regression model, factors that were statistically significant predictors of UI diagnosis ($p<0.01$) included UI score (OR 1.28 (95% CI 1.19-1.81)), urine loss behavior (OR 1.12 (95% CI 1.06-1.18)), Charlson Index (OR 2.22 (95% CI 1.52-3.23)) and duration of UI symptoms (OR 3.09 (95% CI 1.69-5.64)). The remaining variables (age, age2, marital status, education, BMI, and parity) were not statistically significant or associated with a UI diagnosis. **Conclusions:** Self-reported UI severity, duration, behavioral change, and comorbidities increase likelihood of UI diagnosis. Understanding symptom and health characteristics of women with UI who seek care allows us to develop better tools to predict, target and potentially prevent UI.

Keywords: Urinary incontinence, Electronic health record, Survey

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C-A3-03:

Building a Biorepository: Lessons Learned from the Northwest Institute of Genetic Medicine

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Background: The establishment of large population-based biorepositories, linked to clinical and epidemiologic data, is essential for research designed to advance the field of personalized medicine. Health care delivery organizations, with electronic medical record data for large populations of patients, are in a unique position to enhance biorepository development. **Methods:** The Northwest Institute of Genetic Medicine [NWIGM] biorepository is a collaboration between the University of Washington [UW] and Group Health [GH] designed to build and pilot new infrastructure to collect high-throughput genomic data to facilitate future clinical investigation. The short-term goal is recruit 2000 GH enrollees (50-65 years old) who completed an online Health Risk Assessment [HRA]. The rationale for sampling HRA completers guarantees systematically collected demographic and medical history data will be available for future analyses. Potentially eligible enrollees are mailed an invitation and asked to indicate their interest by calling or mailing back the enclosed reply form (a second mailing is sent to non-responders). GH Research Institute staff contact interested enrollees by phone to assess interest and eligibility; those who agree are mailed a blood draw kit to take to a GH lab and consent form to mail back to the Research Institute. Participants receive a $50 incentive. The consent form describes that DNA will be extracted from the blood sample and stored indefinitely, and will be used with data from participants' medical records (including HRA data) for the purpose of future genetic research, and designed to cover a broad range of possible future analyses. **Results:** Developmental work began in September 2008--including protocol and consent development, and "gate-keeping" procedures for future researchers to access biorepository data. Data collection began in November 2009 after a longer than expected contract negotiation process between UW and GH, specifically data sharing and control issues. To date, 1246 of 3,100 invited enrollees (40%) have agreed to participation by phone and 1120 have enrolled. **Conclusions:** Enrollment in the NWIGM biorepository has been higher than expected from this sample of 50-65 year old HRA completers. Researchers will meet the short-term recruitment goal, demonstrating efficient infrastructure is in place to continue building this population-based biorepository.

Keywords: Biobank, Genetics, Personalized medicine

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Plenary III-04:

Media Messages and Public Perceptions of Direct-to-Consumer Genetics: Results of a Media Analysis and Focus Group Study

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Background: Information about genetics and the promise of genomic medicine is commonplace in the mass media. How the mass media themselves contribute – or not – to the persistence of this issue and its perception by the public is the topic of this presentation. The purpose of this study is to investigate the structural and individual perspectives on the issue of direct-to-consumer (DTC) genetics, and assess the degree of correspondence across these perspectives. **Methods:** I conducted a media analysis to determine how the issue of DTC genetics has been framed in mass media stories and the salient topics related to the issue. I conducted focus groups to determine individual knowledge, attitudes and beliefs about the issue of DTC genetics. **Results:** A final sample of 398 mass media stories of DTC genetics from Lexis-Nexis Academic archives between September 1, 2007 and September 30, 2009 were coded for salience and frames. Fourteen focus groups were conducted between October, 2009 and March, 2010 with Kaiser Permanente Colorado members and medical staff. Focus group transcripts were coded for salience and framing of the issue and compared with the media analysis results.Study results found that the issue of DTC genetics was not very important to focus group participants except as it related to the topic of breast cancer. Mass media message topics and frames showed differences over time. Focus group participants were generally negative towards the issue while the mass media was mostly positive towards DTC genetics. Focus group participants used some of the many frames to understand the issue that were utilized by the mass media to package the issue, but participants mainly framed the issue in terms of prevention and a pandora's box, while the mass media presented the issue more in terms of progressive and discrimination frames. **Conclusions:** The mass media appears to function as a field of power for the issue of DTC genetics with the consumers in the middle of the contests. A higher-level concept of an "informed consumer" emerged from the focus groups that appears to provide consumers a degree of power in this battlefield as well.

