OBJECTIVES: The study attempts to investigate the impact of national mass screening program on health service utilizations and medical expenses.

METHODS: Main data is consisted of the subjects (12,449,964) eligible for 2002 screening program provided by the National Health Insurance who were born in even years. To analyze the effect of screening in the case of hypertension, we excluded people who had any medical records of hypertension before 2002. After sorting and random sampling 5% (564,443), we extracted the subjects’ medical payments for hypertension complications in 2007. The independent variable of interest is the status of patients at a hospital discharge, and the dependent variables are identifiable costs of hypertension complications. We compared the results obtained using instrumental variable methods with those from conventional logistic and linear regression models. RESULTS: Conventional logistic and multiple regression models suggest that the importance of utilizing medical services is significantly higher in in-screen group and the average medical cost of hypertension complications reduced by 5% in screen group at 10% significant level. However, the results estimated using instrumental variable methods show different results. The screen group has significantly lower possibility to use medical service (p<0.05), but the lower average cost in screen group is not significant any more. CONCLUSIONS: The different results demonstrate that conventional regression approaches may have limitations in making causal inference using non-experimental data. This study shows that whether one gets medical screen or not affects the possibility of hypertension complications occurring, however it doesn’t significantly relate to average costs.

OBJECTIVES: The current management pathway of patients with acute coronary syndrome undergoing percutaneous coronary intervention in Greece. RESULTS from APTORII STUDY

METHODS: A prospective observational study in ACS patients undergoing PCI from September 2008 - April 2009, capturing current practices over 12 months.

RESULTS: Twenty-two sites enrolled 158 eligible patients: 351 patients had unstable angina or non-ST elevation myocardial infarction (UA/NSTEMI) and 207 ST-elevation myocardial infarction (STEMI). Between 78% UA/NSTEMI and 89% STEMI patients received the first antithrombotic loading dose (LD) in 1 day. Time from start of ACS symptoms to PCI was ≤ 3 days in 67% STEMI patients. Follow-up data were available for 540 (96.8%) patients. Percentage of patients on antplatelets and other medications were as follows: aspirin 96%, 97%, clopidogrel 99%, 86%; statins 81%, 79%; beta-blockers 73%, 72%; calcium blockers 11%, 11%; angiotensin II receptor blockers/angiotensin-converting enzyme inhibitors 64%, 62%; proton pump inhibitors 39%, 35%. A formal diet program was followed by 7% patients and a formal exercise program by 6% through the 1st year of follow up. CONCLUSIONS: In Greece, dual antiplatelet therapy in STEMI patients treated with PCI is maintained in a very high percentage through one year post procedure, and DES use is also high.

OBJECTIVES: The objective was to analyze prescribing patterns of DBG and RIV on the GMS scheme in Ireland in 2010. METHODS: A retrospective analysis of data from a national GMS prescribing database was performed. Analysis was performed using SAS (v.9.1, SAS Institute Inc. Cary, USA). RESULTS: 1096 patients had received DBG. Of these, 37% received it for longer than the maximum licensed duration of 35 days. Indeed, 15.94% received it for longer than 3 months and 7.56% for longer than 6 months. 1948 patients had received RIV, 25.77% had received it for longer than the maximum licensed duration of 35 days. Indeed, 2.1% had received it for longer than 3 months and 0.36% for longer than 6 months. CONCLUSIONS: This indicates that DBG and RIV may have been prescribed for unlicensed indications (for which positive reimbursement decisions have not yet been issued). Such indications include stroke prevention in AF and VTE treatment. There are efficacy, safety and budget impact concerns surrounding unlicensed prescribing. Also, should their licenses be extended in the future, prescribing for such indications may increase regardless of reimbursement decisions. There exists a need to introduce a policy in which drugs are only reimbursed for those indications which have achieved positive reimbursement decisions.

OBJECTIVES: To implement these preventive measures, beginning with systematic procedures for risk assessment of inpatients. We measured the compliance with NICE guidelines in the West of England, two hospitals in 2009, using 200 randomly selected longitudinal case studies, complemented by a qualitative study into their origins, development and practical responses to national guidance. Based on the criteria outlined in the NICE guideline we constructed a compliance score (minimum, maximum 5). RESULTS: We found a mixed picture of compliance with national guidance. Across both hospitals 80% of orthopaedic patients and 70% of general medical patients received VTE prophylaxis. In contrast, the prescribed risk assessment was not systematically carried out or documented: only 68% of orthopaedic and 35% of medical patients were formally risk-assessed. Hospital A achieved a compliance score of 1.28 (SD 0.76) in medicine and of 1.78 (SD 0.93) in orthopaedics. Hospital B achieved a score of 0.88 (SD 0.87) in medicine and of 1.69 (SD 0.59) in orthopaedics. CONCLUSIONS: Despite clear national guidance for VTE prevention, hospitals seem slow to implement, document or comply with the recommendation of individual risk assessment to guide the need for prophylaxis. As shown by the high levels of VTE prophylaxis administration in both hospitals and the qualitative interviews with senior clinicians, this is partially attributable to the fact that hospitals had strong internal guidance before the issue of national guidance. The added value of documenting individual VTE risk assessment is doubtful and limited compliance with national guidance is therefore not surprising.

OBJECTIVES: Current guidelines recommend antithrombotic therapy (oral anticoagulant [OAC] or antiplatelet therapy [APT]) to prevent stroke in atrial fibrillation (AF) patients in relation to stroke risk. Given the limitations of vitamin K antagonists [VKA] or warfarin, OAC is often underused, and less effective APT is prescribed instead or patients remain untreated. The objectives were: 1) To determine the type of antithrombotic therapy used by AF patients as stratified by stroke risk (using CHADS2 scores in developed countries). 2) To assess quality of treatment with OAC by time in therapeutic range (TTR) of international normalized ratios (INR). RESULTS: Studies were identified by literature review that reported 1) AF patients and treatment level categorized by CHADS2 score and 2) TTR for AF patients. RESULTS: In line with guidelines for AF treatment, as CHADS2 scores increased (i.e., higher risk for stroke), the percentage of patients receiving OAC:APT increased and of patients receiving APT alone, or no treatment, decreased. A large number of moderate to high risk patients (based on CHADS2 scores), however, were taking OAC with APT alone (3.4%) or treated with APT alone (means 4.4 -10.6%; range 0.0 -26.3%). Thus, up to 48% were treated inappropriately. The reported proportion of treated patients with poor INR control ranged from 30%-92% and varied according to TTR benchmark (<50% to >75% TTR).

CONCLUSIONS: A large proportion of AF patients at moderate to high risk for stroke are suboptimally treated. Among those who do receive OAC treatment, many are poorly controlled and therefore receive little benefit. Using the CHADS2-VASc score, a more recent risk assessment tool, would result in even higher numbers of patients who are treated suboptimally. To prevent avoidable strokes among AF patients, there is a need for safe and effective treatments that require less complicated management (INR monitoring), therefore likely promoting higher compliance and persistence.