PHIP4

PHARMACEUTICALS OF PRESERVATION MEDICATION USE NOT CAUGHT BY PRESCRIPTION CLAIMS DATABASES

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OBJECTIVES: Prescription claims databases commonly used for identifying patients for disease management programs, studying health outcomes and reporting on quality measures. A shortcoming of claims databases for these purposes is that they include only prescriptions that are adjudicated through insurance claims plans. Growth in the use of cash discount generic programs and the frequent use of drug samples suggests that an increasing number of prescriptions dispensed to insured consumers may not be captured on claims databases. We examined the extent to which prescription claims databases do not provide complete data on drug use. The inclusion of patients’ prescription drug use.

METHODS: We used the 2009 Medical Expenditure Panel Survey (MEPS) dataset. We included participants who purchased at least one prescription drug in the use of the survey. We then quantified the extent to which insured patients used drug samples, drugs paid for by cash only, and/or discount generics. We measured the numbers of prescriptions in each of these categories and the numbers of consumers who had at least one prescription in each category. We report descriptive statistics.

RESULTS: A total of 75% of the U.S. non-institutionalized civilian population was insured for prescription drugs. Of the total number of prescriptions dispensed to insured consumers, at least 0.8% were drug samples and 23.3% were paid for by cash only, and/or discount generics. Additionally, 11.6% of insured consumers received at least one sample medication, 68.0% paid for at least one of their prescribed medications by cash, of which 42.5% used at least one potential discount generic program. Our results indicate that drug samples may not contribute substantially to the problem of missing prescription data on claims databases. On the other hand, substantial numbers of prescriptions, paid for by cash and discount generics, may be missing from these databases.

PHIP4

IMPACT OF DRUG REIMBURSEMENT MODALITIES ON TREATMENT ADHERENCE IN PATIENTS COVERED BY PRIVATE DRUG INSURANCE

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OBJECTIVES: To compare adherence to prescribers with those with immediate and immediate reimbursement at the point of service among Quebecers (Canada) with private drug insurance.

METHODS: A retrospective cohort was constructed by selecting patients aged 18-64 recorded with private drug insurance from the MEIQ database between March 2008 and December 2012. An algorithm was developed to assess the patient’s reimbursement modality, i.e. the drug cost covered by the insurance company was reimbursed immediately at the point of service or reimbursed at a later date (delayed reimbursement).

Adherence was measured with the proportion of days covered (PDC) over one year for new users of the five most dispensed classes of medications, i.e. statins, proton pump inhibitors, thyroid hormones, antipsychotics, and antidepressants. Linear regression models were used to estimate the adjusted mean difference of the PDC between the two groups for each drug class.

RESULTS: The cohort included 6,494 patients with immediate and 1,950 patients with delayed drug reimbursement. More than 40% of patients were 35-49 years, 26% were men and 85% were past or non-smokers. The mean PDC was 79.9% for patients with immediate reimbursement and 89.3% for patients with delayed reimbursement among new users of thyroid hormones. Corresponding frequencies were 48.3% and 41.1% for new users of proton pump inhibitors, 84.7% and 84.8% for new users of thyroid hormones, 67.1% and 66.8% for new users of antidepressants, and 68.4% and 73.5% for new users of antipsychotics. Significant differences in the results of the linear regression analyses show that no differences in adherence were found with immediate or delayed reimbursement.

CONCLUSIONS: Patient’s adherence was low for several drug classes but appeared to be unaffected by different reimbursement. The short period of time being the purchase of the medication and the reimbursement by the insurer might explain the results.

HEALTH CARE USE & POLICY STUDIES – Equity & Access

PHIP4

DIFFERENCE BETWEEN UNITED STATES AND EU AUTHORISATION TIMELINES AND TIME TO REIMBURSEMENT IN THE EUS

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OBJECTIVES: The purpose of this study was to estimate the time difference between the FDA and EMA approval, as well as time to reimbursement in the UK, GER, FRA, ESP and ITA after EMA approval. METHODS: 32 high-cost drugs that were approved by both the FDA and EMA in 2011-2013 were assessed. Two-thirds of the sample were oncology drugs; 30% of the sample were drugs treated other specialty diseases. Out of 32 drugs, 17 have obtained reimbursement from all EUS countries. Time to reimbursement was defined as the date of publication of SMC guidelines in SCT, NICE Final Appraisal Decision in ENG, CT decision in FRA, G-BA decision in GER, AIFA decision in ITA and AMEPS decision in ESP. RESULTS: The time difference between the FDA and EMA approval was 5.9 months (standard deviation (SD) 5.2 months), similar to the median USA-EU approval interval (6 months). The average time to reimbursement after EMA approval varies from 211 days in SCT (SD 75.9 days) to 336 days in ESP (SD 203 days). On average, the delay in reimbursement in different countries, as long as for non-oncology drugs (7.0 vs. 3.8 months), but there was minimal difference in time to reimbursement for oncology versus non-oncology drugs in the EUS, except in ITA, where the reimbursement decision for non-oncology drugs was 112 days faster than for oncology drugs. CONCLUSIONS: There is still a long gap (5.9 months) between an innovative product’s FDA and EMA approval. Average time to reimbursement in the EU5 after the EMA approval ranges from 7-11.2 months. Pharmaceutical companies need to plan ahead and submit the application dossier as early as possible to achieve faster access, especially for oncology products. Early access programmes, such as ATU in FRA and Cinn in ITA, may also be considered in certain countries.

