GENDER-BASED DIFFERENCES IN HEALTH CARE COSTS AMONG ACS PATIENTS: AN APPLICATION OF THE BLINDER-OAXACA DECOMPOSITION
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OBJECTIVES: Gender disparities exist in the treatment pathway for ACS patients, but the implications on costs have not been well established. This study investigates gender-based differences in health care costs among ACS patients. METHODS: A retrospective cohort study was conducted using the MarketScan claims database. A total of 11,649 patients (Female = 3,601, Male = 8,048), aged 18-65 years, hospitalized with a primary diagnosis of ACS between January 1, 2004 and December 31, 2005 were included. The Blinder-Oaxaca decomposition technique was performed to quantify the part of the gender differences in total health care costs that can be explained by differences in observable patient characteristics. The remaining difference was attributable to heterogeneous effects of these characteristics on health care costs. RESULTS: Male ACS patients had significantly greater 1-year health care costs ($49,552 vs. $41,838, p < 0.0001) compared with females. Of the $7714 difference in costs, approximately two-thirds ($5300) can be explained by gender differences in demographic and clinical characteristics, while gender differences in effects of these characteristics accounted for approximately one-third ($2414) of the total differences. Out of the $5300 difference in costs, gender-based differences in comorbidity history and individual historical health care costs accounted for a $2380 reduction in gender costs discrepancy. In contrast, males had a higher rate of myocardial infarction and revascularization procedures during the initial hospitalization, which was associated with an increase in gender difference ($7680) in health care costs with revascularization accounting for most of the difference ($6282). CONCLUSIONS: Differences in demographic and clinical characteristics between genders accounted for more than two-thirds of the health care costs. Differences in revascularization rates during initial hospitalization accounted for most of the explained gender costs differences.

PRESSURES FACED BY PEOPLE WHO CARE FOR SOMEBODY DIAGNOSED WITH A CARDIOVASCULAR CONDITION
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OBJECTIVES: The Cardio and Vascular Coalition (CVC) commissioned YHEC to carry out a study to assess the opportunities and challenges facing cardiovascular disease in England (2008-2018). Part of this study involved assessing the pressures that face people who care for somebody diagnosed with a cardiovascular condition. METHODS: A questionnaire, developed with input from the CVC, was piloted before being distributed by CVC organisations to 825 of their members. Data from 176 questionnaires were analysed (giving a response rate of 21%). Some caution should be used when generalising findings as all respondents were members of a CVC organisation. RESULTS: Most respondents were the spouse or partner of the person cared for (92%), female (80%), white (96%), retired (70%) and had been caring for someone who had been diagnosed for more than 5 years (75%). Just over a third of respondents (34%) said that they felt that their health had deteriorated as a result of being a carer. A number of different categories of people provided support to carers. Support was provided on most occasions by Family/friends (31%) and GPs (28%), and to a lesser extent by Condition Specific Support Groups (15%), Other Professional Carers (15%) and Other Categories (11%). Support to carers was provided ‘in Current situation’ (24%), ‘in Current situation but excluding Diagnosis’ (16%) and ‘After most recent hospital episode’ (24%). The most frequently cited ways that carers felt that their life could be made easier were through provision of more health care and professional support, information and practical help with every day life. CONCLUSIONS: More attention should be given to the needs of those caring for people with CVD. Carers bear significant economic and psychological burdens, in many cases without adequate information and support. Their role will become increasingly important as more people survive acute CVD events and live with heart disease.

CHANGES IN THE COST-EFFICACY OF STATINS IN SPAIN AFTER THE INTRODUCTION OF GENERICS AND REFERENCE PRICES
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OBJECTIVES: To assess the effect of generics and reference prices for simvastatin, lovastatin and pravastatin, introduced since 2003, on the cost-efficiency of statins in Spain. METHODS: The effect was assessed determining the cost-efficiency of atorvastatin 10–80 mg/day, simvastatin and pravastatin 10–40 mg/day and lovastatin and fluvastatin 20–80 mg/day in terms of annual treatment costs per percentage of LDL-cholesterol reduction in 2003 and 2008. Annual treatment costs included medication, consultation measures and adverse side effects. Efficacy of statins to reduce LDL-cholesterol was determined developing a meta-analysis including long-term clinical trials published between 1993 and 2005. Average and incremental cost-efficacy ratios in terms of cost per % of LDL-cholesterol reduced were $8–10 for simvastatin, $11–14 for lovastatin, $11–37 for pravastatin, $14–23 for fluvastatin and $18–31 for pravastatin. Cost-efficiency ratios decreased between 2003 and 2008 by 4–7 % for atorvastatin, 33–51 % for simvastatin (p < 0.05), 24–38 % for lovastatin (p < 0.05), 4–5 % for fluvastatin and 16–23 % for pravastatin (p < 0.05). Based on cost-efficiency in 2008, atorvastatin 20–80 mg/day should be the first election therapy in patients requiring a LDL-cholesterol reduction of < 41 %, simvastatin 40–80 mg/day for > 41 % and lovastatin 10 mg/day in those requiring a reduction of 35–41 % and simvastatin 10–20 mg/day in those requiring a reduction < 35 %. CONCLUSIONS: Generics and reference prices have driven down statins’ prices between 2003 and 2008, increasing the cost-efficiency of health care costs. Atorvastatin should be the first election drug in patients requiring a high LDL-cholesterol reduction and simvastatin in patients requiring a LDL-cholesterol reduction of less than 35 %.

