

in the field of HIT, academic researchers, investigators from the 14 Cancer Research Network sites, information technology (IT) advisors from each CRN site, National Cancer Institute staff, and investigators and consultants involved with the project. The purpose of the symposium was to have experts in the field of HIT present possible approaches to computerizing data collection and feedback of patients' experiences with PCC and to engage in an active dialogue around the strengths and weaknesses of the different approaches proposed. Prior to the meeting, we distributed a list of questions for the IT experts to address in their presentations, based on issues, which have been identified during the interviews. The symposium was digitally recorded, professionally transcribed, and coded using grounded theory approaches. **Results:** Themes identified during the symposium focused on contextual factors to be considered when creating a communication feedback system; data liquidity, using one system in multiple healthcare environments that are very diverse, and hat modality to use when there are a variety of preferences for communication and the technology is constantly evolving. The symposium also confirmed themes that emerged from the interviews; the system would need to be flexible and provide choices, the data obtained would need to be aggregated at a meaningful level, and feedback must be timely. **Discussion:** Our multiple pronged approaches have provided us with unique insights that will be used in the development of a prototype data collection system, pilot testing of the system, and ultimately implementation of the system in multiple health plans.

Keywords: Health Communication; Health Information; Cancer
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PS1-18:

Development and Characterization of a Cohort for Determining Long Term Secondary Side Effects Due to Radiation Treatment for Prostate Cancer Using an Electronic Health Record

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Background/Aims: The long term secondary side effects from radiation treatment for prostate cancer are well described. Here we characterize a cohort with radiation treatment for prostate cancer and an electronic medical record. A subset of individuals, were selected for EPIC quality of life surveys. **Methods:** Inclusion Criteria: Individuals must have radiation treatment for prostate cancer between 1993 and 2011 with medical care prior to treatment; after treatment there must be continued care within the Marshfield Clinic system. Chart Review: Electronic retrospective chart review was performed to determine the cohort characteristics, including age at diagnosis, stage and grade of cancer, radiation treatment type, diagnoses and medications and procedures indicative of gastrointestinal complications or urinary complications or sexual dysfunction (both pre and post treatment). Selection for Surveys: Individuals who were either enrolled in PMRP at the time of review or agreed to enrollment in PMRP when contacted received EPIC and (RAND SF-36 Health Survey) surveys. **Results:** to date: Our cohort included 834 individuals (201 in PMRP). Average age at diagnosis was 70 (range 47-87), with an average interval between diagnosis and treatment of 117 days. Radiation treatments included brachytherapy 36% (302/834), EBRT (including IMRT) 47% (395/834), and combination treatment (16% (137/834). A majority (56% (469/834)) had at least one diagnosis of urinary, sexual or fecal complications prior to treatment, with 58% or 272/469 reporting sexual dysfunction. Long term side effects 90+ days after treatment were reported in the EHR for 64% (531/834), and 37% (309/834) experienced a potential RTOG Grade 2 or 3 event. Sexual dysfunction represented the largest diagnosis group (250 of 309). Diagnosis for urinary with complications were present in 33% of the brachytherapy patients (146/439) and 21% of those treated external beam radiation (84/395). Fecal complications were present in 23% (104/439) of the brachytherapy patients, and 30% (119/395) of those with EBRT treatment. **Discussion:** We can use the EHR to identify individuals with long term clinically significant side effects. These individuals can be used in the future to develop models that identify pre-diagnosis health events that predict potential long term side effects from radiation treatment.

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PS1-20:

Hospice Use in Metastatic Colorectal Cancer Patients

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Background/Aims: Colorectal cancer is the third most common cancer diagnosis in the US, with a lifetime risk of 5.1%. It is the second leading cause of cancer death, and is predicted to cause approximately 50,000 deaths in 2011. With a five year survival rate of less than 25%, the majority of patients diagnosed with metastatic colorectal cancer face decisions about end of life care. This study seeks to understand what influences hospice utilization among metastatic colorectal cancer patients who are part of the Comparative Effectiveness in Genomics and Personalized Medicine for Colon Cancer (CERGEN) population. **Methods:** Electronic medical record (EMR) data was collected, through database queries and manual chart review, for 1220 subjects diagnosed with stage III or stage IV colorectal cancer progressing to metastatic disease between 2006 and 2009, at seven Managed Care Organizations (MCOs) from the Cancer Research Network (CRN). Hospice use is defined as a binary outcome indicating whether there was at least one hospice referral or admission recorded in the subject's EMR. Descriptive statistics (mean, median, variance) and logistic modeling were used to summarize the demographic, health status, and system factors that influenced hospice use. **Results:** Overall, 59% of subjects utilized hospice services. Patients utilizing hospice care were significantly older (69 vs. 63, $p < 0.0001$), with a lower average family income (63% for family income $< \$60,000$ vs. 56% for family income = \$60,000, $p = 0.01$), and with longer follow up time after colorectal cancer diagnosis (follow up interval of 639 days vs. 499 days, $p = 0.01$) than those not utilizing hospice care. We also saw significant variation by site across the seven MCOs studied ($p = 0.01$, range = 47% to 65%). Race, ethnicity, gender, stage at diagnosis, year of diagnosis, Medicare status, alcohol and/or tobacco use, use of chemotherapy and use of KRAS testing were not significantly associated with hospice utilization. **Discussion:** Health status, demographic and system characteristics all influence the use of hospice services by metastatic colorectal cancer subjects in the CERGEN population.

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PS1-21:

Long-term Rectal Cancer Survivors: Perceived Effects of Cancer on Work and Volunteering

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Background/Aims: Surgical treatments for rectal cancer include intestinal ostomy (externalization of the bowel to the abdominal wall) or, more frequently, an anastomosis (reconnection) of the rectum. These surgeries can give rise to long-term after-effects. We examined differences reported between survivors with ostomies (SO) versus anastomoses (SA) with respect to their work and volunteer activities, and how much they perceived their cancer affected these experiences. **Methods:** We mailed our survey to 1,000 long-term (=5 years post-diagnosis) rectal cancer survivors in KP Northern California and KP Northwest during 2010-2011. Our overall response rate was 57.7% (577/1,000). The survey asked about current employment status and the impact of their cancer on labor force participation, demotions, job discrimination, forced retirement, and volunteer activities. Responses from 446 survivors (SA=292 (65%), SO=154 (35%)) were analyzed for differences in changes in work- and volunteer activities. **Results:** Mean ages for both groups were significantly beyond the retirement age for most Americans (SA=72 yrs, SO=74 yrs). SAs were more likely to be currently working (FT+PT = 30% (89/292)) than SOs (FT+PT = 17% (25/151)), while SOs were more likely to be retired (67% (101/151) vs. 55% (160/292) ($p < .05$). Rates of permanent disability were similar between the groups—SOs=6.6%