and $658.8 \pm $1808 (presenteeism) per enrollee per year. Morisky-based adherence was not a significant predictor of HRQL, or productivity in the multivariate models. CONCLUSIONS: Asthma was associated with HRQL detriments and workplace productivity losses. Medication adherence continues to be a problem among asthma patients.

CANCER—Clinical Outcomes Studies

PCN1
ESTIMATING THE EFFECTIVENESS OF EARLY-STAGE LUNG CANCER ADJUVANT TREATMENTS IN PRACTICE USING INSTRUMENTAL VARIABLE METHODS
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OBJECTIVES: Recent randomized controlled trials demonstrated the efficacy of adjuvant chemotherapy for certain patients with early-stage lung cancer (Winton et al. NEJM 2005) while the efficacy of adjuvant radiation therapy hasn’t been determined in clinical trials for these patients. Both treatments have been used in practice for years and it isn’t clear whether patient survival benefits are available by expanding treatment rates.

OBJECTIVE: estimate the effectiveness of these treatments in practice, assess whether survival benefits are available from expanding treatment rates. It has been suggested that instrumental variable estimates on observational data provide such an interpretation (McClellan et al. JAMA, 1994). METHODS: Apply instrumental variable (IV) methods to 7614 early-stage lung cancer patients that received surgery from the SEER-Medicare databases (1991–1999) to assess the effectiveness of each adjuvant treatment. Instruments included area-level Herfindahl indices of patient concentration across providers and area-level treatment rates across time. Covariates included stage, grade, tumor site, age, gender, and race.

RESULTS: Using IV methods, we found that our instruments explained a statistically significant portion of the variation in adjuvant treatment use. Using the treatment variation stemming from the instruments, we found the adjuvant chemotherapy had a positive effect on three-year patient survival (p < 0.05) while adjuvant radiation therapy didn’t. Using standard risk-adjustment models leaving residual confounding in spite of controlling for measured covariates, both adjuvant chemotherapy and adjuvant radiation therapy had statistically significant negative relationships with three-year patient survival (p < 0.05). CONCLUSION: Using IV methods provides estimates of effects of treatments in practice, suggesting survival rates would increase if adjuvant chemotherapy rates increased for early-stage lung cancer patients. No survival gains appear available from expanding adjuvant radiation therapy rates. The IV results contrast the negative “treatment effects” in standard risk-adjustment models, suggesting that providers recommended adjuvant treatments to patients with higher unmeasured severity levels.

PCN2
EFFECTIVENESS OF A COMMUNITY—BASED PROSTATE CANCER EDUCATION KIOSK FOR AFRICAN AMERICAN MEN: ANALYSES OF COST, SATISFACTION, QUALITY, KNOWLEDGE, AND INTENTION VARIABLES
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OBJECTIVES: The Healthy People 2010 goal for the nation concerning prostate cancer is to reduce prostate cancer death rate to 28.8 deaths per 100,000 males by 2010. The reported death rate for African-American men in 2002 was 62.0 per 100,000 males and for Caucasian men 25.7 per 100,000 males. Based on this statistic, Caucasian men already fare better than the projected goal for 2010 while African American (AA) men have a long way to go to achieve this goal. Prostate cancer education and awareness is very important to eliminate the disparities experienced by AA men. Thus, the purpose of this study is to evaluate the effectiveness of the prostate cancer education kiosk (PCEK).

METHODS: Participants were adult AAs who are employees of an HBCU institution. A structured survey instrument assessing participants’ demographics and prostate cancer knowledge was employed for the study. Data collection involved three steps: 1) completion of survey before use of kiosk [pre-test], 2) use of kiosk by participants [post-test], and 3) completion of survey after use of kiosk [post-test]. RESULTS: Of the 100 participants, most were men (78%), single (53%), had at least a college degree (52%), and between 40–49 years (58%). Men’s score on both the pre-test and post-test knowledge scores were higher than women. PCEK was found to significantly improve participants’ knowledge. The post-test knowledge score of participants (89.42%) was higher than the pre-test knowledge score of participants (67.92%). CONCLUSION: PCEK offers an effective method to educate AA men about prostate cancer. Future studies should explore the cost-effectiveness of touch screen computers such as PCEK in educating the AA community on diverse health issues.

PCN3
AN ANALYSIS OF OUTPATIENT SERVICE UTILIZATION FOR DELAYED NAUSEA AND VOMITING USING ELECTRONIC MEDICAL RECORDS
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OBJECTIVES: Delayed chemotherapy-induced nausea and vomiting (CINV) can increase healthcare utilization and decrease patient quality of life. While reports of delayed CINV range from 40–60% with moderately to highly emetogenic regimens, little information is available on utilization of care as a result. To determine the frequency of outpatient service utilization associated with CINV between 24–120 hours following chemotherapy administration during cycles 1–5. METHODS: A retrospective observational design of US Oncology nation-wide iKnowMed electronic medical records (EMR) was employed. The cohort for analysis included patients from four practices in separate states receiving chemotherapy between August 2004 and April 2005. Chemotherapy regimens included one or more of the following five drugs: carboplatin, cisplatin, oxaliplatin, doxorubicin, cyclophosphamide. Failure was defined as one or more of the following events: phone encounters with documentation of CINV; non-chemotherapy office visits for hydration, IV anti-emetic administration, and/or documentation of CINV; oral anti-emetic orders between 24–120 hours. RESULTS: A total of 691 patients were identified as receiving target chemotherapies during cycles 1–5. Mean (std) age was 61 (13) years, and 62% were female. Twenty-six percent had breast cancer, 26% lung, 10% colorectal, and 8% lymphoma. In cycle 1, the rate of failure was 6.7%; in cycle 2, 5.9%; in cycle 3, 5%; in cycle 4, 5.3%; and in cycle 5, 4.0%. All patients received one or more IV anti-emetic on Day 1 of each cycle. CONCLUSION: The rates reported in this cohort of patients from a nation-wide EMR database indicate that while many patients may experience some degree of CINV during days 2–5 of chemotherapy, only a small percentage receive outpatient clinic care as a result.