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