guideline based Multidisciplinary Approach
- Diagnostic Imaging Services
- Thoracic Surgery
- Surgical Oncology
- Urologic Oncology Program
- Telemedicine Program
- Psychology – Whole Health
- Nutrition and Cancer
- Oral Mucositis Care Poster
- Cancer Care Navigation
- Oncology Social Work
- Cancer Screening and Prevention Report
- Cancer Rehabilitation/ Rehabilitation Care Service
- Palliative Care and Hospice Service
- Enhancing Cancer Care services through Whole Health
- Spiritual Care
- Credits

Cancer Registry Report

(based on last complete year 2013 data)

Sudarshana Das, COC Cancer Program Manager & Cancer Registrar

Every year multitude of data on national cancer burden is published by CDC, SEER, American Cancer Society to name a few of the many other organizations. Ever thought where this data comes from? All cancer statistics stems from grass-root level collection of cancer data at local hospital cancer registries by specially trained staffs.

Cancer data collection and reporting is mandated by various statutory acts like the National Cancer Act 1971, Cancer Registries Amendment Act 1992 etc.

A cancer registry collects and accurately records the clinical journey of a cancer patient starting from diagnosis including the process and methods of, to treatment received, both curative and palliative. A cancer registry conducts life-long follow-up of cancer patients till death, and strives to keep on collecting vital information long after the patient has been discharged and/or cured to enable survival and outcome related studies and research.

The collected data is a vital contributor to cancer research and outcomes measurement, and an invaluable tool in the fight against cancer. Cancer Registry Data is useful for analyzing patterns of care and quality of care, evaluating the effectiveness of current treatment modalities, developing educational programs, early detection/screening cancer programs, and can help leadership in making informed decisions for hospital expansion, resource allocation and other business purposes.

Keeping in mind the importance of the accuracy of registry data, the Commission on Cancer (CoC) has made it mandatory accreditation requirement that cancer registry cases are abstracted only by certified tumor registrars (CTR) who cancer data specialists are having the needed education, expertise and certification required for proper execution of the job.

VAPSHCS Cancer Registry

The VAPSHCS Cancer Registry is managed by a facility employed cancer program manager/CTR and the bulk of registry work is contracted out to qualified vendor chosen by the VISN-20 Contracting Office. Best Practices Group is our current vendor for cancer registry work.

The Registry regularly submits data on its analytic cancer caseload to various national databases, including VA Central Cancer Registry (VACCR), Commission on Cancer-National Cancer Data Base (CoC-NCDB), Cancer Surveillance System (CSS- SEER registry) for WA State reporting purposes. In addition, it participates and provides data for special studies conducted at our facility, or at national level for patient care quality improvement studies, and for all other valid purposes as requested.

All data submitted are aggregate, and patient identifiers and protected information are removed during data submission.

(Continued on next page)

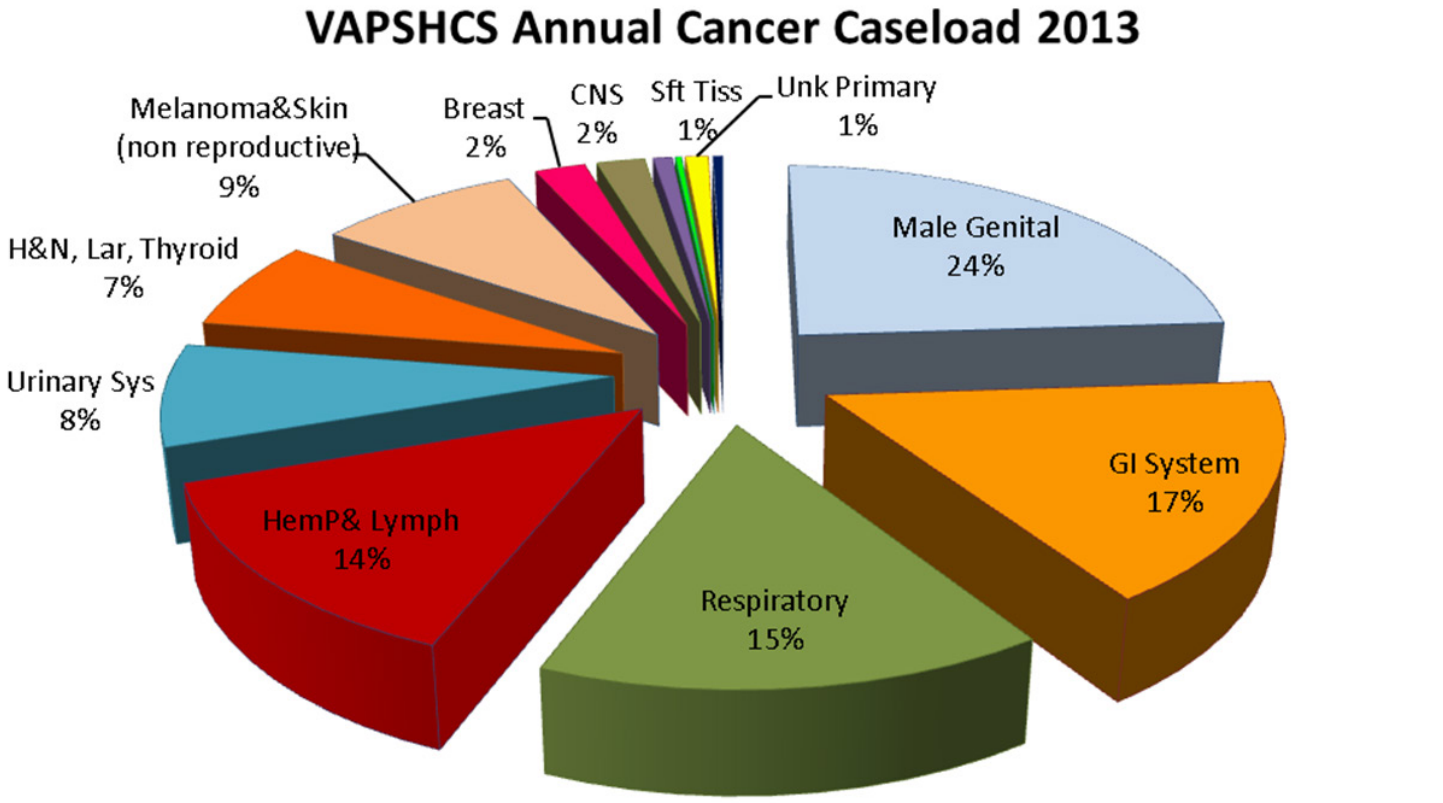
Cancer Registry Report (Continued)

VAPSHCS Cancer Registry Data

The VAPSHCS Registry has compiled a rich data-base comprising of diagnoses, staging, treatment, and outcome related information on over 15,000 cancer cases accessioned at our facility till date since 1998, which was when our registry was formed, also known as the "registry reference date".

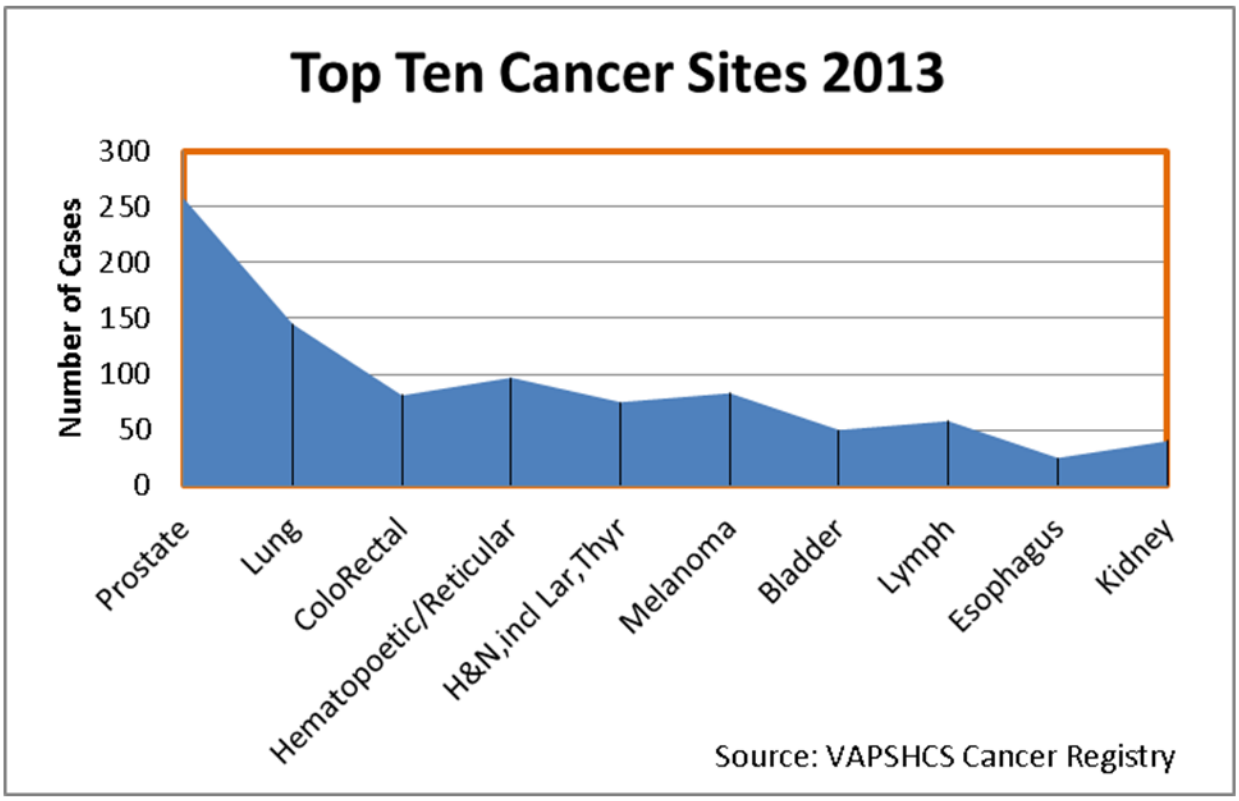
Some examples of the usefulness of cancer registry data can be seen in the data and graphs below:

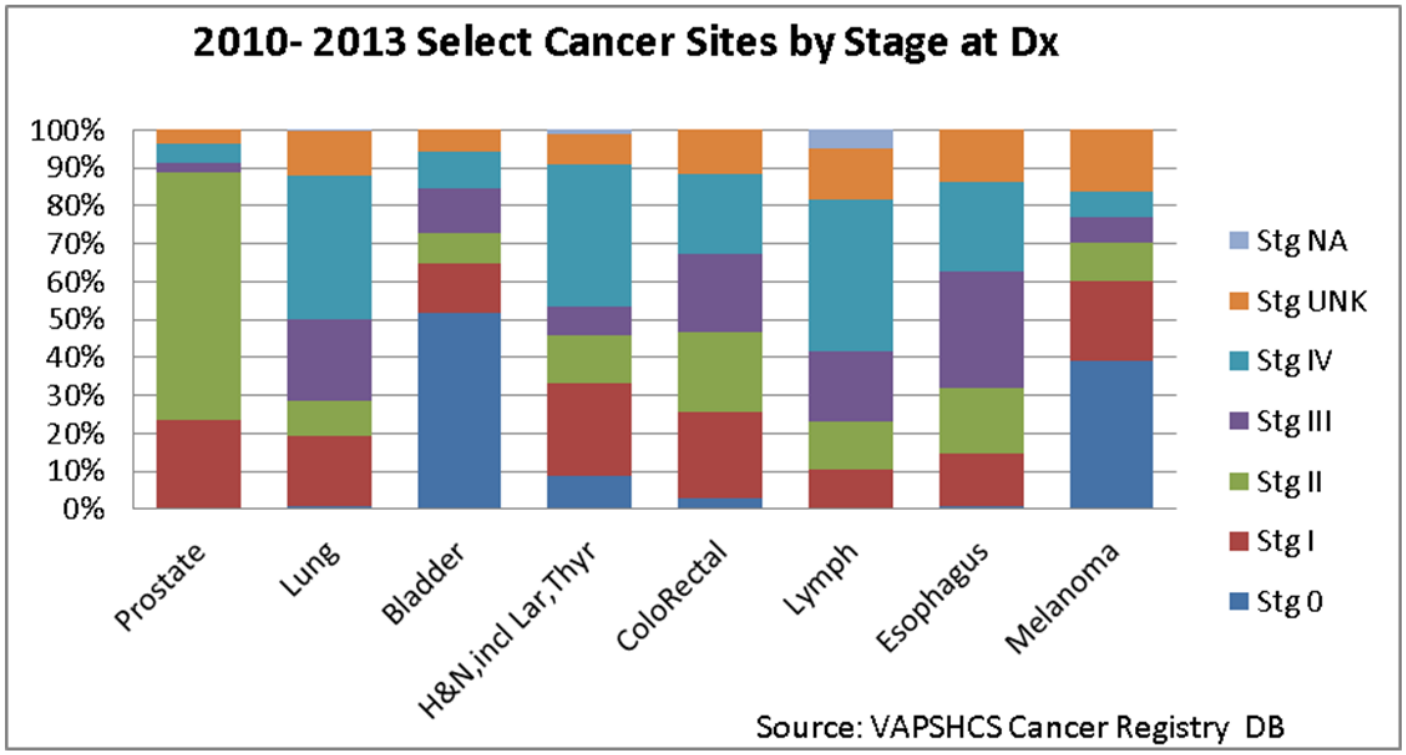
In 2013, 865 analytic cases of cancer, and 235 non-analytic cases, for a total of 1100 cancer cases were accessioned into the cancer registry database.



