PMD38

DO NOT OVERLOOK YOUR COUNTRY-SPECIFIC CHARACTERISTICS: THE CASE OF BAROREFLEX ACTIVATION THERAPY (BAT) FOR THE TREATMENT OF RESISTANT HYPERTENSION

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OBJECTIVES: To assess clinical effectiveness, cost-effectiveness, and budget impact of Baroreflex Activation Therpay (BAT) in comparison with optimal medical treatment from a hospital and societal perspective in Spain. **METHODS:** Clinical effectiveness analysis was based on studies collected from medical databases and grey literature. Cost effectiveness and budget impact analysis was based on a Markov model using epidemiological data, risk functions and clinical management in Spain. **RESULTS:** In a simulated cohort of 55-year-old non-smoker Spanish patients with resistant hypertension, BAT significantly reduced the number of heart attacks, heart failures, strokes, end-of-stage renal disease and liver transplantations. BAT produced 0.78 additional quality-adjusted life years with an incremental societal cost of 50.400€. The resulting incremental cost-effectiveness ratio (65.000€ per QALY) was substantially larger than the one estimated for the Northern European population (7.800€ per QALY). Qualitative results were robust to all-parameter variations. **CONCLUSIONS:** Local health characteristics –both, epidemiological data and clinical management– have a large weight on cost-effectiveness results.

PMD39

ONE-YEAR COST-COMPARISON ANALYSIS OF ABSORB™ EVEROLIMUS ELUTING BIORESORBABLE VASCULAR SCAFFOLD AND XIENCE™ EVEROLIMUS ELUTING STENT: BASED ON FINDINGS FROM ABSORB II

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OBJECTIVES: The objective of this study was to compare the one-year costs related to cardiac adverse events post-index procedure discharge of Absorb and Xience. **METHODS:** Using resource use data from ABSORB II, which comprised of 501 patients randomized 2:1, one-year cardiac-related adverse event costs were calculated for the Absorb and Xience groups in 5 countries (France, Germany, Italy, The Netherlands, and Spain). Unit costs from the perspective of the health system were taken from publicly available data sources (2014 level). Costs were calculated by lipid control and diabetic status, both at baseline. Resource use categories included hospital admissions, outpatient visits, and cardiac diagnostic tests. **RESULTS:** Mean country costs ranged between 1,140-1,880 Euros for Absorb and between 1,310-2,420 Euros for Xience. Mean country-specific per patient cost differences (Absorb minus Xience) were 170 Euros in France, 220 Euros in The Netherlands, 250 Euros in Germany, 420 Euros in Italy, and 540 Euros in Spain. Cost-savings were mainly attributable to the 1.5 unit reduction in mean number of subsequent percutaneous coronary interventions (PCIs) performed in the Absorb arm compared to the Xience group (32 versus 47 per 1,000 population for all country data combined). Regardless of lipid status (lipids <2.0 mmol/l or lipids >2.0 mmol/l) and diabetic status at baseline, cardiac-related adverse event costs were reduced with Absorb. Patients with a lipid profile >2.0 mmol/l at baseline had mean country costs that ranged between 1,240-1,930 Euros for Absorb and between 1,380-2,540 Euros for Xience. Patients with diabetes at baseline had mean country costs that ranged between 1,250-1,920 Euros for Absorb and between 1,380-3,190 Euros for Xience. **CONCLUSIONS:** These findings suggest potential short term cost-savings with Absorb compared to Xience as a result of the reduced mean number of repeat PCIs. Future research is necessary to study total direct and indirect cost and long-term costs of each intervention.

PMD40

COST SAVING ASSOCIATED WITH GLUCOSE METER ACCURACCY IN SPAIN

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OBJECTIVES: ISO 15197:2003, states that 95% of the glucose results shall fall within ±15 mg/dl for concentrations ≤75 mg/dl and within ±20% for >75 mg/dl. Some measures which may fall into the recommended thresholds would be out of the limits of good metabolic control, not permitting to adjust the therapy, increasing the complication risk, and raising the associated costs. The objective was to estimate the annual cost saving in Spain by using glucose meters with better accuracy. **METHODS:** Two samples of true and read values were created according to type 1 and 2 diabetes (T1D, T2D) Spanish population data. Proportion of readings into the recommended thresholds whose true values were out of the limits was calculated. The complication risk associated with those false readings was estimated from the clinical trials, and the cost to manage complications was calculated from public costs. Cost of strips was included to estimate the total cost. The annual cost saving was the difference between the total cost (2015 €) of all Spanish patients in the base case (accuracy level, A20%) and other scenarios (A15%, A10%, and A5%). **RESULTS:** 100% of T1D (n: 116,160) and 32.2% of T2D patients (n: 957,511) will often need glycaemic self-monitoring, with a cost around 168 mill€. Not detected hyper/hypoglycemia values were estimated: 119,302; 81,025, 55,915 and 27,332 in A20%, A15%, A10%, and A5%, respectively. Total cost was 193.94 mill€; 183.94 mill€, 178.29 mill€, and 172.98 mill€, respectively, leading a saving cost of 10.006 mill€, 15.657 mill€ and 20.960 mill€, by changing from A20% to A15%, A10% and A5% scenario. **CONCLUSIONS:** Blood glucose meters with better accuracy leads to decrease complications risk which is associated with cost savings: when meters accuracy increases from 20% to 15% and 10%, cost savings are 5.9%, 9.3%, and 12.4% on total strips cost.

