PCN4 MEDICAL EXPENDITURES ASSOCIATED WITH THE USE OF SYSTEMIC THERAPY FOR COLORECTAL CANCER IN PRIVATELY INSURED ADULTS IN A CLAIMS DATABASE IN THE UNITED STATES
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OBJECTIVES: To examine the factors associated with total health care expenditures in newly diagnosed subjects with colorectal cancer (CRC) receiving systemic therapy.
METHODS: Patients ages 18-65 years were newly diagnosed with CRC between January 1, 2005 and June 31, 2009 receiving systemic therapy were identified using a large, U.S.-based administrative medical claims (MarketScan) database. At least 6 months of patient history prior to CRC diagnosis and at least 1-year post-CRC diagnosis were required. Patients were followed from initial CRC diagnosis (index date) to disenrollment or June 31, 2010. Chemotherapy and biologic treatments over time were analyzed to identify lines of therapy. Generalized linear regression models were used to estimate total medical expenditures (outcome variable) as a function of number of lines of therapy (key independent variable) and demographic/clinical covariates. The excess expenditures associated with additional lines of therapy were estimated as the difference between predicted medical expenditures for those with 1st line of therapy versus 2nd and 3rd + lines of therapy. RESULTS: A total of 5160 subjects were included with the majority being women (55%) and ages between 51-60 years (25%). After adjusting for demographic, and clinical covariates (comorbidities, metastasis development, and post-index CRC surgery and radiation) and follow-up days, the mean annualized total health care costs ($5,160) were predicted to be $87,602. Use of 2nd line and 3rd + therapies was associated with an annualized incremental costs of $11,662 (95% confidence interval (CI): $8,581-$14,876) and $43,313 (95% CI: $43,313-$49,401), respectively. Age, gender, race, and year of diagnosis, post-index CRC surgery and/or radiation, development of metastasis (p-value <0.001), presence of vascular comorbidities (p-value =0.05), plan type (p-value =0.04) and use of first line bevacizumab (p-value =0.0002) were all associated with statistically significant increased likelihood of costs. CONCLUSIONS: Additional lines of therapy and use of first line biologics increased the cost of treatment substantially in CRC patients.

PCN5 COSTS ASSOCIATED WITH TREATMENT OF METASTATIC HER2-POSITIVE BREAST CANCER PATIENTS WITH AND WITHOUT TREATMENT TO TRASTUZUMAB UNDER THE PERSPECTIVE OF THE BRAZILIAN PRIVATE HEALTH CARE SYSTEM
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OBJECTIVES: In the Brazilian private healthcare system, coverage for oral therapy is not mandatory. The association of lapatinib and capecitabine (LAP/CAP), both orally administered, is an effective combination for the treatment of patients with metastatic HER2-positive breast cancer (MBC-HER2+) after progression to trastuzumab, but is not frequently used. The objective of this study was to evaluate treatment patterns and associated costs of MBC-HER2+ patients treated with CT, eligible for treatment with LAP/CAP or TRAST/CAP, had lower treated costs with LAP/CAP were lower than TRAST/CAP.
METHODS: Evidencia database contains data related to around 3,000,000 lives covered by private health plans in Brazil. In this database, patients diagnosed with MBC-HER2+ and treated with chemotherapy after failure to trastuzumab were selected. For every patient, treatment costs were calculated considering drug costs mainly: paclitaxel (27%), docetaxel (20%) and vinorelbine (14%). The average cost per patient were R$19,114.68, R$25,977.61 and R$39,437.26, in the CT, and projected costs were R$19,248; 23%) followed by radiation therapy (median $15,691; 18%). The average cost for pre- and post-cetuximab cohorts were $110,099 and $111,156, respectively (p=0.82). Treatment costs comprised the greatest percentage of total cost (89.3%) for SCCHN patients. Costs for SCCHN patients were the primary driver of treatment costs (median $19,248; 23%) followed by radiation therapy (median $15,691; 18%). Chemotherapy accounted for 2.6% (median $974) of treatment costs. In the post-cetuximab cohort, cetuximab was responsible for 5.7% and 4.4% of total and treatment costs, respectively. CONCLUSIONS: Compared to diagnosis and end-of-life phases, treatment is the primary driver of SCCHN costs, predominated by outpatient treatment. Total costs were similar prior to and following cetuximab approval.