Source:VAPSHCS Cancer Registry

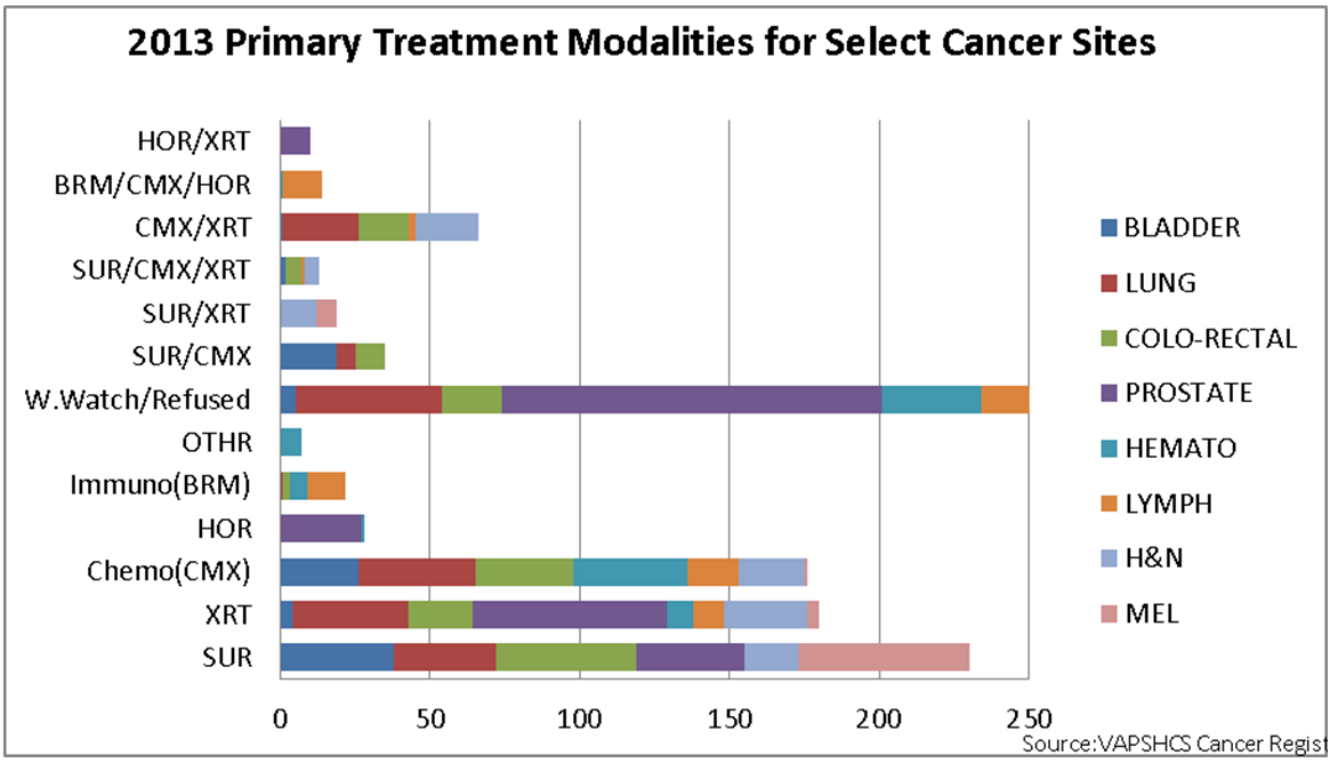
The top ranking cancer primary site/ systems seen at our facility in 2013 were Male-Genital(Prostate) , GI system , Respiratory system, Hematopoietic & Lymphomas, Urinary system , Head-Neck System, and Melanoma/ reportable skin (non-reproductive skin).





(Continued on next page)

Cancer Registry Report (Continued)



Glossary of Terms:

Abstract: a summary or abbreviated record that identifies, a cancer patient's disease process from time of diagnosis till patient's death including diagnosis, staging, cancer treatment. This forms the basis of a cancer registry.

Accession: to enter a reportable cancer case following national rules and guidelines into the registry database.

Analytic: Cancer patients diagnosed and/or received first course of treatment at VAPSHCS.

American College of Surgeons (ACoS): a professional organization of surgeons and physicians founded in 1913, which has supported standards for hospitals, formation of registries, and accredits quality cancer programs nationwide through its Commission on Cancer (CoC) accreditation.

Caseload: the number of new cancer cases annually entered into a registry

CDC: Centers for Disease Control and Prevention is a federal agency of the Department of Health and Human Services.

Certified Tumor Registrar (CTR): the credentials granted to a person who has passed the cancer registry certification examination by the NCRA, and signifies specialized knowledge and education for accurate collection, recording and analysis of cancer data into registry databases.

Commission on Cancer (CoC): a division of the ACoS, consisting of over professional organizations involved in cancer control and improving survival and quality of life for cancer patients through standard-setting, prevention, research, education, and monitoring of comprehensive quality care. CoC accredited cancer programs, such as VA Puget Sound Health Care System, signifies establishment of performance measures for provision of high-quality cancer care and is nationally recognized by JC (formerly JCAHO), ACS, CMS, NQF, NCI, to name a few.

CSS: Cancer Surveillance System collects population-based data on cancer incidence and survival in 13 counties in western Washington State, and is part of the Surveillance, Epidemiology, and End Results (SEER) program of the National Cancer Institute (NCI).

DUA: Data Use Agreement, as required by VA national policies for sharing of data.

First Course of Treatment: Cancer directed treatment planned and administered, usually started within four months of diagnosis or as determined by the managing physician.

PRIMARY SITE:	CASELOAD			MALE			FEMALE		
				RACE			RACE		
	TOT#	ANAL	NON ANA	Wh	B	Oth	W	B	Oth
Sys:H&N excl Larynx									
LIP	2	1	1	2	0	0	0	0	0
TONGUE, BASE	10	9	1	7	0	0	0	3	0
TONGUE, OTHER/NOS	5	5	0	4	0	0	0	1	0
GUM	0	0	0	0	0	0	0	0	0
FLOOR OF MOUTH	3	3	0	2	0	0	0	1	0
PALATE	1	1	0	1	0	0	0	0	0
OTHER/NOS MOUTH	2	2	0	2	0	0	0	0	0
PAROTID GLAND	3	3	0	2	0	0	0	1	0
MAJOR SALIVARY GL	0	0	0	0	0	0	0	0	0
TONSIL	8	8	0	4	0	0	0	4	0
OROPHARYNX	5	5	0	4	0	0	0	1	0
NASOPHARYNX	1	1	0	1	0	0	0	0	0
SUBTOTAL	40	38	2	29	0	0	0	11	0
Sys:Gastro-Intestinal	TOT#	ANAL	NON	Wh	Bl	Oth	W	B	Oth
ESOPHAGUS	21	21		16		1		4	
STOMACH	17	15	2	10		4		3	
SMALL INTESTINE	4	3	1	3				1	
COLON	45	39	6	33	4	3		5	
RECTOSIGMOID JUNC	5	5		5					
RECTUM	28	28		19		2		7	
ANUS/ANAL CANAL	3	2	1	3					
LIVER/INTRAHEPATIC BIL	28	28		21		3		4	
GALLBLADDER	4	2	2	1				2	1
BILARY TRACT OTHER	3	3		3					
PANCREAS	21	20	1	16		1		4	
OTHER-DIGESTIVE	1		1					1	
SUBTOTAL	180	166	14	130	4	14	0	31	1
Sys:Respiratory(+Larynx)	TOT#	ANAL	NON	Wh	Bl	Oth	W	B	Oth
NASAL CAV,MIDDLE EAR	2	2		2					
ACCESS SINUSES	1	1		1					
LARYNX	18	16	2	15		1		2	
LUNG/BRONCHUS	140	131	9	125		4		11	
THYMUS	1	1						1	
SUBTOTAL	162	151	11	143	0	5	0	14	0
Sys:Bones,Joints,Articul	TOT#	ANAL	NON	Wh	Bl	Oth	W	B	Oth
BONES/JOINTS/ARTICULAR	3	2	1	2				1	
SUBTOTAL	3	2	1	2	0	0	0	1	0
Sys:Hematopoetic, Reti	TOT#	ANAL	NON	Wh	Bl	Oth	W	B	Oth
HEMATOPOIETIC/RETICULO	76	58	18	56	4	6	2	8	
SUBTOTAL	76	58	18	56	4	6	2	8	0
Sys:Lymph Nodes	TOT#	ANAL	NON	Wh	Bl	Oth	W	B	Oth
LYMPH NODES	44	27	17	34	2	3		5	

NCDB: National Cancer Database is a nationwide oncology outcomes database for more than 1,400 CoC-approved cancer programs in the United States and Puerto Rico. Approximately 75 percent of all newly diagnosed cases of cancer in the United States are captured at the institutional level and reported to the NCDB.

NCRA: National Cancer Registrars Association is a not-for-profit association with a primary focus of education and certification, representing Cancer Registry professionals and Certified Tumor Registrars (CTRs).

SEER: a federally funded consortium of population-based cancer registries, established by the National Cancer Act if 1971 to collect and publish information on cancer incidence, mortality, survival and trends over time in the US.

References:

1. *VHA Privacy and Release of Information 2006, VHA Handbook 1605.1, http://ww1.va.gov/vhapublications*
2. *VA Central Office Cancer Program, http://www1.va.gov/cancer/*
3. *Commission on Cancer Cancer/ National Cancer Data Base: http://www.facs.org/cancer/*
4. *Previous Annual Reports*
5. *Cancer Registry Management Principles & practice, Hutchison, Menck, Et al.*

(Continued on next page)

Cancer Registry Report (Continued)

SUBTOTAL	44	27	17	34	2	3	0	5	0
Sys:Skin(excl reproductive)	**TOT#**	**ANAL**	**NON**	**Wh**	**Bl**	**Oth**	**W**	**B**	**Oth**
SKIN	74	66	8	50	2			22	
SUBTOTAL	74	66	8	50	2	0	0	22	0
Sys:Retreperitoneum&Per	**TOT#**	**ANAL**	**NON**	**Wh**	**Bl**	**Oth**	**W**	**B**	**Oth**
RETROPERITONEUM & PERI	1	1		1					
SUBTOTAL	1	1	0	1	0	0	0	0	0
Sys:Connective/SubQ	**TOT#**	**ANAL**	**NON**	**Wh**	**Bl**	**Oth**	**W**	**B**	**Oth**
CONNECTIVE/SUBCUTANEOU	6	5	1	3		1		2	
SUBTOTAL	6	5	1	3	0	1	0	2	0
Sys:Breast(excl skin)	**TOT#**	**ANAL**	**NON**	**Wh**	**Bl**	**Oth**	**W**	**B**	**Oth**
BREAST	20	16	4		16		3		1
SUBTOTAL	20	16	4	0	16	0	3	0	1
Sys:Female Genital	**TOT#**	**ANAL**	**NON**	**Wh**	**Bl**	**Oth**	**W**	**B**	**Oth**
CORPUS UTERI	1	1			1				
OVARY	1	1			1				
SUBTOTAL	2	2	0	0	2	0	0	0	0
Sys: Male Genital	**TOT#**	**ANAL**	**NON**	**Wh**	**Bl**	**Oth**	**W**	**B**	**Oth**
PENIS	1	1		1					
PROSTATE GLAND	250	195	55	182		35		33	
TESTIS	6	5	1	4		1		1	
SUBTOTAL	257	201	56	187	0	36	0	34	0
Sys:Urinary	**TOT#**	**ANAL**	**NON**	**Wh**	**Bl**	**Oth**	**W**	**B**	**Oth**
KIDNEY	34	30	4	24		8		2	
RENAL PELVIS	1	1		1					
URETER	1		1	1					
BLADDER	48	47	1	37	2	4		5	
URINARY ORGANS-OTHER/N	2	2		2					
SUBTOTAL	86	80	6	65	2	12	0	7	0
Sys:Eye& Central Nerv	**TOT#**	**ANAL**	**NON**	**Wh**	**Bl**	**Oth**	**W**	**B**	**Oth**
EYE/ADNEXA	3	3		1	1			1	
MENINGES	5	4	1	4				1	
BRAIN	14	12	2	11	1	1		1	
SP CORD,CRANIAL NERVES	1	1		1					
SUBTOTAL	23	20	3	17	2	1	0	3	0
Sys: Thyroid	**TOT#**	**ANAL**	**NON**	**Wh**	**Bl**	**Oth**	**W**	**B**	**Oth**
THYROID GLAND	17	15	2	12	2	1		2	
OTHER ENDOCRINE GLANDS	2	2		2					
SUBTOTAL	19	17	2	14	2	1	0	2	0
Sys:Other ill-defined	**TOT#**	**ANAL**	**NON**	**Wh**	**Bl**	**Oth**	**W**	**B**	**Oth**
OTHER ILL-DEFINED SITE	2		2	1				1	
SUBTOTAL	2	0	2	1	0	0	0	1	0
Sys: Unknown	**TOT#**	**ANAL**	**NON**	**Wh**	**Bl**	**Oth**	**W**	**B**	**Oth**
UNKNOWN PRIMARY SITE	11	10	1	10		1			
SUBTOTAL	11	10	1	10	0	1	0	0	0
TOTAL	1006	860	146	742	36	80	5	141	2

Cancer Committee

Peter Wu, MD (Chair)

The Cancer Care Committee is comprised of representatives from each of the medical center specialties that participate in the care of cancer patients including the allied health departments involved in cancer-related supportive care. The Committee is charged with the establishment and maintenance of an accredited cancer program that assists patients and their families through the continuum of care.

The Cancer Care Committee is involved with the entire spectrum of cancer patient care and is responsible and accountable for all Cancer Care Program activities. Two major responsibilities of the committee are to oversee the Cancer Registry and the multidisciplinary Cancer Conference (Tumor Board). The Committee is also responsible for advising the Executive Committee and Cancer Care Program of any issues related to oncology practice standards as well as sponsoring investigational approaches to patient care.

