Manchester Metropolitan University

e-space

Manchester Metropolitan University's Research Repository

Please cite the Published Version

Fatoye, Francis, Gebrye, Tadesse, Fatoye, Clara, Mbada, Chidozie Emmanuel, Afolabi, Olubukola and Fasuyi, Francis (2021) Evaluation of Missed Physiotherapy Appointment and Its Influence on Cost, Efficiency and Patient Outcomes. In: ISPOR Europe 2020 conference, Milan, Italy., 14 November 2020 - 16 November 2020, Milan, Italy.

Version: Published Version

Downloaded from: https://e-space.mmu.ac.uk/628887/

Usage rights: © In Copyright

Enquiries:
If you have questions about this document, contact openresearch@mmu.ac.uk. Please include the URL of the record in e-space. If you believe that your, or a third party's rights have been compromised through this document please see our Take Down policy (available from https://www.mmu.ac.uk/library/using-the-library/policies-and-guidelines)

€1,378/€729), 42.25% for inpatient care (including medications) (mean/median: €1,198/0€), and 9.16% for aids and remedies (mean/median: €260/€0). Around 5.72% of the insured patient population did not incur any costs in 2018, while 5.93% of patients incurred expenses greater than €10,000. Patients in the highest spending quintile accounted for 74.76% of all healthcare-related costs in 2018; this translates into an average annual cost of €10,630 per person. Similarly, the most costly patients at the 10%/5%/1% levels accounted for 59.12%/44.33%/19.43% of annual healthcare spending (i.e. €16,768/€10,630€/€25,146/€55,122 per patient). ***Conclusions:*** The distribution of healthcare spending is highly skewed with a minority of insured persons causing the majority of costs. In order to improve the cost-effectiveness of the healthcare system, it is of utmost importance to identify and characterize patients who drive healthcare costs, as well as the sectors and interventions that are triggering high healthcare spending.

PMU10
WHEN THE GERMAN HEALTHCARE SYSTEM SEEMS OVERWHELMED - PERFORMANCE OF THE MOST EXPENSIVE PHARMACEUTICALS IN THE GERMAN HTA (AMNOG)-PROCEDURE

Kenfack E,[1] Presuhn F,[2] Schoenermark MP[2]
[1]*SKC Beratungsgesellschaft mbH, Hannover, NI, Germany,* [2]*SKC Beratungsgesellschaft mbH, Hannover, Germany*

Objectives: The AMNOG procedure has significantly reduced prices of pharmaceutical products in Germany which are now even below the European average. However, the small segment of extremely high-priced drugs (annual therapy costs (ATC)> 300.000€) is continuously growing, posing a considerable financial burden on the Statutory Health Insurance. The aim of this study was to analyze this market segment, specifically regarding the performance in the AMNOG process and to understand the underlying and consecutive market dynamics. ***Methods:*** We analyzed data sets from the proprietary MAIS database, including all publicly available G-BA procedures until June 2020. The ATC along with the total rebates were calculated based on the information provided in the benefit assessment and the official price list (Lauer Taxe). ***Results:*** Of the 502 completed procedures to date, 26 equivalent to 22 pharmaceuticals were the most expensive products with net minimum annual therapy costs of 312.129€. The most expensive drug with 1.575.000€ annual therapy costs was betibeglogene autotemcel, a gene therapy. 77% of these pharmaceutical products were orphan drugs with no previously existing therapy. Several of these showed positive effects in survival endpoints. The remaining 23% were hemophilia products with no additional benefit. Furthermore, metabolic disease (42%) and hematology (35%) were the most frequent therapeutic areas in the high cost segment. All high-priced products possess specific, advanced mechanisms of action including recombinant proteins (58%), monoclonal antibodies (15%), synthetic nucleic acids (12%), gene therapies (11%) and kinase inhibitors (4%). The total net rebates after negotiation varied between 14.86% and 39.05% and did not correlate with the benefit category nor with the cost level. ***Conclusions:*** Our results confirm the general German notion, that also in the high-price segment of pharmaceutical drugs, there is no correlation between the negotiated rebate and the category of the additional benefit nor with the cost level of the treatments.

