SMC. **METHODS:** SMC recommendations for technologies appraised between January and March 2016 were collected from the SMC website. Inclusion/exclusion decisions made by each of the 14 formularies for each technology were collected from Health Board websites and compared to the recommendations made by the SMC. Medicines where a formulary decision had not yet been made were recorded as 'not included'. Formulary decisions for the NHS Orkney and NHS Shetland Health Boards use those made by NHS Grampian, and decisions for NHS Western Isles use those made by NHS Highland. **RESULTS:** A total of 23 technologies were appraised by the SMC between January and March 2016, of which 16 were recommended (with or without a restriction) and 7 not recommended. Technologies not recommended by the SMC were not included on any of the 14 formularies. Of the technologies recommended by the SMC, the formulary inclusion rate was relatively low, at 45.1%, with the highest inclusion rate observed in Greater Glasgow and Clyde (93.8%) and the lowest in Lanarkshire (18.8%). There did not appear to be any regional divide in decision outcomes between Eastern and Western Health Boards, with inclusion rates of 42.9% and 47.3%, respectively. For medicines accepted by the SMC but not included by formularies, the most common reason for exclusion was failure of clinicians to respond to the invitation to apply for formulary inclusion. **CONCLUSIONS:** Inclusion rates by formularies for SMC-recommended technologies are surprisingly low, suggesting that Health Boards do not always follow the SMC's decisions, at least in the months immediately after the SMC decision has been made. Medicines may not be available on formularies as soon as they are approved by the SMC.

PHP95

GLOBAL VALUE DOSSIERS (GVDS): HOW TO ENSURE THE VALUE ISN'T LOST IN TRANSLATION

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OBJECTIVES: While GVDs are considered a critical component of a new product's global market access/reimbursement plan, anecdotal evidence suggests variability across organizations in perceptions of purpose and utility. **METHODS:** A web-based survey was fielded to global and regional employees of pharmaceutical manufacturers with responsibility in developing and/or executing market access strategy for new products. **RESULTS:** A total of 42 industry employees participated in the survey; regions represented included Europe, North America, and Asia-Pacific. The perceived primary purposes of a GVD were to assist in preparing local health technology assessment (HTA) submissions and/or provide comprehensive disease state and product review (73%); 20% felt the primary purpose was to highlight product value. However, only 50% of respondents indicated that the GVD adequately addressed their purposes. Only 23 of 36 respondents who have developed a local HTA submission reported having a GVD "the last time" they prepared/reviewed a local HTA submission, and only 31% (n=7/23) felt the GVD provided value. Greatest barriers to use were lack of relevancy to country/region (57%), lack of comprehensive content (39%), language (English) (35%), and cumbersome format (30%). Of elements commonly included in GVDs, those most important for local HTA submissions were clinical efficacy (95%), epidemiology (87%), unmet needs (87%), and product description (76%). In comparison, cost-effectiveness (21%) and budget impact (11%) were deemed the least important. Utility of these sections is likely driven by specific country HTA/reimbursement schema, although the sample size was too small to draw meaningful conclusions. Most respondents indicated the most useful time to have a GVD was 6-12 months pre-approval (65%); 20% would prefer earlier (2+ years pre-approval). **CONCLUSIONS:** One of the greatest challenges with GVDs is balancing comprehensiveness with specificity. Opportunity for improvement remains in the timely provision of valuable data to affiliates responsible for local HTA submissions.

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

PHP96

COST OF LOST PRODUCTIVITY DUE TO PREMATURE, SUICIDE-RELATED MORTALITY IN POLAND

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OBJECTIVES: Suicidal behaviour is thought to be one of the world's major health and social problems. In Poland it is the leading death cause among people aged 15-39. The aim of the study was to estimate the cost of lost productivity due to premature, suicide-related mortality in Poland. **METHODS:** Absolute numbers of suicide-related deaths by gender and five-year age groups were abstracted from Polish Central Statistics Office database. Costs were valued using the human capital approach. Years of lost productive life were computed by multiplying deaths in people of working age by working-life expectancy, then by age- and gender-specific gross wages, and adjusted for unemployment and workforce participation. Wage growth was calculated at 3.4% per annum and a discount rate of 3.5% annually was applied. Cost were expressed in PLN 2016 (1 Euro = 4.3 PLN). **RESULTS:** The number of reported suicides in 2012 was 5,555 males, 810 females, 6,365 in total. The crude rates per 100,000 population were 30.5, 3.8 and 16.6 respectively. The indirect cost of reported fatal suicide-related injuries in 2012 was 3,826,594,040 PLN, representing approximately 10% of the total cost of premature mortality due to all causes of death and 0.2% of GDP. The economic cost of male suicides (3,595,616,337 PLN) was substantially higher than in females (230,977,704 PLN), representing 96% and 4% of the total, respectively. The male indirect costs per suicide death was 2.3 higher than the equivalent female cost (647,275 PLN vs 285,168 PLN). **CONCLUSIONS:** High indirect cost of suicide reinforces the importance of additional preventive measures. Mental illness and family disagreements are the most frequent suicide cause in Poland. It is expected that preventing behavioural disorders, their early detection and effective treatment can notably decrease the social burden and great economic loss of suicide.