The Committee leads the Cancer Care Program through goal-setting and implementation, evaluation, and improvement of cancer-related activities throughout the facility. The Committee establishes annual goals and monitors progress in the following categories: programmatic, quality improvement, and clinical care. During the past year, the Committee established and completed goals related to the areas of quality improvement, community outreach, and clinical improvement.

Tumor Board Activities for 2014

Victoria Campa (Compiled data is from Jan. 2014 through Nov. 2014)

The VA Puget Sound Health Care System Tumor Board is held every Wednesday from 1:00 p.m. to 2:00 p.m. in Building 100, Room BD-152. Tumor Boards provide clinical information, pathologic staging, and treatment recommendations for the patient's disease.

The Tumor Board is composed of a multidisciplinary group of attending physicians, fellows, residents, physician assistants, nurses, medical students, and other health care professionals. Staff representatives from Medical, Surgical, and Radiation Oncology act as discussants. All surgical subspecialties are represented. Images and micrographs are presented by staff physicians from Diagnostic Radiology and Pathology. The conference provides a forum to disseminate the most current information on cancer management. The discussants review data from current publications and determine eligibility of patients for cooperative group trials sponsored by the Southwest Oncology Group (SWOG) as well as in-house clinical trials. The conferences provide continuing medical education and provide a convenient forum for expeditious management decisions of complex patients.

In 2014, there were 45 conferences for the year. All the major cancer sites were represented in the cases discussed. The average attendance at each conference was 21. Attendees can receive one credit hour continuing medical education category 1 per session, which can be applied toward re-licensure requirements in Washington State.

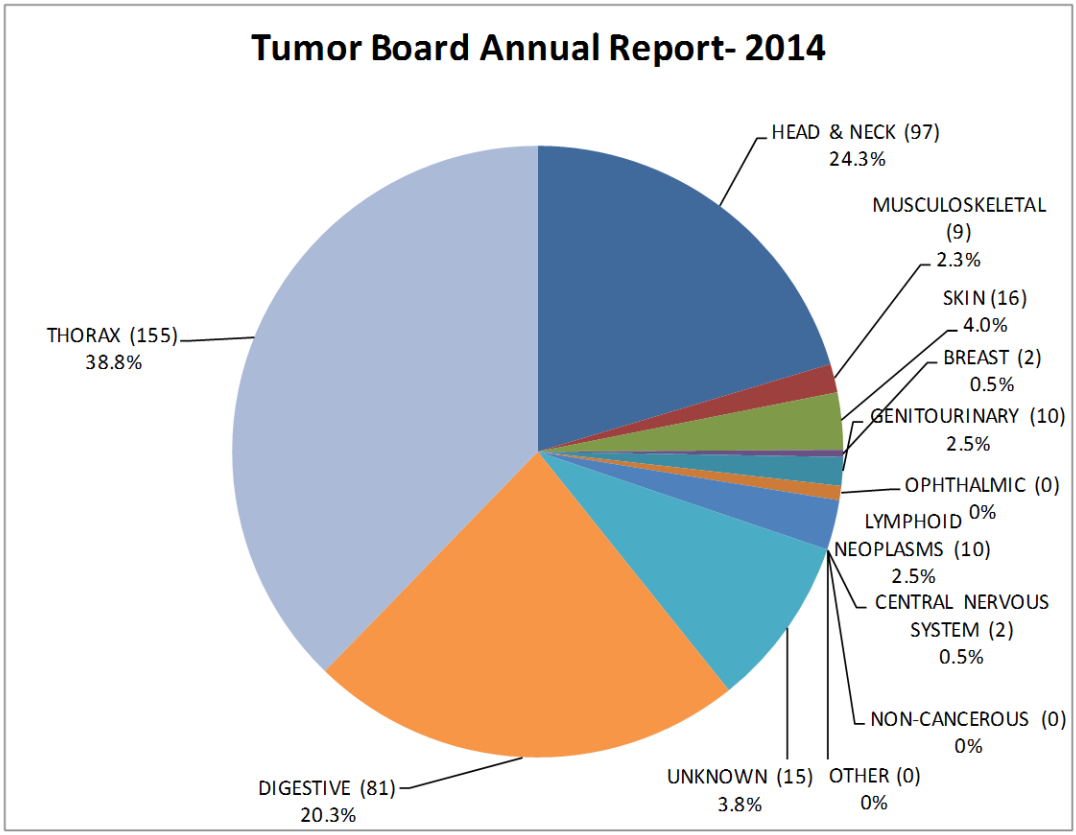
All requests for Tumor Board submission shall be ordered online in CPRS on the order tab. The requesting service must complete the consult template and include a reason for the request. All consult requests will be coordinated through Victoria Campa, Tumor Board Coordinator, Oncology Section (6-4757).

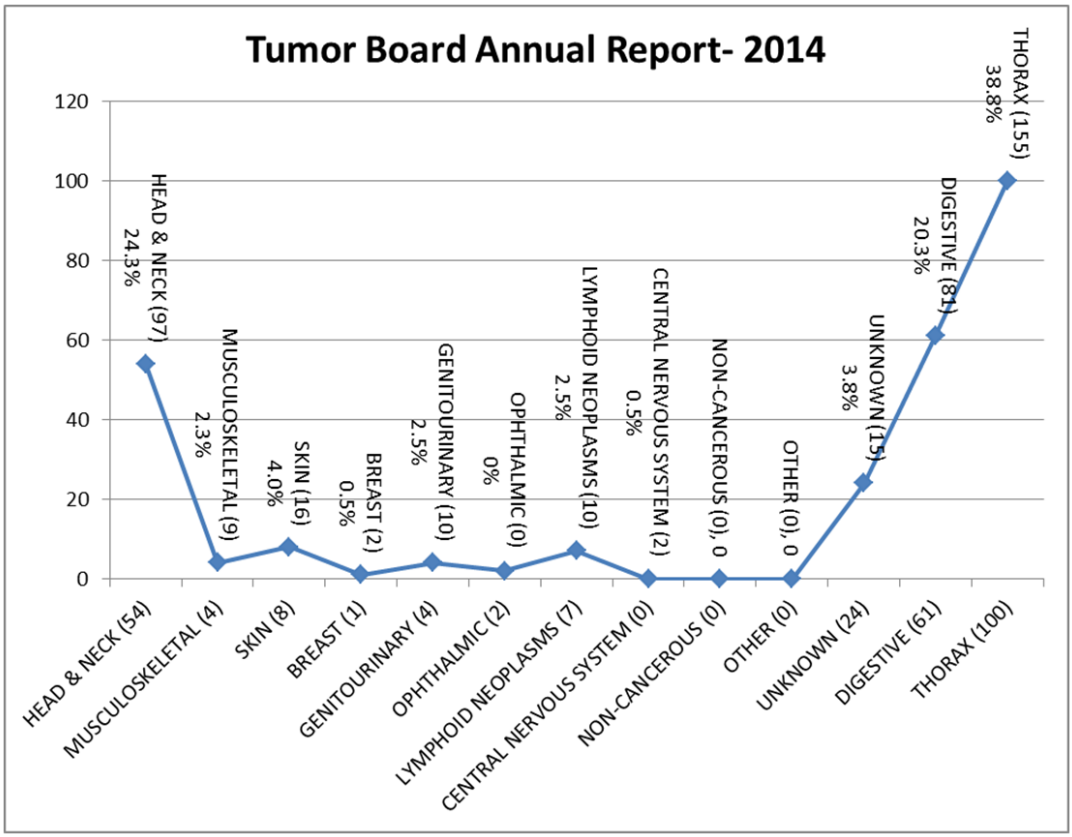
Tumor Board 2014 Distribution of 399 Total Cases (1/1/14 – 11/12/14)

THORAX	155	38.8%
HEAD & NECK	97	24.3%
DIGESTIVE	81	20.3%
SKIN	16	4.0%
UNKNOWN	15	3.8%
GENITOURINARY	10	2.5%
LYMPHOID NEOPLASMS	10	2.5%
MUSCULOSKELETAL	9	2.3%
BREAST	2	0.5%
CENTRAL NERVOUS SYSTEM	2	0.5%
OPHTHALMIC	0	0.0%
NON-CANCEROUS	0	0.0%
OTHER	0	0.0%

(Continued on next page)

Tumor Board Activities (Continued)





Oncology Clinical Trials-

2013 final data & January through November 25, 2014 interim data

Jeannine Barton and Stephanie Magone

Clinical trials in oncology are studies that test, and often compare, treatments in a specific group of patients with a given cancer. Clinical trials define and advance best treatments for patient care. Through some clinical trials, patients may also access novel drugs for treatment of their diseases. Cancer clinical trials are therefore a vital part of the care oncology patients receive at the VA Puget Sound.

VA Puget Sound actively participates as a member institution of the Southwest Oncology Group (SWOG) and NCI-Clinical Trial Support Unit (CTSU)/NCI-National Clinical Trials Network (NCTN). Cancer patients are also offered participation in the Fred Hutchinson Cancer Research Center (FHCRC) peripheral blood stem cell (PBSC) transplant protocols. In addition, cancer patients are offered participation in appropriate pharmaceutical industry-sponsored studies with novel therapies, as well as in-house protocols. Examples of VA supported pharmaceutical industry-sponsored studies include; chemotherapy combination regimens prior to stem cell transplantation and to reduce the risk of side effects from stem cell transplantation, preventative medications to reduce chemoradiotherapy side effects, advanced stage cancer treatment options, new chemotherapy treatment options for different types of cancers, and preventative vaccine studies in patients diagnosed with cancer.

Our commitment to clinical trials involves a multidisciplinary team of physicians including medical, radiation and surgical oncologists as well as physicians of other surgical and medical subspecialties. Patients with head and neck, thoracic, gastrointestinal and hematologic malignancies are discussed at the multidisciplinary tumor board and are offered clinical trial participation by the oncology research staff. Patients are only referred to VA Puget Sound approved research studies. Stem-cell transplant patients are enrolled in sponsored protocols approved by the VA Puget Sound as a part of their routine clinical care.

All patients diagnosed with cancer that are seen by a physician at VA Puget Sound are pre-screened by the Clinical Research Coordinators regarding eligibility for enrollment in a clinical trial. Once pre-screened, if a patient appears to be eligible for a clinical trial, the patient's treating Physician, Clinical Research Coordinators, and/or clinical trial Principal Investigator/Physician will present information regarding the clinical trial to the patient for their consideration of participating in the clinical trial. Information about actively enrolling clinical trials at VA Puget Sound is available in the research kiosks throughout the facility, displayed on the reader boards throughout the facility, and available on https://ClinicalTrials.gov.

In 2013 (final data), 67 cancer patients at VA Puget Sound elected to participate in clinical trials. Within these 67 enrolled patients, 31 patients enrolled in treatment related clinical trials, 8 patients enrolled in preventative treatment trials, and 28 patients enrolled in other types of cancer related trials.

To date, in 2014 (interim data), 52 cancer patients at VA Puget Sound elected to participate in clinical trials. This percentage for clinical trials enrollment was compiled from enrollment data gathered January 1, 2014 through November 25, 2014, but may not reflect the final clinical trial enrollment data for 2014. Within these 52 enrolled patients, 23 patients enrolled in treatment related clinical trials, 11 patients enrolled in preventative treatment trials, 7 patients enrolled in quality of life related trials, and 29 patients enrolled in other types of cancer related trials.

Hospital & Specialty Medical Care – Oncology Division

Daniel Y. Wu, MD, PhD

The VA Puget Sound Oncology Division provides initial medical diagnosis, medical treatment, and follow-up care for Veterans diagnosed with cancer. The division works closely with surgical subspecialties and Radiation Oncology to offer multidisciplinary care; and with social work, nursing, dietary, chaplaincy, and other allied healthcare services to provide holistic care. Care and treatment for cancer patients is frequently coordinated through a multidisciplinary Tumor Board. In this forum, individual cases and therapeutic options are reviewed by representatives from all services and a consensus recommendation is rendered. Oncology nurse coordinators from the Oncology Division ensure follow-up, coordinates diagnostic and therapeutic recommendations, and maintains contact with the patient. In addition, a well-staffed Cancer Care Clinic provides ongoing chemotherapeutic, transfusion, and supportive services for patients undergoing treatment.

The Oncology Division provides care in both inpatient and outpatient settings. Patients are evaluated and followed at four weekly subspecialty outpatient clinics staffed by attending physicians who are also faculties of the University of Washington and fellow physicians from the Fred Hutchinson Cancer Center. Chemotherapy and treatment related care is provided in the newly remodeled Cancer Care Clinic that operates five days per week and staffed by two physician assistants, two nurse practitioners, three RNs, and one clerk. This unit provides all of the outpatient chemotherapy for VA Puget Sound Health Care System patients and also provides a convenient location for outpatient procedures, such as bone marrow aspirates and physical examinations, outside of the regular outpatient clinic hours. A full-time clinical pharmacist manages chemotherapy for both inpatients and outpatients, and ensures safety of drug administration.

New in 2014, the Division has added a four member cancer navigation team to support patients who must travel great distances or are challenged with difficult personal issues. This navigation team, consists of a nurse practitioner, a nurse coordinator, a social worker and a clerk, maintains contact with the patient and provides throughout his/her cancer care journey. The navigation team also ensures seamless transition of the patient back to the referral facility and provider. Additionally, the team will provide survivorship counseling to patients, who have completed treatment.

