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 18-63 years when newly diagnosed with CRC between January 1, 2005 and June 31, 2009 receiving systemic therapy were identified using a large, US-based administrative medical claims (MarketScan) database. At least 6 months of patient history prior to CRC diagnosis and at least 1-year post-CRC surgery 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 male (55.9%), between ages 51-60 years (27%). 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 (N=5,160) were predicted to be $67,902. 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, year of diagnosis, post-index CRC surgery and/or radiation, development of metastasis (p<0.001), presence of vascular comorbidities (p-value: 0.06), plan type (p-value: 0.06) 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.

PCN50 A PILOT ASSESSMENT TO DETERMINE COST OF AHER TREATMENT

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OBJECTIVES: To determine the costs of diagnostic, treatment, and end-of-life phases of SCCHN.

METHODS: A pilot study was conducted to determine the costs of diagnostic, treatment, end-of-life, and overall phases of SCCHN. Outpatient costs were the primary driver of treatment costs (median $19,248; 23%) followed by radiation therapy (median $15,691; 18%). Total medical expenditures associated with the use of systemic therapy ($6680) cohorts (p<0.028). Costs of treatment ($102,427 vs. $79,594; p=0.69) and of 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. Patient 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 costs. Total costs were similar prior to and following cetuximab approval.

PCN51 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 inpatient or outpatient 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 radiotherapeutic 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 generalizated 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 treatments was higher in patients w/oBM (4.8%) compared to wBM (1.2%). With overall costs of $9,728 in men with wBM and $7,405 (p=0.0006) in those w/oBM, nuclear medicine contributed only 1.2% and 5.2%, respectively (p=0.001). Room and board contributed the greatest proportion of costs in men wBM (38.9%), while surgery (24.2%), room and board, and radiation (~20%) 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.