Pre-reminder, 63.4% of targeted women completed a mammogram; this number increased to 75.4% in the post-reminder implementation; 80.6% completed a mammogram in the maintenance phases. After controlling for demographics and clinic visits, intervention women were 1.51 times more likely to complete a mammogram (CI 1.40–1.62) post-reminder implementation, compared to CG 1. The effect was maintained in 2007 (HR 1.81 [CI 1.65–1.99]). Women of other races (Asian, Pacific Island, or Native American) were less likely to complete a mammogram, as were those taking a greater number of medications. Women with a college education, who were married, or who had visited a primary care provider or gynecologist during follow-up were more likely to complete a mammogram. **Conclusions:** We found that a multimodal reminder system could be effectively implemented and maintained in a large health system. If widely implemented, this intervention could substantially improve community mammography screening rates. Insured patients who are sicker, or who are of Asian, Pacific Island, or Native American descent may need more support to complete screening. Future studies should address practice-based factors that assist patients in completing mammograms, as well as other factors that affect the reach and cost-effectiveness of delivering the intervention to diverse patient groups.

PS2-10:

The CRN Cancer Communication Research Center

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We propose an integrated set of three, large posters that will describe the main components of a new research center that bridges HMORN institutions. **Background:** The CRN Cancer Communication Research Center (CCRC) was established in September 2008 at Kaiser Colorado Institute for Health Research. **Objectives:** The CCRC's objectives are to discover the most promising practice-based approaches to cancer communication and care coordination, and to disseminate those approaches. Integrated care delivery systems represent promising opportunities to study these approaches, and the CRN CCRC, with its embedded organizational focus will take advantage of the CRN as a virtual laboratory. **Specific Aims:** The CRN CCRC 1) leverages the existing infrastructure of the CRN to support both the discovery and dissemination of practice-based communication strategies and organizational resources; 2) supports four investigator-initiated research projects to advance communication theory and to evaluate strategies informed by theory; and 3) provides administrative, financial, and scientific support to new investigators, including clinicians, in the development of pilot projects, and assists in submission of broader, investigator-initiated proposals to be submitted for extramural funding. **Methods:** Two R01-scale investigator initiated research projects will advance and test communication theory. The first will: characterize patients' and providers' experiences communicating about errors in cancer care; investigate the health system factors that promote or inhibit effective communication; and develop, disseminate, and evaluate provider training materials and patient informational materials. The second will develop and test an intervention to decrease patient uncertainty and improve psychosocial and communicative outcomes during the period from suspicion of cancer through diagnosis and plan of care. The Center's research projects will be augmented and supported by Shared Resource Cores. The Discovery Core will identify the most promising practicebased innovations and approaches; the Dissemination Core will focus on data harmonization and applying dissemination science to effective interventions.

PS2-25:

Provider Perspectives on Essential Components of a Cancer Survivor Care Plan

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Background: This presentation is based on efforts of the Minnesota Cancer Alliance (MCA), a coalition of more than 80 groups and individuals, to improve quality of life for cancer survivors in Minnesota. The MCA is currently developing a comprehensive and userfriendly SCP based on feedback regarding limitations of existing survivorship care plan (SCP) tools. As a first step, a needs assessment of health care providers was conducted regarding essential elements. **Aims:** To report on components providers wanted incorporated into the tool as well as methods to promote SCPs. **Methods:** In April 2008, participants (e.g., oncologists, primary care providers, nurses, social workers, community health workers) of a working session on SCPs provided feedback on desired components and strategies for communication and promotion. **Results:** A total of 59 health care professionals participated. Treatment given, possible side effects and a follow-up plan were considered the fundamental information needed. Participants wanted a separate psychosocial section which would include information on emotional, spiritual, sexual and economic issues (e.g., work) as well as the ability to document the survivor's support system and any social support services used. A section on family history and genetic counseling/testing was deemed important as well as a section for documentation of other comorbidities. Participants indicated that use of the SCP tool should begin at diagnosis and provide information for both short and long-term survival. **Conclusions:** Feedback obtained from providers indicated that not only were treatment history and side effects important components of a SCP, but addressing the survivor as a whole person and as part of a family system (i.e., psychosocial section, family history and genetic testing, comorbidity section) was crucial. Survivors need information along the entire continuum of cancer care and health care professionals could benefit by a user-friendly process to convey information to their patients and their caregivers. Identifying the needs of health care providers regarding the essential elements of a SCP will help meet patient needs, potentially improve patient care and may help ensure greater use of the SCP among providers.