PMU11
EVALUATION OF MISSED PHYSIOTHERAPY APPOINTMENT AND ITS INFLUENCE ON COST, EFFICIENCY AND PATIENT OUTCOMES

Fatoye F,[1] Gebrye T,[2] Fatoye C,[3] Mbada C,[4] Afolabi O,[5] Fasuyi F[5]
[1]*Manchester Metropolitan University, Manchester, LIN, UK,* [2]*Manchester Metropolitan University, Manchester, UK,* [3]*Manchester Metropolitan University, Manchester, LAN, UK,* [4]*Obafemi Awolowo University, Ile-Ife, Nigeria,* [5]*University of Medical Sciences, Ondo, Nigeria*

Objectives: Missed appointments (MAs) contribute to the rising costs of physiotherapy and are a significant challenge to healthcare administration, organisational workflow and health outcomes for patients. This study assessed prevalence and pattern of missed physiotherapy appointments, wait time, and its impact on cost, efficiency and patient outcome in Nigeria. ***Methods:*** A retrospective study was conducted at the Outpatient Physiotherapy Clinic of Obafemi Awolowo University, Ile-Ife, Nigeria. A total of 3243 physiotherapy appointments booked between 2009 and 2018 were assessed. Data were collected on socio-demographic and patient outcomes related to Mas. MAs was defined as any appointment where a patient did not show up at all, or attend to follow up appointment or notify staff of a cancellation. The total revenue loss due to MAs was calculated as a product of the total of MAs and per treatment cost. Descriptive of mean, standard deviation and frequency and inferential statistics of t-test were used to analyse the data. ***Results:*** MAs constituted 1701 (52.5%) of all appointments and the average wait time for first appointment was 9.6 ± 23.2 days. The proportion of MAs was higher among females (50.2%), middle-aged adults (34-55 years) (31.7%), patients who were not resident close to the clinic (45.3%), patients with orthopaedic conditions (56.2%) and patients referred from orthopaedic surgeons (32.8%). There were significant associations ($p < 0.05$) between MAs and age, sex, location of patient's residence and the source of referral. Considering the per treatment schedule cost of 1000 naira, a 52.5% MAs rate resulted in a lower efficiency of 76.6% with an efficiency ratio of 0.23. ***Conclusions:*** MAs for physiotherapy treatment poses a significant challenge on costs, efficiency and patients' outcome. Thus, an innovative reminder system may help reduce patients' non-attendance of physiotherapy and its consequences.

PMU13
SCHIZOPHRENIA TREATMENT WITH SECOND-GENERATION ANTIPSYCHOTICS: A MULTI-COUNTRY EVALUATION OF THE COSTS OF CARDIOVASCULAR AND METABOLIC ADVERSE EVENTS AND WEIGHT GAIN

Kearns B, Cooper K, Cantrell A
University of Sheffield, School of Health and Related Research, Sheffield, UK

Objectives: Second-generation antipsychotics have similar effectiveness for the treatment of schizophrenia symptoms, so drug choice is often based on differences in rates of adverse events. Relapse is also a key driver of treatment costs. The key aim of this study was to compare the costs due to adverse events, and how they varied across European countries. ***Methods:*** Systematic searches were conducted to identify evidence on effectiveness and costs. A Markov model was developed to assess the costs of ten antipsychotics: aripiprazole, brexpiprazole, cariprazine, lumateperone, lurasidone, olanzapine, paliperidone, quetiapine, risperidone and ziprasidone. Costs were obtained for seven countries: Italy, Hungary, France, Slovenia, Spain, Sweden and the UK. The costs considered were adverse events (including diabetes, myocardial infarction, stroke and weight gain), drug costs, relapse, treatment discontinuation and schizophrenia management. Acute and stable adult populations were modelled, with a life-time horizon for both. ***Results:*** For the acute population, the lowest lifetime costs were observed for lurasidone for all seven countries. The second lowest costs were for ziprasidone. The main drivers of cost differences were diabetes and cardiovascular diseases, which were lowest for lurasidone, followed by ziprasidone then lumateperone. Costs for managing weight gain were lowest for ziprasidone and lurasidone. The stable population provided similar results. The contribution of diabetes and cardiovascular diseases to total costs varied from less than 40% in Slovenia and Sweden to over 70% in Hungary and Italy. ***Conclusions:*** Lurasidone was associated with the lowest total lifetime costs in the acute population in seven European countries compared to nine antipsychotics. This was primarily due to the avoidance of diabetes and cardiovascular events. The rankings of the remaining antipsychotics varied by country, emphasising the importance of considering country-specific costs. Future research should investigate the individual costs of relapse management, including differences in the costs and proportions of hospitalisations.

