OUTCOMES AND COSTS ASSOCIATED WITH FERTILITY DRUG THERAPY IN AN INSURED POPULATION WITH A STATE FERTILITY MANDATE

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OBJECTIVES: To estimate the proportion of all very-low and moderately-low-birthweight (VLBW, MLBW) infants and the short-term costs associated with fertility therapy in an insured population with a state mandate that requires coverage for fertility drugs but not in vitro fertilization (IVF) or drugs used with IVF. METHODS: The study sample consists of all live births, 2003-2007, that could be linked to mothers with continuous pharmacy and medical benefits eligibility during the 11 months before delivery and within a geographically and commercially insured subset of a commercially insured plan. Likely causal relationships with fertility therapy are deduced and categorized as clomiphene or follicle-stimulating hormone (FSH): i) intrauterine insemination (IUI) or IVF, based on the intervals between the dates of delivery and claims for IUI, clomiphene, FSH, or embryo transfer. Birthweight is categorized from claims coding. Maternal and infant claims charge distributions are characterized. RESULTS: Of 31,708 live births from 30,905 deliveries by 27,195 distinct women, clomiphene, FSH, and IUI + IVF categories respectively account for 4.2%, 2.8%, 0.7% of the total number; 8.9%, 16.4%, 3.9% of all VLBW; 8.7%, 12.1%, 3.3% of all MLBW. Mean infant charges during the 12 months after birth were not significantly different from other infants in the same birthweight categories. Mean charges during first 12 months for all VLBW, MLBW, and other infants, were respectively, $248,680, $33,560, $6,990, and low-birthweight infants collectively accounted for 41.6% of all claims charges for infants. Differences in mean maternal charges are explained by fertility therapy, Caesarean section, and multiple gestation. CONCLUSIONS: Analysis of administrative claims data can supplement IVF registry data and published single or multicenter studies to inform models that predict outcomes and costs associated with different policy choices.

POTENTIALLY INAPPROPRIATE MEDICATION USE IN ELDERLY USING JAPANESE BEERS CRITERIA

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OBJECTIVES: Japanese version of Beers criteria (JP-BC) for potentially inappropriate medications in elderly patients was developed by consensus among nine specialists in order to reflect regional medical practice and available medications. The prevalence of, and factors and medical costs associated with JP-BC were examined. METHODS: A cross-sectional study was conducted using health insurance claims data in Japan. Patients aged 65 years or older and had a pharmacy claim between October 2006 and September 2007 were selected and the use of JP-BC was identified. Associations with patient demographics, health care utilization patterns and co-morbidities were assessed using logistic regression models. Medical costs associated with the JP-BC were also examined using generalized linear models. RESULTS: Among 6991 old patients, 41.2% were used one of the JP-BC. Commonly used medications were H2 blockers (19.5%), benzodiazepines (10.9%) and antiarrhythmics and antihtensives (7.8%). Patients with multiple medications were at higher risk for inpatient care and multiple medications among JP-BC were partly explained by their high likelihood of multiple medica
tions and long-term inpatient care. CONCLUSIONS: The prevalence of potentially inappropriate medication use in Japan was relatively higher than those previously reported in other countries even though regional specific medications were considered. Drug utilization reviews using the criteria must be promoted to increase awareness of inappropriate pharmaceutical care among elderly and control medical costs.

THE IMPACT OF MEDICARE PART D ON HEALTH CARE UTILIZATION AND HEALTH OUTCOMES FOR MEDICARE BENEFICIARIES WITHOUT PREVIOUS DRUG COVERAGE

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OBJECTIVES: To examine, using nationally representative data, the impact of Medicare Part D on medication utilization, out-of-pocket costs, non-drug medical service utilization, and health outcomes among civilian non-institutionalized Medicare benefi
ciaries without prescription drug coverage prior to the implementation of Medicare Part D. METHODS: The primary data were from the Medical Expenditure Panel Survey (MEPS) 2005 and 2006 data and the corresponding 2005 and 2006 pharmacy com
potent data. This study included Medicare beneficiaries between 65 and 79 years old that had only Medicare Fee for Service (FFS) in 2003. Patients between 55 and 63 years old with no drug coverage in 2003 served as control subjects. Difference-in-difference methodology was used to identify the effects of Medicare Part D on health care utilization, expenditures, non-drug medical service utilization, and health outcomes among Medi
care beneficiaries. RESULTS: The mean amount paid by the near elderly without insurance in 2005 declined 7.8%, while the mean amount paid by Medicare benefi
ciaries with Medicare FFS only in 2003 decreased 46.6%. The number of prescription
refills of the near elderly increased 10.35%, while there was only 4.3% increase among the Medicare beneficiaries. ER visits among the Medicare FFS group declined 2.6%, while the number of ER visits among the near elderly increased 0.94%. There was only 0.3% increase in pharmacy services among the Medicare beneficiaries. CONCLUSIONS: Evidence from the MEPS data set suggests that Medicare Part D reduced out of pocket costs, drug utilization, and ER visits among patients without prior coverage. While cost reduction was expected, the reduction in utilization of drugs was not. Future research should further examine these trends.

RELATIONSHIP BETWEEN DRUG COST COVERAGE AND PRESCRIPTION DECISION MAKING IN MEDICARE PART D ENROLLEES

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OBJECTIVES: The Medicare Part D prescription drug benefit was introduced for Medicare enrollees to obtain prescription drug coverage. The 2006 benefit did not provide insurance for coverage for standard prescription drug plan (PDP) members who incurred prescription costs between $2250 and $3600 (referred to as the “doughnut hole”). We evaluated whether the “doughnut hole” was a factor in altering the prescription fulfillment decisions of Part D enrollees. METHODS: In the current retrospective, administrative claims data from a nationally representative Part D HMO pharmacy database were investigated for the year 2006. Five hundred par
ticipants (standard PDP members) without coverage in the doughnut hole were com
pared to a group of 250 participants (enrolled PDP members) whose prescription coverage did not lapse in the doughnut hole. All participants were analyzed via a multivariate strategy for their prescription fulfillment decisions which were recorded as an endpoint of filling, delaying, switching, or stopping their respective medication. RESULTS: From 72% of the standard PDP members who experienced the doughnut hole and altered their prescription decision, it was determined that 22% delayed