

Hungarian Forint (HUF) or 234 Euro (EUR) / patient. We found the highest reimbursement per patient in county Nógrád (87879 HUF, 315 EUR), Fejér (80851 HUF, 290 EUR) and Békés (77643 HUF, 278 EUR), while the lowest reimbursement county Budapest (58859 HUF, 211 EUR), Jász-Nagykun-Szolnok (55757 HUF, 200 EUR) and Zala (54924 HUF, 197 EUR). **CONCLUSIONS:** We found significant differences measured by all the three indicators in home care (nursing) services in Hungary. Our results revealed that there are important inequalities both in the access to and utilization of home care services.

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SELF-REPORTED POPULATION HEALTH: AN INTERNATIONAL PERSPECTIVE BASED ON EQ-5D

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OBJECTIVES: General population EQ-5D health surveys have been accumulated in the EuroQol Group's archive over the past two decades. Using the database as a source of standardized measure of self-reported health, the objective was to estimate the level of health (EQ-5D population norms) and the distribution of health within populations along socio-demographic characteristics. **METHODS:** Analyses captured EQ-5D data on 163,838 individuals from 18 countries with nationally representative population surveys. Descriptive statistics were used to provide EQ-5D-3L population norms by age and gender categories for EQ-VAS, EQ-5D index values, and for the 5 dimensions for each country. Odds ratios and the health concentration index methodology were used in the socio-demographic analysis of EQ-5D data. **RESULTS:** The mean EQ-VAS rating varied from 71.1 to 83.7 and from 70.4 to 83.3 across countries without and with age standardization, respectively. Statistically significant inequalities existed in all samples ($p < 0.01$) with the EQ-VAS based health concentration index varying from 0.090 to 0.157 across countries. Among the socio-demographic factors, age had generally the largest contributing share, while education also had a consistent role in explaining lower levels of self-reported health. Among the 5 dimensions, usual activities and pain/discomfort were the highest contributors to overall inequalities in most countries. **CONCLUSIONS:** EQ-5D norms can be used as reference data to compare patients with specific conditions and to assess the burden of the disease in question. Inequalities in self-assessed health exist in all countries with different social and cultural backgrounds, deserving the attention of policy makers within each country.

HEALTH CARE USE & POLICY STUDIES – Formulary Development

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ANALYSIS OF ADVERSE REACTIONS OF MEDICINE IN UKRAINE

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OBJECTIVES: In Ukraine the pharmacovigilance system for adverse reactions is working. In 2008 was received 7,115, 2009 – 8291, 2010 – 8673, 2012 – 11674 card-reports of adverse reactions (AR) drugs. MoH conducted a detailed analysis of these reports found that 13% of them experienced serious adverse events, and 0.7% of the cards with the unexpected AR. **METHODS:** We analyzed the side effects depending on the ATC-group drugs. **RESULTS:** We found that antimicrobial agents for systemic use the largest number of reports received on AR (75.4%), which in most cases manifested anaphylactic AR. Further analysis showed that AR often were drugs (by INN): ceftriaxone (12.6%), amoxicillin in combination with clavulanic acid (8.0%), levofloxacin (6.3%). Among the cardiovascular drugs, reports AR often came on enalapril (10.0%), pentoxifylline (9.7%) and amlodipine (8.1%). Among the drugs affecting the nervous system, haloperidol (7.4%), metazolam sodium (7.4%) and paracetamol (7.0%). The analysis showed that the ratio of serious not serious AR under anti-neoplastic drugs and antiretroviral drugs is 1:2, anti-TB drugs - 1:3, and those affecting the cardiovascular system, gastrointestinal tract, respiratory system - under 1:9, 1 : 6, 1:6. Thus, the frequency of serious AR is much higher in the application of anti-neoplastic, anti-HIV and anti-TB drugs. The greatest risk AR was for children aged 28 days - 11 years, especially boys, and adults, especially women aged 46-60 years. **CONCLUSIONS:** Results of the analysis of AR indicate that needed pharmaceutical care when dispensing antiretrovirals, anti-tuberculosis, anti-neoplastic drugs that meet the requirements of Good pharmacy practice in Ukraine. Implementation of training courses and programs for pharmacists on the subject of safe use of drugs to treat infectious diseases, tuberculosis and HIV / AIDS is essential. As well as acquiring skills pharmaceutical care and prevent AR in dispensing drugs to children and women 45-60 years.

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A 10-YEAR REVIEW OF THE CANADIAN COMMON DRUG REVIEW: PHARMACEUTICAL MANUFACTURERS' SUCCESS RATE

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OBJECTIVES: The Canadian Common Drug Review (CDR) is a national HTA agency that has been in existence for 10 years. During this, the CDR has reviewed the clinical and cost-effectiveness of 188 drugs and provided 269 recommendations to the publically funded drug plans. Of all the drugs reviewed over the past 10 years, 50.4% have received a positive recommendation and 49.6% have received a negative recommendation. The objective of this analysis was to describe the success rate of each pharmaceutical manufacturer in terms of type of recommendation, time to recommendation, and time to listing in the provincial formularies. **METHODS:** The CDR Tracker database was used to analyze all CDR drug reviews from 2003 to the end of 2012. There were a total of 189 reviews during this 10 year period. All manufacturers that had three or more submissions with CDR were included in the analysis; 29 companies met this criterion. **RESULTS:** Of the 189 reviews and 29 companies analyzed, the positive recommendation rates ranged from 100% to 17%. The top 5 most successful manufactures in terms of positive recommendations were Roche

(100%), Abbott (100%), Bayer (83%), Gilead (80%), and Boehringer-Ingelheim (80%). The average time to receive a CDR recommendation varied from 170 days to 248 days. The manufacturers with the fastest time to recommendation are GSK, Abbott, Roche, Boehringer-Ingelheim, and Watson. Time to reimbursement / formulary listings in all provinces ranged from 123 days to 593 days. **CONCLUSIONS:** This is the first analysis to describe the success rate of pharmaceutical manufacturers through the CDR. There appears to high variability in all the metrics that were measured and further research into the determinants of variability is warranted.

