OBJECTIVES: Nowadays hospital at home (HAH) is dealing with increasing demand of the population to be treated at home and government commitment to promote its development. A brake identified for its growth is its funding system based on price per activity. The funding of expensive drugs is a current concern. This present study about oral anti-cancer drugs (OACD) in the Hospital at Home, Assistance Publique – Hôpitaux de Paris (HAH AP-HP) in 2014 aims to determine if the cost of OACD is too high compared to the costs of the respective tariff stays. **METHODS:** Patients with OACD delivery at HAH AP-HP in 2014 are identified and all tariffs datas relating to their stays are extracted. Treatment costs and stays tariffs are calculated to determine ratio cost of treatment /stay tariff per stay. Moreover, another ratio is calculated with national datas from the 2013 costs survey for the same tariff combinations that HAH AP-HP stays. The influential parameters on the HAH AP-HP ratio are determined by multivariate analysis and both HAH and national ratios are compared. **RESULTS:** On 2014, the HAH AP-HP stays with a treatment cost of 30% or more per stay (criteria for total funding in addition to the HAH tariffs) are estimated at 17% (42 of 241). However, the ratio can exceed 100% for a few stays (6). Multivariate analysis reveals two important parameters influencing significantly the HAH ratio: male status and drug special supervision status. About the comparison with the national ratio, the main difference is the extreme values above 100%, more numerous for the national ratio. **CONCLUSIONS:** These results illustrate the difficulties to finance certain drugs in HAH tariff. The creation of a specific funding for these drugs could be a solution to achieve the goal of doubling HAH activity set by the Health Ministry in France.

PHP118

BUDGET IMPACT ANALYSIS OF THE INTRODUCTION OF BIOSIMILARS IN A BELGIAN TERTIARY CARE HOSPITAL: A SIMULATION

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OBJECTIVES: Biosimilar (B) uptake in Belgium is closely related to the hospital financing system. B are mainly distributed through hospitals and bilateral discount negotiations between the hospital pharmacy and company exist. This **budget impact analysis (BIA)** estimates the influence of different B uptake percentages & discount rates from a hospital perspective (Belgium). **METHODS:** The current usage data 2015 (only **originator (O)**; no B uptake) of infliximab, epoetin alfa, filgrastim and follitropine alfa in the tertiary care Ghent University Hospital for all authorized indications were retrieved. Potential discount%, future price reductions for both B & O and potential fluctuation in consumption are analyzed for 3 uptake scenarios: newly diagnosed patients (de novo), 20% and 100% switch of patients. The BIA uses the official Belgian tariff unit prices (NIHDI). A discount difference (in favour of B) of 10% is used for epoetin alfa and follitropine alfa; 20% for infliximab; 40% for filgrastim. Key variables (discount%, price, consumption) were tested in deterministic univariate sensitivity analyses [MIN, MAX]. Time horizon is 5 years. **RESULTS:** Infliximab showed the highest cumulative savings with de novo, 20% and 100% scenario of resp. €686.896,45 [€171.724,11- €1.373.792,90], €763.541,59 [€190.885,40 - €1.527.083,19] and €3.817.707,97 [€954.426,99 - €7.635.415,93], followed by filgrastim with resp. savings of €420.706,24 [€-29.213,72 € - €841.412,49], €105.637,35 [€-7.335,75 - €211.274,71] and €528.186,77 [€-36.678,73 - €1.056.373,54]. Follitropine alfa savings were €68.443,54 [€-12.271,96 - €136.887,09], €19.367,16 [€-3.472,54 - €38.734,32] and €96.835,80 [€-17.362,71 - €193.671,60] and epoetin alfa: €22.495,20 [€-1.649,00 - €44.990,40], €7.380,68 [€-541,36 - €14.761,36] and €36.903,39 [€-2.706,82 - €73.806,78]. Savings became in favour of O (negative MIN) if O-discount% increased 5% (filgrastim), 20% (follitropine alfa, epoetin alfa) above B-discount%. Increased consumption dominated the MAX values. **CONCLUSIONS:** All base-case simulated scenarios were in favour of the biosimilar. Only discount variation inverted the results pro originator.

PHP119

ASSESSMENT OF PRICES OF ESSENTIAL MEDICINES FOR CHRONIC DISEASES PREVALENT IN THE ASIA PACIFIC REGION

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OBJECTIVES: To assess the prices of essential medicines for chronic diseases prevalent in the Asia Pacific Region. **METHODS:** A secondary analysis of medicine prices data from the World Health Organization/Health Action International's database on medicine prices, availability and affordability was undertaken in March - May 2016. Data on price of 18 medicines used for chronic diseases prevalent in the older population were obtained from facility-based surveys conducted between 2001 and 2013 in 11 countries, namely China, Fiji, India, Indonesia, Lao, Malaysia, Mongolia, the Philippines, Sri Lanka, Thailand and Vietnam. Prices were converted into the base year of 2015. Patient prices were adjusted for inflation and purchasing power parity, and procurement prices for inflation and official exchange rates. Data were analysed for lowest priced generic (LPG) and innovator brand (IB) products in both public and private sectors. Outcome measures were median (range) price ratios to international reference price (IRP). **RESULTS:** The median (range) procurement price for IBs were found be highest in the Philippines [23.39 (7.24-106.43)] and lowest in Malaysia [4.05 (1.13-56.77)]; and for LPGs highest in Mongolia [2.71 (1.43-22.73)] and lowest in India [0.36 (0.23-2.2)]. Patient price in public sector for IBs were found be highest in the Philippines [79.13 (12.05-380.08)] and nil in Malaysia as it is providing freely; and for LPGs highest in the Philippines [32.88 (14.19-53.93)] and nil in Malaysia and India as they are providing freely. Patient price in private sector for IBs were found be highest in Indonesia [150.03 (15.53-329.28)] and lowest in India [12 (1.39-29.73)]; and for LPGs highest in the Philippines [46.21 (9.76-140.86)] and lowest in China [0.92 (0.46-9.14)]. **CONCLUSIONS:** Procurement price of essential medicines for chronic conditions were high in Asia Pacific Region compared to IRP, especially for IBs. Patients are paying very high prices for both IB and LPG medicines, especially in private sector.

