Selected Abstracts from the 20th Annual HMO Research Network Conference, March 31 – April 3, 2014, Phoenix, Arizona

Cancer

A1-1:

Linking Electronic Health Records across Institutions to Understand Why Women Seek Care at Multiple Sites for Breast Cancer

Caroline Thompson¹; Harold Luft¹

¹Palo Alto Medical Foundation Research Institute

Background/Aims: Research in a fragmented healthcare system can be challenging when one seeks to follow patients within a care episode. Breast cancer treatment can continue for months or years and a care trajectory may reflect many decisions. Women may seek evaluations or specialty care at more than one medical center, either through physician referrals or “shopping” behavior. Claims data can track where patients are seen, but lack clinical detail. This study aims to better understand treatment location decisions among women seen at more than one healthcare facility. **Methods:** The OncoShare database combines EHR data from two large healthcare facilities in the same catchment area—a multisite community practice and an academic medical center—for all women treated at either site for breast cancer from 2000-2011. We use descriptive statistics and longitudinal modeling strategies to characterize treatment trajectories and define predictors of treatment facility decisions. **Results:** In a previous cross-sectional analysis of these data, the 16% of women who received treatment at both institutions had comparable prognostic factors, but far more diagnostic and treatment interventions than those treated at only one facility. We use a longitudinal analysis to characterize the care trajectories of these women, and test predictors of their treatment decisions such as geographic location, previous diagnostic tests performed, and timing of interventions. **Conclusions:** Preliminary results from this data revealed a marked difference in treatment intensity among women who sought care at both institutions, despite comparable prognoses. The richness of the EHR now allows the extraction of predictors such as patterns of medical care use before the breast cancer diagnosis.

Keywords: Breast cancer; Data linkage

doi:10.3121/cmr.2014.1250.a1-1

A1-3:

Small-scale Implementation Study of the Cancer Survival Query System

Michelle Henton¹; Borsika Rabin¹; Bridget Gaglio²; Larissa Nekhyudov³; James Dearing¹; Sheana Bull⁴; Alfred Marcus⁴

¹Kaiser Permanente Colorado; ²Mid-Atlantic Permanente Research Institute; ³Harvard Pilgrim Health Care; ⁴University of Colorado

Background/Aims: The Cancer Survival Query System (CSQS) is a second generation prototype cancer prognostic tool developed by the National Cancer Institute (NCI). It was designed for physicians to use so they could better understand and communicate with prostate and colorectal cancer patients valid estimates of their cancer survival within the context of all causes of death. The aim of this study was to assess the market readiness and enhance the likelihood of large-scale adoption of CSQS. **Methods:** We conducted a small-scale implementation study of the CSQS prognostic tool in two, purposively selected, diverse healthcare delivery systems (Kaiser Permanente Colorado and Penrose Cancer Center) in the specialty care

context (oncology, urology, surgery) using a mixed method design. Additionally, two private urology practices affiliated with Penrose were incorporated into the study. Implementation strategies included identifying site champions, champions working with study staff to conduct a roll-out meeting for their department, and champions sending CSQS reminder emails drafted by study staff. Data collection consisted of automated usage tracking, follow-up champion interviews, and field notes from roll-out meetings and champion interviews. **Results:** 96 providers attended the roll-out meetings with study staff across the seven departments. 110 providers were reached through the follow-up email sent by champions. 158 providers had login information created for access to CSQS, with 16 individual providers entering 52 different case scenarios (n=26 prostate, n=16 colorectal). KP Urology and Penrose GI departments utilized CSQS the most. Seven of the nine site champions completed the key informant interview. Ten themes were identified from qualitative analysis, including champion recommendation of CSQS to colleagues, providers using CSQS without patients in the room, and discussion of CSQS results by nurses was out of their scope of work. **Conclusions:** Usage was consistent between the data pulls over five months. All champions agreed a patient-facing version would benefit patient-provider communication. Next steps include usability testing of CSQS with prostate and colorectal cancer survivors. Data collected from the one-on-one testing will be used to inform NCI on a patient-facing version of CSQS.

Keywords: Prognosis; Web-based

doi:10.3121/cmr.2014.1250.a1-3

C1-1:

Evaluation of Screening Colonoscopy per Patient Adenoma Count at a Large New York City Center Using Population-based Data

Grace Clarke Hillyer¹; Benjamin Lebwohl¹; Richard Rosenberg¹; Alfred Neugut¹; Randi Wolf¹; Corey Basch²; Jennie Mata¹; Douglas Corley³; Charles Basch¹

¹Columbia University; ²William Paterson University; ³Kaiser Permanente Northern California

Background/Aims: Bowel preparation quality is critical to adequate visualization of adenomas during colonoscopy. We determined the total per person adenoma count (PPAC) in a population undergoing screening colonoscopy during a six month period to assess the utility of this measure as an indicator of bowel preparation quality. **Methods:** Records of outpatients 50-74 years who had undergone screening colonoscopy between September 1, 2012, and February 28, 2013 were extracted. Excluded were diagnostic and surveillance colonoscopies, pre-surgical assessment for organ transplant, and persons with inflammatory bowel disease, and personal or family history of hereditary non-polypoid colorectal cancer, colorectal cancer or polyps. Colonoscopy and pathology reports were manually reviewed to abstract age, gender, examination date, time of procedure, bowel preparation quality, procedural difficulty and tolerability, and number, type, and size of adenomas. Comparisons between those in whom adenomas were and were not detected were performed and associations between study covariates and adenomas detected were examined using multivariable regression. PPAC and adenoma detection rate (ADR) by level of preparation quality were calculated. **Results:** Of 1584 colonoscopies identified, 815 (51.4%) were screening colonoscopies and, of these, =1 adenomas were detected in 203 (24.9%). Most patients were <60 years of age (52.5%) and female (57.4%). Bowel preparation quality was “excellent” or “good” for 81.7% of procedures.