Abstracts

PCASE7

INCLUDING A PHARMACOECONOMIC MODEL IN THE FORMULARY REVIEW PROCESS OF NEW
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1Blue Cross Blue Shield of Vermont, Berlin, VT, USA, 2Pfizer, Jericho Center, VT, USA
Organization: Blue Cross Blue Shield of Vermont
Problem or Issue Addressed: Approval of new prescription products by the Federal Drug Administration dictates that organizations review the medication and consider the drug’s position on the formulary. Pharmacy and Therapeutics Committee members are required to consider many factors.
Goals: Utilize a pharmacoeconomic model to evaluate the impact of pregabalin per member per month (PMPM) costs and incorporate this information into the formulary review process to determine the appropriate formulary status of pregabalin.
Outcomes items used in the decision: Per member per month (PMPM) costs, and the organization’s drug costs and utilization patterns of selected agents for epilepsy and neuropathic pain were reviewed.
Implementation Strategy: Drug utilization data for all second generation antiepileptic drugs and medications commonly used to treat neuropathic pain were reviewed. The drug costs per day and the number patients prescribed each drug were collected monthly. Total drug costs and PMPM costs were calculated for each month between September 2005 and November 2006 using Therapy Cost GPS. Therapy Cost GPS is an analytical software tool, developed by Pfizer, Inc. that supports the development of cost models to assess the financial impact of formulary changes before they are established and accurately evaluates their impact once they have been implemented. The results were compared to the same parameters from August 2005, which served as a baseline before pregabalin was available. The available results were included with the pregabalin formulary presentation to the Pharmacy and Therapeutics Committee in April 2006, with the commitment for continual evaluation.
Results: A total of 6259 patients received drugs targeted for analysis in August 2005, accounting for $1,829,626 in total drug costs, and a PMPM cost of $1.02. In November 2006 after 15 months, 5825 patients received drugs targeted for analysis, and total drug costs decreased by 7.2% to $1,698,187. The PMPM cost was reduced to $0.94, a reduction independent of patient number. During November 2006 pregabalin prescribing was limited, accounting for approximately 2% utilization of comparator drugs. Mean (+/- SD) monthly values during the 15-month data collection period for number patients, total drug costs and PMPM cost were: 5761 (326), $1,726,090 ($42,008), $0.96 ($0.02), respectively. The data suggests pregabalin usage and PMPM costs are projected to remain stable. Shifting drug utilization patterns and reductions in the cost of generic gabapentin likely accounted for the reduced PMPM cost.
Lessons Learned: Because pregabalin utilization was limited and did not increase the PMPM costs, it was decided to continue the drug’s position as an unrestricted third tier agent, without the need to implement a step edit or prior authorization requirement.

PCASE8

POLYPHARMACY MEDICATION THERAPY MANAGEMENT PROGRAM (MTMP) CASE STUDY
Walgreens Health Services, Deerfield, IL, USA
Organization: Walgreens Health Services
Problem or Issue Addressed: Approximately one-third of the elderly population is at risk for polypharmacy and its complications. Polypharmacy increases patients’ risks for many ill effects, including drug interactions, non-adherence, hospitalizations, morbidity and mortality.
Goals: The WHS Polypharmacy MTMP is designed to ensure optimum therapeutic, clinical and financial outcomes by promoting proper prescribing and improving patient medication use. Three polypharmacy cases were examined to illustrate the process of polypharmacy intervention process and how such interventions may help reduce health care expenditures.
Outcomes items used in the decision: a) Drug therapy outcomes: reduction in drug interactions and therapeutic duplications, ensuring appropriateness of medication therapies and improved compliance and persistency; b) Literature-based clinical outcomes: reduction in the incidence and severity of adverse events including falls and fractures, hospitalizations, nursing home admissions, morbidity and mortality; c) Financial outcomes: pharmacy and medical cost savings.
Implementation Strategy: 1) Identify polypharmacy MTMP candidates based on number of disease states, number of maintenance medications and estimated yearly drug spend; 2) Enroll polypharmacy MTMP candidates according to program specification (Opt-in or Opt-out model); 3) Review member medication profiles by pharmacists at the MTM clinical call center, utilizing a Medication Appropriateness Index; 4) Contact the prescribing physician to discuss the identified medication-related issues and recommend possible therapeutic solutions; 5) Document the results of the clinical intervention and fax/mail a copy of the Medication Action Plan (MAP), Personal Medication Record (PMR) and dosing calendar to the participant’s community pharmacist and/or patient; 6) Counsel patient on therapy changes and proper medication use; 7) Follow up on polypharmacy intervention outcomes.
Results: Case One: Ten medications were intervened upon by MTM call center pharmacists after a patient’s medication history was reviewed. Specific interventions accepted by the prescriber included: combining multiple medications to a single medication for the purpose of decreasing pill load; generic substitution to reduce cost; reducing dosage to help ensure safe dosage in the elderly; discontinuing duplicated medication. Assuming all medications were maintenance medications and the patient would be in full compliance with the recommended medications for the next 12 months, the total pharmacy saving for this case would be $4,413 per year.
**Abstracts**

