approval. RESULTS: PMW who initiated RLX following the IBCRR approval versus before approval were less likely to have a lower CDS after the IBCRR approval vs. before approval (medium AOR 0.71 [CI: 0.626, 0.805]). After the IBCRR approval, RLX initiators had a greater likelihood of having a code for family history of BC in the claims database (AOR = 1.761 [CI: 1.213, 2.536]) compared to RLX initiators before approval. PMW who registered RLX after IBCRR approval did not differ significantly from those who initiated before approval with regard to mammograms, fractures, BMD screening, and provider specialty. CONCLUSIONS: PMW who initiated RLX after the IBCRR approval were more likely to be older, have a lower CDS, and have a family history of BC compared with RLX cancer patients before approval. Factors such as mammograms, fractures, BMD screening, and provider specialty did not differ before and after the IBCRR approval.

PCN148

YEAR ONE EVALUATION OF PARTICIPATION AND COMPLIANCE IN REGIONAL PAY FOR QUALITY (P4Q) ONCOLOGY PROGRAM

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OBJECTIVES: The objective of this study was to evaluate the extent to which oncologist would participate and comply with a P4Q program employing clinical pathways.

METHODS: A P4Q program was enacted in five northeastern states, USA, beginning August 1, 2008. Feedback was provided to participants regarding compliance, and increased fee schedules in year 1 were adjusted in year 2 contingent on compliance in year 1. Compliance was measured through the claims submitted by participating practices on cancer patients starting a new line of therapy after August 1, 2008. Compliance was defined by provision of a drug or regimen not according to the defined pathway. RESULTS: A total of 362 physicians were eligible for participation (174 community based; 34 hospital based; 154 academic based). 49% of all physicians, 88% of community based, 44% of hospital based, and 6% of academic based physicians were informed of the P4Q program and were eligible for compliance analysis. Overall 85.9% of patients were judged compliant to treatment pathways (90.5% breast, 90.9% colon, 72.3% lung). Overall 95.4% of patients were compliant to supportive care pathways (100% CSF, 98.6% ESSAs, 91.5% antiemetics). CONCLUSIONS: This study suggests high levels of compliance with clinical pathways may be achieved. Participation varied greatly by practice type. Additional analysis should consider evaluation of alternate definitions of compliance (e.g. errors of omission rather than commission) and reasons for non-participation (e.g. overlap of compliance with potential financial advantage of participation).

PCN149

ELECTRONIC MEDICAL RECORDS: QUALITY CANCER CARE AND COST-EFFECTIVENESS

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OBJECTIVES: The objective of this study was to identify aspects of value of EMR use to providers in assessing and improving quality cancer care and 2) to identify issues in cost-effectiveness of EMR from the provider perspective. METHODS: A systematic literature review regarding perceptions of the quality of cancer care in the United States was conducted in PubMed, EMBASE, and Cochrane Reviews for the last 10 years, English only articles. Oncology medical subject heading (MESH) terms were cross-matched with quality of care MESH terms to obtain 875 abstracts. Of these, 140 publications were selected for full article review based on defined inclusion/exclusion criteria. RESULTS: Reports of EMR use among hospitals, hospital networks (for example, Veterans Hospital Administration), and moderately sized oncology practices indicated that providers rapidly obtained information on guideline adherence and determined whether patients received follow-up in physician offices. Cost savings were incurred across multidisciplinary teams because fewer tests were duplicated. Business management costs for billing were reduced. Other cost savings were lower labor costs due to reduced need for medical records staff, and staff to provide information among caregivers and to direct patient flow. Cost-effectiveness was variable for small physician practices, with some providers recovering the cost of the EMR system and others incurring serious financial problems as a result of implementing EMR use in their practices. CONCLUSIONS: EMR may be financially challenging for some small physician practices. However, EMR can improve patient care by providing guideline-adherent care and aid in more efficient processes of care, thereby improving overall quality of cancer care.

PCN150

TRENDS IN USAGE AND UPTAKE OF TARGETED CANCER THERAPIES VERSUS CHEMOTHERAPIES

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OBJECTIVES: The oncology market has become one of the major focus areas for pharmaceutical and biotech firms. As of March 2009, 15,752 of 39,747 Phase II, II, and III trials listed on clinicaltrials.gov, were related to cancer (approximately 40%). This huge interest in oncology stems from market success of cancer therapies launched in the past decade and the existence of high unmet need to treat different types of cancers. As the number of FDA approved cancer therapies increases there is a need to understand treatment patterns of these cancer drugs. METHODS: To understand the usage and sales of the therapies we analyzed trends of approval (prescription) 2005–2008 data for all FDA approved cancer drugs. Drugs were categorized as targeted cancer therapies, chemotherapies, monoclonal antibodies, small molecules, branded and generics. RESULTS: During the past five years the usage of targeted cancer therapies and chemotherapies increased by 66% and 30%, respectively. While the sales of both types of these drugs are expanding, the majority of sales growth is attributed to an increasing uptake of targeted cancer drugs. The sales share of targeted cancer therapies in the US oncology market increased from 36% in 2004 to 56% in 2008. Among targeted cancer therapies, majority (more than 75%) of uptake belongs to monoclonal antibodies. CONCLUSIONS: The usage and sales trends show a significant increase in the use of cancer drugs. The high usage of targeted cancer therapies versus chemotherapies shows the rapidly changing nature of cancer treatment regimen.