The Marrow Transplant Service remains a marquee program of the VA Puget Sound Oncology Division. The Marrow Transplant Unit (MTU) is one of only three such units nationwide under the national VA program. The MTU performs approximately 50-60 transplants per year on patients referred from both remote and regional sites. The MTU works in close collaboration with the Fred Hutchinson Cancer Research Center, and the treatment and experimental protocols for transplantation are shared between the two institutions. After the acute transplant phase, the MTU performs outpatient follow-up on transplanted patients as well as annual long-term follow-up. The MTU is a discrete physical patient care unit with integrated outpatient and inpatient care, and a dedicated nursing and clerical support staff.

As always, the Oncology Division supports the overall direction of the VA Puget Sound Cancer Committee, a multidisciplinary committee that maintains accreditations and promotes cancer care activities of the institution. As a part of the mission to provide Veterans with cutting edge cancer care, the Oncology Division also actively maintains a clinical research program. We provide clinical trial participation opportunities so that patients can have access to novel drugs and advanced oncological concepts. Our clinical research program participates in a number of studies through national cooperative programs and pharmaceutical sponsors; and is staffed with three clinical research coordinators. The Oncology Division additionally maintains a local cancer registry under a certified Cancer Registrar; and undergoes regular clinical and system improvement evaluations under a full-time quality improvement coordinator.

Marrow Transplant Unit

http://www.pugetsound.va.gov/marrowtransplant/Welcome.asp

Thomas R. Chauncey, M.D., PhD

The Marrow Transplant Unit at the VA Puget Sound Health Care System was founded in 1982. It operates in conjunction with the Seattle Cancer Care Alliance, Fred Hutchinson Cancer Research Center and the University of Washington School of Medicine. The San Antonio VA began performing marrow transplants in 1986, joined by the Nashville program in 1995. Together, the three VA transplant centers provide comprehensive marrow and stem cell transplantation services for adults with a variety of malignant and nonmalignant hematologic disorders.

Since 1982, close to 1,400 patients have been transplanted in Seattle, including over 200 from unrelated donors. Utilizing 8 inpatient beds and 1 outpatient suite, 60-70 transplants are performed yearly. Seattle patients receive infusion of marrow or peripheral blood stem cells from themselves (autologous transplantation) or from a matched or closely-matched relative or unrelated donor (allogeneic transplantation). Allogeneic transplant recipients, especially those receiving stem cells from mismatched and unrelated donor sources, require prolonged immunosuppression and are at risk for a variety of complications. Immunologic tolerance ultimately occurs with time, although close medical surveillance can be required for months to years. The longitudinal follow-up care and clinical advice provided by the Seattle program is a key element to the successful transplantation for patients throughout the country.

The largest proportion of patients treated in Seattle have received transplants for multiple myeloma, followed by non-Hodgkin's lymphoma, acute myelogenous leukemia (AML), Hodgkin's disease, chronic myelogenous leukemia (CML), and chronic lymphocytic leukemia (CLL). Multiple myeloma, non-Hodgkin's lymphoma and CLL are service-connected conditions for veterans with prior Agent Orange exposure. Other malignancies and nonmalignant hematologic disorders are considered for transplantation on a case-by-case basis.

Clinical research projects performed at the Marrow Transplant Unit in conjunction with the Fred Hutchinson Cancer Research Center have led to improved safety and efficacy of marrow transplantation, making curative treatments available to a broader number of patients. Outcome data from patients transplanted at the Marrow Transplant Unit at the VA Puget Sound Health Care System compares favorably to published data in the medical literature.

Head & Neck Cancer Service

Marc D Coltrera, MD, Isaac Bohannon, MD and Jeffrey Houlton, MD

More than 40,000 Americans (and more than 750,000 people worldwide) are diagnosed with head and neck (H&N) cancer every year. Because veterans have disproportionately high rates of smoking and alcohol use (which are two of the greatest risk factors for the development of H&N cancers), many of these Americans are veterans of our country's military services.

At the VA Puget Sound Health Care System (VAPSHCS), cancers of the head and neck are the third most common solid tissue cancer. Our Head and Neck Cancer Service treats over 50 new cancer patients and 40 recurrent cancer patients each year, making it one of the busiest VA H&N centers nationally.

Unfortunately, H&N cancers have a devastating impact on our patients' lives. These cancers impair the most basic functions responsible for our daily quality of life, including: eating, speaking, and breathing. These cancers also impact our vital senses, such as taste, smell, hearing, voice, and sight. In addition, these tumors may distort our patients' outward physical appearance leading to social isolation.

Fortunately, we have made significant progress in treating H&N cancers. Thanks in large part to advancements in technology, novel surgical techniques, and organ-sparing treatments (which take advantage of the newest equipment and protocols), we have made remarkable improvements in the quality of our patients' lives during and after treatment.

We are one of a few select VA centers that offer microvascular free tissue reconstruction for defects follow head and neck cancer resection. These microvascular techniques provide our patients with the highest form and function achievable following tumor removal. In addition, we offer our laryngeal cancer patients larynx-sparing trans-oral laser surgery, an alternative to total laryngectomy. This advanced surgical technique allows our patients to preserve their larynx, maintaining both their voice and the ability to breath without a stoma. Our newest surgical advancement involves minimally-invasive transoral robotic surgery. Robotic surgery is an exciting new technology that allows tumors of the tonsils and base of tongue to be removed through the mouth rather than through a more extensive open operation. When used appropriately, this technique seems to spare patients intensive chemotherapy and radiation which was previously the standard of care for treatment of these tumors (given the morbidity of open operations). Reduction in chemotherapy and radiation may have important important impact on our patients swallowing function and overall quality of life. The role of robotic surgery is currently being researched both at our center and nationally.

We are proud to offer these cutting-edge technologies to our patients. In doing so, out H&N program distinguishes itself as one of the very select centers in the country with the ability to offer patients all state-of-the-art treatment modalities. Yet, the most important aspect of our cancer care continues to be our ability to work as a multidisciplinary team. Our team consists of surgical, medical and radiation oncologists, neuroradiologists, nurse practitioners, nurses, social workers, speech pathologists, and psychologists. Our team meets each week to discuss all new head and neck cancer patients presented at our multi-disciplinary care conference (Tumor Board). This collaborative approach ensures that our treatment plan is being uniquely tailored to each individual patient.

We also continue to have cross-institutional collaborations amongst centers in the region. We are partnered with physicians at the University of Washington Medical Center, where our surgical oncologists, medical oncologists, and radiation oncologists all hold appointments on the faculty. We have substantial research collaborations with faculty from the University of Washington, the Seattle Cancer Care Alliance, and the Fred Hutchinson Cancer Research Center. These research programs offer exciting progress towards treating patients with Head & Neck cancer. It is through these multidisciplinary, cross-intuitional collaborations that we will be able to obtain our ultimate goal: to achieve the highest possible cure rates, while offering the highest possible quality of life for patients with even the most devastating Head & Neck cancers.

Radiation Oncology-

Continuous Quality Improvement as a Pillar for Quality, Safety, and Patient Centered Care

Tony S. Quang, MD, JD and Kent E. Wallner, MD

The VA Puget Sound Health Care System is a radiation oncology referral center in the Veterans Affairs (VA) system. It draws patients from the VA Northwest Health Network (VISN 20) which serves Alaska, Idaho, Oregon and Washington.

We deliver state-of-the art care to patients diagnosed with various malignancies including head and neck cancers, lung cancer, breast cancer, gastrointestinal and genitourinary malignancies, sarcomas, and intracranial neoplasms.

Our bone marrow stem cell transplant program using total body irradiation as a conditioning regimen for multiple myeloma, leukemias and lymphomas is unrivaled with the implementation of safer and less toxic myeloablative and non-myeloblative regimens both in clinical and research settings.

Continuous quality improvement (CQI) is actively implemented and every opportunity is seized to streamline the program. This effort is spear-headed by the radiation oncologists—Tony S. Quang, MD, JD and Kent E. Wallner, MD. These quality improvements are not only founded in best clinical practice guidelines, but fortified with interdisciplinary efforts to ensure its robustness. Our department continues to be accredited by the American College of Radiology. The recent site visit revealed minimal findings, and our department is poised to be re-accredited for another 3 years.

We continue to convene weekly for interdisciplinary chart rounds. Radiation oncologists, physician assistant, nurse, and dosimetrists attend the meetings. Other regular attendees include our social worker, Ana Fisher, MSW who has been pivotal in implementing added supportive measures for patients who need ancillary services. Our dietitian, Venus Ng, RD carefully monitors weights on patients under treatment and makes recommendations for their nutritional intake. Lynsi Slind, cancer care navigator, along with Ana Boekenoogen, RN, OCN plays an important role in coordinating patient care. Jason Trumbull, PSA, has recently joined our department. He along with Corey Check, PSA and James Rapp, ASM, ensure that new consults are scheduled expeditiously.

Furthermore, M&M conferences are held quarterly. Physician retrospective peer review is done quarterly. Physics peer review is done biannually. Focus studies are done regularly. In fact, Jean Hargrett, PA-C led the QI project, "Reducing Inpatient Admissions of Cancer Patients with Mucositis and Aspiration Pneumonia by Implementing Standardized Oral Care Procedure," which won 3rd place at our local VA competition.

Drs. Quang and Wallner are active participants at weekly Tumor Board meetings where patients are offered the optimal management recommendations through an interdisciplinary effort. Dr. Quang runs month-

(Continued on next page)

Radiation Oncology (Continued)

ly clinical case conferences while Dr. Wallner runs monthly journal clubs teaching residents at University of Washington Medical Center. They are Visiting Oncology Lecturers at Bellevue College teaching clinical oncology to radiation therapy students. Students from this training program have consistently over the years scored in the 90th to 95th-percentile.

On the physics and technical side, Adam Tazi, PhD, our new Chief Physicist, and Carl Bergsagel, MS are upgrading the Pinnacle radiation treatment planning system to version 9.8, which fixes some bugs and allows for further integration of electronic record and documentation. We are also planning to upgrade our electronic medical record— MOSAIQ Management System to version 2.6, which is the most up-to-date version in the industry. Implementation of this latest version would allow for automated scripting and an additional layer of treatment verification and quality assurance which meets national standards. Implementation of additional quality assurance and patient safety measures include involving Janice Short, ARRT(T), who has assumed the role of Health Information Officer to troubleshoot linear accelerator software issues. Last month, 4D-CT respiratory management technique has been commissioned to allow radiation oncologists to treat lung cancer patients with peripheral lesions with tighter treatment margins to increase tumor control and decrease treatment toxicities.

Intensity modulated radiation therapy (IMRT) continues to be used treat head and neck, prostate, and lung, and rectal cancers. Volumetric modulated art therapy (VMAT), a faster and better technique of radiation therapy delivery, is being commissioned and will soon be in clinical use.

Dr. Quang, Dr. Tazi, Mr. Bergsagel, Sharon Hummel-Kramer, CMD, ARRT(T), David Cain, ARRT(T), CMD, and Donald Putman, ARRT(T) continue to improve clinical and technical treatment precision by optimizing protocols for dose-volume constraints and cone beam CT imaging to include specific treatment sites. Ms. Hummel-Kramer and Dr. Quang worked with resident physician, Michael Gensheimer, MD to develop a mathematical model predicting success in parotid gland sparing for head and neck IMRT treatment planning. This algorithm adds efficiency as it predicts success in planning allowing both the dosimetrist and the radiation oncologist to have reasonable expectations of parotid sparing. The findings were presented at the 55th ASTRO Annual Meeting in Atlanta, Georgia, and the manuscript is in press.

As a national authority on the quality assurance effort of other VA brachytherapy programs, Dr. Wallner has pioneered a specialty clinic in the administration of seed brachytherapy for prostate cancer patients. Our clinic continues to offer brachytherapy to prostate cancer patients who come from every region of the United States. We have integrated brachytherapy with a prostate cancer program that includes IMRT with placement of gold seed fiducials. Using a shorter course— hypofractionated radiation therapy treatment has allowed patients to complete their treatment quicker so they can go back home.

Radiation Oncology continues to play a strong leadership role in the VA system. Dr. Quang provides our VA with up-to-date scientific and best clinical practice expertise in his respective roles as Co-Chair on the VA Institutional Review Board and Surveyor for the American College of Radiology. Dr. Quang continues to be an active member of the Integrating Healthcare Enterprise in Radiation Oncology (IHE-RO) planning and clinical advisory committees. IHE-RO works in collaboration with the American Society for Radiation Oncology (ASTRO), which addresses ways to improve the use of computer systems for information sharing, work flow, and patient care. He also serves on the ASTRO Bylaws Committee and is Vice Chair of the Young Physician Section of the Washington State Medical Association.

The VA Puget Sound Radiation Therapy Department has maintained its position as a nationally visible center drawing referrals from other VA facilities throughout the United States. Our patient census remains stable and our department continues to successfully implement new technology and offer sophisticated treatment plans. Our expansion of cutting edge technology, continued innovation efforts, and our commitment to quality assurance through the implementation of a robust continuous quality improvement has positioned our department to offer our patients the best of care for now and well into the future.

Neoadjuvant chemotherapy for muscle invasive bladder cancer

A guideline based multidisciplinary approach to treating bladder cancer

Michael P. Porter, MD, R. Bruce Montgomery, MD

Bladder cancer is the 4th most common non-skin malignancy in Veterans. At the VA Puget Sound approximately 40 new cases of bladder cancer are diagnosed each year, and patients with advanced bladder cancer are referred from all over VISN20 (Alaska, Washington, Idaho, Oregon and Montana). Patients with tumors confined to the inner lining of the bladder (clinical stage CIS, Ta, and T1) are managed initially with endoscopic resection, sometimes in conjunction with chemotherapy or immunotherapy placed directly into the bladder. However, approximately 25% of newly diagnosed bladder cancer cases are invasive into the deeper muscle layers of the bladder or have spread to lymph nodes or other organs at time of diagnosis. These patients with more advanced tumors (clinical stage T2-T4, N0-3, M0-1) are managed with multimodal therapy that can include chemotherapy, radical cystoprostatectomy (surgical removal of the entire bladder and prostate), and radiation therapy.