PHIP4

Socioeconomic and Health Determinants Associated with the Use of the Ambulatory and Hospital Care Services among the Mexican Population

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OBJECTIVES: Health care utilization is likely to be conditioned to socioeconomic factors. The aim of this study is to identify the impact of these determinants, as well as health insurance type on health care utilization in the use of ambulatory and hospital care services in the Mexican population.

METHODS: Data from the National Health Survey 2012 was used to identify social, economic and health perception variables among users of the ambulatory and hospital care services. Statistical analysis was performed to test significant differences in health care utilization in reference to gender, age, education, income and age data. A Probit model was used to identify and measure the impact of these variables on the utilization of the ambulatory care services among patients and a Poisson model for modelling the number of hospitalizations.

RESULTS: 4.8% of the population used ambulatory services during the last two weeks and 3.89% required hospitalization at least once during the last year. Significant statistical differences were observed between gender, income and age with the ambulatory and hospital care use. The results from the Probit model showed that men are less likely to use ambulatory services compared to women, as well as individuals at younger ages (0-9 years) (2.7-95). Additionally, at higher income deciles, a positive significant impact was found for hospital care use. These results implied that education, employment and medical insurance are statistically significant variables with positive impact on the times people are hospitalized. Finally, other variables with a positive impact on health care utilization on both types of care are morbidity and the illness perception mainly when this is severe.

CONCLUSIONS: In addition to the influence of socioeconomic and demographic factors, health perceptions among patients are significant determinants that explain the frequency and health care utilization in the Mexican population.

PHIP4

RAJASTHAN’S UNIVERSAL HEALTH CARE PLAN WITH FREE DISTRIBUTION OF QUALITY MEDICINES THROUGH COST MINIMIZATION

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OBJECTIVES: Public expenditure on health on India is around 1% of GDP and 79% expenditure in health of people is through out-of-pocket. Almost 30% of the households slide into poverty due to high treatment costs of medicines. Though, India is considered as Pharmacy for developing countries, yet due to poor regulatory control there is huge price variation in off-patent branded generics, even 50 times or more and leaving affordability at the mercy of prescribers/dispensers. The Government of Rajasthan (a federal state with a population about 70 million) has launched a scheme called Chief Minister’s Free Drug Distribution Scheme (CMFDDS) for providing free essential medicines to all irrespective of their economic status, establishing an autonomous Rajasthan Medical Services Corporation (RMSC). By well-defined transparent prequalification measures for products and suppliers, RMSC procures quality medicines through cost minimization. Educational, managerial and regulatory strategies have been used to ensure complete compliance with the scheme. RESULTS: Quality essential medicines are procured at unbelievable low cost compared to market retail prices, e.g. procurement cost / market retail prices for strip of 10 tablets of DICLOFENAC 50 mg. The procurement cost / market retail prices are 1.24/31.73, 2.98/103.74, 1.95/125.00 and 8.54/147.44 respectively (1 USD = INR 70). Similarly, we have observed substantial reduction in procurement cost / market retail prices for many medicinal products.

CONCLUSIONS: Essential medicines are not costly but are being made expensive. By utilizing the pricing information of quality medicines along with transparent pooled procurement and proper distribution system can make free access to medicines, especially under-served population with a strong political commitment coupled with the proper strategies in low resource settings.

PHIP4

WORLD CLINICAL EVIDENCE DEVELOPMENT: AN ANALYSIS OF RELEVANT INTERNATIONAL MODELS FOR THE POTENTIAL IMPLEMENTATION OF SUCH A PROGRAM IN QUEBEC

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OBJECTIVES: There is a growing need for the development of real-world clinical evidence, particularly in the field of health technology assessments. The objective of this study is to identify the elements for the implementation of a program aiming to develop real-world clinical evidences in Quebec.

METHODS: A literature review was conducted to analyze the position, progress and development of strategies fostering risk management and development of real-world clinical evidences in different provinces and countries. A literature search was performed using electronic databases including PubMed, Medline and Embase. Additional guidelines and government policies were retrieved using Google and Google Scholar. The following keywords were used for search, alone or in combination: risk-sharing and product listing agreements, coverage with evidence development.
HEALTH CARE USE & POLICY STUDIES – Formulary Development

PHP49

USE OF ECONOMIC EVIDENCE TO INFORM DRUG REIMBURSEMENT DECISION MAKING: THE CASE FOR OPIOIDS

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OBJECTIVES: The objective of this analysis was to examine the degree to which economic evidence was utilized to inform drug reimbursement decision making in Ontario for extended release opioids.

