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

doi:10.3121/cmr.2011.1020.c-a3-04

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

doi:10.3121/cmr.2011.1020.c-a3-01

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 between 1997-2008 (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 of 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

doi:10.3121/cmr.2011.1020.ps1-14

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 undermeasurement 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 anticonvulsants) 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