Over the past decade the standard of care for treatment with curative intent in patients with bladder cancer that has invaded the muscle layers of the bladder (clinical stages T2-T4, N0, M0) in the United States has been chemotherapy followed by cystoprostatectomy. This strategy of administering chemotherapy prior to surgical removal of an organ with cancer is termed "neoadjuvant chemotherapy". Eligible patients receive 3-4 cycles of a specific regimen of chemotherapy containing the agent cisplatin, followed by cystoprostatectomy after completion of chemotherapy. Despite level 1 evidence and major guideline panels such as the NCCN supporting this approach, adoption has been slow in the United States. Some studies have suggested that less than 10% of patients receive neoadjuvant chemotherapy, and another study suggested that less than 20% of patients being treated at centers accredited by the American College of Surgeons' Commission on Cancer receive this recommended approach (Figure 1).

In 2010 the VA Puget Sound embarked on a multidisciplinary effort to improve compliance with guideline concordant care for patients with bladder cancer, with the ultimate goal to improve patient outcomes. A key part of this initiative was developing processes that improved opportunities for patients with muscle invasive bladder cancer electing for radical cystoprostatectomy to be considered for receipt of neoadjuvant chemotherapy. All potentially eligible patients with bladder cancer have been subsequently discussed at a multidisciplinary conference, including medical oncology and urology surgical specialists, which meets weekly. This report describes our experience with neoadjuvant chemotherapy from 2011-2013.

(Continued on next page)

Neoadjuvant chemotherapy for muscle invasive bladder cancer (Continued)

Methods

We retrospectively identified all patients at VAPSHCS that underwent radical cystoprostatectomy for muscle invasive bladder cancer. Patient charts were then reviewed and basic demographic information, tumor stage, comorbidities, and outcomes were abstracted. The receipt of neoadjuvant chemotherapy was noted, as were the reasons for not receiving neoadjuvant chemotherapy.

Results

We identified 29 patients who underwent radical cystectomy for bladder cancer between January 2011 and February 2014. All patients were male, and median patient age was 69 years. Demographic characteristics are shown in table 1.

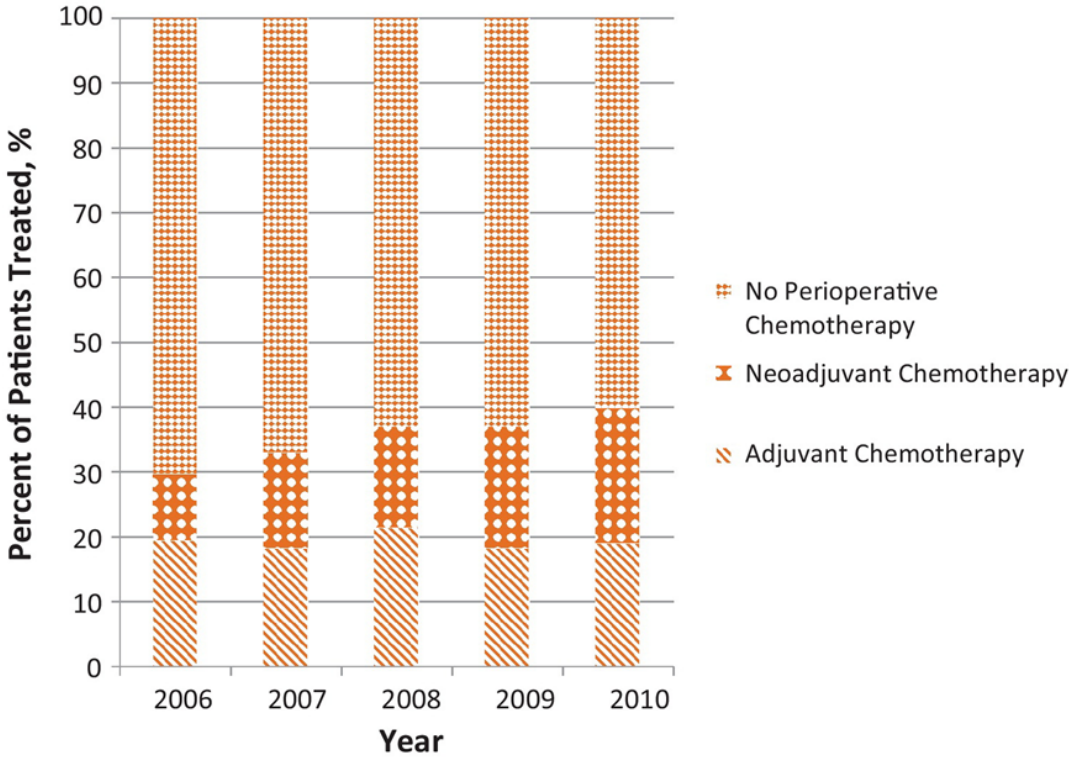


Figure 1: Percentage of bladder cancer patients receiving chemotherapy at COC accredited hospitals in the United States (Reardon et al, European Urology 2014).

26 patients had muscle invasive bladder cancer and were eligible for neoadjuvant chemotherapy. 19 out of 26 patients (76%) received chemotherapy, and 14 patients (56%) completed all planned cycles (Table 2). Reasons for not receiving chemotherapy included renal insufficiency (n=3), patient preference (n=2) and poor patient compliance with medical care recommendations (n=1). Reasons for not completing chemotherapy included tumor non-response of progression (n=3), renal toxicity (n=1) and poor tolerance with pancytopenia (n=1).

Table 2: Receipt of neoadjuvant chemotherapy at VA Puget Sound

	Total Eligible n=25
Neoadjuvant chemotherapy started	19 (76%)
Neoadjuvant chemotherapy completed	14 (56%)

Conclusions

Over 75% of patients with muscle invasive bladder cancer at the VA PSHCS receive neoadjuvant chemotherapy prior to planned cystoprostatectomy. This is significantly higher than published national averages at other COC accredited hospitals, and is concordant with evidence-based guidelines. This provides objective evidence that patients with muscle invasive bladder cancer seeking care at the VA Puget Sound are receiving state of the art multidisciplinary cancer care.

Diagnostic Imaging Service (DIS)

Julie Takasugi MD and Joseph G Rajendran, MD,

Diagnostic radiology and nuclear medicine are important fields in detection, diagnosis, treatment and follow up of a variety of diseases, including malignancies. Diagnostic Imaging Services (DIS) is responsible for the performance of quality examinations, interpretation of those examinations and for the communication of study results to the referring clinician in a timely fashion. At the VA Puget Sound Health Care System (VAPSHCS), Seattle and American Lake Divisions, there are 8 receptionists/schedulers, 2 program support persons, 1 administrative officer, 2 PACS administrators, 3 file clerks, 2 health technician/escort, 34 radiologic/nuclear medicine technologists, 5 technology students, 1.4 FTE Nurse Practitioners, 1 nurse, 8 residents, 2 fellows, 9 full-time and 2 part-time attending physicians. Attending radiologists subspecialize in abdominal imaging, cardiothoracic radiology, gastrointestinal radiology, neuroradiology, musculoskeletal radiology, nuclear medicine (diagnosis and therapy) or vascular and interventional procedures.

Services provided by DIS include conventional radiographic exams, fluoroscopic studies of the gastrointestinal and genitourinary tracts and nervous system, computed axial tomographic (CT) scans, ultrasound exams, magnetic resonance imaging (MRI), angiography and radionuclide studies. Modern CT, SPECT/CT and PET/CT scanners have been installed. The PET/CT a collaborative effort with R&D in providing clinical PET scan capability at VAPSHCS and we have started of with 18F-fluorodeoxyglucose imaging. Mammography is performed at Virginia Mason, UW, and other local imaging centers that are accessible to patients. Percutaneous biopsies, aspiration and drainage of fluid collections, biliary and genitourinary drainage, long-term intravenous catheter placement, percutaneous feeding tube placement, tumor embolization and ablation procedures, intra-arterial chemotherapy access and intravascular stent placement are some of the diagnostic and therapeutic procedures offered by this department. In nuclear medicine, all general nuclear imaging studies including myocardial perfusion studies, brain SPECT imaging (including DAT scan), In-111Octreotide and I-123MIBG scans and lymphoscintigraphy are performed. A modern SPECT/CT (16 slice) was installed at SEA. Therapy with radiopharmaceuticals is routinely performed for hyperthyroidism, thyroid cancer (using Iodine 131) and bone pain palliation (using Strontium 89 and Samarium 153). Radioimmunotherapy (with Yttrium 90 Ibritumomab tiuxetan) for treating non-Hodgkins lymphoma and Ra-223 chloride therapy for metastatic prostate cancer are now available for our patients. VAPSHCS provides teleradiology service for the interpretation of nuclear medicine studies performed at Spokane VA Hospital. In addition, DIS supports a number of committees and conferences dealing with cancer patients at its Seattle Division, including Tumor Board, Cancer Committee, Tumor Registry, Gastroenterology-Surgery Conference, Neurology/Neuro-Surgery Conference, Liver tumor conference and Genitourinary Conference. In 2014, a total of 98,000 radiologic examinations were performed at the VAPSHCS. Diagnostic Imaging also provides consultation on studies performed at outside hospitals and teleradiology services for other VA hospitals in VISN20.

Thoracic Surgery 2014

Leah M. Backhus, MD, Michael S. Mulligan, MD, Thomas McDonough, PA-C

The Thoracic Surgery service at the VA Puget Sound Health Care System (VAPSHCS) has been an active participant in the care of Veterans in the Pacific Northwest for many years. The Thoracic Surgery section is an integral part of the Division of Cardiothoracic Surgery at the University of Washington, which attends to all aspects of thoracic pathology. We are dedicated to the prevention, detection, treatment and research of thoracic diseases.

Our service consists of Dr. Leah Backhus, Dr. Michael Mulligan and Mr. Thomas McDonough, PA-C. Dr. Backhus is an assistant professor of surgery at the University of Washington with clinical and research emphasis on thoracic oncology and lung transplantation. Dr. Michael Mulligan is a professor of surgery at the University of Washington and is director of the lung transplant and minimally-invasive thoracic surgery programs and Section Chief for Thoracic Surgery. The team is also supported by a dedicated Physician Assistant, Thomas McDonough, who has been a part of the section for over ten years. We offer a wide variety of surgical treatment options for patients with both benign and malignant diseases.

Lung cancer is one of the most common solid tumors encountered in our nation's Veterans and it constitutes the majority of the Thoracic Surgery practice at the VA. In addition to lung cancer, we provide treatment for mesothelioma and malignancies involving the trachea, chest wall, mediastinum, esophagus and secondary pulmonary metastases. We utilize a multidisciplinary approach to the thoracic oncology patient and collaborate with our colleagues in Pulmonary Medicine, Radiation Oncology, Medical Oncology, Radiology, Nuclear Medicine and Pathology. Patients require a number of diagnostic tests that are coordinated by the Physician Assistant. Preoperative counseling and testing are performed in tandem with the Pulmonary and Oncology services within an integrated clinic structure. Because most lung cancer patients require extended follow-up as a part of their cancer care, the Thoracic Surgery service follows all resected lung cancer patients for five years. This requires biannual imaging, clinical examinations, and assistance and counseling regarding smoking cessation. All tests and examinations are performed by the Thoracic Surgery service at a weekly outpatient clinic. Approximately fifty to sixty lung resections are performed at the VAPSHCS each year.

Thoracic Surgery remains on the leading edge of technology and surgical techniques. We offer minimally-invasive surgery including Video Assisted Thoracic Surgery (VATS). This technique allows removal of a lobe of the lung (lobectomy) through small incisions with the assistance of a thoracoscope. It avoids the traditional large incision associated with significant morbidity and mortality in lung cancer patients. Patients undergoing VATS lobectomy appear to have less pain associated with surgery and generally leave the hospital and return to normal activity sooner. Oncologic results with VATS lobectomy appear to be equivalent to traditional open thoracic procedures. VATS is also utilized in performing lung and lymph node biopsy, as part of minimally-invasive esophageal surgery and management of pleural conditions. A state-of-the art bronchoscopy suite provides the ability to perform interventional bronchoscopy procedures for diagnosis, staging, and palliation of symptoms. Finally, we offer lung volume reduction surgery to select patients and we are one of three VA Medical Centers nationwide offering lung transplantation as another option for end-stage lung disease.

