PCN132

COST OF BREAST AND CERVICAL CANCER TREATMENT AND FOLLOW-UP CARE IN MEDICAID BENEFICIARIES: IMPLICATIONS FOR STATE PROGRAMS PROVIDING COVERAGE FOR LOW-INCOME WOMEN

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OBJECTIVES: To date, no study has reported on the cost of treating breast and cervical cancer among Medicaid beneficiaries younger than 65 years. This study estimates the incremental cost of breast and cervical cancer treatment among Medicaid beneficiaries under age 65. METHODS: Administrative data from the North Carolina (NC) Medicaid program linked with the state cancer registry for all women aged 20–64 in NC under age 65 diagnosed with breast or cervical cancer from 2002–2009 were used to calculate total Medicaid costs for medically underserved low-income women aged <65 years diagnosed with breast and cervical cancer who are eligible for the Medicaid program and the incremental costs for breast and cervical cancers aged 12, 24, 36, and 48 months after diagnosis. We used a two-stage approach to estimate the impact of breast and cervical cancer by stage at diagnosis on total Medicaid expenditures from time of diagnosis through 6, 12, and 24 months. All analyses were completed using SAS. RESULTS: The total incremental Medicaid costs (standard error) of treating breast cancer relative to no cancer at 6 months after diagnosis was $11,350 ($760), $20,227 ($1,146), and $28,911 ($3,422) for those with local, regional and distant cancers, respectively. These costs increased 33.0%, 43.7%, and 50.6% at 12 months; and 19.3, 45.4, and 73.6% at 24 months, respectively. For cervical cancer, these costs were $11,995 ($2,043) and $20,753 ($2,299) for those with early and advanced stages. These costs increased 63.0%, 103.3%, and 186.7% at 12 months. As expected, women whose cancers were detected at a local stage incurred lower medical expenses compared with women with invasive cancers. CONCLUSIONS: Our study shows that NC Medicaid beneficiaries with late stage cancers incurred higher medical costs. Increased survival for advanced stages after the date of diagnosis: Improved early detection of breast and cervical cancer among low-income women could potentially reduce the financial burden to the Medicaid program.

PCN133

A SUCCESSFUL ADOPTION OF PERSONALIZED MEDICINE: EXAMPLE OF KRAS MUTATIONAL ANALYSIS

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OBJECTIVES: This study examines KRAS mutational analysis in metastatic colorectal cancer as an example of a successfully adopted personalized medicine technology. Objectives are to describe factors involved in the adoption of KRAS mutational analysis and to examine relationships between factors over time. METHODS: We use a two-stage approach to describe and analyze factors that influence the adoption of KRAS mutational analysis in metastatic colorectal cancer. We use a data collection framework called the Evaluation Data for Assessing Personalized Medicine’s Translation (EDAPT) to collect and organize data on KRAS mutational analysis. EDAPT focuses on collecting data on clinical application, economic, policy and regulatory issues using structured reviews of academic and gray literature. We used Innovation-Decision Theory to analyze how factors emerged over time and relationships between factors. RESULTS: Initial studies suggesting association between KRAS status and drug efficacy led to industry-supported retrospective analyses of RCT data. After assessing evidence via systematic review, National Comprehensive Cancer Network and American Society of Clinical Oncology signaled acceptance of KRAS mutational analysis by issuing clinical guidelines, thereby making KRAS mutational analysis standard of care. The clinical guidelines were influential in implementation of payor coverage policies, which led to discussions at the FDA regarding use of retrospective data. We detect a pattern: 1) Retrospective analyses of RCT data increased knowledge of the technology among stakeholders; 2) A systematic review of evidence concluded that evidence surrounding the technology was robust; 3) Persuaded by the review’s conclusion, provider organizations decided to accept the technology and communicated this decision to providers; 4) Clinical guidelines influenced payor policies, which framed the implementation of the technology into health care. Provider organization decisions swayed regulatory agents’ recognition of these retrospective analyses, which framed the implementation of the technology into health care. Provider organization decisions swayed regulatory agents’ recognition of these retrospective analyses, thereby confirming acceptance of the technology. CONCLUSIONS: This example illustrates how evidence of clinical utility and provider organization support can drive rapid adoption. We propose an application of the Innovation-Decision Theory that may help to anticipate future trends in personalized medicine.

