RESULTS: Cancer-related CRC costs averaged $32,303 in the initial phase, $3,548 per year in the continuing phase, and $14,323 in the terminal phase. Initial-phase costs were similar by site (CC: $32,528; RC: $31,701; P = 0.015), while continuing-phase costs were roughly 1.3 higher for RC versus CC ($4,266 vs. $3,287; P < 0.001). Terminal-phase costs were $14,197 for CC and $14,654 for RC (P = 0.424). Initial-phase CC costs were $17,278 and $40,501 for Stages 0 and 4, respectively (P < 0.001), compared to $14,060 and $37,235 for Stage 0 and 4 RC (P < 0.001). Continuing costs ranged from $2,499–$17,861 and $2,822–$17,741 for Stage 0–4 CC and RC patients, respectively; terminal costs ranged from $7,814–$27,742 for Stages 0–4 CC and $6,376–$20,047 for Stages 0–4 RC patients. CONCLUSION: Excess costs associated with CRC are striking and vary considerably by treatment phase, cancer site, and stage at diagnosis. Interventions aimed at earlier diagnosis and prevention have the potential to reduce cancer-related health care costs.

PCN40
CONTROLLING FOR POTENTIAL CENSORING BIAS ON DEPENDENT VARIABLES
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OBJECTIVE: To determine how independent variables (e.g., gender, comorbidities, etc) predict total medical cost of lung cancer in the two years following diagnosis after we account for the bias introduced by censoring. METHODS: Since health care costs and utilization may be subject to right censoring and therefore are not always observable, the standard regression models cannot be used to assess the effects of confounders. Inverse Probability Weighted estimation is ideally suited to estimation from non-random samples which might arise due to censoring or by the censoring strategy used. IPW produces consistent estimator with a covariance matrix that can be calculated by most commercial statistics software. We applied a test to see if possible censoring bias exists. We also calculated the deviation from the consistent value if standard ordinary least square method was used. RESULTS: A total of 201 patients with incident of cases of lung were recruited from Michigan community hospitals and their oncology units. We obtained Medicare claim files for the two years following diagnosis. 28.8 percent of the cases were censored, therefore their annual costs were not observed. The total cost of all care is $60,429 for the two years following a lung-cancer diagnosis and $53,877 for incomplete cases. Inverse probability weighted results significantly diverged from standard regression model. There exist a selection bias (P = 0.000) therefore IPW estimation yielded consistent results. CONCLUSION: This paper applies the inverse probability weighted estimation to an inception cohort of patients newly diagnosed with lung cancer. Our findings suggest that standard regression models yields inconsistent estimator due to censoring bias. IPW least square estimation method removes that bias.

PCN41
THE LIFETIME COST OF CERVICAL CANCER IN TAIWAN
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OBJECTIVE: Cervical cancer is the top female cancer in terms of incidence rate in Taiwan. Since July 1, 1995, the NHI program has provided annual cervical smear tests for all women over the age of 30. Besides, the vaccine for preventing cervical cancer has been marketed in Taiwan in 2006. The purpose of this paper was to estimate the lifetime (20 years) direct medical cost of cervical cancer patients for future economic evaluation. METHODS: The estimation of the lifetime cost based on insurer perspective and incidence approach sourced from 1994–2002 cancer registry statistics of patients with cervical cancer and the claim data from Taipei Veterans General Hospital (TPE-VGH). Totally, we have 2525 patients. Propensity score method was applied to match the comparison group using the population claimed data from The National Health Research Institutes (NHRI). The probabilities of survival, dying of cancer or dying of other causes were estimated through Cancer Registry statistics. We divided the whole disease process into initial, continuing and terminal three phases. The cost of cancer is the sum of the average cost of each phase. Lifetime costs of cancers were estimated from the costs calculated above incorporate survival rates of the cancers. RESULTS: The results showed only 61 patients survived less than one year and each patient spent $US13,358 during that period. For those survived more than one year, terminal phase resulted in the highest costs which was $US23,078. For those survived more than one year, the initial phase cost for each patient was $US4157 and the monthly cost for continuing phase was $US113. The expected lifetime cost (20 years) of average cervical cancer patient was $US30,238. CONCLUSION: Our study provided critical information for the economic evaluation of Pap smears screening and the vaccination program for human papilloma virus.

PCN42
THE ECONOMIC BURDEN OF CHRONIC LYMPHOCYTIC LEUKEMIA IN THE UNITED STATES
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OBJECTIVE: Currently, two out of every 100,000 people develop Chronic Lymphocytic Leukemia (CLL) annually. Over 90% of cases are found in people who are older than 50 years of age. As the United States population ages over the next two decades significantly more patients with CLL are likely to be diagnosed resulting in increased spending on CLL. METHODS: Prevalence estimates of CLL in various age cohorts from Surveillance Epidemiology and End Results (SEER) data combined with population demographics from the United States Census Bureau are used to project the direct costs associated with CLL over the next two decades. Sensitivity analysis is conducted around all estimates to assess key model parameters. RESULTS: In 2006, the average direct cost of treatment was estimated at $304 million this is estimated to increase to 333 million by 2010 and over 413 million in 2020; an increase of 27% in the numbers of individuals in need of treatment. These conservative cost estimates are based on changing demographic distributions and do not include increases in the costs of health care delivery, treatments or indirect costs. The total costs of CLL are expected to reach over 1.5 billion USD by the year 2020. CONCLUSION: This work reviews the literature on the economic costs associated with CLL and based on expected demographic changes to the United States population, identifies an area of increasing concern to health care policy makers and providers of clinical services to oncology patients.