disparities in the patterns of treatment and survival, but these studies are performed in academic tertiary centers with populations comprised mainly of referral patients with limited follow up. No studies have been performed within vertically integrated health systems. **Methods:** The Henry Ford Health System's Virtual Data Warehouse was queried to obtain data on head and neck cancer patients diagnosed between 1990 and 2013. Search criteria included all tumors of the upper aerodigestive tract including SCC, salivary gland malignancies and also endocrine tumors. Mortality data was obtained from SEER and Michigan State mortality data. Follow up was 20 years. Both HMO and non-HMO patients were included within the study. Statistical analysis was performed using chi-squared test. **Results:** 1364 thyroid cancers, 225 salivary gland cancers and 1376 aerodigestive SCCs were found. Statistically significant survival differences were found with regard to race and gender in several tumor types. For thyroid malignancies, females and Non-African Americans had a statistically significant improved survival ($P = 0.0073$ and $P < .0001$). For salivary gland malignancies, females and African Americans had a statistically significant improved survival ($P = 0.0384$ and $P = 0.0013$). For aerodigestive SCCs African Americans had a worse survival but there were no statistical differences by gender ($P < .0001$ and $P = 0.6984$). **Conclusions:** Disparities in head and neck cancer outcomes exist relative to race and gender within an integrated health system. It is unclear why African Americans with salivary malignancies have a survival advantage but worse survival in other tumor types. Further study and analysis is required to control for other factors such as socioeconomic status, education, smoking/alcohol use, comorbidities and treatment modality to answer these questions.

Keywords: Head and neck cancer; Squamous cell cancer

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PS2-35:

Strategies Used by Rectal Cancer Survivors to Improve Bowel Function Other than Diet, Exercise, or Dietary Supplements

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Background/Aims: Rectal cancer (RC) surgery includes a colostomy (or ileostomy) or, more frequently, anastomosis of the rectum. Both surgery types may create long-term after-effects. We examined differences reported between survivors with ostomies (O) versus anastomoses (A) regarding bowel function and self-care. This analysis highlights patient-reported changes in daily routines that helped their bowel function, as revealed by responses to a question about post-surgical changes other than diet, exercise, or use of supplements "(such as timing of eating, number of meals, or other changes to your daily routines) that have helped with your bowel function?"

Methods: In 2010-2011, we mailed questionnaires to 1,063 long-term rectal cancer survivors (= 5 year's post-diagnosis) from two Kaiser Permanente (KP) Regions, Northern California (KPNC) and Northwest (KPNW), who had undergone a major intra-abdominal operation as part of their cancer treatment. Potential participants (KP members age 18 years or older with tissue-verified RC diagnoses) were identified through an electronic search of each site's computerized tumor registry. The overall response rate was 60.5% (577 respondents/953 eligible patients). **Results:** Survivorship ranged from 5 to 25 years. Mean age at time of survey was 72 years for anastomoses and 74 years for ostomies ($P < .03$). About 56% of patients with anastomoses were male compared to 66% of ostomates ($P < .03$). The most frequently mentioned strategies to help bowel function for both surgery types were: smaller meals (O = 26%, A = 33%; $n = 13/30$), regular time of meals (O = 26%, A = 9%; $n = 13/8$), and not eating dinner too late (O = 8%, A = 9%; $n = 4/8$). Patients with anastomoses mentioned the following additional strategies: grazing or multiple small meals/snacks (10%, $n = 9$), and not eating before activity (4%, $n = 4$). The most frequent bowel symptoms helped by these strategies were: predictability (52%, $n = 73$), gas (34%, $n = 48$), constipation (31%, $n = 43$), diarrhea (26%, $n = 37$), and bloating (23%, $n = 32$). **Conclusions:** Minimal differences were observed between ostomy/anastomosis survivors in bowel self-care strategies beyond diet, exercise, or use of supplements. Clinicians caring for RC survivors should be aware of these bowel self-management strategies both to offer as potential self-care practices and to understand whether these activities pose any risks to specific

patients, given their comorbidity burdens and other health practices.

Keywords: Rectal cancer; Bowel function

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PS2-36:

Incremental Medical Care Costs of Prostate Cancer for Medicare Beneficiaries

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Background/Aims: We estimated incremental monthly medical costs of prostate cancer (PC)—differences in monthly standardized costs between PC cases age = 65 and age-gender-health plan matched cancer-free controls—for SEER-Medicare and HMO Medicare beneficiaries across four 12-month phases of care—Pre-diagnosis, Treatment, Survivorship, End-of-Life—to understand whether type of health care arrangement—FFS indemnity vs. HMO capitation—was associated with differences in PC costs. **Methods:** Cases were SEER-Medicare and HMO patients aged = 65 years with PC (per tumor registry). Cancer-free controls were aged male Medicare indemnity beneficiaries and aged male HMO members who had no tumor registry evidence of any cancer prior to 2009. SEER-Medicare controls were a 5% random sample of aged Medicare beneficiaries. HMO controls were frequency matched to cancer cases on a 5:1 ratio by age group, gender, and having health plan eligibility during the year of the diagnosis from the matched prostate cancer case. We used a longitudinal case-control design to estimate incremental medical costs for PC cases starting 12 months prior to diagnosis. We extracted data for 2000-2008 from HMO standardized data warehouses and SEER-Medicare files. We applied Standardized Medicare reimbursement rates to utilization vectors and summed to total monthly medical expenses per patient in 2008 dollars. We analyzed monthly cost trajectories by phase of care and SEER-Medicare vs. HMO for Stages I-III vs. Stage IV vs. unknown Stage cases. **Results:** Monthly incremental PC costs in the pre-diagnosis phase were negative in the first 3 quarters and then rose rapidly in the quarter prior to diagnosis, with advanced-stage cases showing the steepest. FFS advanced-stage cases had the highest peak costs in the month of diagnosis, followed by HMO advanced stage cases. By the 12th month of the Treatment phase, monthly costs for all study groups converged at about \$500 per month. In the first survivorship year, FFA and HMO advanced-stage cases had higher incremental costs than the other study groups. In the last year of life, advanced-stage cases had higher incremental costs than all other groups. **Conclusions:** Stage-IV Medicare FFS PC cases received the most costly treatments of all study groups. FFS incremental costs were mostly higher than HMO costs.

Keywords: Prostate cancer; Cost

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PS2-38:

Cancer Research Network: Cancer Incidence, Prevalence, and Health Plan Enrollment

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Background/Aims: Nested within the HMO Research Network (HMORN), the Cancer Research Network (CRN) is a collaboration among the National Cancer Institute, 9 funded HMORN sites, 6 affiliate sites, and scientific collaborators from multiple institutions. Now in its fourth cycle, the CRN has been funded continuously since 1999. CRN's goals are to build data infrastructure, expertise, and collaborations to promote successful cancer research involving integrated healthcare delivery systems. Understanding