PS1-14:

Data Collection for Development of an Adenoma Clinical Risk Prediction Model

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Background/Aims: Screening colonoscopy is inefficient in that precancerous polyps (adenomas, advanced adenomas) or early carcinoma will be detected in only a small proportion of the patients undergoing the procedure. If predictive models could be developed to predict which types of patients are most likely to have advanced adenomas, screening colonoscopies could be targeted to these groups. This 1-year pilot project, funded by CRN-3, is collecting the data needed to construct an adenoma prediction model. **Methods:** Subjects are Health Partners Medical Group primary care or specialty care patients who had an initial screening colonoscopy at a Health Partners outpatient endoscopy center between 2008 and 2010. Eligible subjects will be identified using a 2-step process: Step 1 will select potential patients based on age and availability of referral information. Step 2 will restrict the analysis to initial procedures performed for screening indication. The narrative pathology reports of these patients will be extracted from the central surgical pathology database, and information extracted to ascertain the polypectomy outcome (carcinoma, advanced adenoma, hyperplastic adenoma, adenoma number and size). Demographic and risk factor data will be collected from the primary care records of these patients, including age, gender, race, family history, body mass, smoking status, and diabetes diagnosis. **Results:** To date, the study has identified 22,088 unique subjects (step 1) who had a procedure during the study interval. Of this number, 10,794 had polypectomies (48.9% polyp yield). We have successfully constructed and tested a polyp classification algorithm using the pathology data of 130 subjects. Polyp pathology records have been extracted from the electronic pathology database. Risk factor data for age, gender, and race have been collected. Race is 96.3% complete; 2002 subjects (9.1%) are African American. Retrieval of risk factor data, including family history, body mass, smoking status, and diabetes diagnosis is underway. An R03 proposal for data analysis is being drafted for Dec. 2011 submittal. **Discussion:** This study will develop a model to predict the probability that a subject having a combination of risk factors will have an advanced adenoma detected during screening colonoscopy.

Keywords: Colorectal Cancer; Screening; Cancer

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PS1-15:

Illustrating Changes in Cancer Variable Composition Over Time: Developing Documentation for Cancer Researchers

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Background/Aims: Cancer researchers often use variables that evolve over time due to changes in national standards, such as AJCC (American Joint Committee on Cancer) staging or Collaborative Staging versions. The evolution of these standards impacts the construction of composite variables such as Stage AJCC in the VDW, and Extent of Disease in the local Group Health data environment. Knowledge of how cancer data registry items evolve over time and how they map into composite variables will aid researchers and programmers design cancer research studies and maintain cancer data infrastructure. **Methods:** We are experimenting with ways to document cancer variables that effectively illustrate their evolution over time and the relationships among them. Currently these consist of time lines that are delimited by the item number from NAACCR (North American Association of Central Cancer Registries) and annotated with other information. Time lines of items that are related under the same concept are drawn adjacent to each other. When appropriate, the diagrams demonstrate how Group Health has populated VDW and local composite variables through each period of changing standards. **Results:** Early response from cancer researchers has been positive. The diagrams have been especially useful in assisting in the querying of cancer counter data via a complicated NAACCR ontology (on i2b2) and aiding discussions around how Group Health should build its VDW Tumor StageGen composite SEER Summary Staging variable. **Discussion:** The documentation of the composition of classes of cancer variables addresses a need in the cancer research community. Continuing to explore ways to illustrate the cancer variables is a low cost and efficient way of improving understanding around these topics for a broad audience and improving data use and quality.

Keywords: Cancer Variables; NAACCR; Cancer

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PS1-16:

Patterns of Surgical Care for Ductal Carcinoma In-situ

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Background/Aims: Overall prognosis for ductal carcinoma in-situ (DCIS), a non-invasive breast malignancy, is generally quite positive with a mortality rate of < 2%. DCIS may progress to invasive breast cancer if left undetected or inadequately treated. Age, family history and individual preference are factors influencing quality and extent of surgical treatment of DCIS. Breast conserving surgery with or without radiation is commonly used to treat limited DCIS, with consideration for adjuvant endocrine therapy. Re-excision is not uncommon for DCIS, as it may be difficult to initially obtain a negative margin and also there may be suspicion of co-existing invasive breast cancer. Sentinel lymph node biopsy and prophylactic mastectomy have been considered over-treatment for DCIS, except in cases where DCIS is high grade, diffuse, large size, or has components of microinvasion. Our study aim was to evaluate patient characteristics and impact of features of DCIS on surgical patterns of care for DCIS. **Methods:** Data relating to initial surgical treatment of stage 0-III breast cancer was collected both electronically and by manual chart abstraction to develop the multicenter Breast Cancer and Surgical Outcomes database. Study sites included the University of Vermont, Marshfield Clinic (Wisconsin), Kaiser Permanente (Colorado) and Group Health (Seattle). Women with a pre-operative diagnosis of DCIS (n=943) between 2003–2008 were included in this analysis. **Results:** Of 943 women with a pre-operative diagnosis of DCIS, 932 (99.0%) had post-operative final diagnosis of DCIS. Planned analyses include determination of variability in surgical treatment of DCIS, including initial mastectomy and sentinel node biopsy, and incidence of positive margins following initial surgical excisions. Variability will also be examined based on factors unique to this dataset such as surgeon-specific and regional variation patterns of surgical care. Patient characteristics, DCIS features, MRI use and prophylactic contralateral mastectomy rate will also be reported. **Discussion:** Understanding the variability of surgical treatment for DCIS may lead to improved quality of care and better outcome for patients with DCIS.

Keywords: Colorectal Cancer; Lymph Node; Cancer

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PS1-17:

Assessing Communication During Cancer Care: Multiple Perspectives, Multiple Considerations

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Background/Aims: Patient-centered communication (PCC) between clinicians and patients is necessary for quality care. Measurement of communication over the cancer care continuum is an important step in describing current practices and remediating breakdowns. As a first step in developing a system to assess PCC longitudinally across the cancer care continuum, we interviewed patients, family members, physicians, health information technology (HIT) leaders, and health plan leaders. The purpose of the present study was to expand our understanding of possible approaches to create and implement such a system by conducting a symposium with experts and stakeholders. **Methods:** We conducted a symposium with experts