the DDS results indicated small declines in medication adherence for cancer survivors relative to beneficiaries without a cancer diagnosis in all three drug classes (3 to 5 percentage points), whereas longer term cancer survivors had much better adherence to all three drug classes (10 to 12 percentage points higher) relative to beneficiaries with cancer who had a poor prognosis. CONCLUSIONS: A diagnosis of cancer is a modifying factor in the use of the DDS, with patients who adhered to DDS at least 30% of the time more likely to be taking evidence-based medications recommended in diabetes treatment guidelines.

PN166
REGIONAL VARIATIONS IN HEALTH CARE EXPENDITURES AMONG MEDICARE BENEFICIARIES WITH COLORECTAL CANCER

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OBJECTIVES: To examine total health care-expenditures in the initial phase-of-care for those from WVCR-Medicare and SEER-Medicare with colorectal cancer (CRC) from a rural setting and compare them with “national” estimates. METHODS: A population-based retrospective cohort-study was conducted on fee-for-service Medicare beneficiaries aged ≥66 years diagnosed with CRC between 2003-2006 identified from the West Virginia Cancer Registry (WVCR)-Medicare linked database (n=2,114). Similarly, a comparative cohort was identified from Surveillance, Epidemiology, and End Results (SEER)-Medicare (n=38,172). Medicare claim payment-amounts were used to calculate total average health care, inpatient, outpatient, physician- and visits’s costs. Further健康 care utilization expenditures. To control for geographic variation in cost-of-living across the different counties, health care-expenditures were expressing using county-specific cost-of-living indices (COLI). RESULTS: After COLI-adjustment, the average total health care expenditures in the initial phase-of-care in the study population from the WVCR-Medicare linked database were estimated at $66,446. The average total health care and inpatient expenditures in initial phase-of-care were found to be lower (6% and 8%, respectively) for those from WVCR-Medicare as compared to those from SEER-Medicare. However, they had a higher co-morbidity burden, and significantly higher (45%) outpatient expenditures as compared to their “national” counterparts. Total expenditures were highest for those from SEER-Medicare with chronic-conditions, which have a higher prevalence in the WVCR-Medicare group as compared to those from SEER-Medicare. Further, the differences in total health care-expenditures between beneficiaries from WVCR-Medicare and SEER- Medicare reduced from $2,982 to $898, and remained no longer significant in a multivariable setting after controlling for receipt of minimally-appropriate CRC treatment (MCT) and presence of chronic-conditions. CONCLUSIONS: This study highlights the importance of providing preventive health services and better co-management of CRC and chronic-conditions, to control the higher outpatient expenditures among beneficiaries with CRC from a rural population. This study also showed that the differences in total health care-expenditures between rural and urban beneficiaries were likely to be partially explained by the receipt of MCT and comorbidity-burden.

PN167
TREATMENT AND SURVIVAL PATTERNS AMONG ELDERLY MEDICARE BENEFICIARIES WITH COLORECTAL CANCER: A COMPARATIVE ANALYSIS BETWEEN A RURAL STATE CANCER REGISTRY AND NATIONAL DATA

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OBJECTIVES: To examine phase-of-care CRC treatment patterns in the initial phase-of-care, the extent of receipt of minimally-appropriate CRC treatment (MCT), the associated survival in a three-year period following a CRC-diagnosis in Medicare beneficiaries, which were diagnosed with CRC between 2003-2006 from the West Virginia Cancer Registry (WVCR)-Medicare linked database (n=2,119). A comparative “national” cohort was identified from Surveillance, Epidemiology, and End Results (SEER)-Medicare (n=38,168). CRC-treatment received was ascertained from beneficiaries’ Medicare claims by following them for 12-months from their CRC-diagnosis date or until death. Receipt of MCT was defined based on National Cancer Institute CRC-treatment guidelines. All-cause and CRC-specific mortality in the 36-month period following CRC-diagnosis were examined after accounting for selection bias using inverse probability treatment weights. RESULTS: Although a higher proportion of beneficiaries from WVCR-Medicare were diagnosed in the earlier stages of CRC (when it can still be treated effectively) as compared to their SEER-Medicare counterparts, they had poorer CRC-survival with adjusted hazard ratios (aHR) = 1.26 (95%CI=[1.20, 1.32]). This poorer survivorship may be due to a lower-risk (adjusted odds ratios (aOR)=0.85; 95%CI=[0.76, 0.96]) of beneficiaries from WVCR-Medicare of receiving MCT as compared to their “national” counterparts. Differences in usage of CRC-surgery, chemotherapy and radiation were also observed in the two populations. Those from WVCR-Medicare were less likely to receive any type of CRC-surgery with aOR=0.82 (95%CI=[0.73, 0.93]) CONCLUSIONS: This study highlights the need for an increased emphasis on adoption, and adherence to accepted surgical and adjunctive CRC-treatment guidelines, and improving access to CRC-care for those from rural settings. Further research needs to be conducted to determine if similar rural-urban differences in receipt of MCT exist in the elderly in other rural-areas of the nation.

