population, while also revealing the potential limitations of the model in response to a sudden influx of heavy utilizers.

**PHS120**
PREVENTING CERVIX-UTERUS CANCER IN ARGENTINA: STRUCTURE, ORGANIZATION AND RESULTS
Marie D.
Center for the Study of State and Society (CEDES), Buenos Aires, Argentina

OBJECTIVES: To assess effectiveness of the self-administered HIVF test in Argentina, the goal of this paper is to document the Federal Program for the Prevention of Cervix-Uterus Cancer (PNFCCU) operation at the first level of care and its upstream linkages to the secondary and tertiary levels, identifying process and outputs indicators.

METHODS: The project designed and implemented a series of questionnaires distributed to the local Ministry of Health, each one of its four Programmatic Regions, a sample of 111 health care centers (CAPs), cito/colposcopy labs and gynecology facilities. It is a quality improvement program treating cancer. Information about CAPs, Papanicolaou samples, submit them to labs, receive results and communicate it to patients was collected. Descriptive statistics, robust MLS and logistics regressions were used to analyze the dataset. RESULTS: The outreach activities through sanitary guidelines were delivered to 35,367 women (35-60 years old). Although 63.6-70.7% of CAPs reports systematic mechanisms to submit Pap samples to labs according to norm, strong idiosyncratic-informal criteria prevail, with mix effects on efficacy in outputs. A significant proportion of centers are not able to meet PNFCCU recommendation of a maximum four-week time-span between samples is taken at CAPs and results reach patients. Time gaps (one-to-four weeks) are found across regions between the time abnormal results are identified and treatments are initiated. Besides, coverage of such cases is completely addressed and dropout rates are nil. CONCLUSIONS: The econometric analysis provides insights about the poor influence of context variables on process indicators (Paps performed, and number of rounds) but more precise form and reaches result the patient). Also, the analysis identifies that the reduction of idle-times in identification and communication as well the improvement of equitable results are under the span of action of CAPs and the coordination of the primary level’s health care network.

**PHS121**
A NOVEL STILLBIRTH AUDIT TOOL IMPLEMENTATION IN GHANA: ASSESSMENT OF DEPLOYMENT AND UTILIZATION
Daivon Teye B1, Baison HM2, Oduro Mensah E1, Vanotou L2
1DfNrey Consult Ltd, Accra, Ghana, 2Greater Accra Regional Health Directorate Ghana Health Services, Accra, Ghana, 3Isaiah Hospital, Accra, Ghana

OBJECTIVES: Even though stillbirth audit improvements healthcare quality, it is invisible in global policy prioritization (UNICEF, 2009) as its not counted in local data collection. This study assessed deployment of novel stillbirth audit tool in Ghana. Standardized Stillbirth Audits tool and protocol were deployed by the Regional audit task group using the Vanotou design, Ghana Maternal death Notification form and Perinatal Society of Australia and New Zealand perinatal death guidelines. District and audit committees were formed and trained. The tool was deployed from January 2014 in the Greater Accra Region. Census of all audited stillbirths in 2014 was made. Data on total stillbirth and deliveries abstracted from District Health Information Management System 2. Data entered and analyzed in Epi info 7. RESULTS: Total of 109,187 deliveries with 208 stillbirths (19.1 stillbirths per 1000 deliveries) was documented. Fifty eight percent were macerated, 42% were fresh. Only 6.4% of documented stillbirths were audited of which 50.0 percent were macerated, 46.0 percent were fresh and 62 percent females. Ninety three percent had ANC attendees’ mothers with 47.7 percent booking by the end of second trimester. Fifty seven percent had follic acid in first trimester and 40.3 percent completed IPT-Sulfadoxine/Pyrimethamine prophylaxis. The birth weight ranged 0.5 to 5.0 Kg with mean 2.8 0.9, median 3.0 and 90% weight of 3.0 Kg. Nine percent had birth weights greater ≥ 2.5 Kg. Birth asphyxia caused 41% of the audited deaths and 26.9 percent unknown causes. Poor management, lack of expertise and inadequate human resources were identified as contributory factors and only 32.2 percent were monitored with partograph. CONCLUSIONS: The importance of introducing the novel stillbirth audit in the Greater Accra Region cannot be overemphasized however, findings underscore the need to enforce implementation since majority (93.6 percent) of stillbirths were not audited.