PMD41

COSTS ANALYSIS OF PCR UNYVEROTM I60-ITI TECHNIQUE FOR DETECTING MICROORGANISMS IN PATIENTS WITH SUSPECTED CHRONIC INFECTION AT MUSCULOSKELETAL IMPLANTS

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OBJECTIVES: Polymerase chain reaction (PCR) techniques could provide an earlier diagnosis than traditional techniques (TT) to identify chronic infections in patients with musculoskeletal implants. The aim was to determine costs associated to microorganism's diagnosis in sonicate samples of musculoskeletal implants, comparing the addition of a PCR technique (UnyveroTM i60-ITI) to TT versus TT only. **METHODS:** A preliminary cost analysis was developed to estimate the hospital costs in patients admitted at Fundación Jimenez Diaz Hospital (May-2014 to April-2015) for musculoskeletal implant removal due to chronic infection suspect. Sonicated samples were tested for microbiological diagnosis using TT. Additionally, samples were tested using UnyveroTM i60-ITI. Medical hospitals records were reviewed for data collection: sociodemographic data; type, dosing and antibiotic treatments; and hospital length of stay (LOS). Intravenous vancomycin and ceftazidime were selected as the initial empiric treatment. Replacement to a specific antibiotic was performed after microbiological diagnosis. Total estimated costs (€, 2015) included antibiotic treatment, hospital stay (€1,006 per day) and UnyveroTM i60-ITI kits (€350 per kit) costs. **RESULTS:** Ten patients were retrieved for preliminary analysis (average age: 75.39±6.31 years; 20% men). Hip (40%) and knee (40%) were the most frequent implant sites. Average period from implant removal to final diagnosis lasted 4.60±1.35 days with TT. UnyveroTM i60-ITI diagnosis was available 24h after removal. LOS was 24.4 days for TT and 23.3 days for UnyveroTM i60-ITI added to TT. The average antibiotic treatment cost was €1,016.01 for TT and €976.84 for UnyveroTM i60-ITI added to TT. Hospital stay cost was €25,591.26 for TT and €24,361.98 for UnyveroTM i60-ITI added to TT. The use of UnyveroTM i60-ITI reduced average total costs in €840.67. **CONCLUSIONS:** UnyveroTM i60-ITI PCR for microbiological identification in musculoskeletal implants sonicated is associated to faster diagnosis and shorter hospital stays than traditional techniques only, allowing cost savings at hospital level.

PMD42

THE COST OF NUTRITION ALTERNATIVES FOR PREMATURE INFANTS IN THE NEONATAL INTENSIVE CARE UNIT IN RUSSIA

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OBJECTIVES: To perform economic evaluation of donor breast milk (DBM) (using clinical breast pump) or artificial formula (AF) for premature infants in the neonatal intensive care unit (NICU) for Russian healthcare setting. **METHODS:** We calculated the cost of providing 100 ml of DBM using clinical breast pump and 100 ml of AF for premature infants in the NICU. The total cost of providing DBM was measured as: the breast pump cost, the individual pumping set cost and staff costs. The cost of providing AF was calculated using the mean cost per 100 ml for powdered AF and staff costs. We also calculated the cost per averted case of necrotizing enterocolitis (NE) for premature infant when breastfeeding instead of the AF is used. The cost of the averted NE was obtained using the difference in cost of feeding during the period, required for NE development and number of patients "needed to treat" (NNT) to prevent 1 NE case derived from the clinical trials. Besides we calculated the DBM cost when breast milk fortifier (BMF) is added for low-weight infants. **RESULTS:** The costs per 100 ml of AF and DBM were similar (0,67 EUR and 0,77 EUR respectively). The cost per averted case of NE was 344,5 EUR within 35 days that is less than NE treatment. The difference in costs (in favor of AF) amounted to 2,87 EUR per 100 ml with the use of BMF. **CONCLUSIONS:** The cost of DBM is comparable to the cost of AF, with a significant DBM clinical benefit. The costs per averted NE within 35 days shows that DBM is acceptable from the position of Russian health care system. When calculating the costs of DBM with the use of BMF, DBM costs exceed those for AF for more than 5 times.

PMD43

COST CONSEQUENCES OF SINGLE-USE AND RE-USE OF URINARY CATHETERS AMONG PATIENTS PERFORMING DAILY INTERMITTENT CATHETERIZATION

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OBJECTIVES: The material cost for reusing intermittent urinary catheters is lower than to use single-use catheters. These cost savings are misleading since complications may increase and lower compliance to the therapy can be expected, necessitating use of the second choice therapy form with even more complications, i.e. an indwelling catheter. The purpose of this cost-comparison study was to compare single-use of coated catheters to re-use of non-coated catheters in a group of individuals performing intermittent catheterization where some of them fail their first choice therapy and switch to an indwelling catheter. **METHODS:** A 1-year Markov simulation model with monthly cycles was developed for users of daily intermittent catheterization. Individuals who used 4 catheters/day (single-use) were compared to individuals who re-used their catheters (1 catheter/day). After one month's use, 18% of the patients in the single-use group were assumed to fail their treatment and switch to indwelling catheter. The corresponding frequency in the re-use group was 35%. The model was populated with risks from the literature for complications (e.g. symptomatic UTI, UTI resistant to antibiotics, pyelonephritis, bacteremia, epididymitis, strictures, bladder stones) as well as catheter and healthcare costs for single-use, re-use and indwelling catheters, respectively. **RESULTS:** The total annual catheter cost per patient was 2188 euros (including 163 euros for indwelling catheters) in the single-use group and 817 euros (including 317 euros for indwelling catheters) in the re-use group. The total annual cost per patient for