PCN5 A PILOT ASSESSMENT TO DETERMINE COST OF AHER2 TREATMENT
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OBJECTIVES: This pilot study provides a reasonable estimate of resource utilization and costs for SCCHN. Outpatient costs were the primary driver of treatment costs (median $19,248; 23%) followed by radiation therapy (median $15,691; 18%). Chemotherapy accounted for 2.6% (median $974) of treatment costs. In the post-cetuximab cohort, cetuximab was responsible for 5.7% and 4.4% of total and treatment costs, respectively. CONCLUSIONS: Compared to diagnosis and end-of-life phases, treatment is the primary driver of SCCHN costs, predominated by outpatient treatment. Total costs were similar prior to and following cetuximab approval.

PCN5 COMPARING THE USE AND COST OF RADIOPHARMACEUTICALS IN PROSTATE CANCER PATIENTS WITH AND WITHOUT BONE METASTASIS
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OBJECTIVES: The use of radiotherapeutics in oncology is expected to increase over the next few years. There are few studies, however, describing the cost associated with their use. This analysis compared the utilization and cost of patients treated in an outpatient or inpatient setting for prostate cancer (PCa) with bone metastasis (wBM) to those without bone metastasis (w/oBM). METHODS: Patients in the Premier Hospital Database between January 2006 and December 2010 treated in an outpatient or inpatient setting for PCa (ICD9 Codes 185 and 233.4) were included. Patients were required to be ≥60 years of age with no additional cancers. Patients were put into cohorts based on the presence of bone metastasis (ICD9 code 198.5 or the use of zoledronic acid or pamidronate disodium). Utilization of radiotherapeutics and PCa-specific treatments were compared, controlling for age, race, hospital, provider payer type, bed size, and admission source and type. Differences in treatments were assessed utilizing logistic regression, while differences in costs were analyzed using gamma distributed general linear models with a log link function. RESULTS: There were 23,747 hospitalizations for men wBM and 187,708 hospitalizations for men w/oBM. The mean age of men wBM was 73 years compared to 69 years for men w/oBM. The use of nuclear medicine-related PCa therapies was higher in patients wBM compared to w/oBM (4.8% versus 1.7%, p=0.0006). With overall costs of $9,728 in men with wBM and $7,405 ($0.0006) in those w/oBM, nuclear medicine treatment contributed only 1.2% and 5.2%, respectively (p=0.0001). Room and board contributed the greatest proportion of costs in men wBM (38.9%), while surgery (24.2%), room and board, and radiation (~20%) each were the major contributors in men w/oBM. CONCLUSIONS: Although increasing in use, currently radiotherapeutics do not significantly contribute to the total cost of treating PCa patients in an inpatient or outpatient setting.

PCN4 SEGMENTED MEDICAL COSTS OF SQUAMOUS CELL HEAD AND NECK CANCER: A PHARMACOECONOMIC ANALYSIS USING A PRIVATE INSURANCE DATABASE
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OBJECTIVES: In 2004, Medicare payments for treating squamous cell head and neck cancer (SCCHN) were estimated was $25,000 higher than matched controls. Specific diagnostic, treatment and end-of-life cost have not been delineated nor have the cost of newer biologic agents been factored into these estimates. We aim to determine the costs of diagnostic, treatment, and end-of-life phases of SCCHN in and overall cost of treatment prior to and following cetuximab approval.
METHODS: This was a retrospective analysis of the Pharametrics Choice insurance claims database. Patients ≥20 years of age with ICD-9-CM codes suggestive of advanced SCCHN diagnosed between March 1, 2003 and March 1, 2008 were included. Patients were divided by date of diagnosis prior to or following cetuximab approval (2006). Direct medical costs were calculated for costs of medical (i.e., diagnostic, treatment, end-of-life) and overall. Patient characteristics are presented as descriptive statistics. Medical costs between phases and cohorts were compared using the Mann-Whitney U-Test. RESULTS: Overall, 366 patients met study criteria. Patients were predominately male (78.4%) with a median age of 57 years. Diagnostic costs were lower in pre-cetuximab ($5053) versus post-cetuximab ($6860) cohorts (p=0.028). Costs of treatment ($102,427 vs. $97,594; p=0.69) and end-of-life ($15,853 vs. $21,822; p=0.57) were similar among cohorts. Median total costs for pre- and post-cetuximab cohorts were $110,099 and $111,156, respectively (p=0.82). Treatment costs comprised the greatest percentage of total cost (89.3%) for SCCHN patients. Costs for SCCHN patients were the primary driver of treatment costs (median $19,248; 23%) followed by radiation therapy (median $15,691; 18%). Chemotherapy accounted for 2.6% (median $974) of treatment costs. In the post-cetuximab cohort, cetuximab was responsible for 5.7% and 4.4% of total and treatment costs, respectively. CONCLUSIONS: Compared to diagnosis and end-of-life phases, treatment is the primary driver of SCCHN costs, predominated by outpatient treatment. Total costs were similar prior to and following cetuximab approval.