PHP18

TRENDS IN BEERS DRUG USE IN THE DUALLY ELIGIBLE MEDICARE AND MEDICAID POPULATION USING THE 1997 BEERS DRUG LIST FROM 1999 THROUGH 2004

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OBJECTIVES: To examine trends of potentially inappropriate prescribing in a population dually eligible for Medicare and Medicaid during the period 1999 through 2004. METHODS: Descriptive analyses (population parameter assessments) were conducted on the 1999 through 2004 Medicaid files for dually eligible enrollees. Inappropriate drugs independent of diagnosis as identified by the 1997, beers drug list were analyzed. RESULTS: Proportionally, decreases in Beers drug use occurred in the initial year, 1999-2000; thereafter Beers drug use increased. The younger elderly (i.e., 65-74 years old) showed an increase in Beers drug use from 1999 to 2000 (20%) while older elderly (age 85+) showed a decrease in use (11%). Hispanics had the greatest increase in use of Beers drugs (13%) during the study period followed by African-Americans (10%). Our results indicate that for central nervous system products prescribing patterns increased by 43.2% for the dually eligible population during this period of time, followed by neuromuscular prescriptions (31.92 percent) as compared to all Beers prescriptions dispensed. Within therapeutic category, we found that Beers drug use for neuromuscular drug products had the highest increase during the study period at 13.42% followed by central nervous system drug products at 4.57%. CONCLUSIONS: Our results underscore the need for medical professionals to make a conscious effort to familiarize themselves with Beers drugs so that when treating the elderly these risks can be reduced. We found that Beers drugs use among the younger elderly (65-74) was increasing. We also found that Beers drug use is increasing among the Hispanic-American and African-American populations.

PHP20

A SYSTEMATIC LITERATURE REVIEW OF ELECTRONIC MONITORING DEVICES FOR MEASURING MEDICATION ADHERENCE

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OBJECTIVES: Self-reported questionnaires provide an easy way to measure adherence, however they can be subject to misrepresentation. This study reviewed electronic monitoring devices for measuring adherence to oral, inhaled, and injectable medications. METHODS: The literature search was performed from 1980-2008 using PubMed, Pubmed In Process and Non-Indexed, OVID MEDLINE, PsychINFO (EBSCO), CINAHL (EBSCO), OVID Healthstar, EBEme (Elsevier), and Cochrane Database. The search terms were patient compliance, medication adherence, treatment compliance, drug monitoring, drug therapy, electronic, digital, computer, monitor, monitoring, drug, drugs, pharmaceutical preparations, compliance, and medications. Two authors independently reviewed titles and abstracts, which were ranked by 3-point scoring (1 point for monitoring device, 1 point for adherence topic, and 1 point for medication) for relevance and publications were retrieved in full text for data extraction. Additionally, a search on the United States patents was performed for relevant information. RESULTS: From 1679 relevant citations, full-text review was conducted for 156 articles (scored 3 points), of which 123 studies (79%) used electronic medication monitoring system (MEMS) caps. A total of 46 (30%) of all studies used electronic monitoring devices in clinical trial settings. Adherence was measured in 105 (67%) studies, most frequently in HIV/AIDS (n = 26), followed by hypertension (n = 8), depression (n = 7), diabetes (n = 7), and asthma (n = 6). Additionally, 174 of the reviewed studies (47%) of studies and were able to correlate moderately well with electronic measures of adherence. No peer-reviewed studies using a monitoring device for injectable medications were found. Secondary search found 21 US patents relevant to medication monitoring, particularly three were designed for injectable regimens. CONCLUSIONS: MEMS remains a dominant device for measuring medication adherence. Commercialization of a device for measuring adherence with injectable and inhaled regimens may address the gap in health outcomes research for patients who have medical needs for these drugs.

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EQUITY AND ACCESS TO GENERIC DRUGS: A COMPARISON OF GENERIC DRUG DISCOUNT PROGRAMS OFFERED BY CHAIN PHARMACIES IN THE UNITED STATES

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OBJECTIVES: Wal-Mart Stores (WMS) was the first pharmacy to offer the Generic Drug Discount Program (GDDD) in 2006. The objective of this study was to compare GDDPs offered by large chain pharmacies in the United States. METHODS: A prospective cross-sectional field study was conducted by obtaining data (March 2008 to November 2008) on GDDPs offered by 100 pharmacies in 2008, compared to those offered in the 2007 data. Data was obtained from the pharmacy included GDDPs offered, type of GDDD (patient cost for 30/90 day supply (DS)), number and type of drugs covered. Data coded in an excel sheet was analyzed by considering the WMS program as a reference to evaluate similarities/differences among GDDPs. Comparison were further performed by matching drugs covered in each GDDD to GDDD offered by WMS (by units) consumed in the US in 2007. RESULTS: A total of 22 (of 37) pharmacies offered GDDPs. The patient sharing cost ranged from $3.99 to $9.99 for a 30DS and from $9.99 to $15.99 for a 90DS. Seven GDDPs (31.8%) were similar to WMS program with respect to number of generics covered (300-400), cost for 30DS ($4), and cost for 90 DS ($10). Four GDDPs (18.2%) were identified as not at par with the WMS program, while 10 (45.4%) were identified as superior. The superior GDDPs offered more drugs (>400), while the inferior programs offered the same or less number of drugs at a higher cost ($9.99 for 30DS, and $12.99-$15.99 for 90DS). The GDDPs varied by the number of top 100 drugs covered with 72.7% covering more or same number of top 100 drugs as WMS. CONCLUSIONS: GDDPs were different across pharmacies in terms of number and type of generic medications covered, and cost for 30/90 day supply. Patients can save on generic drugs if they make the right choices.

PHP33

UNMET PRESCRIPTION MEDICATION NEED DUE TO COST, HEALTH PLAN PROBLEM, AND LACK OF INSURANCE OF CHILDREN IN THE UNITED STATES: RESULTS FROM NATIONAL SURVEY OF CHILDREN’S HEALTH 2003 DATA

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OBJECTIVES: To examine the nature of unmet prescription medication need (UPMN) due to cost, health plan problem and lack of insurance using 2003 National Survey of Children’s Health (NSCH). METHODS: A nationally representative sample of 102,333 children under 18 years of age from 2003 and 2004 NSCH was used for analysis. Children who did not get all the prescription medication needed in the past twelve months due to cost, health plan problem or lack of insurance were examined. Multivariate logistic regression for UPMN due to cost revealed that children with attention deficit hyperactive disorder (Odds Ratio (OR), 2.39) or asthma (OR, 3.15) were more likely to report UPMN due to cost and children having public insurance (OR, 0.26) or gained insurance (OR, 0.26) were less likely to report UPMN due to cost. Logistic regression models were run to examine health plan problem revealed that racial group other than whites and blacks (OR, 4.35), children with public insurance (OR, 1.19) and gained insurance (OR, 2.85) were more likely to report UPMN due to health plan problem. Lastly, children of 5–11 years (OR, 1.18) and 12–17 years (OR, 6.15) were more likely to report UPMN due to lack of insurance. CONCLUSIONS: Several predisposing, enabling and need factors are associated with UPMN due to cost, health plan problem and lack of insurance. Findings suggest that there is a need to focus on certain sociodemographic groups to improve access to prescription medication for children.