PS1-44:

Reviewing Electronic Medical Records of Patients Assessed for Polycythemia Vera by a Multiphysician / Multicenter Group Practice Can Both Identify Physician Errors and Lead to Targeted Medical Education

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Background/Aims: In 2005, researchers described an acquired mutation in JAK-STAT signaling, the JAK2V617F mutation which is present in 95% of patients with P. vera (PV). Within three years, testing for this mutation led to new World Health Organization (WHO) criteria for the diagnosis of PV, and other related myeloproliferative neoplasms. This project was initiated to assess the impact of molecular testing within a multiphysician, multicenter group practice and ultimately to use this knowledge to develop educational programs regarding how best to evaluate patients with polycythemia. **Methods:** In 2001, Geisinger Health Systems implemented use of an electronic medical records system including most outpatient sites. This database was searched, identifying 268 patients who had at least one office visit between 2004 and 2009 with a primary (billing) code of PV. The clinician's diagnosis, when available, was determined from progress notes. There were 204 cases with complete records, which were scanned for JAK2V617F mutation testing, serum erythropoietin level, splenomegaly, and bone marrow histology. Results of the diagnostic evaluation, and the clinician's diagnosis, were compared with both the PV Study Group and subsequent 2008 WHO criteria. **Results:** Of the 204 fully evaluable patients, 56 never underwent JAK2V617F mutation testing, and only 11 met the 1971 PV study group criteria for that diagnosis. There were 87 patients who were positive for the JAK2V617F mutation, but only 48 met the 2008 WHO criteria for the diagnosis of PV. JAK2V617F mutation testing, when performed, led to a diagnosis change in 10% of patients originally diagnosed with PV prior to molecular testing. Serum erythropoietin levels were obtained in only 118 of the 204 fully evaluable patients, and were below 4 in only 52 of these patients. **Conclusions:** From this data, we created a cost-effective approach to the assessment of PV, and a continuing medical education lecture. This lecture has subsequently been delivered at numerous hospitals ranging from small community hospitals in the PV cluster region to several major university centers. This presentation will provide details of both the diagnostic paradigm and the subsequent lecture.

Keywords: Polycythemia Vera; Molecular Testing; Physician Education

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PS1-53:

Effects of Transitioning from Conventional Methods to Liquid-Based Methods on Unsatisfactory Pap Tests: Results from a Multicenter US Study

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Background/Aims: Pap testing has transitioned from conventional preparations (CP) to liquid-based preparations (LBP) due to perceived superiority of LBPs. Many studies conclude LBPs reduce unsatisfactory (UNSAT) tests, however some believe the evidence to substantiate this claim is weak. We studied the effect of the transition from CPs to LBPs on the proportion of UNSAT Pap tests (PT) in four health care systems in the United States. **Methods:** Our study cohort consisted of 548,174 women with 1,443,725 total PTs, ages 21-65 years, between 2000 and 2010. We used segmented regression analysis to estimate the effect of adopting LBPs on the proportion of UNSAT PTs. The effect of age on the rate of unsatisfactory PTs was also investigated. **Results:** Three sites implementing Surepath LBP experienced significant reductions in UNSAT PTs (Site 1 estimated effect: -2.46% [95% CI: -1.47%, -3.45%], Site 2: -1.78% [95% CI: -1.54%, -2.02%], Site 3: -8.25% [95% CI: -7.33%, -9.17%]. The fourth site implementing ThinPrep LBP did not experience a significant reduction in UNSAT studies. The relative risk of an UNSAT PT in women ≥ 50 increased after the transition to LBPs (Surepath: RR 2.1 [95% CI: 1.9, 2.2] and ThinPrep: RR 1.7 [95% CI: 1.5, 2.0]). **Conclusions:** We found that the strength of the effect of transitioning to LBPs on the proportion of UNSAT PTs varied with the proportion of unsatisfactory tests with CPs and the LBP platform used. The greatest reduction in UNSAT PTs is seen in women under 50.

