

able. **RESULTS:** The strategy of vaccinating people over 65 yo showed incremental cost-effectiveness ratios of 41,467€/QALY gained from a payer perspective and 40,733€/QALY from a societal perspective. The analysis by age group showed that the ICER is age-dependent, the lowest ICER (30,780€/QALY in both perspectives) having been found in the cohort 70-74 years old. In sensitivity analyses data on the duration of PHN, utilities and vaccine efficacy duration showed a major impact on the results. **CONCLUSIONS:** Our cost-effectiveness analysis shows that a HZ vaccination policy for adults aged  $\geq 65$  years in Norway can be cost-effective and provide substantial public health benefits in the Norwegian health care system.

#### PIH26

##### COST-EFFECTIVENESS ANALYSIS OF SURGICAL MANAGEMENT OF STRESS URINARY INCONTINENCE WITH SINGLE-INCISION MINI-SLING VERSUS TENSION-FREE VAGINAL OBTURATOR IN SPAIN

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**OBJECTIVES:** To analyze the cost effectiveness of surgical management of stress urinary incontinence (SUI) in women with single-incision mini-sling (SIMS) compared with tension-free vaginal obturator (TVT-O). **METHODS:** A cost-effectiveness analysis based on the results of interventions performed with TVT-O (2005-2008) and SIMS (2008-2011) in women with a diagnosis of SUI was performed. The clinical effectiveness was defined as an objective cure at 12 months (pad-test <1 g/h). A perspective of the hospital payer was adopted; therefore, only direct health care costs (diagnostic and surgical procedures, medical devices, medications, hospital stay times and staff) were included. CI95% of total cost was estimated by bootstrapping; later, different sensitivity analyses were conducted. **RESULTS:** Procedures were carried out in 81 women (44 in the SIMS group and 37 in the TVT-O). A small difference (6.7%) in clinical effectiveness was observed in favour of SIMS, however, it was not statistically significant (SIMS: 93.2% and TVT-O: 86.5%). The total annual cost per patient with SIS was lower (2,059€; CI95%: 1,914-2,285) than with TVT-O (2,821€; CI95%: 2,661-2,997), showing a statistically significant cost saving of 762€ (CI95%: 516-987). In the base case, the probability of SIMS is less costly than TVT-O was 100%. The sensitivity analysis showed that the cost determinant was the length of the hospital stay, observing that an equivalent cost was only achieved if there was no cause for any hospital stay with TVT-O. **CONCLUSIONS:** The use of single-incision mini-sling is associated with an comparable clinical effectiveness but with a 762€ per patient reduction of the average annual cost, compared to tension-free vaginal obturator. Therefore, the results suggest that, over a post-operative period of twelve months, tension-free tape single-incision mini-sling is a dominant alternative to tension-free vaginal obturator because of a lower cost and a comparable effectiveness.

#### PIH27

##### A COST-EFFECTIVENESS ANALYSIS OF DIFFERENT TYPES OF LABOR FOR SINGLETON PREGNANCY – REAL LIFE DATA

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**OBJECTIVES:** To assess cost, clinical outcomes and cost-effectiveness of different types of labor in singleton pregnancies. **METHODS:** A decision model was used to compare vaginal labor, induced labor and planned cesarean section. All data were taken from the Book of Labor from the University Hospital for Gynecology and Obstetrics "Narodni Front" in Serbia, for labors conducted during one month period in 2011. Successful delivery, (i. e. labor that began up to 42 gestation weeks, without maternal mortality and the newborn Apgar scores greater than or equal to seven in the first and fifth minute of life) was considered as the outcome of the cost effectiveness analysis. To test the robustness of this definition probabilistic sensitivity analysis was performed. **RESULTS:** From a total of 667 births, vaginal labor was conducted in 98 cases, induced vaginal in 442, while planned caesarean section was performed 127 times. Emergency caesarean section as a complication was much higher in the vaginal labor cohort compared to the induced vaginal cohort (OR = 17.374, 95% CI: 8.522 to 35.418, p < 0.001). The least costly type of labor was induced vaginal labor: average cost 461 euro, with an effectiveness of 98.17%. Both, vaginal and planned cesarean labor, were dominated by the induced labor. The results were robust. **CONCLUSIONS:** Elective induction of labor was associated with the lowest cost compared to other types of labor, with favorable maternal and neonatal outcomes.

#### PIH28

##### COST EFFECTIVENESS OF PENTAVALENT ROTAVIRUS VACCINE (RV5) IN SLOVENIA

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**OBJECTIVES:** To assess the potential impact of universal vaccination with RV5 on health care burden and costs associated with rotavirus gastroenteritis (RGE) among a hypothetical birth cohort of 21,938 Slovenian children in their first five years of life. **METHODS:** A Markov model was used to evaluate the cost per quality-adjusted-life-year (QALY) and public health impact of vaccination with RV5 from the health care payer and societal perspectives. The base case assumes three dose coverage rate of 94% at 2, 4 and 6 months among the vaccinated, the remaining receiving 1 or 2 doses. In the absence of universal vaccination 819 hospitalizations and 3,276 office visits were projected to occur in the first 5 years of life. RGE associated costs include direct and indirect costs associated with parental work loss. The efficacy of RV5 in reducing health care resource utilization is based on the results of the Rotavirus Efficacy and Safety Trial (REST). **RESULTS:** A universal RV5 vaccination program is projected to reduce hospitalizations, office visits and parental work

loss by 94, 76 and 87% respectively. The cost per case avoided would be 165 Euros, and cost per hospitalization avoided would be 1,639 Euros with implementation of universal vaccination. The cost per QALY saved would be 29,452 Euros and 20,453 Euros from the health care and societal perspectives respectively. **CONCLUSIONS:** RV5 is projected to avert substantial number of RGE hospitalizations and office visits in Slovenia and would be considered a cost effective intervention. **KEYWORDS:** rotavirus vaccine, cost effectiveness, QALY.