ADENOSINE-STRESS CARDIAC MAGNETIC RESONANCE IMAGING IN SUSPECTED CORONARY ARTERY DISEASE: A NET COST ANALYSIS & REIMBURSEMENT IMPLICATIONS
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OBJECTIVES: To investigate the use of cardiac magnetic resonance imaging (CMR) to diagnose cardiac risk saves costs by leading to referrals in refinements for cardiac catheterization. METHODS: Two hundred and eighteen subjects were matched to a prior sample in which CMR was demonstrated to reliably stratify patients regarding their risk of major cardiac events. Propensity scoring methods were used to match on comorbidity profiles, demographics, coronary artery disease (CAD)-related clinical presentation, and CAD risk as measured by their Morise scores. The matched sample included adult subjects with suspected coronary artery disease who were enrolled by stress CMR. RESULTS: The identified the proportion of people who were able to avoid cardiac catheterization based on the results of their CMR tests. Given this information, and data on the costs of cardiac catheterization and CMR tests, a net cost analysis was performed. RESULTS: CMR use substantially reduces the need for cardiac catheterization by 62.4%. In countries like Germany, CMR is not yet reimbursed. Assuming CATH costs of €631, the break-even-level for CMR costs at which it is cost neutral is €393. These results were robust in sensitivity analysis. Cost savings are greatest for patients with lowest risk of CAD as measured by their baseline Morise scores. However, cost savings are likely for all Morise sub groups examined, with the exception of patients at the highest risk of CAD as measured by their Morise score. CONCLUSIONS: CMR is a safe and cost effective approach to evaluating patients with suspected CAD. Even at reimbursement levels up to €393, the use of CMR as a gatekeeper saves money.

A CLUSTER RANDOMIZED CONTROLLED TRIAL TO EVALUATE AN AMBULATORY PRIMARY CARE MANAGEMENT PROGRAM FOR PATIENTS WITH DYSLIPIDEMIA: THE USE OF CARDIAC MAGNETIC RESONANCE IMAGING AS A GATEKEEPER TO REDUCE THE NEED FOR CARDIAC CATHETERIZATION
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OBJECTIVES: Evaluate the efficacy of family physician-community pharmacist collaborative care (PPCC) in which pharmacists are responsible for titrating lipid-lowering therapies based on cost-efficacy. METHODS: 15 clusters comprising 77 physicians and 108 pharmacists were randomly assigned to the PPCC or the usual care (UC) group. A total of 108 PPCC and 117 UC patients were followed for 12 months. PPCC pharmacists provided counselling; requested laboratory tests; monitored effectiveness, safety, and adherence to treatment; and adjusted medication dosage. Change in low-density lipoprotein cholesterol (LDL-C) level (primary outcome), proportion of patients reaching their target lipid levels and changes in other risk factors were assessed at month 12. RESULTS: At baseline, PPCC patients had higher LDL-C (3.5 versus 3.2 mmol/L; p = 0.05). During the study, they were less likely to receive high-potency statin (11.1% versus 39.7%), had more health-professional visits and laboratory tests, were more likely to have their lipid-lowering treatment changed, and to report lifestyle changes. At 12 months, the difference in the crude and the adjusted mean change in LDL-C between the PPCC and the UC groups was equal to −0.2 mmol/L (95% CI: 0.3 to −0.1) and −0.04 (95% CI: 0.3 to 0.2), respectively. The crude and the adjusted relative risk of achieving lipid targets were equal to 1.10 (95% CI: 0.95 to 1.26) and 1.16 (1.01 to 1.32), respectively. CONCLUSIONS: Collaborative practice can be implemented in primary care. Among patients with modest dyslipidemia, this study provides no evidence of a significant clinical impact on lipid control.

COMMUNITY PHARMACY DISPENSING OF PRESCRIPTION MEDICINE SAMPLE PACKS—CHANGING THE BUSINESS OF MEDICINE INITIATION! Nadia Gi, Nissen LP, Tate SE
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OBJECTIVES: To pilot and ascertain the viability of an alternative supply model for free sample (starter) packs of prescription medicines involving community pharmacists. METHODS: General practitioners (GPs) recruited patients (purposive sampling)