**PHS125**
DIFFERENCES IN CHARACTERISTICS, HEALTH SERVICE UTILIZATION AND COST BETWEEN OLDER HOSPITALIZED LUNG CANCER PATIENTS WITH OR WITHOUT ASTHMA
Roy E1, Blancheotte CM2, Zacherle E2
1University of North Carolina, Charlotte, Charlotte, NC, USA, 2University of North Carolina at Charlotte, Charlotte, NC, USA

OBJECTIVES: Asthma holds considerable risk for developing lung cancer. It can be assumed that asthma has an effect on healthcare utilization and healthcare costs accrued by lung cancer patients. This study looks at differences in patient characteristics and healthcare utilization and costs. METHODS: The study used 2010 Seer-Medicare registry and hospitalization data for cancer sites lung, bronchus and not otherwise specified lung cancer to look at patient characteristics and measures of health service utilizations and costs. Two patient groups were formed based on having any or no asthma diagnosis during the hospitalization. Descriptive statistics like frequency, percentage, mean and standard deviation were used to characterize differences in patient demographics, cancer characteristics and survival metrics between the two groups. RESULTS: In the prevalence sample of 14371 cases, 506 patients had a diagnosis of asthma. Patient characteristics like gender female (66.34% vs 49.34%), race black (53.24% black vs 38.76%), and geographic location compared to non-asthmatics, showed differences in presence of asthma in the population. Asthmatics (mean: 7.73; SD: 13.43) stay at shorter mean length of stay compared to non-asthmatics (mean: 8.56 days; SD: 16.73). Asthmatics had more intermediate inpatient intensive care use (54.55% vs 52.18%) and had more healthcare costs (mean: $4853.53; SD: 11038.30 vs mean: $4167.20; SD: 6132.22) and outpatient costs (mean: $11.59; SD: 237.65 vs $15.26; SD 90.49) when compared to non-asthmatics. CONCLUSIONS: There are subtle differences in patient characteristics, healthcare utilization and costs between lung cancer with asthma and without asthma. Intuitively, utilizations and costs should be more abundant in asthmatics. However, our study suggests that this variation may not be marked across all utilization and cost measures.

**PHS126**
POTENTIAL SAVINGS IN HEALTHCARE SPENDING ON “LOW-VALUE” INTERVENTIONS: CASE STUDY OF ARTHROSCOPIC KNEE SURGERY
Rane PN1, Olicanski N2, Saret CJ1, Cohen JT2, Neumann PJ3
1Center for the Evaluation of Value and Risk in Health, Tufts Medical Center, Boston, MA, USA, 2Center for the Evaluation of Value and Risk in Health, Institute for Clinical Research and Health Policy Studies, Tufts Medical Center, Boston, MA, USA