Beginning in 2013, VA Puget Sound has partnered with members of the Portland VA to create the VISN 20 Specialty Care Access Networks – Extension for Community Healthcare Outcomes (SCAN-ECHO) Program. The team is led by Pulmonary Medicine and includes Thoracic Surgery, Radiology, Medical Oncology and Palliative Medicine. SCAN-ECHO is a form of tele-health promoted by the VA Office of Specialty Care Transformation. During weekly hour-long SCAN clinics, clinical case presentations are combined with educational sessions for the target audience of primary care providers from rural and underserved areas. Dr. Backhus is a clinical specialist faculty providing education and consultation on topics relevant to Thoracic Surgery which include:

- Pre-Operative Evaluation of the Patient Undergoing Lung Surgery
- Transition in Care Following Lung Cancer Treatment
- Surgical Management of COPD: Lung Volume Reduction Surgery

Urologic Oncology Program

Bruce Montgomery, MD, Michael Porter, MD

The multidisciplinary Urologic Oncology program is designed to help patients with genitourinary cancers of all types and give them the opportunity to discuss their therapeutic options with a broad range of care providers who treat patients with this disease, including urologists, radiation oncologists, medical oncologists and endocrinologists. By providing this type of integrated patient care, doctors hope to help patients make informed decisions and receive the best possible treatment. The multidisciplinary team offers some of the most advanced treatment options available for prostate cancer, including nerve sparing prostate surgery, brachytherapy (radiation implants), adjuvant chemotherapy and advanced disease chemotherapy studies. The center is one of a select few VA centers in the country utilizing the DaVinci robotic system to perform prostatectomies. We also offer cutting edge treatment options for kidney and bladder cancer, including robotic partial nephrectomy, laparoscopic nephrectomy, energy based ablative techniques for small renal tumors, radical cystectomy with urinary diversion for muscle invasive bladder cancer, and adjuvant therapies for non-muscle invasive bladder cancer including chemotherapy placed into the bladder. We are a cancer referral center for all of VISN 20 and also provide comprehensive care for cancers that are more uncommon in the Veteran population, including testis and penis cancer. The Program is the national coordinating center for a randomized study of how to prevent relapse of prostate cancer after prostatectomy and has other prostate cancer study protocols open. For information, contact the Oncology Department at (206) 764-2709 or the Urology Department at (206) 764-2265

Surgical Oncology

Peter C. Wu, MD

The surgical oncology program provides comprehensive evaluation and treatment for tumors of the upper and lower gastrointestinal tract, hepatobiliary system, pancreas, breast, melanoma, soft tissue sarcoma, and endocrine system. Together with Drs. Lorrie Langdale, Roger Tatum, Dana Lynge, Edgar Figueredo, and Deborah Marquardt; our section provides surgical expertise covering a broad range of procedures, including sentinel lymph node mapping, minimally invasive and robotic surgery, and complex oncologic resections including esophagectomy, hepatic resection, pancreaticoduodenectomy and total mesorectal excision with anal sphincter preservation. We work in tandem with colleagues in Medical and Radiation Oncology to offer personalized combined modality protocols. Our goals are to provide state-of-the-art solid tumor treatment in a multidisciplinary environment, enroll patients in cancer clinical trials, conduct innovative cancer research, and provide education and mentorship to our students, residents, and fellows affiliated with the University of Washington and Fred Hutchinson Cancer Research Center.

Whole Health Healing and Oncology

Dawn Irene Aragón, PhD

As the VA Puget Sound Health Care System (VAPSHCS) Oncology programs have expanded to provide care for more hematologic/oncologic disorders, so have the roles of all health care providers. A plethora of research shows a clear relationship between stress and illness.

In order to provide our veterans with 21st Century Health Care The VA Way, The Office of Patient Centered Care and Cultural Transformation (OPCC&CT) was established in 2010. The OPCC&CT is working with VHA leadership and other program offices to transform the system of health care from the traditional medical model to a personalized, proactive, patient-driven model. OPCC&CT has contracted out and developed useful materials on the Health For Life website. This approach is aligned with the VHA Strategic Plan FY2013-2018 and the National Leadership Committee-Veterans Experience Committee.

The OPCC&CT is dedicated to supporting the field in the cultural transformation to Health for Life. The office exists to provide resources help expand evidence-based strategies that enhance the health and well-being of the Veterans we serve.

Everything is connected to everything. The Components of Proactive Health and Well-Being can be fully explained here: http://healthforlife.vacloud.us/index.php/components-of-proactive-health-and-well-being

Personalized Health Plan (PHP)

The Personal Health Inventory (PHI) is a customized plan that is overarching in scope and is designed to optimize the health and well-being of each patient according to what matters to him or her. The Personal Health Plan (PHP) is a combination of clinical information and knowledge and the patient's mission, health goals, and priorities. It is created in a partnership between the patient's health care team and the patient and is developed at a face-to-face or telephone visit with the patient. The patient-driven PHP is a tool that can be utilized to develop a set of resources and support teams available to the patient as well as the next steps in professional care.

Both the PHI and PHP are living records of the patient's care. Whenever the patient's condition or circumstances change, and at least once a year, the care team should revisit the health plan with the patient to make sure it always meets his or her goals for health and life. The personalized health approach encompasses all aspects of traditional care, from outpatient to long-term and rehabilitation. Building from their values and goals, the PHI and PHP develop a plan that addresses all components of a patient's health and well-being.

Whole Health Resources:
Office of Patient Centered Care website: http://healthforlife.vacloud.us/

Whole Health Curriculum: http://healthforlife.vacloud.us/index.php/research-education/education

To learn more about PCC & CT, a 4-part presentation by Tracy Gaudet, MD (Director, Washington, DC) includes:

1. What Matters Most: Personalized, Proactive, Patient-Driven Care [16 min]
   http://www.youtube.com/watch?v=auhwb9qQ8VE

2. Change the Practice: Why Patient Centered Care [7 min]
   http://www.youtube.com/watch?v=auhwb9qQ8VE

3. Experience the Change: The Elements of Patient Centered Care [20 min]
   http://www.youtube.com/watch?v=Fehn04VUCWM

4. What Veterans Value: The Future of VHA Health Care [26 min]
   http://www.youtube.com/watch?v=D0EzTU9lTb4

Nutrition and Cancer

Melissa Powell, RD, Wing Yan (Venus) Ng, RD, CNSC

Nutrition is essential in contributing to optimal outcomes in patients undergoing cancer treatment. Eating well during cancer treatment can help patients maintain strength and energy, decrease their risk of infection, and reduce the side effects from treatment. Patients undergoing cancer treatment can experience numerous side effects that can adversely affect their ability to maintain proper nutrition: nausea, vomiting, early satiety, diarrhea, taste and/or smell changes, difficulty with swallowing, and loss of appetite. Weight loss can result from these side effects and can put patients at higher risk of hospitalization, and potentially delay surgery. Nutrition and Food Services at VA Puget Sound Health Care System provides nutrition education and counseling by Registered Dietitians to Radiation Oncology, Cancer Care Clinics, Marrow Transplant Unit patients and their caregivers on an individual and group basis. Topics of evidence-based education and counseling include weight management, food safety, cancer reoccurrence prevention, basic healthy eating, Diabetes education, and symptom management. Many patients will require a feeding tube to maintain nutrition and hydration during and after cancer treatment. The dietitian provides tube feeding formula recommendations to patients and providers, provides instruction on feeding and hydration, utilizing feeding pumps, and monitors tube feeding tolerance and progression.

Many patients undergoing Bone Marrow Transplants may require total parenteral nutrition (TPN) during their treatment. In this case, the dietitian provides TPN recommendations and monitors patients' nutritional status throughout the transplant process. In addition, the dietitian provides guidance and policy oversight to the provision of high quality patient food service.

Our Nutrition Support Team, (NST) continues to meet weekly to discuss high risk patients, current articles, and to make sure that we are all utilizing the most current evidenced based nutrition practices. Our team includes several Clinical Dietitians, Doctors from GI and Surgery, and a Pharmacist as available. We also continue to work closely with Pharmacy as we are enjoying the ability to customize our TPN.

This Spring, we established two outpatient nutrition clinics for Radiation Oncology and Cancer Care to meet the growing needs of nutrition education, dietary counseling, weight monitoring, and nutrition support management in this high risk population. Over the past few months, the utilization of these nutrition clinics has been increasing. On average, 60% of the patients we see are head & neck cancer patients who mostly require supplemental or total enteral nutrition support. About 30% are esophageal cancer patients who are undergoing definitive or palliative treatments. The rest is mostly other gastrointestinal cancers, e.g. gastric and pancreatic cancers, and lung cancer. Our department has been working on VISN 20 Outpatient Enteral and Oral Nutrition Supplement Products Policy, which will soon allow Clinical Dietitians to prescribe oral supplements for outpatients who meet specific malnutrition criteria or who are undergoing certain pre-surgical evaluation and preparation.

Cancer Telemedicine Program

Peter C. Wu, M.D.

The Cancer Telemedicine Program based at the VA Puget Sound is broadcast twice monthly and serves to advise and coordinate multidisciplinary oncology care throughout the Veterans Integrated Service Network (VISN) 20. Originally conceived as the Northern Alliance Cancer Center and funded by the VA New Clinical Initiatives Program and VACO Transformational Initiatives Program, the VA Cancer Telemedicine Program has matured into a vital clinical program for the region. Providers at regional VA facilities throughout the VISN 20 present cases in a live interactive format to the multidisciplinary tumor board in Seattle staffed by surgical, medical, radiation, and thoracic oncologists. Participation in this program facilitates patient referral, minimizes consultation delays, avoids unnecessary patient travel, coordinates outpatient studies, and provides multidisciplinary evaluation of all cancer patients. The program's success ensures that all veterans within the VISN 20 have access to state-of-the-art multidisciplinary cancer care. Over the past year, we have expanded the program to include sites represented by the Spokane, Boise, Anchorage, and Walla Walla VA centers.

For further information, please contact our Cancer Telehealth Coodinator, Lisa Mandell, R.N., J.D. e-mail: Lisa.Mandell@va.gov

Nutrition and Cancer

Melissa Powell, RD, Wing Yan (Venus) Ng, RD, CNSC

Nutrition is essential in contributing to optimal outcomes in patients undergoing cancer treatment. Eating well during cancer treatment can help patients maintain strength and energy, decrease their risk of infection, and reduce the side effects from treatment. Patients undergoing cancer treatment can experience numerous side effects that can adversely affect their ability to maintain proper nutrition: nausea, vomiting, early satiety, diarrhea, taste and/or smell changes, difficulty with swallowing, and loss of appetite. Weight loss can result from these side effects and can put patients at higher risk of hospitalization, and potentially delay surgery.

Nutrition and Food Services at VA Puget Sound Health Care System provides nutrition education and counseling by Registered Dietitians to Radiation Oncology, Cancer Care Clinics, Marrow Transplant Unit patients and their caregivers on an individual and group basis. Topics of evidence-based education and counseling include weight management, food safety, cancer reoccurrence prevention, basic healthy eating, Diabetes education, and symptom management. Many patients will require a feeding tube to maintain nutrition and hydration during and after cancer treatment. The dietitian provides tube feeding formula recommendations to patients and providers, provides instruction on feeding and hydration, utilizing feeding pumps, and monitors tube feeding tolerance and progression.

Many patients undergoing Bone Marrow Transplants may require total parenteral nutrition (TPN) during their treatment. In this case, the dietitian provides TPN recommendations and monitors patients' nutritional status throughout the transplant process. In addition, the dietitian provides guidance and policy oversight to the provision of high quality patient food service.

Our Nutrition Support Team, (NST) continues to meet weekly to discuss high risk patients, current articles, and to make sure that we are all utilizing the most current evidenced based nutrition practices. Our team includes several Clinical Dietitians, Doctors from GI and Surgery, and a Pharmacist as available. We also continue to work closely with Pharmacy as we are enjoying the ability to customize our TPN.

This Spring, we established two outpatient nutrition clinics for Radiation Oncology and Cancer Care to meet the growing needs of nutrition education, dietary counseling, weight monitoring, and nutrition support management in this high risk population. Over the past few months, the utilization of these nutrition clinics has been increasing. On average, 60% of the patients we see are head & neck cancer patients who mostly require supplemental or total enteral nutrition support. About 30% are esophageal cancer patients who are undergoing definitive or palliative treatments. The rest is mostly other gastrointestinal cancers, e.g. gastric and pancreatic cancers, and lung cancer. Our department has been working on VISN 20 Outpatient Enteral and Oral Nutrition Supplement Products Policy, which will soon allow Clinical Dietitians to prescribe oral supplements for outpatients who meet specific malnutrition criteria or who are undergoing certain pre-surgical evaluation and preparation.

Cancer Care Navigation Team

Ana Fisher, LICSW OSW-C, Tamarind Keating, ARNP,
Jesus Rivera, PSA, Lynsi Slind, RN, MN

A new diagnosis of cancer can be overwhelming physically and emotionally. Diagnosis and treatment often require complex coordination between many disciplines within our large healthcare system. In addition, many Veterans travel long distances to the VAPSHCS to receive this care. For our Veterans, receiving cancer care may be further complicated by limited transportation, financial strain, lack of social support, mental health issues, homelessness, and other health conditions.

The Cancer Care Navigation Team (CCNT) is a VISN-funded pilot program created to identify and address barriers that prevent Veterans from getting timely and efficient cancer care. There were two main goals established by the VISN for the first year of the CCNT program: staff recruitment and program development. The first goal was met by assembling a four member team consisting of a nurse practitioner, registered nurse, social worker and a program support assistant. Our nurse practitioner, Tamarind Keating, ARNP, MPH has experience in program development and evaluation and has worked as a clinician in stem cell transplant for the past six years. Lynsi Slind, RN, MN came in May of this year from fifteen years at the University of Washington Medical Center in Oncology where she worked as a staff nurse and as a Clinical Nurse Educator. Ana Fisher, LICSW, OSW-C has been the Oncology and Palliative Care Social Worker at VA Puget Sound since 2008 and has experience in clinical social work in hospital and skilled nursing facility settings for the past 15 years. Ms. Fisher is a Clinical Instructor for the University of Washington School of Social Work and has provided education to colleagues at the VA and community hospice agencies on how to best care for Veterans with cancer and at the end of life. Jesus Rivera, PSA, came from the VA hospital in Loma Linda with 7 years of military experience in administrative, clerical and medical duties as Healthcare Specialist in the U.S Armed Forces.

CCNT program development requires identifying individual and systemic barriers to cancer care and developing strategies to address them to improve the experience of cancer care patients at the VAPSHCS. Working closely with the VISN program managers and champions as well as stakeholders at VAPSHCS, we are creating education material, patient services, and resources for health care providers to support and enhance existing cancer care services. We are also developing new clinics to serve high risk Veterans with cancer.