METHODS: Published literature, initially identified by the committee in charge of evaluating opioids, was supplemented by queries to key stakeholders (e.g., researchers). Articles were screened to identify those that included a discussion of economic evidence beyond price and statement of a price of therapy less than cost. Descriptive statistics and logistic regression analyses were conducted to assess the frequency of economic evidence in the reimbursement decision making at a range of US health plans (national, regional, integrated). These plans included 33.8 million members enrolled in forms of managed care.

RESULTS: Overall, 52% of decisions considered economic evidence beyond price alone; a recommendation to fund by 67% of plans. Regression analysis found that documents including a discussion of economic evidence greater than 50% of the time. In the 1990s, 70% of decisions included economic evidence; however complexity was limited to a discussion of price therapy only for the majority (70%). Regression analysis found that documents including a discussion of economic evidence beyond price and statement of a price of therapy less than cost were more likely to result in positive recommendations (p < 0.05).

CONCLUSIONS: Economic evidence was routinely reviewed, discussion was usually limited to price of therapy. When pharmacoeconomic evidence beyond price alone was discussed, a recommendation to fund by the CED was more likely.

PHP50

ACADEMY OF MANAGED CARE PHARMACY (AMCP) DOSSIERS: USE IN HEALTH CARE DECISION MAKING

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HEALTH CARE USE & POLICY STUDIES - HEALTH CARE COSTS & MANAGEMENT

PHP52

SOURCES OF SPENDING VARIATION IN PROFESSIONAL SERVICES AMONG TEXAS HOSPITAL REFERRAL REGIONS: AN ANALYSIS OF PRIVATE INSURANCE POPULATION

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OBJECTIVES: Health care expenditure in the United States is expected to be 19% of GDP by 2022 and professional services account for a substantial portion of total health care spending. The study aims to decompose the source of spending variation in professional services across Texas hospital referral regions (RBRs) due to quantity, price, health risk and cost of doing business. METHODS: The study used 2011 commercial insurance claims data from 2.5 million employees enrolled in forms of managed care (CBCS) of Texas, largest commercial insurer in Texas. Professional claims were classified into seven categories (i.e. evaluation and management, procedures, imaging, tests, durable medical equipment, other and exceptions/unclassified) using the Berenson-Eggers-Type of Service (BETOS) code and Health Care Procedure Coding System (HCPCS) procedure codes. Geographic variation in spending per capita for each category was decomposed into quantity, price, cost of doing business and health risk. Results: Geographic variation in price was mainly explained by quantity (68.5%), followed by price (19.0%), cost of doing business (8.4%) and health risk (4.1%). Across categories, variation due to price was observed to be the highest for procedures (28.2%) and evaluation and management (22.4%) categories. Quantity accounted for majority of variation for imaging (80.5%), tests (83.2%), durable medical equipment (80.9%) and other (78.6%) categories. Contribution of health risk in explaining variation was relatively small for all professional subcategories (range: 0.34% to 7.0%). CONCLUSIONS: Majority of the geographic variation in professional services spending was explained by quantity. However, contribution of quantity and price varied considerably in explaining geographic differences across different professional services. Further exploration is required in understanding factors that lead to such variations across service types.

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ANALYSIS OF AVERAGE MANUFACTURER PRICING OF NEW DRUGS APPROVED IN THE UNITED STATES (1990-2012)

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OBJECTIVES: Reimbursement of brand drugs is typically set as a percentage of manufacturers’ listed prices. This study evaluates trends in the manufacturer pricing of new drugs at market entry or of oral solid forms of new molecular entities (NMEs) approved by the US Food and Drug Administration (FDA) in the period 1990-2012. METHODS: Drug regulatory information derived from the FDA. Daily defined dosages (DDD) were collected from the World Health Organization. Average wholesale prices (AWP) per unit at market entry derived from the Redbook. Prices were converted to 2013 dollars using the consumer price index. Descriptive statistics, 95% confidence intervals and t-tests were performed in the analysis. RESULTS: The FDA approved 576 NMEs during the study period; 505 were marketed as of December 2013. mean price was $44.92 (SD = $21.86, 95%CI: $39.57-$50.27). In the 1990s, mean price was $13.81±$31.99 (95%CI:$8.53-$19.09) in the 1990s, $45.54±$92.44 (95%CI:$25.53-$65.53) in the 2000s, and $112.83±$175.27 (95%CI:$86.02-$189.64) in the period 2010-2013. The average AWP per DDD was $8.44±$5.78 (95%CI: $6.75-$10.13) in the 1990s, $15.53±$6.55) in the 2000s, and $43.68±$65.59 (95%CI: $27.43-$61.83) in the period 2010-2013. The average AWP per DDD was significantly higher (p<0.001) for FDA priority review drugs ($59.61±$13.90, 95%CI: $54.80-$63.83, n=65) than for standard review drugs ($10.33±$2.00, n=65). CONCLUSIONS: Majority of the geographic variation in professional services spending was explained by quantity. However, contribution of quantity and price varied considerably in explaining geographic differences across different professional services. Further exploration is required in understanding factors that lead to such variations across service types.