PHP120

IMPACT OF CHANGES IN THE METHODOLOGY OF EXTERNAL PRICE REFERENCING ON PRICES

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OBJECTIVES: External price referencing (EPR), by which authorities set medicine prices based on the prices in other countries, is a commonly applied pricing policy in Europe. The study aims to analyse the impact of changes in the EPR methodologies on prices. **METHODS:** In spring 2015, we surveyed methodological specifications of existing EPR schemes in 31 countries (28 EU Member States, Iceland, Norway, Switzerland) through a questionnaire with competent authorities for pharmaceutical pricing and reimbursement. The gathered information was used to model medicine price developments using discrete-event simulations. Different scenarios (consideration of statutory discounts, regular price revisions, changes in the composition of reference countries, changes in the calculation method, changes in choice of exchange rate, and accounting for the economic situation of the reference countries) were run over a 10 year horizon. **RESULTS:** Based on actually surveyed EPR specifications, including the frequency of re-evaluations, the erosion of the average price over the years is EUR 78.2 in the 28 EPR applying countries (base case, starting price: EUR 100).When referring to prices taking into account published statutory discounts (existing in Germany, Greece and Ireland), the average medicine prices fall by 27 percent, from EUR 78.1 to EUR 57.15. A decrease of similar magnitude can be observed (average EPR price drops by 25.5%, from 78.2 to EUR 58.2) if all countries use as calculation formula the minimum price. If countries re-evaluate their medicine prices every six months the average price level, it results in drops of the average price of all EPR countries after 10 years of 6 percent, from EUR 78.1 to EUR 73.6. **CONCLUSIONS:** The simulations illustrate that EPR methodological choices have an impact on national price levels and – as a consequence – on public expenditures.

PHP121

ECONOMIC BURDEN OF PRIMARY IMMUNODEFICIENCY IN NATIONAL INSTITUTE OF PEDIATRICS IN MEXICO

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OBJECTIVES: Observational and retrospective study examining the economic burden of disease in children with Primary Immunodeficiency (PID) in the National Institute of Pediatrics in Mexico (INP). The aim of this study was to describe health care resource use (HCRU) and disease cost burden in both, children with PID in treatment and children with PID belatedly diagnosed. **METHODS:** 34 cases of IDP were enrolled, registered from 2010 to 2015 in INP (47% agammaglobulinemic type and 29% with common variable immunodeficiency). Clinical histories were reviewed and It was developed a medical-economic model for register HCRU. Local sourced unit costs were used in the calculation for total costs and cost per capita was estimated by using INP attended reference population. **RESULTS:** Overall, the mean annual cost for patients with PID in treatment was in $11,564 USD and the mean annual cost for children with PID belatedly diagnosed was $16,019 USD. Main cost for patients with belatedly diagnosis were produced for infections: Pneumonia $6,785 USD, Acute Otitis Media $733 USD, Acute Respiratory Infection (upper tract) $843 USD, Sinusitis $609 USD, Septic Arthritis $1,242 USD and Infectious Gastroenteritis $5,805 USD. Cost per capita for patients with PID in treatment was estimated in $0.023 USD and cost per capita for patient with PID belatedly diagnosed was estimated in $0.031 USD. **CONCLUSIONS:** Belatedly diagnosis for PID in INP have a significant impact on HCRU and associated costs. Timely and effective diagnosis and management of these group of diseases has the potential to reduce disease burden and health care costs. **ECONOMIC BURDEN OF PRIMARY IMMUNODEFICIENCY IN NATIONAL INSTITUTE OF PEDIATRICS IN MEXICO. Maciel-Hernandez Humberto, Espinosa-Rosales Francisco, Partida-Gaytan Armando. Keywords: primary immunodeficiency, economic burden, cost of illness, health care costs, cost per-capita.**

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ASSESSMENT OF PRICE OF ESSENTIAL MEDICINES IN INDIA

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OBJECTIVES: To assess the procurement and patient price of selected medicines from a national list of essential medicines (NLEM) 2011 in pharmacies across India. **METHODS:** Data on procurement and patient price of medicines were extracted from seven states in India (Delhi, West Bengal, Karnataka, Haryana, Maharashtra, Chennai and Rajasthan) conducted the medicine prices and availability survey using the World Health Organization/Health Action International methodology. Twelve medicines from NLEM 2011 which are commonly surveyed across all the states were included. Because different states conducted their survey at different years, data were converted into the base year of 2015 for comparison. Outcome measure was median (range) price ratios to international reference prices. **RESULTS:** As there was no procurement of originator brand medicines in public sector, price was not calculated for this. The median (range) procurement price for generic medicine in public sector was highest in Rajasthan [1.44 (0.12-2.87)] and lowest in Chennai [0.38 (0.13-0.91)]. Patient price in public sector for generic medicine was nil in all the states as they are providing freely. Patient price in private sector for originator brands was found be highest in Maharashtra [15.44 (3.24-22.45)] and lowest in Chennai [12.75 (3.21-22.45)]; and for generic highest in the Delhi [14.22 (3.47-22.12)] and lowest in Rajasthan [9.27 (3.27-18.93)]. **CONCLUSIONS:** Procurement price of essential medicines were low in Chennai compared to other states. Patients treated in private sector paying very high price for both originator brand and generic essential medicines.