OBJECTIVES: Research indicates that waste and inefficiency consumes 10% to 30% of health care spending, but the relative importance of low-value health care interventions are contributing the most to this misallocation is poorly understood. Some “low-value” interventions that offer relatively low or no additional health benefits for their costs have been identified including comparative cost-effectiveness and cost-utility analysis. This study aims to quantify the healthcare resources and expenditures spent on low-value interventions in Massachusetts (MA) in an effort to better understand and allocate healthcare dollars more effectively. METHODS: We identified a list of low-value services based on published literature, which included arthroscopic debridement/ chondroplasty for knee osteoarthritis (procedure codes: 29877, 29879, and G0389). We used the 2012 MA All Payer Claims Database (APCD) to examine the utilization and characteristics of the individuals who received these services, and to calculate the state’s associated annual healthcare expenditure. The APCD included medical and pharmaceutical claims from all commercial payers and certain public programs (Medicare Part C only and Medicaid), including patient out-of-pocket payments. RESULTS: From our study population (N=6,549,289), a total of 8,488 individuals were identified as receiving arthroscopic knee surgery in 2012. Of these patients 52.5% were aged < 50 years, and 52% were female. Total state healthcare spending associated with this procedure in 2012 was $8.7 million, 9% of which were spent by private payers. Most (64%) of the resources were utilized in the outpatient setting, followed by other sources of service (non-inpatient and non-outpatient, such as swing-bed and ambulatory surgical center) (27%). CONCLUSIONS: Quantifying the resources spent on low value interventions can help decision makers gain insight on the potential healthcare savings that could be accrued if healthcare resources were reallocated away from these interventions.

**PHS127**
A VISIONAL IMPAIRMENT ASSOCIATED WITH INCREASED HOSPITALIZATION: A RETROSPECTIVE COHORT STUDY OF COMMUNITY-DWELLING MEDICARE BENEFICIARIES
Zakaria M1, Oluchukwoga E2
1University of Maryland School of Pharmacy, Baltimore, MD, USA

OBJECTIVE: Visual impairment (VI) is related to poor health outcomes such as difficulty with everyday activities, falls, and fracture. However, it is unclear whether VI as a secondary diagnosis is related to increased hospitalization rates. We aimed to determine whether higher levels of VI are associated with increased rates of hospitalization.

METHODS: We used a retrospective cohort study design. The Medicare Current Beneficiary Survey (MCBS) data covering the 2005 to 2010 time period were used to identify community-dwelling beneficiaries, 65 years old and older who provided 9666.000.03; the likelihood of receiving BCS was lower in non-SNP DEs than in dual members (OR: 0.81, p-value<0.0001) and D-SNPs (OR: 0.76, p-value<0.0002). CONCLUSIONS: The probability of receiving BCS was lower in dual members than in D-SNPs plan and non-DE populations. There was no significant difference in the probability between D-SNP and non-DE populations. The SNP plans included more dual members compared to duals not in a SNP plan. This provides evidence of the value of SNP plans in achieving better outcomes for the vulnerable DE MA population.
information regarding visual status. All-cause hospitalization was ascertainment using Medicare claims data that were linked to MCBS. The Negative Binomial generalized linear model was used to quantify the relationship between VI and hospitalization controlling for confounding factors such as age, gender, race, income, marital status, smoking, body mass index, and chronic conditions. RESULTS: At baseline, 29% of those who had mild VI, and 6% had moderate-to-severe VI. Over time, the rate of hospitalization declined for those with mild VI or no VI, but was constant for those with moderate-to-severe VI. The rate of hospitalization was higher in those with moderate-to-severe VI compared with beneficiaries with no VI (Rate Ratio: 1.21, 95% Confidence Interval: 1.06, 1.37), adjusting for potential confounding variables. CONCLUSIONS: Moderate-to-severe VI was associated with an increased rate of hospitalization among older adults. Our results suggest that further research is needed to determine whether visual impairment would be an effective measure to reduce hospitalization.

