

RESULTS: A substantial share of the variance (around 20%) was related to the hospital level. Preliminary results suggest that supplementary fees had a borderline significant positive impact on DES use. Further hospital characteristics also had a significant impact on the use of DES ($p < 0.05$), as well as area characteristics. **CONCLUSIONS:** Although there seems to be a small influence of supplementary fees on the use of DES, further hospitals' and area characteristics might be of higher importance than reimbursement incentives. Attributing the diffusion of technologies to financial incentives only would fall too short.

PMD65

SYSTEMATIC REVIEW OF STUDIES OF THE EFFICIENCY OF NEGATIVE PRESSURE THERAPY FOR COMPLEX FOOT WOUNDS IN DIABETIC PATIENTS

Quecedo L¹, Del llano J²¹Fundación Gaspar Casal, Madrid, Spain, ²Fundación gaspar casal, Madrid, Spain

OBJECTIVES: Systematic analysis of the available studies of the clinical effectiveness and safety of negative pressure therapy, as compared with traditional courses of treatment, in complex foot wounds in diabetic patients. **METHODS:** A bibliographical search was performed in the following databases: Embase.com, Medline and Cochrane Library, covering from 2000 until the present. The following descriptors and key words were used: diabetic foot, negative-pressure wound, vacuum-assisted closure and diabetic ulcers. The Jaddad criteria were used to determine the quality of the clinical trials. The studies selected were randomized clinical trials that featured patients older than 18 years, with complex ulcers, postoperative wounds, or wounds resulting from the amputation of the foot, with a control group comparing negative pressure therapy with conventional therapies (saline solution, alginates or hydrophilic substances). The treatments were applied every 48 hours. A total of 12 studies, of which only 7 were pertinent, were selected. Two independent reviewers extracted the information and determined the methodological quality of the selected studies. **RESULTS:** Of the 7 studies selected (539 patients), 5 involved patients with postoperative wounds and 2 used the same group of patients. One of the two studies involving ulcers of the foot was limited by its simple size ($N=10$). The methodological quality of the studies is moderate-low. **CONCLUSIONS:** The evidence supports the effectiveness and security of negative pressure wound therapy in complex foot ulcers in diabetic patients. Given that it is unlikely that further research will change this positive appraisal (despite the moderate-low quality of the studies analyzed, its cost profile and the absence of adverse effects) it is possible to make a strong recommendation in favor of the therapy.

PMD66

DEMAND FOR ROUTINE IN OFFICE FOLLOW-UP VISITS FOR CARDIAC IMPLANTABLE ELECTRICAL DEVICES (CIED) IN GERMANY AND THE UNITED KINGDOM

Smala A¹, Gessler M², Stoepel C³¹Biotronik SE & Co KG, Global Reimbursement and Health Economics, Berlin, Germany, ²Biotronik SE & Co KG, Global Sales Strategy, Berlin, Germany, ³Städtische Kliniken Neuss, Lukaskrankenhaus GmbH, Medizinische Klinik I, Neuss, Germany

OBJECTIVES: Based on clinical trial evidence, remote follow-up (FU) has been recommended for replacing in office visits routinely scheduled to monitor device functionality and health status of patients with CIED. No data exist on the actual demand for such visits. To estimate the total number of calendar based in-office FU visits in Germany and the UK (UK) by 2015. **METHODS:** Official national sales data for implantable pacemakers (PM), cardioverter defibrillators (ICD) and cardiac resynchronisation therapy (CRT) devices were combined with published replacement rates and estimates for patient mortality and device longevity. Following HRS/EHRA guidelines on FU frequency, demand for FU consultations until 2015 was modelled. **RESULTS:** For 2010, the model estimates about 677'800 prevalent patients with a CIED in Germany and 225,000 in the UK. The growth in CIED patients recently seen in the UK is expected to slow down but to continue to be higher than in Germany (+8.3% per annum until 2015 versus 4.8%). Assuming two annual visits for PM patients and four visits for ICD and CRT patients, the total number of routine FU visits is estimated to increase from 1.66 mio in Germany (2010) to 2.23 mio (2015). For the UK, service numbers will increase from 538,000 (2010) to 836,000 (2015). These estimates do not include unscheduled FU visits. **CONCLUSIONS:** Regular FU services for CIEDs are mandatory to ensure device functionality and monitor disease status. Increasing patient volumes will push demand for these services, placing a potentially unmanageable burden on cardiology service providers, payers and patients, unless infrastructure investments occur. High demand for services and low actionability of routine visits may result in inappropriate guideline adherence with potentially negative impact on patient safety and device longevity. Clinics need to become aware of this situation and adopt strategies for handling the expected workload in the future.

PMD67

THE COST-EFFECTIVENESS OF TRANSCATHETER AORTIC VALVE IMPLANTATION IN ELDERLY PATIENTS WITH SEVERE AORTIC STENOSIS WHO ARE CONTRAINDICATED FOR CONVENTIONAL SURGICAL AORTIC VALVE REPLACEMENT IN THE UNITED KINGDOM

Campbell J¹, Faivre P², Kumar P², Drummond M³¹OptumInsight, Medford, MA, USA, ²OptumInsight, Uxbridge, UK, ³University of York, Heslington, York, UK