PMU15
COMPARISON OF CLINICAL AND ECONOMICAL OUTCOMES OF ALTERNATIVE IMAGING METHODS IN TURKEY

Kockaya G,[1] Şen S,[2] Oğuzhan G,[3] Caliskan Z,[4] Çallı C,[5] Ertürk ŞM[2]
[1]*ECONiX Research, Istanbul, Turkey,* [2]*Istanbul University, Istanbul, Turkey,* [3]*Ondokuz Mayıs University, Samsun, Turkey,* [4]*Hacettepe University, Ankara, 06, Turkey,* [5]*Ege University, Izmir, Turkey*

Objectives: Magnetic resonance imaging (MRI) with Gadobutrol (GAD), MRI with Gadoteric Acid (GOT), and peripheral angiography (PA) methods are used in the diagnosis of vascular disease (VD). MRI with Gadoxetic-acid (GAX), MRI with extracellular contrast agent (ECCM), or contrast CT (CCT) are used for the diagnosis of liver metastasis (LM). The study aimed to compare the clinical and economic outcomes of alternative imaging methods in the diagnosis of VD and LM in Turkey. ***Methods:*** The clinical and economic data were examined through a literature review. An expert opinion survey conducted for the missing data. The data gathered from literature and expert opinions analyzed via the decision tree model. In case of no diagnosis with GAD for VD; it is modeled that MR contrast imaging applied with GOT; or vice versa. PA was performed in cases in which diagnoses couldn't be made using both agents with MRI. The same model tree used for if the patient didn`t get diagnosed with GAX or ECCM or CCT for LM, then MRI contrast imaging was applied with another agent. Reimbursement guidelines of the Social Security Institution were used for cost calculations. ***Results:*** The cost per patient with the diagnosis with VD was calculated via a decision tree as 245 TL for GAD and 251 TL for GOT. 7% less PA was needed in the GAD which avoids 29% less unnecessary treatment compared to GOT. The diagnosis rate was 99% with GAX, 82% with ECCM, and 60% with CCT for LM. The cost of diagnosis per patient with LM was 280 TL for CT, 229 TL for ECCM, and 280 TL for GAX. ***Conclusions:*** GAD offered more favorable cost, a higher rate of correct diagnosis, and fewer patients who needed PA. GAX as the gold standard in patients with LM according to clinical guidelines.

PMU16
HEADROOM ANALYSIS OF LOW-DOSE CT FOR COMBINATION SCREENING OF LUNG CANCER, CHRONIC OBSTRUCTIVE PULMONARY DISEASE AND CARDIOVASCULAR DISEASE IN THE NETHERLANDS

Behr C,[1] Koffijberg E,[1] Degeling K,[2] IJzerman M[2]
[1]*University of Twente, Enschede, Netherlands,* [2]*University of Melbourne, Melbourne, VIC, Australia*

Objectives: Discussions regarding the implementation and cost-effectiveness of lung cancer (LC) screening using low-dose computed tomography (LDCT) are ongoing. One way to potentially increase economic viability is by introducing combination screening. Whether extending LC screening with screening for chronic obstructive pulmonary