Our clinic is a consult service for Veterans who are considered at highest risk for cancer care barriers, namely Veterans referred to the VA Puget Sound from another VA facility. Navigation teams have also been established in Spokane, Walla Walla, Boise, Anchorage, Portland, Roseburg and White City. With these partners, we are easing transitions between VA facilities by assisting with communication between Veterans and their PACT and Oncology teams, arranging travel and lodging, offering psychosocial and symptom management support, and providing education to Veterans and their families.Since June of this year, our Seattle CCNT has assisted with care for more than 135 Veterans.

A Survivorship Clinic is also being established to see Veterans who have completed cancer therapy given with curative intent. These patients will receive a Survivorship Care Plan which provides a record of their cancer treatment, a plan for future cancer surveillance and other routine health care, and a description of late effects that may occur as a result of their cancer treatment. The clinic will include a visit with the nurse practitioner and social worker to address both physical and psychosocial effects of cancer treatment.

In year two, the CCNT program hopes to expand our services to more Veterans receiving cancer care to make a meaningful and measurable impact in their experience at the VAPHSCS.

Oncology Social Work

Cathy Blanchard, LICSW, OSW-C, Ana Fisher, LICSW, OSW-C

When patients receive a cancer diagnosis they have many concerns about what the diagnosis means, what to expect, details on medical care, concerns from loved ones, finances, and survival. Comprehending and organizing the provided information can provoke anxiety and be overwhelming while one is making important health care decisions. The role of the Oncology Social Worker (OSW) is central to helping patients, caregivers and communities with detection, prevention, navigation and survival in a rapidly-changing treatment environment. OSWs are uniquely trained in accessing resources, recognizing disparities in care, communication, stress reduction, family systems, advocacy, and community resources, allowing the OSW to affect positive change in the lives of Veterans and their families.

Specifically, OSWs strive to obtain accurate and up-to-date educational information and other resources for patients. The hope is that by contacting patients early in the process and providing them with verbal and written material, the patients will have a better understanding of what to expect during their treatment and will also be better prepared to cope. Social workers have been active in public education campaigns including workshops for veterans, conducting training for staff and community partners, and public message boards to inform Veterans about cancer prevention, detection and care; as well as Veterans' benefits and VA resources. The OSW also presented a component on cultural competence and grief, loss and bereavement during the End-of-Life Nursing Consortium in the Fall of 2014. Additionally, OSWs provide ongoing education to social work students through the University of Washington School of Social Work (UWSSW) practicum program, which provides hands-on experience to students and to provide the University with input regarding Social Work in health care. In April and November 2014, OSWs participated in the University of Washington, Interprofessional Education Care of Veterans training to Dental, Medical, Nursing, Pharmacy and Social Work students. OSW provided a training presentation on End of Life Care for Veterans to the University of Washington School of Social Work, Carol LaMare Scholars Seminar in May and November 2014.

Support groups and educational offerings can be beneficial at all stages of the cancer experience. At VA Puget Sound, Social Workers co-facilitate a support group for patient caregivers who receive stem cell transplants as well as a general diagnosis support group for caregivers. Social Work, with the assistance of other departments, sponsors and organizes a day-long workshop developed for Veterans and their caregivers called "Heroes of the Heart," which provides information about self-care, resources available, Medicare and Medicaid planning, advance care planning, and estate planning. This workshop is scheduled to be held in March 2015. OSWs are also planning an ongoing Survivorship psycho-educational group for patients to provide information and support regarding the effects of cancer and treatment on emotions, work and family.

Cancer treatment moves patients into a new awareness and self-image. Patients and their loved ones may feel incapable of managing independently at home. OSWs are highly skilled at assessing patients' and families' resources and referring patients to the level of care appropriate for their current situation and needs, including community outpatient programs, home health care, skilled nursing or assisted living facilities, or hospice/palliative care. OSW assisted in the implementation of the NCCN Distress Thermometer for Patients and is addressing the psychosocial needs of the Veterans at their initial radiation oncology and cancer care clinic visits.

OSWs participate as members of the inpatient consultation team in the palliative and hospice care program. Social workers, along with other staff members, focus on the patient's quality of life by assisting with end-of-life planning, care resources and emotional support. Additionally, OSWs provide the patient and loved ones with grief and bereavement support and referral to resources during this transition. Social workers participate in end-of-life education for staff members and education for community partners about the VA hospice and palliative care program, survivor benefits, and burial benefits.

OSWs are essential in Advance Care Directive (ACD) planning, education and completion. Social workers participate in a hospital-wide initiative to improve Veterans' and staff members' understanding of living wills, durable power of attorney, and the role of surrogate decision makers. Veterans are encouraged to complete health care directives to ensure their ongoing participation in their own health care and to relieve stress for loved ones who are named as surrogate decision makers.

During the next year, OSWs at VA Puget Sound will continue to advocate for Veterans in our care, reducing barriers to care and increasing access to treatment whether through locating appropriate transportation resources or finding financial resources to allow them to keep their appointments. Social workers conduct quality training for veterans, caregivers, staff, and community members and will continue to train student interns at VA Puget Sound. Social Work will continue to hold trainings at community hospitals and institutions of higher education to increase awareness of Veterans' benefits, programs and unique health care needs. With renewed emphasis on survivorship, there are plans to hold a cancer survivorship clinic at VA Puget Sound. OSWs will continue to work on the committee to improve the cancer survivorship resources and pass that information to Veterans and medical professionals at the hospital. We will continue to provide caregiver and Veteran education and support groups. These efforts support the overall goal to help patients maintain their quality of life while they cope with various issues that arise during cancer care.

Cancer Rehabilitation/Rehabilitation Care Service

Meg Sablinsky, PT, DPT, CLT – LANA

For patients undergoing cancer treatment, quality of life matters as much—if not more—than the quantity of life. With an increasing focus on rehabilitation, patients are able to have improved quality of life during and after their cancer treatment. Patients undergoing cancer treatment may experience one or more of the following side effects: decreased muscle strength, decreased bone density, peripheral neuropathy related to chemotherapy, fatigue, decreased range of motion, pain, lymphedema, and scar adhesion. Rehabilitation Care Services can assist patients who have been diagnosed with cancer with a variety of their rehab needs on an inpatient or outpatient basis. These needs include pain control, weakness and deconditioning, mobility including assessment and provision of equipment for mobility safety, activities of daily living such as dressing/grooming/bathing, cognition, communication, swallowing, nutrition, bowel/bladder functions, skin integrity and wound management, lymphedema management, depression/adjustment/anxiety, social support, and vocational guidance. Goals for cancer rehabilitation often include effective pain control, maximal functional independence, restoration of maximal strength and mobility, prevention of further impairment, care-giver training to assist functionally-dependent patients, home management, community reintegration, and behavioral adaptation to pain and illness.

In addition, a specialized service that Rehabilitation Care Services offers is Complete Decongestive Therapy (CDT), a treatment for lymphedema. Lymphedema is swelling of a body part, most commonly involving the extremities, face and neck but it may also occur in the trunk, abdomen or genital area. It is most commonly the result of damage to the lymphatic system due to surgery or radiation treatment therapy, surgical procedures performed in combination with the removal of lymph nodes such as mastectomies, lumpectomies, prostatectomies, or neck dissection procedures, trauma or infection of the lymphatic system, as well as severe venous insufficiency. There is no cure for lymphedema. However, CDT can help reduce the swelling and maintain reduction, and significantly improve a patient's quality of life. This comprehensive treatment involves the following four steps:

- manual lymph drainage
- compression therapy (bandaging)
- decongestive exercises
- skin care

Once the treated extremity/area is back to close to normal size or is no longer reducing in size, the patient is fitted with a compression garment. Patients are also taught how to self manage their condition after treatment has ended. At the end of 6-8 weeks of sessions, we can expect a 60% decrease in the swelling, which facilitates functional activities for these patients. In addition, the lymphedema treatment program for head and neck patients will help them recover their ability to swallow and produce saliva, voice, and ROM of the neck.

During this 2014 year, our Lymphedema Clinic has a total of four certified therapists: Brian Reaksecker, PT CLT, Erin Hirschler, OTR-L CLT, Meg Sablinsky, PT CLT-LANA, and Melissa Smith, PTA CLT.

We also have developed a Head and Neck Lymphedema Management Program and we are working closely with Radonc and Surgery to see these patients as early as possible. Sometimes it will be only for a few sessions, evaluating, educating about warning signs, decongestive exercises, range of motion exercises, posture, or sometimes manual lymphatic drainage when necessary. We are also trying to develop post-surgery education handouts, in conjunction with Surgery.

We also have an increasing number of early consults for patients with breast cancer, which is quite successful since most of the time they haven't developped lymphedema yet or it is at a very early stage. These patients receive education regarding warning signs, decongestive exercises, activities of daily life, manual lymphatic drainage when indicated, and sometimes they will be fitted with an appropriate compression garment.

In all the cases of oncology patients, not only do they get better with treatment, but they also feel somewhat reassured and feel support which is also very important. Their quality of life is much improved.

Cancer Screening and Prevention 2014 PSHCS

Kristin Grady, ARNP, AOCN, Nurse Practitioner Oncology

In 2014 the hospital performance measures for cancer screening have remained within the target or have steadily improved. The breast cancer screening rate is at 88%, exceeding the target of 87.29%. The target for cervical cancer screening is 87.29% for all age groups and VA Puget Sound is at 89.6% for 21-65 year olds, and 94.8% for 21-29 year olds . The colorectal screening target was increased to 87.29% this year and although our screening at VA PSHCS has improved from 78% in 2013 to 80.28% in 2014, we did not meet this performance measure. Breast screening has improved over the past year and it meeting the meeting the target at 88%. The outpatient measures for tobacco use are as follows: 1) the percentage of patients using tobacco in the past year who have been offered medications to assist with quitting smoking is 98%, exceeding our target of 94.14%. 2) The percentage of patients using tobacco in the past year who are provided with counseling on how to quit is 98%, with a target of 94.15%. 3) The percentage of patients using tobacco in the past year who are offered referral to a cessation program is 98%, exceeding the 94.15% target. These changes demonstrate our hospital's commitment to cancer screening and prevention and are just a few of the improvements that were completed in 2014. Working with the Veterans receiving care at VA Puget Sound inspires us to continue to strive for excellence in Cancer Care.

Palliative Care and Hospice Service Report

Lisa Vig MD and David A Gruenewald MD

The Palliative Care and Hospice Service (PCHS) continues to provide care for patients on both campuses of VAPSHCS. The Palliative Care Service saw 585 consults in FY14 (a 7% increase from FY13), of which 29% were cancer patients. Palliative Care saw 81% of all the Veterans who died within our facility exceeded the Emerging Measure 3 standard (55% of all inpatient deaths seen by the consultation team within 12 months prior to death). We also provided hospice referrals to 429 Veterans and paid for 44% of the hospice care provided under these referrals.

The consult service follows Veterans at both the Seattle (SEA) and at American Lake (AL) divisions. There are 10 hospice/palliative care beds at the SEA Campus and 12 beds at AL. An outpatient clinic is available at AL as well as limited home visits/in-home vesting visits in a defined area around the AL campus.

The PCHS continues to engage actively with our community partners in the We Honor Veterans program, sponsored by the Department of Veterans Affair in collaboration with the National Hospice and Palliative Care Organization (NHPCO). The program invites hospices and state hospice organizations into Hospice-Veteran Partnerships by recognizing the unique needs of America's Veterans and their families. The Palliative Care & Hospice staff has provided in-services at individual community hospices. A Military History Checklist has been incorporated into many hospices' initial assessments, which has increased calls to the PCHS as hospice programs seek ways to access VA benefits for Veterans in the community.

The Bereaved Family Survey (BFS) is a national VA family satisfaction survey administered by the PROMISE Center that continues to monitor the quality of end of life care for inpatients at all VA medical centers. The national campaign slogan is "Strive for 65", which refers to the goal that 65% of bereaved family members responding to the BFS will rate the overall care the Veteran received at the end of life as "excellent". Our facility's performance on this indicator dropped from 67% in FY13 to 60% (slightly better than the national average of 59%) in the first 3 quarters of FY14, in concert with a nationwide decrease in families reporting "overall excellent" care during this time. This may reflect a change in survey methodology from phone surveys to mail-in surveys. Predictors associated with higher BFS ratings included the presence of a "Do Not Resuscitate" order, a chaplain visit with the Veteran or family member, palliative care consultation, and care in a dedicated hospice unit (i.e., CLC hospice beds).

Palliative care is continuing to collaborate with our ICUs to improve palliative care in the ICU, with a focus on improving the quality and timeliness of family meetings. A stakeholder workgroup meets every 2 weeks and a report to the Critical Care Committee is planned soon. The workgroup developed a family meeting note template that allows the collection of health factors to track quality measures for ICU family meetings, including which disciplines were represented, the code status of the Veteran before and after the meeting, and goals of care at the end of the meeting. We are continuing to develop nursing education approaches to empower nurses to participate in

the meetings and to take a key role in the "4 C's" – Convening, Checking, Caring, and Continuing – referring to essential elements of communication in family meetings.

The long term goal is to encourage these discussions to happen earlier in the course of care, which could result in fewer Veterans with cancer and other life-limiting illnesses receiving unwanted and inappropriate ICU-level interventions at the end of their lives. We have found that a surprising number of patients with terminal cancer are dying in the ICU. In a survey of ICU deaths in Q3 of FY 2013, 17 of 27 ICU deaths occurred in patients with terminal illnesses such as metastatic cancer at the time of ICU admission (Dr. Vincent Fan, personal communication). This presents an opportunity for collaboration between Oncology, ICU and Palliative Care.