PHP97

SPECIALTY PHARMACY, DIAGNOSTIC, AND GENETIC TESTING COVERAGE IN THE UNITED STATES

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OBJECTIVES: To gain a better understanding of health-plan management of specialty pharmacy (SP), SP-products (2015 spending increased 21.5%) and diagnostic/genetic testing (per-test costs declining,availability/use increasing). **METHODS:** Online survey of US medical+pharmacy directors from public/private plans with multiple member-types on: advisor+plan information; specialty-pharmacies/pharmaceuticals, copays, and genetic/diagnostic test coverage and restrictions. **RESULTS:** MDs represented 59% of respondents from plans representing commercial lives=79.6%; Medicaid (low-income)=61.1%; Medicare (elderly)=68.5% with 28.6%=local; 41.1%=National; and 30.4%=regional. SPs were a top current/future concern. 51.7% of plans restricted SP providers and 40.3% used their PBM as their SP, 46.1% of the SPs were privately-owned, 46.1% PBM-owned, and 7.7% hospital-IDN-owned. Top SP-conditions included HCV=90.4%;Oncology=88.5%;HIV=73.1%. The majority (68.1%) restricted SP services to a small set under contract, 14.9% allow any SP; 14.9% only restricted products available through multiple specialty-pharmacies, 2.1% carved them out. Plans covered clinician-administered products (CAPs, i.e., injections/infusions) under the medical-benefit (MB= 64.3%); under the pharmacy-benefit (PB=5.4%); 30.4% were product-specific; 70.9% expect no change; and 29.1% expect to complete changes before 12-2018. Oral Biologics (OBs) were managed under the PB=78.9%; the MB=7.0%; 14.0% based on plan-design/product. Expectations for OB benefits: no change (78.6% of plans), currently changing (7.1%); before 12-2017 (12.5%) and before 12-2019 (1.8%). SP+OB copays vary by group/benefit design and are shifting from fixed to %-copays with Multiple-Sclerosis agents maintaining more fixed copays. Most (82.5%) of plans do not require AMCP-dossiers for testing. In 2016, genetic tests (GTs) were covered in all cases (63.5% of plans); not covered (15.4%) and threshold-based (21.1%) with minimal expected changes. GT coverage was highest for oncology (92.4%); OB/GYN (66.0%); cardiovascular (52.8%). Disease marker tests were covered in all cases (79.6%), not covered (5.6%), and 14.8% threshold-based. Coverage for therapy-response tests (HCV, RA, etc): all cases (68.5%), no-cases (20.4%); and 11.1% threshold-based. **CONCLUSIONS:** Testing and specialty pharmacy/pharmaceutical expenditures are expected to grow and require appropriate coverage.

PHP98

RELEVANCE AND ECONOMIC CONSEQUENCES OF MEDICINE WASTE IN VIENNA: ANALYSIS OF A HOUSEHOLD GARBAGE SAMPLE

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OBJECTIVES: Medicine waste is an underestimated problem. This negatively impacts the environment, and is an indication of possible non-adequate patient adherence to medicines, and thus implies losses for public payers. The aim of this research is to examine the relevance and economic consequences of medicine waste in household garbage in Vienna (Austria). **METHODS:** We analysed four samples of pharmaceutical waste that were quarterly collected from household garbage by the Vienna Municipal Waste Department ('MA 48') between April 2015 and January 2016. The four samples that weighted around 12 kg each contained items that included at least some content (e.g. one tablet as a minimum). We examined the items with regard to the therapeutic group of the included medicines, dose form, expiry status, expiry date, country of origin, prescription status and quantity left over. This was done for the total data set and for sub-groups (e.g. items with 100% content). For the analysis of the economic consequences medicine price data were accessed in the Austrian price list called 'Warenverzeichnis'. **RESULTS:** The four samples included 637 items of which 18% had 100% content. 32% of the items that contained 100% content were not expired. 63% of all items and 70% of those items which had 100% content were prescription-only medicines. The value of the medicines was estimated to be around €4200 for the total sample, and around €1500 for the subgroup of the items with 100% content. **CONCLUSIONS:** The findings confirm that some medicines end up unused in household garbage in Vienna. In particular, the shares of items not expired and of 100% content suggest a public health issue that should be addressed. There is apparently a need for better medication adherence as well as for improved policies related to the disposal of medicines.

PHP99

A SYSTEMATIC REVIEW: ECONOMIC BURDEN OF NEEDLESTICK INJURIES ON HEALTHCARE WORKERS

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OBJECTIVES: To understand the economic burden of needlestick injuries (NSIs) in Mainland China and other countries and regions worldwide. **METHODS:** A literature review was conducted to measure the costs of NSIs. Literature published from 1990 and May 2016 on PUBMED, SCIENCEDIRECT, EBSCOhost, Cochrane, CNKI and Wan Fang were searched. The population included were healthcare workers in public and private hospitals. Inclusion and exclusion criteria were set to select the appropriate literatures. All costs were adjusted to 2016 US dollars. **RESULTS:** 272 studies were obtained from a search of literature globally and 13 met the inclusion and exclusion criteria. Among the 13 studies, there are 6 on the USA, 2 on Spain and 1 on the UK, Sweden, South Korea, Belgium and Taiwan each. The objective of these studies were to provide a measure on the effectiveness of existing measures relating to needlestick injuries. There is no economic study of NSIs on China. The mean costs are $384.92(Standard Deviation:$199.58) for every injury occurred and the costs range from $125.00 to $850.00 according to the treatment procedures and severity of injury. From an individual country perspective, the UK has the highest economic