standard care. Related costs were calculated according to Greek NHS official prices. The analysis was undertaken from a Greek third-party payer perspective. **RESULTS:** According to the model, the reduction in expenditures related to diagnosis and prognosis/monitoring with NT-proBNP use were estimated at €6.8 and €3.2 million/year respectively. The projected net savings, considering the cost of NT-proBNP implementa-
tion (€118,600) and the savings at €9.3 million/year, translate to a net cost reduction of €2.5 million/year, representing a 92% reduc-
tion of health care resources, by preventing 1,800 initial hospitalizations/year, leading to 10,235 fewer hospitalization days in general ward and 3,252 in intensive care unit, and avoiding 491 hospital readmissions/year. **CONCLUSIONS:** The overall reductions in hospitalizations and length of stay, achieved by early diagnosis and prognosis of HF with the implementation of NT-proBNP, could generate cost-savings and increase hospitals’ efficiency and productivity.

**PMD28 CLINICAL AND BUDGET IMPACT OF USING A MOLECULAR TEST TO DETECT KRAS MUTATIONS IN METASTATIC COLORECTAL CANCER PATIENTS IN DENMARK**
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**OBJECTIVES:** Existing guidelines recommend determination of RAS mutation sta-
tus in patients with metastatic colorectal cancer (mCRC) as an anti-epidemial growth factor receptor (anti-EGFR) therapies are ineffective in tumors with RAS mutations. The cobas® KRAS Mutation Test (cobas test) detects two mutations in KRAS exon 2 and seven mutations in exon 3, whereas the therascreen® KRAS RQQ PCR Kit (therascreen test) detects seven overlapping mutations in KRAS exons 2 and 2. We estimated the potential clinical and economic impact of using cobas test versus the therascreen® KRAS PCR Kit (therascreen test) in mCRC patients in Denmark. **METHODS:** A budget impact model was developed from the Danish healthcare perspective. Model inputs were estimated from the literature (e.g. 1,260 annual mCRC cases were esti-
ated from 2015 data). Sensitivity and specificity were assumed to be the same as positive percent agreement and negative percent agreement comparing to Sanger sequencing, which were 96.9% and 88.7% for cobas, 94.2% and 95.5% for therascreen. Drug and cost-related treatment costs were es-
timated from the national pharmaceutical procurement service (Amgreens) and Danish national tariffs, respectively. The model calculated the average treatment cost for mCRC patients over 5 years, using median time on treatment and median overall survival. Costs were presented in 2015 Euros ({€}1,721.26/€1,351). **RESULTS:** Using the cobas test resulted in a reduction of 63 patient-months lost due to inappropri-
ate care (avoiding anti-EGFR therapies in mutant patients) and an improvement in median overall survival. Using cobas KRAS testing reduced the costs of inappropri-
ate care by €991K and decreased monthly cost per patient by €37, while having a minor increase (±105K, 0.2%) in healthcare costs. **CONCLUSIONS:** Using the cobas test with better sensitivity and broader mutation coverage of KRAS was associated with a lower burden of false results and may improve patient outcomes by reducing the likelihood of receiving inappropriate care in mCRC patients.

**PMD29 INTRODUCTION OF AN ORGANIZATIONAL MODEL OF TELEMEDICINE IN MANAGEMENT OF ORAL ANTICOAGULANT THERAPY: A BUDGET IMPACT ANALYSIS FROM ITALIAN PATIENT PERSPECTIVE**
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**OBJECTIVES:** Oral Anticoagulant Therapy (OAT) is a therapy to prevent thromboembolic and vascular events requiring a frequent monitoring of prothrombin time and a dose adjustment to maintain the intensity of anticoagula-
tion within a safe therapeutic range. The objective of the study was to quantify the budget impact after the introduction of the decentralized monitoring model for OAT patients. This model creates a link between specialized hospitals and pharmacies in the territory using Point-of-Care coagulometer Coaguchek and the telemedicine system (TelePat) with lower adverse events thanks to increased accessibility to the service, compared to the centralized monitoring model and non-specialized monitoring model, and an elevated standard of quality. **METHODS:** A comparative analysis was carried out on three patient management models following the prospec-
tive of NHS with a time horizon of five years, taking the following into account: phar-
macutical treatments, patient monitoring and adverse events. The rate of adverse events was estimated from scientific literature and the consumption of resources was quantified taking into consideration the DRG tariffs and the outpatient national palliative care list. **RESULTS:** The adoption of the decentralized monitoring model compared to the centralized and non-specialized model leads to an annual saving of €26.45 and €25.15, respectively. Considering a target population of 935,903 patients requiring OAT and the monitoring model distribution among patients is 1.7% with the decre-
entalized model, 86.4% with the centralized model and 11.9% with the non-specialized model. Assuming an incremental adoption rate of 6% per year of decentralized moni-
toring, the model predicted an annual cost saving of €4.33 million by its fifth year. **CONCLUSIONS:** Despite initial higher investments for Point-of-Care coagulom-
et and the telemedicine technology, the decentralized monitoring model for OAT patients is more cost-effective and cost-controlling. Centralized monitoring model and non-specialized monitoring model with a potential increase of patient quality of life.