Keywords: DTC genetics, Genetic testing, Media messages

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C-A3-04:

The Kaiser Permanente Research Program on Genes, Environment and Health: A Resource for Genetic Epidemiology in Adult Health and Aging

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Aims: The Kaiser Permanente Research Program on Genes, Environment and Health (RPGEH) is designed as a resource for epidemiologic studies of genetic and environmental influences on health and disease. The resource links together clinical data from electronic health records (EHR), demographic and behavioral data from participant surveys, and data on the social and physical environments in participants' neighborhoods, with saliva and/or blood samples for deriving genetic and other data. When completed in 2013, the RPGEH is planned to include 500,000 members of Kaiser Permanente in Northern California (KPNC). Participants provide informed consent for a broad spectrum of health research and sharing of data with collaborating investigators from many institutions. **Methods:** As of October 2010, 430,000 mailed surveys and 154,000 biospecimens and consent forms had been collected from adult participants. Several collaborative genome-wide association studies that utilize RPGEH resources are underway. In September 2009, the RPGEH received an NIH grant to conduct genome-wide (675,000 SNPs) genotyping and measurement of telomere length on 100,000 participants. The average age of the participants is 65 years; approximately 24% (24,000 of 100,000) are African American, Asian, or Latino; the remaining 76,000 are non-Hispanic white. Custom microarrays have been designed to include newer SNPs from sequencing projects, high density coverage in gene regions, significant SNPs from the literature, SNPs in pharmaco-response genes, better coverage among racial-ethnic minorities, and good coverage of the entire genome. **Results:** To date, DNA has been extracted from 90,000 samples, and about 48,000 samples have been genotyped. Genotyping call rates and other measures of quality are excellent. The project will be completed in 2011. **Conclusions:** The resulting integrated

database of genome-wide genotypes, telomere length, and rich environmental and clinical data on a diverse cohort of 100,000 adults constitutes an unprecedented resource for research on genetic and environmental determinants of aging-related diseases, response to treatment, healthy aging and longevity. The RPGEH has developed collaboration and access procedures to facilitate sharing of these data. The development of this resource shows the potential for collaborative research in a large integrated health services delivery organization with a comprehensive EHR, linked biospecimens and environmental exposure data.

Keywords: Biobank, Genetics

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C-A3-01:

Current Use of KRAS Testing in Clinical Practice

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Background/Aims: Provisional clinical guidelines, published by the American Society of Clinical Oncology in 2009, recommend that patients with metastatic colon cancer (mCRC) be tested for mutations in the Kirsten ras (KRAS) oncogene, and that patients found to have the non mutated KRAS gene be offered anti-epidermal growth factor receptor (EGFR) antibody therapy. Such therapy has been shown to extend life; yet it is also expensive and frequently associated with severe side-effects. Currently, little is known about how clinicians are using KRAS testing in clinical practice. This study compares the adoption of policies for and usage of KRAS testing and anti-EGFR therapy in clinical practice among seven integrated health delivery systems. The purposes were to examine 1) physicians' attitudes toward and experiences with KRAS testing and the communication process with their patients, 2) patients' experiences with KRAS testing and anti-EGFR therapy and associated quality-of-life issues, and 3) the adoption of policies for KRAS testing and anti-EGFR therapy at the different health plans. **Methods:** Data collection includes 1) semi-structured interviews with 33 oncologists at the participating HMORN sites, one leader at each site, and 20 mCRC patients in KPNC, and 2) collection of policy documents from each site. Coding is conducted through an iterative process by three social scientists. **Results:** To date, twenty-eight 15-30 minute physician interviews have been conducted; coding and data analysis has begun. For this meeting, we will focus on the range of practices among the physicians, specifically addressing following questions: 1) To what extent have oncologists adopted the KRAS test? 2) At what point in the clinical process do they test for KRAS? 3) What concerns regarding the KRAS test do they articulate? 4) To what extent do costs (of the test, of treatment) feature into their treatment decisions? 5) How do oncologists incorporate patients into the treatment decision making process? 6) To what extent are these physicians adhering to guidelines for KRAS testing vs. considering the specifics of each case in their treatment plan? **Conclusions:** We expect that the results will shed light on how recommendations for KRAS testing are translated into clinical practice.