Keywords: Pap Test; Unsatisfactory

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PS1-54:

Clinical Perspectives on Under- and Overutilization of Cervical Cancer Screening Services

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Background/Aims: The underutilization of cancer screening services is an on-going concern to program planners and policy makers; such underutilization is common among under-insured, ethnic- and language-minority populations and is associated with advanced stage of disease detection, limited treatment options, and diminished survival. At the same time, growing research interest has focused on the over-utilization of cancer screening services. We sought to gather the perceptions of clinic personnel at Latino-serving federally qualified health centers about patients' utilization of screening services for cervical cancer. **Methods:** We conducted one-on-one interviews among 17 clinic personnel at four Latino-serving federally qualified health center networks in Oregon. **Results:** Estimated proportions of eligible patients who are under-screened ranged from 20% to 60%, with 30% most commonly cited. Under-screening for cervical cancer was thought to occur among low-income, under-insured and undocumented patients. External factors, such as limited funding to pay for screening and access barriers to follow-up testing in patients with positive screens were cited as contributing to under-screening. The most frequently cited proportion of eligible patients who are over-screened was 10%, and ranged from 10% to 50%. Notably, over-screening for cervical cancer was thought to occur among young women (those younger than 21) and women with a recent pregnancy. Inconsistent capture of history of screening in electronic medical records and unclear and changing screening guidelines were thought to contribute to over-screening in some patients. **Conclusions:** The health care providers we interviewed had widely varying perspectives of the under- and over-utilization of screening services for cervical cancer. Our findings may inform future efforts to promote guideline-appropriate cancer screening and coordinated follow-up care.

Keywords: Cancer Screening; Utilization; Clinical Perspectives

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PS1-55:

Strategies and Opportunities to STOP Colon Cancer in Priority Populations: Pragmatic Study Design and Methods

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Background/Aims: Colorectal cancer (CRC) is the second leading cause of cancer death in the United States. One key factor thought to explain the relative high mortality is low utilization of screening services for CRC. Data from the National Health Interview Survey show that, in 2010, 41% of adults aged 50–75—nearly 35 million people—were not up-to-date with CRC screening. Almost 30% of eligible adults have never had any type of CRC screening. Screening rates are alarmingly low among certain population subgroups, including those with minimal education, low income, or having no health insurance. The subgroups least likely to be up-to-date with screening are those who receive preventive care services, including CRC screening, at Federally Qualified Health Centers (FQHCs). Strategies and Opportunities to STOP Colorectal Cancer in Priority Populations (STOP CRC) is a collaborative partnership between health research institutions and FQHCs to raise rates of CRC screening in FQHCs. STOP CRC uses a

pragmatic design to evaluate health systems-based approaches to CRC screening among age-eligible patients who receive care at FQHCs. **Methods:** STOP CRC has two phases. In Phase I (Year 01), we will pilot-test an evidence-based approach to improve participation in CRC screening in two FQHCs. This phase will include an assessment of the intervention's feasibility, effectiveness, and cost. In Phase II (Years 02–05), we will conduct a comparative effectiveness pragmatic clinical trial, using a mixed-methods approach to evaluate the adoption, implementation, and maintenance of our CRC screening program. Throughout the project, we will involve a diverse planning advisory group of FQHC clinicians and patients, community representatives, state policy makers, and researchers, using principles of Community-Based Participatory Research. **Conclusions:** STOP CRC is a large-scale approach to raising rates of colorectal cancers screening in FQHCs. STOP CRC is expected to expand meaningful use of electronic health information; synergistically meet national goals to improve cancer screening rates, address health disparities, reduce health care costs; and act as a catalyst for future systems-based approaches to improve care delivery in FQHCs and other health systems.

Keywords: Methods; Pragmatic Trial; Colon Cancer
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PS1-56:

Beyond Barriers: Systemic Constraints Limiting Sexual Health Care for Breast Cancer Survivors