PCN134

THE ECONOMIC IMPACT OF CONTOUR VERSUS HAND SEWN SUTURE AND OTHER MECHANICAL STAPLES IN LOW ANTERIOR RESECTIONS IN COLON RECTAL CANCER SURGERY: INTERIM RESULTS USING REAL WORLD DATA FROM PREMIER’S HOSPITAL DATABASE

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OBJECTIVES: The CONTOUR® Curved Cutter Stapler is designed to allow for increased visibility of anatomical structures. As a result, it is currently being used for colon rectal procedures where Low Anterior Resection (LAR) is necessary. To assess the impact this technology has on hospital operations, length of stay, and surgery time, this research compares the contour stapler to traditional staples and to other staplers for colon rectal procedures where Low Anterior Resection (LAR) is being performed. METHODS: A retrospective analysis was completed using Premier’s de-identified hospital database and enrollment information for the fourth quarter of 2008. Multivariable analysis evaluated the effect of the contour stapler vs. traditional sutures and the contour stapler vs. other staplers on hospital costs, length of stay, and surgery time while controlling for patient severity. This abstract reports preliminary findings. RESULTS: There were a total of 356 procedures meeting inclusion criteria. Patients were identified, through patient billing files, as using the Contour stapler, 41 procedures were identified as traditional sutures only and the remaining 3,308 reported the use of another stapling device. When comparing the Contour patients to the suture only patients and the other staple patients, on average hospital costs were as follows: Contour ($23,742.52) vs. sutures ($24,547.66) and other staplers ($24,845.59). Multivariable findings for Contour vs. traditional sutures were statistically significant for hospital costs with the interaction between contour vs. traditional sutures and patient severity being significant. These findings suggest that the more severe patients will have higher hospital costs with traditional sutures than they will with Contour. Length of stay and surgery time were not statistically significant for either comparison. CONCLUSIONS: Contour appears to be cost saving when compared to traditional sutures, especially when the case is severe and cost neutral when compared to other staples.

PCN135

CONTROLLING THE COST OF CARE OF BREAST CANCER PATIENTS IN GERMANY USING CLINICAL PATHWAYS

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OBJECTIVES: In Germany, development of clinical pathways in routine health care settings is a slow process. Our main objectives were: 1) to introduce proper clinical pathways of breast cancer (BC) management in a large hospital in Munich, Germany, 2) to identify problems in the implementation process of clinical pathways, and 3) to suggest steps for further improvement of clinical pathway strategies. METHODS: In collaboration with health care professionals (HCPs) working in a large Munich hospital, we developed a clinical pathway algorithm for management of BC patients and introduced it to that hospital for implementation. Then we developed a standardized checklist to measure the success of the clinical pathways program based on various clinical indicators, reported by HCPs included in BC management. And finally, we compared health economics data of two groups of patients with primary diagnosis of BC: intervention group (n = 45), which was managed according to our clinical pathways in 2004, and comparator group (n = 65), which was managed in 2003 prior to introduction of clinical pathways. RESULTS: Mean duration of hospitalization in intervention group was slightly higher compared to comparator group (9.08 vs. 8.75, respectively), but approximately 51% of patients in intervention group were discharged from the hospital within 7–8 days compared to 40% in comparator group. About 73% of patients in intervention group have been admitted 1 day prior to operative treatment, compared to 93% of patients in comparator group. By means of a survey we learned, that only a small percentage (up to 17%) of HCPs in that hospital were aware of the detailed processes of clinical pathways. CONCLUSIONS: Clinical pathways are important tools in that they optimize health care processes and can potentially lead to cost savings through optimal care. However, proper training and active involvement of HCPs in the implementation of clinical pathway processes is important.

PCN136

THE IMPACT OF PROSTATE CANCER AMONG CAUCASIAN AND AFRICAN AMERICANS IN A HOSPITALIZED SETTING

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OBJECTIVES: Prostate cancer is the second most common cause of death from cancer in men of all ages and the most common cause of death from cancer in men over 75 years old. The mortality rates in African-American men are more than twice that of Caucasian men, even after attempts to adjust for access-to-care factors. Even with increases in screening, African American men still experience high incidence and mortality rates than all races. Therefore, the specific aim was to examine differences affecting Caucasian and African American men with prostate cancer in a hospitalized setting. METHODS: The study design was an exploratory, nonrandomized, secondary data analysis of the 2006 HCUP—NIH. Ten percent of the subsample was used. Only Caucasian and African American men with a primary diagnosis of prostate cancer (ICD-9 Code = 183.2) were included. SPS 15.0 was used to analyze the data. RESULTS: The study population consisted of 9,736 Caucasian Americans (87.8%) and 1,387 African Americans (12.5%). Results of the t-test (p = .0000) indicated that Caucasian Americans experienced a significantly lower average length of stay than African Americans (3.04 vs 5.04 days, respectively). Based on the regression analysis, the model was significant (F = 520.746, p = .000; R2 = 27.6%). Six of the eight variables were significant; race, income, admission source, principal procedure, length of stay, and died during hospitalization, each with a p < .0000 value. The mean for total charges was $22,923, with a standard deviation of $33,139. CONCLUSIONS: The study found that racial differences were found among the two groups. These findings may assist health care entities in determining additional factors which could aid in the fight against prostate cancer. In addition, private payers (including HMOS and Medicare) would especially be interested in which entity represented the bulk of expected primary payers for the hospitalized patients.