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SESSION I

HEALTH POLICY I

HP1

VALIDITY OF THE MINIMUM-DATA-SET-BASED QUALITY INDICATOR FOR DETERMINING THE PREVALENCE OF ANTIPSYCHOTIC MEDICATION USAGE AMONG LOW RISK NURSING HOME RESIDENTS: A STATEWIDE ASSESSMENT

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OBJECTIVE: The Minimum Data Set (MDS) is an international facility-reported database used to standardize the assessment process and improve the quality of care in nursing homes. Specific MDS assessments are used as quality indicators to determine the prevalence of antipsychotic prescribing as well as potentially inappropriate antipsychotic usage. MDS classifies low-risk residents as receiving an antipsychotic medication but having no documented psychotic or related condition and no cognitive impairment with behavioral symptoms. Without an audit of resident records, it is impossible to determine if the MDS accurately reports the prevalence of antipsychotic medications and whether all low-risk residents represent inappropriate prescribing. The purpose of this study was to determine MDS validity for identifying low-risk residents in Texas.
METHODS: Facility-based MDS assessments were compared to independent on-site assessments. A team of pharmacists reviewed the chart records of low risk residents and determined whether a resident received an antipsychotic medication and the presence or absence of a valid indication. These findings were compared to the statewide MDS quality indicator prevalence rate.
RESULTS: Based on MDS assessments, 10,163 residents from 1021 nursing homes were identified as low risk. The chart records revealed that 12.4% of these residents were not receiving antipsychotic medication. Of the 8904 residents who were receiving an antipsychotic, 48.2% had a valid diagnosis or indication and were mistakenly identified as low-risk by the MDS database. Of the remaining 4610 residents, 84.4% were missing a diagnosis and 15.6% had an inappropriate indication.
CONCLUSION: For this population of residents, a lack of accurate essential diagnostic information in MDS assessments and a high prevalence of inappropriate antipsychotic prescribing was found to be a widespread problem. These findings indicate that nursing facilities were inaccurate in their responses to MDS assessment items and therefore, the MDS had poor validity as a quality indicator for antipsychotic use.

HP2

TRANSLATING EVIDENCE TO PRACTICE IN BREAST CANCER

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OBJECTIVE: Practice guidelines are being implemented for many diseases to improve outcomes, increase use of evidence-based medicine, and to reduce medical errors. Rarely are these efforts systematically evaluated in clinical care. We chose breast cancer in women as one disease that has excellent scientific evidence on treatment efficacy but almost no data on actual use in physician practice.
METHODS: We studied use of breast conserving surgery, breast reconstruction, adjuvant chemotherapy, radiation, taxoids, tamoxifen, and aromatase inhibitors in eligible women. The population was diagnosed between 1995 and 2000 in six surgical oncology practices in the eight counties around Philadelphia with nearly seven million people. Four thousand three hundred ninety five women were enrolled and followed retrospectively up to five years after diagnosis. We abstracted each patient's complete clinical record.
RESULTS: Lumpectomy was provided to 51.0% of women, among whom 2.3% also had reconstruction. Forty nine percent of women (49.0%) had mastectomy with 18.0% having breast reconstruction, 56.8% received radiation therapy and 32.3% received adjuvant chemotherapy. Among eligible women, 0.6% had aromatase inhibitors and 12.3% were prescribed taxoids. Among estrogen and/or progesterone-receptor-positive women, 72.4% got tamoxifen, while 35.1% with negative estrogen and progesterone receptors got tamoxifen. One woman refused all treatment, one refused any breast surgery, five refused adjuvant chemotherapy, two refused radiation. Eight percent of eligible women refused tamoxifen, mainly because of elevated risk of adverse side effects, and one had an autologous bone marrow transplant. Logistic regression found that breast reconstruction was in-

versely related to patient age (p = .0029), tamoxifen varied directly with patient age (p = .0002) but inversely with physician age (p = .02), and adjuvant chemotherapy and taxoids varied inversely with patient age (p < .0001).
CONCLUSIONS: Two decades of multiple randomized control trials and meta-analyses have led to only modest success in the use of highly beneficial treatments for breast cancer in these specific oncology practices, although non-beneficial treatments are almost never used.