Keywords: Use of genetic tests, Qualitative methods

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PS1-14:

Recent Trends in Induction of Labor

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Background: Induction of labor is a common obstetric procedure associated with an increased risk of adverse outcomes. The purpose of this study is to describe maternal characteristics and recent trends in induction of labor based on maternal age and race/ethnicity. **Methods:** We used the Matched Perinatal Service System (PSS) and Hospital Inpatient records of women delivering in KPSC hospitals between1997-2008 (n=289,576). The PSS database includes all births in KPSC hospitals, ICD-9-CM codes from hospitalization in all KPSC hospitals, and infant birth certificate records. Pregnancies were identified using PSS; maternal and infant characteristics were obtained from the birth certificate, and maternal and infant outcomes were obtained from ICD-9-CM codes. Indication for induction of labor was determined using ICD-9-CM procedure codes (73x) and subjects were grouped into spontaneous labor, clinically indicated, and elective (inductions for which no medical or obstetrical indications was documented) induction groups. We compared event rates in the earliest (1997-1998) versus recent (2007-2008) periods. **Results:** The elective induction rates increased from 5.4% (2,888 of 53,600) in 1997-1998 to 9.9% (4,384 of 44,094) in 2007-2008 (p<.001). The indicated induction rates increased from 3.4% (1,813 of 53,600) in 1997-1998 to 5.7% (2,523 of 44,094) in 2007-2008 (p<.001). Electively-induced women were more likely to be white, educated, to have initiated prenatal care early in the pregnancy, and smoked during pregnancy compared with those with spontaneous onset of labor. From 1997-1998 to 2007-2008, elective induction rate increased among whites (7.6% [1,177 of 15,506] to 13.2% [1,298 of 9,845], respectively; p<.001), Hispanics (4.9% [1,207 of 24,898] to 9.4% [2,271 of 24,249], respectively; p<.001), and Asian/Pacific-Islanders (3.9% [195 of 4,968] to 6.2% [322 of 5,196], respectively; p<.001). African-Americans had the largest relative increase (4.8% [260 of 5,430] to 10.3% [396 to 3,843], respectively; p<.001). The increases in the rate of elective and indicated inductions were similar according to maternal age categories. **Conclusions:** Our findings indicate elective induction of labor is rising faster than the rate of indicated induction of labor. The increase in elective induction rate is disconcerting; largely because of the known increased risk this patient population has for adverse perinatal outcome.

Keywords: Induction of labor, Elective induction, Indicated induction

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Pharmacoepidemiology

PS1-40:

Laboratory Monitoring of HEDIS Medications in the Ambulatory Setting: The Relative Contribution of Physician and Patient Behavior to Undermonitoring

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Background/Aims: Initiative to improve the quality and safety of pharmaceutical care have lead to the development of quality of care measures including standards for the appropriate monitoring of high-risk medications (defined as medications commonly implicated in adverse drug events or with narrow therapeutic window). While low rates of laboratory monitoring of high-risk medications might indicate poor physician performance, it is unclear how much patient non-adherence to physician-ordered tests contribute to undermeasruement of physician quality. The study aim is to determine, for Health Employer Data Information Set (HEDIS) quality of care, high-risk medication laboratory monitoring measures: 1) the prevalence of completion of recommended monitoring tests; and 2) the proportion of incomplete testing attributable to lack of clinician test ordering relative to patient non-adherence to ordered tests. **Methods and Results:** We measured the ordering and completion of laboratory tests for HEDIS-based high-risk medications (ACE inhibitors, ARBs, digoxin and diuretics, and anticonvulants) in a large multispecialty group practice between January 1, 2008 and July 31, 2008. Laboratory test completion for HEDIS cardiovascular drugs was higher than for anticonvulsants. Each cardiovascular drug had a completion rate of