PS2-27:

Identification of Patients With Nonmelanoma Skin Cancer Using HMO Claims Data

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Background: Despite the large population affected, the epidemiology of nonmelanoma skin cancer (NMSC) is understudied, and U.S. cancer registries often exclude NMSC. Secondary data analysis has been limited in that squamous cell (SCC) and basal cell carcinoma (BCC) do not have their own unique International Classification of Disease (ICD-9) identifiers. Our aim was to define and compare algorithms for identifying NMSC by secondary analysis using a computerized database of a large health maintenance organization (HMO). **Methods:** A computerized claims database of a large HMO in Southeastern Michigan was used to identify NMSC patients who were diagnosed between January 1, 1988 to December 31, 2007. Three algorithms were examined: NMSC ICD-9 codes, Current Procedural Terminology (CPT) code for treatment of malignant NMSC, or both ICD-9 and CPT codes. A subset of charts for the overall cohort and all charts from 2007 HMO-enrollee members only were reviewed to verify NMSC diagnosis. Positive predictive values were calculated. **Results:** Analyses of data from 1988–2007 identified NMSC in 165,000 patients using ICD-9 codes, 44,875 patients by CPT codes and 113,666 patients who had both codes. A random sample of 1275 cases were selected for chart review to verify NMSC, which was validated in 73.7% of ICD-9 identified patients, 94.6 % of CPT identified patients, and 97.5% of patients identified using both codes. Data was then limited to HMO-health plan

enrollee-only unique patients for the year 2007, and all charts were reviewed (n=1116). NMSC cases were confirmed via chart review in 96.7% of ICD-9 identified patients, 98.5% of CPT-identified patients, and 98.9% of patients identified using both codes. **Conclusions:** HMO computerized claims data can be used to identify NMSC. Preliminary analysis suggests that the use of an algorithm which requires that both a CPT and ICD-9 code be recorded may be slightly better compared to either ICD-9 or CPT codes for case identification. This algorithm should be validated in a population captured by reputable tumor registry to determine sensitivity and specificity.

PS2-35:

Variation in Capture of Chemotherapy Data: Preliminary Findings From the CRN Economic Rx Burden Pilot Study

Debra P. Ritzwoller, PhD, *Kaiser Permanente Colorado*; Tom Delate, PhD, MS, *Kaiser Permanente Colorado*; Jared Freml, Addie Clarke; Maureen O’Keeffe-Rosetti, MS, *Kaiser Permanente Northwest*; Paul Fishman, PhD, *Group Health, The Center for Health Research*; Donald J. Bachman, MS, *Kaiser Permanente Northwest*; Jennifer Elston Lafata; Mark C. Hornbrook, PhD, *Kaiser Permanente Northwest*

Background: A number of high-cost chemotherapy agents, including targeted biologic and genetic therapies, have been introduced to the U.S. in recent years. Much of the literature on use and costs of these new agents has been derived from clinical trials and Medicare/SEER-based studies. To date, few studies have been published describing diffusion and costs of new cancer therapies within or across health plan populations. **Aims:** To describe capture of chemotherapy use (antineoplastics, hormone therapies, immune therapies, infusion time and site, ancillary therapeutics) within and across four Cancer Research Network (CRN) health plans for older (age 50+) cancer patients. **Methods:** Using data from health plan pharmacy systems and the Virtual Data Warehouse (VDW) Tumor Registry (TR), Pharmacy (Rx), and Procedure (PROC) files, we created dichotomous variables from each file separately denoting capture of chemotherapy use for each cancer patient aged 50 and older for the years 2000–2007. Variables were created using chemotherapy-specific national drug codes (NDCs) stratified by type of product (antineoplastic, hormone, immune) and route of administration (oral, infused/injectable) (Rx), procedure codes (CPT4, HCPCS, CPT4 Q codes, and revenue center codes) (PROC), and chemotherapy treatment flags (TR). Data were then stratified by health plan, year, cancer site, and stage. Chi-square analyses were employed to measure variations over time, within and across the four health plans’ Group Health, KPCO, KPNW, and HFHS. **Results:** Preliminary findings show significant variation in chemotherapy capture by data source over time within and across the four health plans, and by cancer site and stage. While the VDW TR has complete capture of abstracted data that denote whether or not chemotherapy was recommended in the initial treatment plan, other VDW-based sources may not be as complete with respect to detailed capture of the products by NDC code, dosing, and infusion time and site. **Conclusion:** Additional analyses are required to investigate how missing data affect the use of VDW chemotherapy data for research and to develop the steps to improve data capture. Algorithms may be needed to impute the average cost of some therapies for subsets of cancer cases across the four health plans. This project complements and builds on several components of the CRN infrastructure projects, and will leverage the expansion the VDW with respect to the inclusion of chemotherapy services.