OBJECTIVES: To assess the cost-effectiveness of transcatheter aortic valve implantation (TAVI) versus medical management (MM) for severe aortic stenosis (AS) in elderly patients with excessive surgical risk. **METHODS:** A Markov model was developed of survival, quality-adjusted life-years (QALYs) and medical costs, in elderly patients in the UK with severe AS and excessive risk for conventional aortic valve replacement (AVR). Incremental cost-effectiveness ratios (ICERs) were esti-

mated as cost per QALY-gained, from the National Health Service (NHS) perspective, over 3 years. Clinical and utility outcomes over the first year were derived from published results of a head-to-head randomized controlled trial comparing [transfemoral] TAVI and MM. Base-case analyses assumed no additional procedure-related adverse events after the first year—not including re-hospitalizations due to cardiovascular events—and constant treatment-specific mortality after the first month. Costs of procedures, adverse events, re-hospitalizations and long-term health care utilization were estimated using NHS tariff and reference cost schedules, National Institute of Health and Clinical Excellence reports, peer-reviewed literature and clinical experts. Outcomes and costs (2010£) were discounted at 3.5% per annum. **RESULTS:** Under conservative assumptions, treatment with transfemoral TAVI is estimated to result in better survival (35% vs. 13% at three years) and more QALYs (1.17 vs. 0.76) than MM. TAVI is also associated with higher costs of initial treatment and procedure-related adverse events, partially offset by lower costs of re-hospitalizations (net costs of £34,500 vs. £23,700). The base-case ICER of £26,100 is sensitive to variation in assumptions about long-term mortality for MM and long-term cardiovascular events for TAVI but remains below £30,000; the model is also sensitive to assumptions on long-term care use. **CONCLUSIONS:** In elderly patients who are contraindicated for AVR, TAVI is estimated to result in better survival and fewer re-hospitalizations over a three-year period compared with MM, and can be considered cost-effective at 3 years with a base-case ICER of ~£26,000.

PMD68

PURCHASING AND ADOPTING CARDIOVASCULAR DEVICES: A GLOBAL SURVEY

Menzin J¹, Neumann P², Duczakowski C¹, Woodward RM¹, Friedman M¹, Outlaw JJ³, Durtschi A³¹Boston Health Economics, Inc., Waltham, MA, USA, ²Tufts University School of Medicine, Boston, MA, USA, ³Abbott Vascular, Santa Clara, CA, USA

OBJECTIVES: The objectives of this study were to: 1) evaluate, from a global perspective, the decision-making processes, roles of individuals involved, and physicians' and administrators' beliefs about future decision making for the adoption of cardiovascular devices and medical technologies; and 2) determine which clinical and health economic factors decision makers consider the most influential and what types of data they use when making decisions. **METHODS:** We surveyed cardiovascular physicians and hospital administrators in the US, UK, Australia, France, Germany, and Japan using a web-based questionnaire. Respondents were asked about their involvement in and opinions on the decision-making process in their institutions, and the role that clinical and economic data play in influencing decisions. Chi-squared tests were used to test for statistical differences between physicians and hospital administrators (all countries combined) and across countries. **RESULTS:** The questionnaire was completed by 151 physicians and 154 administrators across the six countries with roughly 25 physicians and 25 hospital administrators responding from each. Physicians, followed by hospital committees, were most frequently responsible for making decisions, but respondents believed influence would shift towards committees in the future. Physicians (78%) and administrators (81%) believed costs would more heavily influence decisions in the next 5 years. Approximately half of hospital administrators consulted economic data often when making device adoption decisions. Use varied somewhat by country with most frequent use by both physicians and hospital administrators in the U.S., U.K., and Australia. **CONCLUSIONS:** Physicians' and hospital administrators' roles in decision making for cardiovascular devices appear to be changing in many countries, with committees and administrators assuming more important roles. While clinical data is most influential to the decision process, the impact of health economic data seems to be growing.

PMD69

TREATMENT OF URINARY TRACT INFECTIONS IS COMMON AMONGST SWEDISH PATIENTS IN NEED OF CHRONIC CATHETERISATION

Bruce S¹, Löfroth E¹, Knutsson B², Börstell T², Myrén KJ¹¹IMS Health, Stockholm, Sweden, ²AstraTech, Mölndal, Sweden

OBJECTIVES: To collect real-life data from a Swedish setting on treatment patterns and frequency of urinary tract infection (UTI), amongst patients in presumed need of chronic, intermittent catheterisation. **METHODS:** We used the CEBRxA database, which combines data from a public claims database for the South-West region of Sweden, comprising around 1.5 million individuals, with national Swedish registers on drug utilisation and mortality. We identified two sets of patients; Population I: spinal injury, in addition to neurogenic bladder, and Population II: self-catheterisation training (GB005). A list of antibiotics, known for their frequent use in treating UTIs was used to evaluate treatment patterns. In addition, a prophylactic treatment for UTI was evaluated (J01AXX05). An antibiotic regime was defined through considering all dispatches that occurred within 14 days from each other, simultaneously (data available from 2005-07-01 until 2009-12-31). **RESULTS:** We identified 295 and 989 patients for Population I and II, respectively. Both populations consisted primarily of males, while Population I was on average much younger (44 vs. 65 years). For Population I, we observed an average frequency of 2.5 UTI-related antibiotic regimes per year. For Population II, an average rate of 1.9 UTIs per year was observed, while females showed an elevated rate of 2.5. Interestingly, prophylactic use of antibiotics was widespread in Population I, with usage in 25% of patients, while for Population II, only 3% of patients had dispatched J01AXX05. An evaluation of the prescribed dose for Population I prophylaxis users, pointed to an almost continuous use, at an average 235 DDD per patient and year. **CONCLUSIONS:** Through studying UTI-related antibiotic treatment patterns we demonstrated a high disease burden for UTIs in two, primarily male, populations, in presumed catheterisation need. The frequent use of prophylactic treatment in the spinal injury population pointed to an even larger disease burden for these patients.