**PCASE9**: MANAGEMENT OF INAPPROPRIATE USE OF GROWTH HORMONE

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Horizon Blue Cross Blue Shield of New Jersey, Newark, NJ, USA

**Organization**: Horizon Blue Cross Blue Shield of New Jersey

**Problem or Issue Addressed**: Inappropriate use of growth hormone

**Goal**: The goal of the program was to identify off label use of growth hormone.

**Outcomes items used in the decision**: Pharmacy and medical data with diagnosis was used for identification.

**Implementation Strategy**: Members receiving growth hormone were identified by using Pharmacy and medical claims data. The physicians prescribing these members were also identified. Communications were sent to members and Physicians who did not meet the FDA approved criteria or the diagnosis. Based on the responses the next step was either discontinuation or further investigation.

**Results**: We identified 78 members who received growth hormone in the first quarter of 2006, letters were sent to 35 members who met the criteria of inappropriate use. This resulted in 28 blocks and based on that the yearly savings was approx. $400,000. This also included identifying 17 prescribers who were not using growth hormone according to FDA approved indication and were referred to investigation department for reviews.

**Conclusions/Lessons Learned**: The program was very effective in identifying a potential problem of inappropriate utilization and helped the organization both clinically and financially. Integration of pharmacy and medical data provided evidence to take measures for inappropriate utilization.

**PCASE10**: SHOULD GENETIC TESTING BE USED TO GUIDE WARFARIN THERAPY?

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**Organization**: Intermountain Healthcare, Salt Lake City.

**Problem or Issue Addressed**: Use of gene testing to guide warfarin dosing.

**Results**: The study is currently underway.

**Implementation Strategy**: The CGI hopes to use this project as a pilot to introduce clinically useful, cost-effective (CE) genetic testing into the Intermountain system, as well as developing methods that can be used to make coverage decisions by the system’s health plan. The primary goal is to determine both the clinical and economic value of adding testing for these genes into the warfarin dosing algorithm, in the setting of a community-based hospital, in order to inform decisions about the use and coverage of the testing. The secondary goal is to use this pilot to help educate stakeholders in the principles of cost effectiveness.

**Outcomes items used in the decision**: The primary endpoints are the differences in the total cost of anticoagulation-related care, the cost per adverse event avoided, and the cost per day within therapeutic range.

**Implementation Strategy**: The intent is to use the results from the cost effectiveness study in conjunction with the results of the clinical trial, to bring the health plan decision makers together with the delivery-side decision makers to make a coordinated decision, explicitly including local economic outcomes, about both the use of and reimbursement for CYP2C9 and VKORC1 testing in this setting. These efforts will be applied in the context of the principles of process improvement and clinical decision support, both integral parts of Intermountain’s culture, to ensure their consistent and efficient application.

**Results**: The study is currently underway.

**Lessons Learned**: Health plans will increasingly be required to develop coverage and reimbursement policies for genetic tests, which can present a complex balance of benefits, risks, and costs. Because sufficient evidence for decision-making may not be avail-