for the three countries were used in the model. The model focused on the initial imaging, the need for further or confirmatory imaging and unnecessary or modifi-
cation. The model was validated using data from the Euro Cost Pilot study.

RESULTS: Using PFI-III, the incremental cost-effectiveness ratio (ICER) was €7,748 per QALY obtained from the model. The ICERs for the non-implanted and ILR strategy were €10,683 and €1,512 per QALY gained, respectively.

CONCLUSIONS: The use of the Implantable Loop Recorder (Reveal XT) in patients who had already suffered a first atrial fibrillation event is cost-effective compared to current clinical practice in the diagnosis of AF in patients with a previous history of atrial fibrillation.

PMD30

ANALYSIS OF PCR GUIDED PRE-EMPTIVE ANTIBIOTIC TREATMENT OF S.AUREUS-INFECTIONS: AN ANALYTIC DECISION MODEL

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OBJECTIVES: To examine whether rapid PCR-based screening is a cost efficient tool to optimize pre-emptive antibiotic therapy of meticillin resistant and meticillin sensitive S. aureus infections. METHODS: A decision analytic cost model was developed using data from peer reviewed literature. Sensitivity analyses were undertaken to investigate the impact of variation in MRSA rate, cost ratio of the cost of appropriate antibiotic therapy to cost of inappropriate antibiotic therapy, PCR test cost and total hospital costs per case. RESULTS: At the current MSRA-rate of 24% in Germany, PCR-guided treatment regimen is cost-efficient compared to empirical strategies. Costs of alternative treatment strategies differ, on average, up to € 1780 per case. A pre-emptive MSSA-treatment strategy with PCR test is least costly at lower rates of MRSA, while a pre-emptive MRSA-treatment strategy with PCR testing is the least costly approach when the MRSA rate is greater than 53.7%. An empirical MRSA-treatment strategy is least costly when the cost ratio is less than 1.06. When the total hospital cost per MRSA-case is increased, pre-emptive MSSA-treatment with PCR test achieves the lowest average cost, and the cost difference between the four treatment strategies increases. CONCLUSIONS: Early verification and adaptation of an initial pre-emptive antibiotic treatment of S. aureus infections using PCR-based tests are advantageous in most situations to be expected in Germany and other European countries. PCR tests according to be considered as elements in antimicrobial stewardship programs.

PMD31

ASSISTING THE PREVALENCE AND ECONOMIC BURDEN OF ATRIAL FIBRILLATION IN SELECTED COUNTRIES, 2010-2025

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OBJECTIVES: Atrial fibrillation (AF) is a chronic, progressive disease characterized by uncoordinated atrial activation involving a rapid and irregular heartbeat (Fuster et al., 2006). The prevalence of AF is ~1% in adults <55 years old, but increases to as much as 10% by age 80 (Go et al., 2001). The purpose of this study was to estimate prevalence and economic burden in 2010 and forecast the prevalence and economic burden of AF in 2015, 2020 and 2025 in selected countries. METHODS: The prevalence and economic burden of AF in Belgium, Japan, The Netherlands, and Spain was calculated based on prevalence rates identified via a literature search. The prevalence and economic burden were forecasted based on 2010 estimates of AF prevalence. Population forecasts for the selected countries were taken from United Nations Department of Economic and Social Affairs forecasts. The adult population was adjusted for the percentage of the population with access to health care. The model assumed current age-adjusted prevalence rates would remain constant through 2025. All costs are reported in 2011 euros. One-way sensitivity analysis was performed for the healthcare accessible population and the country forecasted population. RESULTS: In 2010, the prevalence and economic burden of AF in Belgium, Japan, The Netherlands, and Spain was respectively 77,700 and 236 million EUR in Belgium to 88,800 and 2.04 billion EUR in Japan. In 2025, the prevalence and economic burden ranged from 88,800 and 270 million EUR in Belgium to 970,000 and 2.24 billion EUR in Japan. Sensitivity analyses revealed that prevalence and economic burden were most affected by forecasted population growth. CONCLUSIONS: AF in the pre-emptive strategy was forecasted to grow substantially in both developing and developed countries. As the world’s population ages and health care becomes more accessible, the economic burden of AF will continue to rise as well.

PMD32

DECONFLICTING THE COST BURDEN OF UNEXPLAINED SYNCPE IN FIVE EUROPEAN COUNTRIES: A DATABASE ANALYSIS

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OBJECTIVES: Transient loss of consciousness (T-LOC) is characterised by rapid-onset, short duration and spontaneous complete recovery. When the underlying cause is cardiovascular, this event is known as syncope. Syncope is one of the most common reasons for people attending the emergency department. Due to the rapid onset of symptoms, syncope can lead to injuries and high costs. A database analysis was undertaken in five European countries to estimate the cost burden of syncope. METHODS: Inpatient hospitalisation data were related to hospital tariffs in national and local databases in France, Germany, the UK, Italy and Spain. Where possible, the data were split according to whether syncope was the primary or secondary diagnosis, to capture all cases in which syncope contributed to the hospitalisation. RESULTS: In 2010, the prevalence and economic burden ranged from £305 to £1,300 per case for each country for the period 2008-2011. RESULTS: When considering hospitalisations for which syncope was the primary diagnosis, annual costs per country ranged from £90 million to £230 million (the total number of hospitalisations per country ranged from 41,800 to 105,000). When different hospitalisations were considered, the annual figures per country ranged from £130 million to £305 million. In cases where syncope was a secondary diagnosis, the most common reasons for hospitalisation were injuries to the head, pelvis and limbs. Within each country, the results were consistent year on year. CONCLUSIONS: Syncope has a significant cost burden which has been consistently observed across five major European markets. These costs are only part of the overall burden, which also