HEALTH CARE USE & POLICY STUDIES – Health Care Costs & Management

PHP65

IMPACT OF MEDICARE PART D ON PRESCRIPTION USE, HEALTH CARE EXPENDITURES, AND HEALTH SERVICES UTILIZATION: NATIONAL ESTIMATES FOR MEDICARE BENEFICIARIES, 2002 TO 2009

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OBJECTIVES: To investigate the impact of Medicare Part D on prescription utilization, health services utilization, and health care expenditures in the general Medicare population. **METHODS:** A retrospective analysis of Medicare beneficiaries (N=32,228) was conducted using the Medical Expenditure Panel Survey 2002 to 2009 data. Multivariable quantile regression was used to estimate the following outcomes at the 25th, 50th, 75th, and 90th percentiles, adjusting for socio-demographic characteristics: 1) number of prescription fills; 2) out-of-pocket (OOP) drug expenditures; 3) total drug expenditures; 4) OOP health care expenditures; 5) total health care expenditures; 6) number of hospitalizations; and 7) number of emergency department (ED) visits between the pre-Part D (2002-2005) and post-Part D (2006-2009) periods. All expenditures were inflation-adjusted to 2009 dollars. **RESULTS:** In the general Medicare population, Part D was associated with decreases in OOP drug expenditures (-25.7% to -33.6%; $p < 0.0001$) and OOP health care expenditures (-22.1% to -24.3%; $p < 0.0001$) across all percentiles. Part D was associated with increases in the number of prescription fills across all percentiles (5.8% to 8.4%; $p < 0.0001$) but only at the 75th and 90th percentiles for increases in total drug expenditures (75th percentile: 5.5%; 90th percentile: 10.2%; $p < 0.0001$). Part D was not associated with changes in total health care expenditures, hospitalizations, or ED visits in the general Medicare population. **CONCLUSIONS:** Part D resulted in increases in medication utilization and reductions in OOP drug and OOP health care expenditures among Medicare beneficiaries, but was not associated with differences in total health care spending, hospitalizations, or ED visits.

PHP66

THE IMPLICATIONS OF DEMOGRAPHIC CHANGES FOR GMS COSTS IN IRELAND THROUGH TO 2026

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OBJECTIVES: The General Medical Services (GMS) scheme presently covers around 40% of the Irish population and entitles them, inter alia, to free prescription drugs and appliances. This paper projects the effects of future changes in population, coverage, claims rates and average claims cost on GMS costs in Ireland. **METHODS:** Data on GMS coverage, claims rates and average cost per claim are drawn from the Primary Care Reimbursement Service (PCRS) and combined with Central Statistics Office (CSO) (Regional and National Population Projections through to 2026). A Monte Carlo Model is used to simulate the effects demographic change (by region, age, gender, coverage, claims rates and average claims cost) will have on GMS prescribing costs in 2016, 2021 and 2026 under different scenarios. **RESULTS:** A total of 100,000 Monte Carlo simulations indicate that GMS medicines costs could rise to €1.9bn by 2026 and will likely fall in the €1.7bn to €2.3bn region. Population is projected to grow by 32% by 2026 and by 96% for the over 70s. The Eastern region is estimated to grow by 3% over the lifetime of the projections at the expense of most other regions. The Monte Carlo simulations project that females will be a bigger driver of GMS costs than males. Those aged 70 and over and children under 12 will be significant drivers of GMS costs with the impending demographic changes. **CONCLUSIONS:** GMS coverage is increasing in tandem with falling public health budgets and poses a threat going forward to the sustainability and funding of the GMS scheme. Our projections and simulations map the likely evolution of GMS cost, given existing policies and demographic trends.

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VARIABILITY IN PUBLICALLY-PRESCRIBED DRUG COSTS: THE ROLE OF REGION, AGE AND GENDER

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OBJECTIVES: Ireland currently has one of the highest levels of public drug spending per capita in Europe. As budget retrenchment efforts continue, publically-funded drug schemes such as the General Medical Scheme have been the subject of several initiatives to reduce costs in recent years. However, little is known about the regional and socio-demographic factors that may influence variations in prescribing across the state. The objective of this study was to identify these factors. **METHODS:** Using a 192,000-strong sample of PCRS data drawn from monthly GMS returns for 2007, we constructed an ANOVA model that included the main effects of age, gender and region together with their second order and third order interactive terms in an interactive effects regression model examining the role of gender, age category and region of residence in explaining variation in prescribing costs for Ireland. **RESULTS:** Mean cost per person per month was €102. Men were on average more expensive than women (€109 vs. €94) and cost increased with age group (€34 for those 0-12yrs and €169 for those over 75). The most expensive region was the Midlands HSE region (€103) while the North West (€90) was the least costly. Most of the variation in prescribing costs was explained by age, though the relationship between prescribing cost and age category was not constant. A significant three-way interaction was found between age category, gender and region. **CONCLUSIONS:** The regional and