PN168
FIRST TWO YEARS OF HEALTH SYSTEM RESOURCES AND COSTS FOLLOWING A STAGE DEFINED BREAST CANCER DIAGNOSIS: A POPULATION BASED APPROACH


OBJECTIVES: To determine the publicly funded health care costs associated with breast cancer (BC) at diagnosis and one year post-diagnosis, and the usage of publicly funded health care services used were stratified by disease stage over the first two years following diagnosis. BC cases were matched to controls (women without cancer). Overall average costs (2008$CAN) and costs per person per QALY were compared across stage groups. The average disease-specific time horizon was determined. RESULTS: There were 39,655 BC cases and 190,520 controls in our cohort study. The average age was 61.1 years old and 60.9 years old, respectively. Of the BC cases with staging information, the majority of cases were Stage I (54.4%) and Stage II (31.8%). Eight percent of the entire cohort died within the first two years of diagnosis. The overall mean cost per BC case from a public payer perspective in the first two years following diagnosis was $41,686 based on the study cohort of 39,655 BC cases. The mean cost increased by stage: Stage I ($25,938), Stage II ($46,893), Stage III ($65,369) and IV ($66,627). When compared to controls, the net cost for BC cases was $31,732. Cost drivers for the entire cohort were cancer-related health care expenditures, physician billing and inpatient hospitalizations. CONCLUSIONS: Costs increased by stage of disease. Cost drivers were identified and a net cost was calculated. This data will allow for planning and decision making around limited health care resources.

PCN169
TREATMENT PATTERNS AMONG PATIENTS WITH BREAST CANCER: DOES INSURANCE STATUS MATTER?

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OBJECTIVES: To determine the publicly funded health care costs associated with breast cancer (BC) by stage of disease in the first two years following diagnosis. Patients were classified into the early stage group (stage 0-2) and the advanced stage group (stage 3-4). Logistic regressions were used to estimate the Odds ratios (ORs, with confidence intervals [95% CIs]) of receiving surgery, chemotherapy, and trastuzumab, and insurance status by stage. RESULTS: A total of 32,217,386 patients with breast cancer were retrieved from the database during the study period (2000-2011). Patients with private insurance, Medicare, Medicaid or no insurance were more likely to undergo partial mastectomy than the uninsured (OR 1.80, [1.78-1.83] respectively). The type and insurance status are associated with different treatment patterns. It may have an impact on clinical management of patients with breast cancer.

PN171
EFFICACY, SAFETY AND COST-EFFECTIVENESS OF TRASTUZUMAB IN METASTATIC GASTRIC CANCER TREATMENT IN CHINA

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OBJECTIVES: The study aims to systematically review the efficacy, safety and cost-effectiveness of trastuzumab in metastatic gastric cancer treatment in China. METHODS: A systematic review method was performed. We searched both national and international clinical, cost-effectiveness and disease burden studies mainly from database of Pubmed, MEDLINE, CNKI, etc. And health insurance status of trastuzumab in China was also collected. RESULTS: With inclusion and exclusion criteria, there were 8 clinical studies, 2 cost-effectiveness study and 19 disease burden studies finally recruited for the analysis. Clinical results showed that trastuzumab in combination with chemotherapy was effective and well tolerated in 14% of Asian patients. Trastuzumab plus chemotherapy had similar survival improvement (13.8 vs. 11.1 months) and progression-free survival (6.7 vs. 5.7 months). One cost-effectiveness study was performed with the cost-effectiveness of UK NHS, ICER of trastuzumab plus chemotherapy compared to second-line chemotherapy. Trastuzumab plus chemotherapy can be considered as a new standard option for HER2-positive metastatic gastric cancer patients. However, more evidences on efficacy, safety and cost-effectiveness of trastuzumab are still needed to support local public decision making on health insurance benefits update in China.