**PMD30 BUDGET IMPACT ANALYSIS OF HIGH-RISK HPV DNA (hrHPV) TEST WITH 16/18 GENOTYPING AS A PRIMARY SCREENING METHOD FOR CERVICAL CANCER IN GREECE**
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**OBJECTIVES:** To compare both economic and clinical impact of alternative cer-
vical cancer screening strategies in women 25-65 years old using different algorithms with primary screening methods including cytology alone or hrHPV test and genotyping. **METHODS:** Screening and diagnosis of CC were modeled by a decision tree while the natural history of the disease was simulated by a Markov model. All costs and outcomes were estimated from a Greek NHS perspective. The economic model was developed using published data. Sensitivity and specificity of hrHPV testing with 16/18 genotyping and reflex cytology 3) triennially HPV testing with reflex genotyping and reflex cytology and 3) annually cytology alone. Clinical outcomes were derived from the National French cervical cancer screening program. **RESULTS:** The cost of strategy 2 and 3 which was estimated at €38,109,522 and €18,209,511, respectively. **CONCLUSIONS:** The adoption of hrHPV test with 16/18 genotyping as a primary screening method can generate significant savings to the Greek healthcare system and in parallel optimize health outcomes.

**PMD31 ENDOVASCULAR INTERVENTIONS FOR TREATMENT OF FEMOROPoplITEAL PERIPHERAL ARTERY DISEASE: UPDATED BUDGET IMPACT ANALYSIS FOR GERMANY BASED ON LATEST CLINICAL EVIDENCE**
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**OBJECTIVES:** The objective was to study the economic impact of the four main endovascular treatment strategies for femoropopliteal arterial disease on payers in the German healthcare system, using up-to-date clinical evidence and current reimbursement amounts. **METHODS:** We estimated latest clinical performance of percutaneous endovascular therapy (PFA), bare metal stents (BMS), drug-coated balloons (DCB), and drug-eluting stents (DES) by performing a systematic search for studies published through 2014 that reported target lesion revascularization (TLR) as an endpoint. 24-month TLR rates were estimated for each treatment combined by sample size. We updated a previously published decision-analytic Markov model to assess budget impact to payers of the four index procedure strategies using 2015 reimbursement rates for Germany and considering up to one reinterven-
tion (up to 3 TLRs) in each strategy included. Possible TLR rates of TLR were 16.5%, 19.4%, 26.9%, and 39.6% for DCB, and drug-eluting stents (DES) respectively. Over 24 months, DES had the lowest budget impact to payers of €5,799, closely fol-
lowed by DEW (€3,915). The corresponding amounts for BMS and PTA were €4,189 and €4,451, respectively. **CONCLUSIONS:** The most effective (DCB) to the least effective therapy (PFA), we found a number needed to treat (NNT) of 4.34. This suggests that for every four patients treated with DCB as opposed to PTA, one TLR could be avoided over one month, at overall cost savings to the healthcare system.

**PMD32 POTENTIAL FOR COST SAVINGS ASSOCIATED WITH A NOVEL IBS BLOOD PANEL FOR STAGING DIARRHEA-PREDOMINANT IRITABLE BOWEL SYNDROME (IBS-D): ITALIAN PERSPECTIVE**
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**OBJECTIVES:** IBS is a considered a diagnosis of exclusion based on several labo-
ratory tests and a clinical examination. A novel IBS diagnostic blood panel has been developed which tests for the presence of two biomarkers associated with IBS-D. This analysis estimates the cost impact to the Italian healthcare system by introducing this test into the diagnostic pathway. **METHODS:** A budget impact model was based on a cost-minimization decision model developed to compare the costs associated with two diagnostic pathways: (1) diagnostic pathway with a novel IBS diagnostic blood panel and (2) exclusionary diagnostic pathway and applied to the Italian popula-
tion 18-65yrs old. Model structure was based on current literature and guidance from IBS expert clinicians. Direct medical expenses for laboratory tests, diagnostic procedures, and visits were compared in Euros and weighted by utilization rates provided by practicing gastroenterologists in Italy. Indirect cost estimate was based on the literature and only included time off work, adjusted for per patient and per year in Italy. **RESULTS:** The introduction of the IBS-D blood panel was accompanied by a 3% decrease in costs (€312.50, €70 and €330, respectively. Estimated total base case charges for the IBS diagnostic panel pathway (assumes 77% of test positive patients receive IBS-D treatment vs the exclusionary pathway were €1,351 vs €1,425, respectively. If clinicians use the test 50% of the time for the 50% of the estimated 447,275 people who might have IBS-D who seek treatment, net savings to the Italian healthcare system is +72,581,982. Cost neutrality occurs if 45% of the "test positive" patients seek IBS