PCN151

CLINICAL AND SOCIO-DEMOGRAPHIC DETERMINANTS OF PRIMARY PROPHYLACTIC G-CSF USE IN ELDERLY BREAST CANCER MEDICARE BENEFICIARIES RECEIVING CHEMOTHERAPY

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OBJECTIVES: Systematic chemotherapy is a vital component of breast cancer management but early-onset toxicities like neutropenia hinder its administration. Primary prophylactic (PP) use of granulocyte-colony stimulating factors (G-CSF) helps prevent neutropenia and ensures successful chemotherapy completion. Nevertheless, lack of specific guidelines for G-CSF administration in the elderly has led to unexplained geographic and racial, and counter-intuitive clinical variations. For example, older individuals with higher co-morbidities (at higher neutropenia risk) have lower probability of G-CSF receipt. This study examined the reasons for these variations and for the first time looked at variations in G-CSF use across geographic, racial and clinical variations. METHODS: A retrospective observational study of newly diagnosed breast cancer patients receiving chemotherapy was performed using the 1994–2003 SEER-Medicare data. Univariate analyses and multi-variate logistic regressive were used to explore the determinants of PPG-CSF administration. Previously unexplored clinical and therapeutic characteristics (e.g. chemotherapy characteristics before the administration of PPG-CSF) were also included. RESULTS: Univariate analyses demonstrated geographic, racial and clinical disparities similar to previous studies. However, multi-variate analyses revealed that controlling for chemotherapy characteristics (type and number of drugs and between cycle duration) made the correlation of age and other clinical characteristics with PPG-CSF administration insignificant. Significant geographic and racial disparities existed. Exploration of geographic variations suggested that regions with higher rates of PPG-CSF administration have higher proportion of physicians administering them; none of the physicians using PPG-CSF administered it on a significantly higher proportion of their patients. CONCLUSIONS: Physicians’ decision to administer PPG-CSF is predominantly driven by neutropenia risk associated with pre-planned chemotherapy regimen. Older, sicker women at a higher risk of neutropenia received less intense/toxic chemotherapy thus did not require PPG-CSF. Geographic variations are driven by provider-level variations in PPG-CSF administration with no evidence for overlap among the providers. Racial and geographic disparities have no clinical basis and are a matter of concern.

PCN152

TREATMENT PATTERNS IN ADULT PATIENTS WITH METASTATIC RENAL CELL CARCINOMA IN THE US MARKET

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OBJECTIVES: To examine the prescribing patterns of the recommended pharmacologic treatments for metastatic renal cell carcinoma (mRCC). METHODS: A retrospective claims-based analysis was conducted that identified incident mRCC patients (18–64 years) in the Thomson Reuters MarketScan Commercial Claims Database (January 2005–September 2008). Patients were required to have at least 6 months of continuous enrollment before the index date. Treatment patterns were described as proportions of mRCC patients receiving the following guideline-recommended pharmacologic agents: immunotherapies (interferon-alpha and interleukin-2) and the newer targeted agents (sunitinib, sorafenib, bevacizumab, temsirolimus and everolimus) either as initial or second-line therapies any time on or after the index date. RESULTS: A total of 1390 patients with mRCC were included in the analysis. Mean age was 55.6 years and 70.3% were male. The mean continuous enrollment after diagnosis of metast-
Abstracts

taxes was 10.9 ± 8.9 months. The percentages of patients receiving at least one of these therapies increased from 10.5% in 2005 to 74% in 2008. Sunnitum use showed consistent increase from 0% in 2005 to 50% in 2008. Sorafenib with zero use in 2005 increased to 25% in 2006 but decreased thereafter to 11.7% in 2008. Interferon-α (range: 5-8%) and bevacizumab (range: 2-4%) use remained relatively stable during the observation period, whereas interleukin-2 and temsirolimus was used rarely (≤1%) and everolimus not at all. CONCLUSIONS: Pharmacologic agents were increasingly used to treat mRCC patients in recent years. Targeted therapies have become the main modality of treatment, with sunnitum accounting for most of the growth.

TREATMENT PATTERNS OF MALIGNANT ONCOLOGIST IN FIVE BIB: IIA, IIb and IB (17.6%, 20.0% and 16.9%, respectively). R rectum cancers, as non-resectable disease in 60.0% of cases in stage IV. Drugs used to treat metastatic renal cell cancer were interferon-α (80.0% and sunnuninb (9.0%), prescription is driven by drug availability and efficacy, respectively. Discontinuation rate of interferon-α was 90.0%. CONCLUSIONS: Knowledge of oncology current medical practice provides a basis for evaluation, as well as supports decision making process and the generation of new strategies for policy makers.

COLORECTAL CANCER HOSPITAL ADMISSIONS IN WEST VIRGINIA FROM 2003 TO 2007
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OBJECTIVES: Colorectal cancer (CRC) is the third most common form of cancer in men and women in West Virginia. Hospitalization followed by surgical resection is the standard curative treatment. The aim of this study is to examine colorectal cancer hospitalizations and common comorbidities and evaluate associated outcomes during the standard curative treatment. The aim of this study is to examine colorectal cancer hospitalizations and common comorbidities and evaluate associated outcomes during the standard curative treatment. The aim of this study is to examine colorectal cancer hospitalizations and common comorbidities and evaluate associated outcomes during the standard curative treatment. The aim of this study is to examine colorectal cancer hospitalizations and common comorbidities and evaluate associated outcomes during the standard curative treatment. The aim of this study is to examine colorectal cancer hospitalizations and common comorbidities and evaluate associated outcomes during the standard curative treatment. The aim of this study is to examine colorectal cancer hospitalizations and common comorbidities and evaluate associated outcomes during the standard curative treatment. The aim of this study is to examine colorectal cancer hospitalizations and common comorbidities and evaluate associated outcomes during the standard curative treatment.