for women and decrease of 0.4% for men (P=0.033). **Discussion:** SMR users maintained adherence while non-users had small declines over time. Future studies should focus on amount of SMR use, longer-term effects, and identify additional subsets of patients that may particularly benefit from the enhanced access provided by SMR services.
Keywords: Behavior Change; HIV

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Cancer

PS1-05:
Disparities in Breast Cancer Survival by Molecular Subtype and Race/ Ethnicity

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Background/Aims: Little information exists on breast cancer survival rates according to molecular profiles among different race/ethnic groups. We investigated the impact of molecular subtypes on breast cancer-specific survival by race/ethnicity in a large group of medically-insured women diagnosed with breast cancer. **Methods:** The cohort included 20,749 diverse Kaiser Permanente Southern California (KPSC) women diagnosed with breast cancer (AJCC Stage 0-IV) between 1996 and 2007, and followed through 2009. The women's cancers were classified into four main molecular subtypes: luminal A (ER+ and/or PR+/HER2-); luminal B (ER+ and/or PR+/ HER2+); basal-like ("triple negative", ER-/PR-/HER2-); and HER2+/ER-. The outcome was breast cancer mortality. Follow-up began on the date of surgery and ended on date of death, health plan disenrollment, or study's end. Hazard rate ratios (HR) and 95% confidence intervals (CI) were estimated using Cox proportional hazards models. We adjusted for age, tumor characteristics, cancer treatments, income, and comorbidity. **Results:** Of the 20,749 women, 65% were white non-Hispanic (n=13,487); 13% Black (n=2,697); 12% Hispanic (n=2,490); and 10% Asian (n=2,075). We observed 2,019 deaths (10%) deaths due to breast cancer over 14 years of follow-up. In all race/ethnic groups combined, breast cancer mortality was higher in women with basal-like (HR 2.90, 2.38-3.53) and HER2+/ER- (HR 1.98, 1.55-2.54) tumors compared to women with luminal A subtype (referent group). In addition, we examined breast cancer mortality in each molecular subtype, stratified by race/ethnic group. Among women with luminal A tumors, Black women were more likely to die of breast cancer (HR 1.53, 1.02-2.29) than white women (referent group). In women with luminal B tumors, South Asians had a 10-fold increase in breast cancer mortality (HR=10.57, 1.42-78.64) compared to whites; however, numbers were small and the confidence interval was wide. Among women with basal-like tumors, Black women had a greater mortality risk (HR 1.36, 1.02-1.82) compared to white women. In women with HER2+/ER- tumors, breast cancer mortality was similar across the race/ethnic groups. No other comparisons were significant. **Discussion:** Despite similar access to healthcare, we found survival disparities by race/ethnic groups within the luminal A, luminal B, and basal-like molecular subtypes of breast cancer.
Keywords: Molecular Subtypes; Breast Cancer; Cancer

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PS1-06:
Radiation Oncology Data in Integrated Healthcare Delivery Systems

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Background/Aims: Radiation oncology is an integral component of high-quality cancer care, in both curative and palliative settings. Nationally, concern exists regarding access, quality, and diffusion of radiation oncology technologies, especially newer high-cost modalities. This study is exploring capture and quality of radiation oncology data at three CRN sites—GHC, KPCO, and KPNW. Our aims are to identify the magnitude and sources of data leaks and to expand capture of variables related to radiation therapy, (e.g. anatomic focus, radiation type, numbers and duration of sessions, and total radiation dose). Our ultimate goal is to conduct comparative effectiveness research using the full spectrum of cancer treatments. **Methods:** The current sites also participated in Burden of Cancer Care, an NCI-funded R01 study (PI: Mark C. Hornbrook) of cancer cases and matched, non-cancer controls. A comprehensive list of radiation oncology-related codes were developed using interviews of local billing experts, project lists, Internet searches, and review of CPT-4/HCPCC/ICD-9-CM code books. Radiation oncologists and business managers were interviewed to develop diffusion timelines and identify new data sources. A SAS program was written and distributed for use in Burden datasets to compare encounter- and claims-based evidence of radiation receipt among enrollees between 2000-2008, in the presence or absence of cancer diagnosis by tumor registry and/or claims/encounter data. **Results:** While use of radiation codes differ (e.g., facility revenue codes), the proportion of patients receiving radiation was similar across sites (N=27,210 of 627,682 cases and controls). About 85% (N=23,222) of patients receiving radiation therapies were identified as having cancer via tumor registry and encounter-/claims-based sources, with the remaining 15% identified by encounter or claims only. Of those identified by both methods, 99% (N=22,984) received radiation after cancer diagnosis. Overall 4.5% (N=1,228) of radiation recipients did not have a cancer diagnosis in the study period. Of those with data (N=985), the majority had either a cancer diagnosis outside the study period (23%, N=231) or a benign tumor (77%, N=754). Additional treatment data exists in network-based radiation departments and efforts are ongoing to integrate these data at two sites. **Discussion:** Further work is necessary to ensure radiation oncology data are comprehensive and complete across CRN sites.
Keywords: Cancer; Radiation Oncology

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PS1-07:
PSA Test Use in Primary Care

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Background/Aims: Some professional organizations advocate for PSA testing to screen for prostate cancer while others recommend against it. Regardless of position, each advocates for consideration of individual risk factors and for patients to consult with their physician when deciding. We describe men's use of PSA testing around the time of a periodic health examination (PHE), whether test use varies by patient risk factor status, and the extent to which PSA testing occurs following patient- physician discussion of PSA testing, prostate cancer, or both. **Methods:** Physician and patient subjects were enrolled in an observational study of patient-physician decision making in primary care. Physicians were salaried, general internal and family medicine physicians. Patients were insured, aged 50-80 years, without a history of prostate cancer, and due for colorectal cancer screening at the time of an audio-recorded office visit between 2007-2009. Office visit recordings were joined with data from pre-visit patient surveys and automated laboratory data for the 6 prior and 8 subsequent weeks. Content of patient-physician discussions was coded with a structured coding worksheet (mean Cohen's Kappa = 0.77). Generalized estimating equations were used to evaluate associations among patient-physician screening-related talk, patient risk factors, and PSA use. **Results:** Among N=161 study-eligible men, just over half (53%) presented with at least one risk factor: 11.2% family history; 29.2% aged 65+; and 21.2% black. Eighty-one percent used PSA testing around the time of their PHE (8.3% prior and 72.7% subsequent to visit). Test use did not differ significantly by risk factor status: family history, 94.4% vs. no family history, 79.4%, (p=0.13); aged 65+, 85.1% vs. aged <65, 79.8% (p=0.39); and blacks, 76.5% vs. whites, 82.7%(p=0.49). Prostate cancer, PSA testing, or both was mentioned during 82% of visits: 34.8% mentioned prostate cancer and 79.5% PSA testing. Among men tested subsequent to visit, these percents were 92.9%, 35.0% and 89.3%, respectively. **Discussion:** PSA testing is common among men who schedule a PHE, regardless of risk factor status. Furthermore, 7% of men who receive PSA