PS2-36:

Influence of Travel Time on the Receipt of Surveillance Mammograms for Women With History of Breast Cancer

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This presentation will assess the impact of travel time to the nearest breast cancer mammographic facility on receipt of surveillance mammography following completion of breast cancer treatment. The study population includes women (n=1,312) diagnosed with stage I or stage II breast cancer

(TNM classification) from 1990 to 1997 at Group Health Cooperative enrolled in either the Breast Cancer Treatment Effectiveness in Older Women (BOW) or Optimizing Breast Cancer Outcomes: BMI, tumor marker, and quality of care (ACS) retrospective cohort studies. We will obtain information on receipt of screening mammograms up to 5 years after enrollment, women’s demographics at cancer diagnosis, and link them to a geospatial database created to assess distance to nearest mammography facility and area-level socioeconomic characteristics. We will employ generalized linear regression models to assess the relationship between receipt of surveillance mammography following completion of breast cancer treatment and travel time adjusting for women level socio-demographic factors, tumor stage, type of cancer treatment, and comorbidities if they are found significantly related to receipt of mammography. Receipt of surveillance mammography will be defined in two ways: (1) ever receiving a surveillance mammogram and (2) average surveillance mammogram interval over the 5 years of follow-up. We will account for different censoring mechanisms, such as recurrence, all cause mortality, breast cancer-specific mortality, and disenrollment from Group Health, and their impact on our measure of receipt of surveillance mammography.

PS2-37:

Oral Cancer Information on the Web: Assessing the Quality and Content of English and Spanish Oral Cancer Websites

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Background/Aims: In the United States, about 8,000 people a year die from oral cancer and more than 30,000 new cases are diagnosed annually. A recent study showed that 80% of American adult Internet users have searched the Web for health information and 15% of those specifically searched for dental health information. Having high quality oral cancer information available via the Web is important given the significance of this health problem. The goal of this study was to evaluate the quality and content of multiple English and Spanish oral cancer websites. **Methods:** We developed a search strategy using the keywords: oral cancer, mouth cancer, and tongue cancer to find oral cancer sites via Medline Plus, Google, and Yahoo. We then used the translations cancer oral, cancer de la boca, and cancer de la lengua to search Medline Plus en Español, Google Español, and Yahoo Telemundo. We added sites to the datasets based on inclusion/exclusion criteria. Two native speaking raters evaluated each site within their set for quality using the modified Information Quality Tool (IQT). We then developed a survey tool to assess the content of the sites. Two native speaking oral cancer experts evaluated each site within their set using this new tool. **Results:** Our search strategy produced 24 English language sites and 24 Spanish language sites for evaluation. English language websites had an average IQT score of 74.7 (out of 100) and average content score of 51.5 (out of 100). Spanish-language sites had an average IQT score of 48.8 and an average content score of 25.9. **Conclusions:** Despite higher scores for the English language websites, our analysis showed that there was a great variation in overall quality and content with room for improvement for both language types. English sites could make the biggest improvements by providing more information about their sponsors and who controls site content as well as updated and fixing links and author credentials. The Spanish sites should focus on improving information about their agenda and overall site design. For content, both types of sites need to provide more images and information on etiology and risk factors. Both English and Spanish sites scored highest in coverage of clinical presentation, treatment and follow-up care after treatment. Overall, this study identifies several information gaps and areas for improvements for oral cancer websites. We hope our results will be used to improve online oral cancer information.