#### PIH29

##### HEALTH ECONOMIC MODEL ON THE COSTS AND EFFECTS OF ROTAVIRUS VACCINATION IN ROMANIA

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**OBJECTIVES:** Rotavirus gastroenteritis (RVGE) is one of the most frequent diseases in children less than 5 years old. Today, no recommendation for general rotavirus vaccination exists in Romania, which leads to a vaccination coverage rate of < 8%. We model whether the strategy of "Universal Mass Vaccination" should be cost-effective from the Social Health Insurance Fund (SHIF) perspective. **METHODS:** We adapted an already published simple model to estimate the cost-effectiveness of rotavirus vaccination in Romania. It helps identifying the drivers of the economic analysis in a birth cohort of 194,411 children (Romania 2012) followed over a period of 5 years. In the model, vaccine efficacy results from international clinical trials are combined with Romanian epidemiology and cost data from the SHIF perspective for 2012. The model assumes a theoretical vaccination rate of 100% and uses discount rates of 3% on costs and effects. Results are tested on their robustness using univariate sensitivity analysis. **RESULTS:** The model predicts that a two-dose rotavirus vaccine could avoid around 82,581 mild, 51,328 moderate and 3,075 severe RVGE cases. Moderate and severe events are associated with physician visits and hospital stays respectively. These also lead to a total cost saving of € 2.4 million for indirect cost estimates. The main factors responsible for the savings are the reduction in hospital stays, in productivity losses of parents and in medical visits. Sensitivity analysis indicates the importance of good epidemiological data and cost numbers on productivity loss. **CONCLUSIONS:** General vaccination against rotavirus could avoid many of the severe diarrhea events in children less than 5 years old in Romania. Depending on the price per course, the vaccination strategy will lead to societal cost gain.

#### PIH30

##### COST-EFFECTIVENESS ANALYSIS OF COFFEE CONSUMPTION FOR PREVENTION OF ALL-CAUSE MORTALITY IN GERMANY

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**OBJECTIVES:** Coffee contains over 1,000 distinct molecular compounds and is one of the most widely consumed beverages worldwide. Epidemiologic studies have shown an inverse relationship between coffee consumption and all-cause mortality. This analysis aims to assess the cost-effectiveness of coffee from a blended German consumer and payer perspective. **METHODS:** An existing decision-analytic model was adapted with German data. A cohort life-table analysis was developed to model life-years (LYs) of German coffee consumers vs. non-consumers over a lifetime horizon. Age- and gender-specific mortality rates were used to model survival outcomes. Relative risks of death by average coffee intake (cups/day) were obtained from a recent large, prospective cohort study. Cost were considered for cost per cup (home prepared and from a national sample of low and high-cost vendors) and for health care. Incremental analyses were conducted by cost, sex, and level of daily coffee consumption. Deterministic and probabilistic sensitivity analysis was performed. **RESULTS:** Coffee increased undiscounted LYs in 1, 2-3, 4-5, and 6+ cup/day male (0.65, 1.10, 1.33 and 1.10) and female (0.45, 1.21, 1.51, 1.41) consumers, respectively, versus non-consumers. ICERs per undiscounted LY gained were € 3,938/ € 7,047/ € 16,271 for males and € 5,514/ € 5,066/ € 13,537 for females, respectively, for 1, 2-3, and 4-5 cups/day consumption of home-prepared coffee;  $\geq 6$  cups/day was strictly dominated. Consumption of 4-5 cups per day purchased from high-cost vendors was not cost-effective (male: € 168,780/ female: € 135,636). Results were consistent throughout the sensitivity analyses, whereas coffee effectiveness in preventing death and coffee acquisition cost has the largest impact on ICERs. **CONCLUSIONS:** In this analysis, coffee consumption was associated with increased LYs and was shown to be potentially cost-effective, especially if home-prepared or purchased from low-cost vendors. Given the observational nature of the study data, further research is warranted to validate these findings.

#### PIH31

##### COST-EFFECTIVENESS ANALYSIS OF SCREENING SYPHILIS AMONG PREGNANT WOMEN

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**OBJECTIVES:** Maternal and congenital syphilis prevalence rates are currently rapidly increasing in Mongolia. On-site screening and same-day treatment for syphilis in pregnancy prevents greater numbers of congenital syphilis and its complications. The Ministry of Health has been implementing on-site rapid screening test (RT) intervention and same day treatment approach for maternal syphilis with the contribution of the World Health Organization. Objective of the study was to understand the cost-effectiveness (CE) of screening antenatal syphilis using the RT strategy, to compare this intervention with RPR testing strategy. And in order to estimate CE we found out maternal syphilis prevalence. **METHODS:** Ingredients-based cost data and epidemiological data were collected retrospectively from the pregnancy medical records. Decision analysis was used to estimate the incremental CE of on-site PT compared to the current practice, off-site PRP/TPHA. Descriptive analysis has done for prevalence of syphilis, and economic analysis has done to calculate costs. Stability of cost-effectiveness ratios were evaluated by the univariate sensitivity analysis. **RESULTS:** With antenatal syphilis prevalence of 3.0% (1.46% in urban and 5.7% in sub-urban area), the cost effectiveness was US\$ 14.60/DALY