HP3

REGIONAL VARIATION IN PRESCRIPTION USE IN THE UNITED STATES

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OBJECTIVE: To evaluate the factors influencing the utilization of prescribed medications across the United States.
METHODS: Prescription claims data for a random sample of commercially insured Express Scripts members, 18 to 64 years of age and continuously eligible for at least two months in 1999 (N = 1,467,699), were geo-coded at the block group level. Key independent variables included age, gender, family size, median income, education, urban/rural location, client type, and pharmacy benefit design. Outcome measures included any use of prescriptions. Hierarchical modeling (HLM) was used to control for clustering of patients within health plans.
RESULTS: Results from HLM indicate that after controlling for demographics, client type, and pharmacy benefit design, variation in the probability of using a prescribed medication was found across regions of the country. Members in the South have a greater likelihood of use and members in the Northeast and West having a lower probability of use than members in the Midwest. A greater probability of use was associated with older age, female gender, higher income, family size >1, and enrollment in a managed care plan. Factors associated with lower probability of prescription use included presence of a deductible, living in an urban area and having a mandatory generic policy.
CONCLUSIONS: While patient age and gender remain key factors driving prescription utilization, socioeconomics, pharmacy benefit design, and where a person lives are also predictors of prescription use. Future research is needed to better understand the causative roles of disease burden, physician practice style, and consumer preferences in prescription drug use variation across the United States.

CANCER I

CN1

BRIEF ASSESSMENT OF PRIORITY SYMPTOMS IN HORMONE REFRACTORY PROSTATE CANCER (HRPCA)

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OBJECTIVE: The objective of this study was to derive a brief, clinically relevant symptom index for men with HRPCa.
METHODS: An international sample of 44 medical oncologists, radiation oncologists, and urologists were presented with 29 disease-related symptoms derived from the Functional Assessment of Cancer Therapy-Prostate (FACT-P) quality of life (QOL) instrument and asked to select the five most important symptoms in assessing the treatment response for men with HRPCa. Symptoms endorsed at a frequency greater than chance were retained for the index. Retrospective validation of the index was accomplished using data from a multi-national, randomized, double-blind, placebo-controlled clinical trial of atrasentan, a selective, oral ET-A receptor antagonist. The FACT-P and European Organization for Research and Treatment of Cancer (EORTC) QLQ-C30 administered at baseline, six weeks and final visit were used to evaluate QOL responses to treatment of 288 men with HRPCa.
RESULTS: Experts initially selected eight priority symptoms. Item-Response Theory analysis identified one misfitting item (worry), lending support for a seven-item index (FPSI-7). Internal consistency was high for the seven-item index (0.75). Concurrent validity was established through correlations ($P < 0.05$) between the FPSI-7 and the FACT-General (FACT-G; $r = 0.56$); FACT-P ($r = 0.73$); FACT Prostate Cancer Subscale (PCS; $r = 0.88$); Trial Outcome Index (TOI; $r = 0.83$); and QLQ-C30 global score ($r = .56$), symptom domain scores ($r = -0.33$ to -0.76), and generic domain scores ($r = 0.36$ to 0.60). The FPSI-7 successfully differentiated patients by functional status, measured by the Eastern Cooperative Oncology Group (ECOG) performance status rating (PSR, $p < .001$), and clinical outcome, measured by disease progression status ($p < .001$). PSR and disease progression are important outcomes for patients and clinical trials. The FPSI-7's responsiveness to PSR change compared favorably to the FACT-G, PCS, FACT-P and TOI.
CONCLUSION: The FPSI-7 is a valid and responsive symptom index that can provide efficient, rapid symptom assessment to evaluate treatment outcome in clinical trials.

CN2

RESOURCE CONSUMPTION RELATED TO MUCOSITIS IN LYMPHOMA PATIENTS RECEIVING HIGH-DOSE CHEMOTHERAPY WITH AUTOLOGOUS PBPC TRANSPLANTATION

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OBJECTIVES: To evaluate resource consumption related to mucositis in lymphoma patients receiving high-dose chemotherapy (HDC) with autologous PBPC transplantation.