With this in mind, the PCHS has begun to see patients in the Cancer Care Clinic who are identified by their Oncology providers as being appropriate candidates for palliative care involvement (e.g., for goals of care discussions, symptom management support, family support, or other needs). Dr. Gruenewald recently met with Tamarind Keating and Lynsi Slind (Cancer Care Navigators) to identify ways to improve the coordination of Veterans requiring Cancer Care. With Ana Fisher MSW now in the Cancer Care Navigator role, PCHS anticipates working closely with the Navigator program in the care of Veterans followed by both services.

Enhancing cancer care services through Whole Health - VA's own model of patient-centered, personalized, integrative care.

Dr. Leila Kozak, Clinical Champion OPCC & CT, VAPSHCS

Integrative Therapies are complementary therapy interventions that have been shown to support healing and wellness as well as improve symptom management (particularly in cancer care). Integrative therapies are a core resource in the implementation of Whole Health, the VA's own model of patient-centered, personalized and integrative care now rolling out throughout VA facilities nationally (see below for more on Whole Health).

Integrative therapies have an important role in cancer and palliative care, providing a wide range of benefits. Healing Touch, Touch/Massage Therapies, Yoga, Tai Chi and meditation are evidence-based complementary interventions widely used in cancer care around the country and abroad. Because of their evidence-base in decreasing pain and anxiety and improving quality of life, they are increasingly offered to cancer patients and their families to improve symptom management.

The Whole Health approach to care includes these modalities as part of the wellness strategies that we need to make available for patients and families needing support through cancer treatment and in palliative care. Other modalities widely used that can be incorporated into cancer care include acupuncture, guided imagery, hypnosis, music and art therapy, and animal-assisted therapies. For more information on how other VA facilities have embraced Whole Health (including within cancer and palliative care services) please visit http://healthforlife.vacloud.us/index.php/research-education/education/

In addition to our current psycho-oncology offerings (see article above by Dr. Aragon), one of the current programs we have at Puget Sound Cancer Care is the "Touch, Caring & Cancer" (TCC) Program (www.partnersinhealing.net). TCC was originally tested at VAPSHCS in 2012-2013 and results from the study showed that Veterans and their caregivers were highly satisfied with this program (Kozak et al, 2013). The study suggested that caregivers who learned to provide massage benefited from learning the massage techniques, feeling more confident about the ability to support their partner during cancer treatment and reporting an increased sense of closeness in their relationship that was nurtured by the massage practice. Thanks to OPCC funding, VAPSHCS has received copies of this award-winning multimedia program and the DVD and manual are currently available for free to any Veteran and their spouse/caregiver at VA Puget Sound Cancer Care through Oncology Social Work.

Integrative Therapy Tool-Kits for Whole-Health Implementation

Last year we reported on our project funded at Puget Sound to develop implementation tool-kits for Healing Touch and Touch Therapies. Through this project e brought together 20 VA hospitals and CLCs from 5 different VISNs. We are currently undergoing review for the Healing Touch toolkit and video materials. The Healing Touch Implementation Tool-Kit will help facilities learn how to design and implement their own Healing Touch services, including a "step by step guide" to hold an in-house Healing Touch training, credentialing and billing issues, scientific evidence, education resources, and all the forms, policies and procedures required for implementing Healing Touch. One of the Healing Touch videos (produced with EES) that will be available is a 57 Minute TMS course on Healing Touch that will provide CE credits for MDs and nursing professionals. This video examines the role of Healing Touch as an integrative approach to Veteran-Centered Care, the research evidence and how it has been implemented at many VA facilities; and portrays Veterans, staff and leadership perspectives about Healing Touch.

A similar implementation tool-kit developed for Touch Therapies includes information from facilities that have successfully implemented touch/massage services, and guides VA facilities that want to establish similar services. Two videos are currently undergoing final editing. One of the videos will be disseminated as a TMS course, and will describe the experience of the first VA that has implemented massage services widely with a full-time staff Licensed Massage Therapist. It will also de-

scribe a variety of other touch-based programs currently implemented at various VA hospitals and will present Veterans, staff and leadership perspectives about Touch Therapies. The second video will provide training in basic touch/massage skills for staff who is interested in learning basic skills to include in their clinical work. Research has shown that multimedia trainings are effective to teach basic and safe massage skills to lay caregivers. In this video production, an experienced Licensed Massage Therapist at the VA Ann Arbor teaches staff and volunteers how to provide safe massage in a hospital bed or in a chair, providing a great learning opportunity to VA staff.

In addition to the tool-kits we developed at Puget Sound, I have been involved in collaborating with a West Los Angeles VA team in the development of other Implementation Toolkits for Yoga, Tai Chi, Mindfulness (MBSR) and Aromatherapy. West Los Angeles VA as well as other facilities have been extremely successful in delivering integrative therapies across various services. For example, West Los Angeles VA currently offers "Integrative Health and Healing Consults" across all services, and provides 26 (yes, twenty six) yoga classes a week including seated yoga for palliative care and yoga for cancer patients. These tool-kits are amazing resources as they have gleaned the wisdom from facilities that have already implemented integrative modalities successfully, and will be available to us shortly to design and implement our own integrative therapy services at Puget Sound.

What is Whole Health and why it is relevant to cancer care?

Big changes are happening nationally with the official rolling out of the Whole Health Curriculum developed by the Office of Patient Centered Care and Cultural Transformation (OPCC & CT) at VACO. Whole Health is VA's own model of patient-centered care, and it has been developed through partnerships with Planetree (www.planetree.org) and the Department of Integrative Medicine at the University of Wisconsin/Madison. These national contracts with Planetree and UW Madison have helped the VA systematize their approach to delivering Veteran-centered, personalized and integrative care.

At the core of implementing PCC is what we call "changing the conversation" from "What is the matter with you" to "What matters to you? To "change the conversation," we are using new tools developed by OPCC that help clinicians develop a "personalized health plan" that is centered on each Veteran's personal vision of health. We use the "Components of Pro-active Health & Well-Being" to help the Veteran become aware of the different areas that may be affecting their sense of health and well-being and where they feel it is important to initiate according to their preferences and priorities (for more detailed information on these tools you can visit HealthforLife.vacloud.us/).

Through this transformative journey, OPCC & CT is ensuring that all VA facilities nationally shift into Whole Health through on-site and online staff education and resources available to all. Puget Sound is quickly advancing implementation of Whole Health through various means. In October 2014, more than 200 employees attended in person or online the Staff Education Sessions to introduce the facility to the Whole Health Curriculum and we will be hosting the Whole Health Clinical Course for clinicians in January 2015.

Patient-centered care (PCC) is care that places the patient at the center and considers the patient as a

(Continued on next page)

Enhancing cancer care services through Whole Health (Continued)

whole – as a physical, psychological, spiritual and social being. PCC implies changing the way we offer medical care by emphasizing not only state of the art medical interventions but also focusing on providing the best supportive environment that promotes healing. This is usually referred to as enhancing the "patient experience." The patient experience of care has been shown to have such an impact on healing outcomes that hospitals around the country (VA and non-VA) are increasingly hiring "Patient Experience Officer" to enhance the patient experience around the facility.

The "patient experience" is nurtured by two core principles of PCC - Healing Environments and Healing Relationships as well as in the integration of complementary therapies ("integrative therapies") that enhance wellness and provide psycho-social-spiritual support.

The concept of Healing Environments refers to transforming the physical environment of care in a nurturing, supportive space that is conducive to healing. Healing environments are created through the use of Evidence-Based Architectural Design principles. "Evidence-Based Design" is a field that emphasizes research evidence to guide the design of healthcare spaces indoors and outdoors. Studies have shown that certain architectural design features can improve patient and staff well-being, support healing, promote stress reduction and enhance safety. For example, designs that incorporate natural light, colors, views of nature and art installations have been shown to promote healing and improve outcomes in health care. The use of relaxing music and aromatherapy has been shown to improve mood and decrease stress/anxiety in patients as well as employees.

The concept of Healing Relationships refers to creating relationships between patient-provider and among staff that reflect trust, hope, and a "sense of being known" (Scott et al, 2008). Emotional self-management (emotional intelligence) and mindfulness are competencies that have been found to be key facilitators in healing relationships. The Whole Health curriculum provides resources for staff to enhance awareness of emotional self-management and mindfulness, so they may model these to patients and in that manner, foster healing relationships within healthcare.

For Whole Health to take roots and provide its full benefits, everyone involved in the health care system needs to have the skills to provide supportive, patient-centered, holistic care. A welcoming smile or a helping hand, atrium space with live plants or a view of the mountains, a quiet space to pray or meditate, every detail affects a patient's experience and contributes directly to his/her health and well-being. Healing environments and healing relationships support patients in overcoming their challenges and achieving their health goals. Each and every staff member who works within a VA facility has an impact on the patient's experience. OPCC offers an online Whole Health curriculum for all VA employees (not just clinicians) to learn how to incorporate PCC principles into their daily duties. To access this curriculum you can visit http://healthforlife.vacloud.us/index.php/research-education/education/.

As I continue my work as a Clinical Champion for OPCC now in my 4th year, I reflect on the exciting opportunities that we have at Puget Sound to continue leading the way in the integration of Whole Health into cancer and palliative care.

References

Kozak L, Vig E, Simmons C, Eugenio E, Collinge W & Chapko M. (2013) A Feasibility Study Of Caregiver-Provided Massage As Supportive Care In VA Cancer Patients. J. of Supportive Oncology, 2013Aug [Epub ahead of print].

Scott JG, Cohen D, Dicicco-Bloom B, Miller WL, Stange KC, Crabtree BF. Understanding healing relationships in primary care. Ann Fam Med. 2008 Jul-Aug;6(4):315-22. doi: 10.1370/afm.860. PubMed PMID: 18626031; PubMed Central. PMCID: PMC2478496.

Touch Caring & Cancer Program, available at http://partnersinhealing.net/index.htm

A Guide to Integrative Oncology for Clinicians and Patients, available at http://depts.washington.edu/integonc/clinicians/about.shtml

Office of Patient-Centered Care & Culture Transformation website, available at http://healthforlife.vacloud.us/

Office of Patient-Centered Care & Culture Transformation SharePoint site, available at http://vaww.infoshare.va.gov/sites/OPCC/default.aspx

Whole Health curriculum may be accessed at http://healthforlife.vacloud.us/index.php/research-education/education/

Spiritual Care

Chaplain Gary K. Cowden, BCC, Chief of Chaplain Service

The Chaplain Service of the VA Puget Sound Health Care System has been given the overall spiritual care of all VA patients. Among our Veterans are those that experience the diagnosis and treatment of cancer. At the time of a patient's diagnosis and treatment projection, Chaplaincy endeavors to support the patient and their family as they progress through the various treatments, whether it is surgery, chemotherapy, radiation, or a stem cell transplant. Spiritual support covers both the negative and positive aspects of cancer care such as times of wellness and times of palliative intervention.

Chaplains are available with the treatment teams as various spiritual needs surface in the treatment process. Often, along with the concerns of treatment symptoms, comes uncertainty, anxiety, fear of treatment outcomes, guilt, and spiritual distress. Through consults and various patient contacts, chaplains give spiritual support affecting patient and family morale. Chaplains have also been involved in the Tele-health program which brings care to patients in their home.

One aspect of care involves times when treatment options become limited. Palliative Care chaplaincy affords opportunity to bring meaning and purpose to these times to help patients and their families transition to a different perspective on their treatment goals. Chaplains have given consistent and positive support through this process. When the limitations of science lead a patient toward another destiny, Chaplains

are prepared to give spiritual support through these un-charted experiences to both the patient and the families surrounding them.

Finally, Chaplains bring bereavement care to patients and families in the journey of finishing their time of life. Memorial services are held twice a year for all patients who have been in the hospital at their end of life. Their families are invited to attend as a way of celebrating their memory. Each family is invited to attend and to bring pictures and memorabilia that helps share their memory with others. The Hospital Director and various staff members are invited to share the experience. Family members are invited to share their loved ones experience. Many of the stories of support by the VA Hospital give overwhelming credibility to the Cancer program .

CREDITS

Editing Consultants

Sudarshana Das, CTR, RHIT
Alisa Engeland

Graphic Design

Alisa Engeland

Article Contributors

Dawn Irene Aragon, PhD
Leah Backhus, MD, with Michael S. Mulligan, MD, and Thomas McDonough, PA-C
Jeannine Barton with Stephanie Magone
Cathy Blanchard, LICSW, OSW-C with Ana Fisher, LICSW, OSW-C
Victoria Campa
Thomas R. Chauncey, MD, PhD
Marc D Coltrera, MD with Isaac Bohannon, MD and Jeffrey Houlton, MD
Gary K. Cowden, BCC
Sudarshana Das, B.Com, CTR, RHIT
Yeshearg Dagne, BSN, RN, OCN
Ana Fisher, LICSW and Cathy Blanchard, LICSW
Kristin Grady, ARNP, AOCN
David A Grunewald, MD, and Lisa Vig, MD
Leila Kozak, PhD
Michael P. Porter, MD with R. Bruce Montgomery, MD
Melissa Powell, RD with Wing Yan (Venus) Ng, RD, CNSC
Tony S. Quang, MD, and Kent Wallner, MD
Joseph G Rajendran, MD, and Julie Takasugi, MD
Margaret Sablinsky, PT, DPT, CLT-LANA
Lynsi Slind, RN, MN with Tamarind Keating, ARNP, Jesus Rivera, PSA, Ana Fisher, LICSW OSW-C
Daniel Y. Wu, MD, PhD
Peter C. Wu, MD (Cancer Committee Chair)

1660 S. Columbian Way
Seattle, WA 98108
Phone: 206.764.2934
Fax: 206.764.2851