PHS127 HEALTH SERVICES UTILIZATION AND COSTS AMONG EMPLOYED ADULTS WITH DEPRESSION
Ganong N, Yang Y
University of Mississippi, University, MS, USA
OBJECTIVES: Depression is a major cause of increased work absenteeism and low productivity increasing the total healthcare costs. Continuing to work while suffering from depression (presenteeism) may actually improve patient condition through colleague support and reduce healthcare costs, however, there is not enough evidence to support this. The objective of this study was to compare health services utilization and healthcare costs among employed patients with depression who engage in presenteeism and absenteeism. METHODS: A retrospective study was conducted using the 2011 and 2012 Medical Expenditure Panel Survey (MEPS) data. Adult patients (≥18 years) with depression were identified using ICD-9 codes (296 and 311). Employed patients who were employed throughout the year were assessed for presenteeism and absenteeism through survey responses. Logistic regressions were used to analyze the association between presenteeism/presenteeism and office-based visits, emergency department visits, hospitalizations, and the rate of hospitalization among those who engaged in absenteeism and presenteeism. RESULTS: A total of 1,501 adults with depression were identified. Of those, 66.7% were females. Among employed adults with depression, 14.7% engaged in absenteeism, while the others engaged in presenteeism. After controlling for individual socio-demographic covariates, clinical comorbidities, and individual perceived health status, depressed patients engaging in presenteeism were 65% less likely to have more than three office-based visits as compared to patients engaging in absenteeism (OR: 0.349, 95% CI: 0.235-0.518). Results for the adjusted cost analysis suggest that the behavior of presenteeism or absenteeism was not a significant predictor of total healthcare costs (p>0.05). CONCLUSIONS: Compared to absenteeism, presenteeism among employed adults with depression is associated with lower health services utilization that can potentially be cost-saving in the long run. Employers and the medical community should work together for depression management among employees and reduce the clinical and economic burden of depression.

PHS128 MEDICAL RESOURCE UTILIZATION OF ACUTE MYOCARDIAL INFARCTION PATIENTS WITH READMISSION: A RETROSPECTIVE ANALYSIS OF HOSPITALIZATION DATA FROM BEIJING MEDICAL INSURANCE DATABASE
Wei L1, Wu J1, Yang L1
1Peking University, Beijing, China, 2Beijing, China
OBJECTIVES: To describe out-of-pocket (OOP) expenditures for hospitalizations, ambulatory care visits and prescription medications and to determine if there is the difference in OOP expenditures by insurance status among patients with Chronic obstructive Pulmonary Disease (COPD). METHODS: Data for this study were drawn from the 2012 Medical Expenditure Panel Survey (MEPS). The sample included adults (≥18 years) with a COPD diagnosis (ICD-9 codes 491, 492, and 490) who received COPD services at least once in 2012. The dependent variable was total annual OOP expenditures and the independent variable was health insurance type (private, public, or no insurance). Descriptive statistics and inferential tests were conducted using SAS ProcSurvey for complex sampling design. RESULTS: Study subjects’ (N=587 unweighted, N=5,982,925 weighted) total means(SE) OOP COPD expenditures were $236.2±45.1 per person. Subjects with no insurance had total OOP expenditures ($261.3±385.9 $) that were 2.8 to 4.0 times higher than those who were privately ($221.4±22.6) or publicly ($156.9±22.9) insured. Inpatient expenditures (N=31 unweighted, N=352,414 weighted) were significantly higher for subjects with no insurance ($4,631.7±0), and lower for subjects with private ($186.9±4.9) and public insurance ($105.6±4.7). Ambulatory care visit (N=385 unweighted, N=3,831,525 weighted) OOP expenditures for subjects with no insurance ($77.9±4.9) were over 2 times higher than OOP expenditures for those privately or publicly insured ($35.0±5.3, $28.2±6.6, respectively). Of those who had prescription expenditures ($468 unweighted, $1,496,191 weighted), patients with private and those with no insurance paid similar OOP amounts ($222.1±24.8, $220.5±24.1, respectively), while those with public insurance had lower OOP expenditures ($162.5±24.4). CONCLUSIONS: When compared to subjects with private or public insurance, those with no insurance had higher OOP expenditures for COPD services, total inpatient and ambulatory care services and lower OOP expenditures for prescriptions. Increasing the use of appropriate COPD medications among the uninsured may result in cost-savings due to reduced hospitalizations.