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Background/Aims: Sexual health problems represent one of the most frequently experienced and longest-lasting effects of breast cancer treatment, but research suggests that providers rarely discuss sexual health with their patients. Existing research examining barriers to addressing the sexual health concerns of cancer patients has focused on discrete characteristics of the provider-patient interaction without considering the broader context in which these interactions occur. Drawing on focus group discussions with breast cancer survivors, we explore how foundational cultural and structural characteristics of the healthcare system may be preventing breast cancer survivors from addressing their sexual health concerns. **Methods:** Five focus groups were conducted with breast cancer survivors receiving support services at a breast cancer advocacy and resource organization in Northern California. Each group focused on a different aspect of treatment including: 1) diagnosis; 2) surgery and reconstruction; 3) chemotherapy; 4) radiation; and 5) survivorship. An interview guide for each topic area was used to elicit participants' thoughts, opinions and experiences of breast cancer treatment. Analysis utilized inductive techniques incorporating elements of Grounded Theory to identify salient themes that emerged in the discussions. **Results:** An average of eight women participated in each focus group, and women were allowed to participate in more than one group, for a total of 21 participants. Participants' discussions illustrated three core ways in which cultural and structural characteristics of the healthcare system prevented them from addressing their sexual health concerns, including: 1) the structure of cancer care led to participants being disconnected from the healthcare system at the time when sexual side effects most commonly emerged; 2) when their sexual side effects did emerge, the highly specialized structure of the biomedical system made it difficult for patients to identify the appropriate provider to address their complex sexual health concerns; and 3) when patients did discuss sexual health with their providers, their providers approached sexuality as primarily physical, while participants were experiencing biopsychosocial sexual concerns. **Conclusions:** These results suggest that addressing breast cancer survivors' sexual health needs will require a comprehensive approach that includes educating physicians, coordinating existing resources, and developing new sources of information and support during the survivorship period.

Keywords: Breast Cancer; Sexuality; Communication
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PS1-60:

Advanced Pancreatic Cancer: Patterns of Care and Recommendations for Education and Support

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Background/Aims: Advanced pancreatic cancer has a poor overall prognosis. Fear, anxiety, sadness, and uncertainty are common responses felt by many who are diagnosed with this unfortunate disease, as well as feeling a variety of discomforts related to the cancer itself. Faced with limited time, many hope for longevity while maintaining as good a quality of life as possible. After diagnosis, a multitude of considerations are thought to be essential and beneficial for the patient, caregivers, and medical care providers, including addressing advanced illness planning related to coping, decision-making, cancer treatment, symptom management, and end-of-life care. While the recognition of those considerations is thought to contribute to improved quality of care, often these topics or related interventions are not fully addressed or implemented, potentially leading to a less than ideal experience for the patient with advanced pancreatic cancer. The goal of this study is to evaluate care patterns for advanced pancreatic cancer, address completeness of care based on current standards and guidelines, and provide recommendations for improved overall care and support. **Methods:** Data from the Marshfield Clinic electronic medical record and cancer registry will be electronically and manually abstracted. All patients diagnosed with stage IV pancreatic cancer from 2010-2012 will be included to reflect current care patterns. Data will include patient and cancer characteristics; cancer treatment; presence and management of significant symptoms; number and reason for hospitalization(s); whether or not prognosis and treatment options were discussed; and whether palliative/hospice care and other supportive care referrals were offered or occurred. Comprehensive review of the literature will be undertaken to compile present standards and guidelines regarding advanced cancer care. **Results:** Planned analyses include summary of patient and cancer characteristics, including survival; and determination of variability and commonalities in patient care coordination and utilization of supportive services. **Conclusions:** Understanding the met and unmet needs of patients with advanced pancreatic cancer will lead to improved quality of care and quality of life. Results of this study will be used to write a guideline for improved care and support.

Keywords: Advanced Cancer Planning; Pancreatic Cancer; End of Life Care
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PS1-61:

Race and Receipt of Radiation Therapy with Curative Intent after Radical Prostatectomy for Prostate Cancer

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Background/Aims: We determined if differences existed in prostate cancer treatment received by Caucasian and African-American men who had local or biochemical recurrence following radical prostatectomy (RP) for prostate cancer at an HMO where access to medical care is theoretically equal for all members. We used data collected for a population-based case-control study designed to evaluate the role of specific molecular markers in prostate cancer survival. The subjects were diagnosed with prostate cancer from 1971 through 2001. **Methods:** Study subjects were members of one of three health plans: Kaiser Permanente Northwest (KPNW), Kaiser Permanente Southern California (KPSC), or Kaiser Permanente Northern California (KPNC). The study population included 90 African-American and 233 Caucasian men with prostate cancer who had either local or biochemical recurrence following RP. We compared the likelihood, according to race, of treatment with salvage radiation therapy with curative intent (SRT) among these subjects. We reviewed medical records of all subjects to determine all treatment received in addition to RP and to assess potential confounding factors and effect modifiers. **Results:** After adjusting for case/control status, institution, age at diagnosis, year of diagnosis, Gleason grade (all matching criteria in the