PHS130 PREDICTING MEDICAL REIMBURSEMENT AMOUNT - WHAT FACTORS DRIVE THE MEDICAL COST TREND
Wang Q1, Sicker A, Chawla R, Nigam S2
1Independent Blue Cross, Philadelphia, PA, USA
2University of Mississippi, University, MS, USA
OBJECTIVES: Healthcare costs in the U.S. are the highest worldwide and are rapidly increasing. As a result of this upward trend, employers and health insurance companies are considering options to contain the growth of medical care expenditures. The objective of this study is to identify several factors associated with medical reimbursement amount for Commercial and Medicare health insurance members in Southeastern Pennsylvania and to determine if using privately funded Medicare and Medicaid health plan enrollment and claims data from 2011 and 2012 for 2 million participants, this study empirically examined the impact of socio-demographic, environmental and health utilization, risk and obesity characteristics on medical reimbursement amount using risk adjustment and risk predictive models. The dependent variables - medical reimbursement amount, was measured separately as concurrent, prospective, and change variable (taking first difference) at each plan participation time period. Regression analysis was used to examine individually and cumulatively how much variation was explained by different independent variables for Commercial and Medicare separately using adjusted R-squared. Socio-demographic variables included age, gender, and derived 2010 census variables at the ZIP code level. Separate risk scores were derived for Commercial and Medicare using DaCo’s all medical predicting concurrent medical risk. RESULTS: Among both Commercial and Medicare members, utilization (including services by inpatient, outpatient and prescription drug use) was the predominant factor of medical reimbursement amount. Risk scores and number of chronic diseases are predictive but not as significant as utilization in terms of explanatory power. Socio-demographic variables are important predictors but only explain a small portion of the variation. CONCLUSIONS: This study examined several factors associated with medical reimbursement amount. Further research is needed to help understand what other factors are important which may help shed light on potential options for ‘bending the cost curve’.

PHS131 OUT-OF-POCKET HEALTHCARE EXPENDITURES AMONG PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE
Kang H.A, Barner J.C.
University of Texas at Austin, Austin, TX, USA
OBJECTIVES: To describe out-of-pocket (OOP) expenditures for hospitalizations, ambulatory care visits and prescription medications and to determine if there is the difference in OOP expenditures by insurance status among patients with Chronic obstructive Pulmonary Disease (COPD). METHODS: Data for this study were drawn from the 2012 Medical Expenditure Panel Survey (MEPS). The sample included adults (≥18 years) with a COPD diagnosis (ICD-9 codes 491, 492, and 490) who received COPD services at least once in 2012. The dependent variable was total annual OOP expenditures and the independent variable was health insurance type (private, public, or no insurance). Descriptive statistics and inferential tests were conducted using SAS ProcSurvey for complex sampling design. RESULTS: Study subjects’ (N=587 unweighted, N=5,982,925 weighted) total means(SE) OOP COPD expenditures were $236.2±45.1 per person. Subjects with no insurance had total OOP expenditures ($261.3±385.9 $) that were 2.8 to 4.0 times higher than those who were privately ($221.4±22.6) or publicly ($156.9±22.9) insured. Inpatient expenditures (N=31 unweighted, N=352,414 weighted) were significantly higher for subjects with no insurance ($4,631.7±0), and lower for subjects with private ($186.9±4.9) and public insurance ($105.6±4.7). Ambulatory care visit (N=385 unweighted, N=3,831,525 weighted) OOP expenditures for subjects with no insurance ($77.9±4.9) were over 2 times higher than OOP expenditures for those privately or publicly insured ($35.0±5.3, $28.2±6.6, respectively). Of those who had prescription expenditures ($468 unweighted, $1,496,191 weighted), patients with private and those with no insurance paid similar OOP amounts ($222.1±24.8, $220.5±24.1, respectively), while those with public insurance had lower OOP expenditures ($162.5±24.4). CONCLUSIONS: When compared to subjects with private or public insurance, those with no insurance had higher OOP expenditures for COPD services, total inpatient and ambulatory care services and lower OOP expenditures for prescriptions. Increasing the use of appropriate COPD medications among the uninsured may result in cost-savings due to reduced hospitalizations.