Narracci O[9], Nica M[10], Colombo D[10], Buda S[1]
[1]*CliCon S.r.l. Health, Economics & Outcomes Research, Ravenna, Italy,* [2]*Cardiology Department of Vittorio Emanuele II Hospital, Bisceglie, Italy,* [3]*General Practitioner of Local Health Unit BT, 76011, Bisceglie, Italy,* [4]*Rehabilitation Department of Caduti in Guerra Hospital, 76012, Canosa di Puglia, Italy,* [5]*General Practitioner of Local Health Unit BT, 76121, Barletta, Italy,* [6]*Risk Management Service Local Health Unit BT, 76123, Andria, Italy,* [7]*Local Pharmaceutical Department, Local Health Unit BT, 70031, Andria, Italy,* [8]*Directorate Medical Local Health Unit BT, 70031, Andria, Italy,* [9]*Directorate General Local Health Unit BT, 70031, Andria, Italy,* [10]*Novartis Farma Italy, Origgio, Italy*

OBJECTIVES: To analyze therapeutic pathways of patients with HF, and to estimate healthcare resources consumption. **METHODS:** An observational retrospective cohort analysis based on administrative databases of 1 Local Health Unit in Italy was performed. Patients ≥18 with a hospitalization discharge diagnosis of HF (ICD-9-CM 428.xx; 402.xx) from January 1st, 2010 to December 31st, 2014 (inclusion period) were included. The index-date (ID) was the first hospitalization for HF during inclusion period. All patients were characterized 12 months prior the ID and followed up after the ID for 12 months. Patients were excluded if not treated with specific drugs as: ACE-inhibitors, ARBs, diuretics, digitalics, beta-blockers. Two cohorts were built: patients with HF as primary and patients with HF as secondary diagnosis. **RESULTS:** A total of 2,669 patients with HF were enrolled in the study, 1,960 as primary and 709 as secondary diagnosis. About 49% and 55% males, mean age of 77.0±10.4/76.5±11.1 years in both cohorts. Mortality during 12 months of follow-up was 46% and 43% respectively. Charlson Index score was >0 for more than 90% of patients. In follow-up period, half of the patients present a switch from the original therapy, 10% of the patients requires an add-on. Healthcare resource consumption for patients discharged alive is 11,900€ for patients with primary diagnosis and 12,500€ for patients with secondary diagnosis. Cost for a hospitalization is around 3,600€ for HF patients in primary diagnosis and 4,200€ in secondary diagnosis. **CONCLUSIONS:** Our findings highlight that, in real-world setting, HF has a strong impact on National Health Service. During follow-up period, a high percentage of patients were under-treated, more of half of the patients changed their therapy or added drugs. A big effort, by cardiologist should be done to give the right therapies to the right patients, in order to improve therapeutic pathways and quality life.

PCV103

DIRECT COSTS AND HEALTHCARE RESOURCE USE ASSOCIATED WITH PATIENTS WITH HYPERCHOLESTEROLAEMIA AND ESTABLISHED CARDIOVASCULAR DISEASE IN SPAIN

Guijarro C[1], Perez L[2], de la Sierra A[3], Valdivielso P[4], Rubio M[5], Barroso P[5], Hurtado P[6]
[1]*University Hospital Alcorcon Foundation, Alcorcon, Spain,* [2]*University Hospital Clinico San Carlos, Madrid, Spain,* [3]*University Hospital Mutua Terrassa, Terrassa, Spain,* [4]*Malaga University, Malaga, Spain,* [5]*Sanofi, Barcelona, Spain,* [6]*Insights in Life Sciences (ilS), Barcelona, Spain*

OBJECTIVES: Cardiovascular disease (CVD) is a major cause of premature death worldwide. Elevated levels of blood lipids represent a major risk factor for CVD events. This study aims to estimate healthcare resource use (RU) associated with CVD events among patients receiving lipid-modifying therapy and to calculate the resulting direct healthcare costs to the Spanish Healthcare system. **METHODS:** An expert panel with 4 cardiologists and internists was created to estimate RU and cost associated with the management of patients with established CVD receiving lipid-modifying therapy. A three-stage technique was adopted. During a 1st round experts achieved consensus on the clinical situations related to hypercholesterolemia. At a 2nd round experts answered to a questionnaire concerning resource consumption associated with patient journey. Finally, at a 3rd round experts validated the weighted mean results obtained from the questionnaires. Phases of patient journey considered were: index situation (ie. patients entering in secondary prevention), follow up and recurrent CVD acute events. Medical visits, clinical procedures/examinations, surgeries, inpatient/outpatient/intensive care hospitalizations and cardiac rehabilitation were resources considered. Only low, moderate and high intensity lipid-modifying drug costs were included. Costs for each phase were obtained by multiplying mean estimates of RU by unit costs from official sources. **RESULTS:** Direct costs per patient during 18 months of aortic aneurysm, acute coronary syndrome (ACS), ischaemic heart disease (IHD), peripheral artery disease (PAD) and ischaemic stroke were estimated as 40.882,96€, 37.971,22€, 37.226,13€, 28.306,82€ and 7.866,82€, respectively. Medical procedure/examination costs assumed major role during index situation and recurrent CVD events in ACS, IHD and PAD; whereas hospitalizations accounted for the highest cost for aortic aneurysm and ischaemic stroke. Lipid-modifying drug costs were very low. **CONCLUSIONS:** The economic burden of established CVD is substantial for the Spanish Healthcare system, therefore a more efficient strategy is required to prevent CVD.

PCV104

THE ECONOMIC IMPACT OF CAREGIVER FOR PATIENTS WITH ATRIAL FIBRILLATION: AN ITALIAN SURVEY

Integlia D[1], Di Censi L[2], Di Giuseppe F[3]
[1]*ISHEO Srl, Roma, Italy,* [2]*Independent Researcher, Rome, Italy,* [3]*ISHEO Srl, Rome, Italy*

OBJECTIVES: Atrial fibrillation (also called AF) is an irregular heartbeat (arrhythmia) caused by anatomical and electrophysiological features of left atrium. It can increase the risk of blood clots which can lead to stroke, heart failure and other heart-related complications. An average of 2.04% of the population is living with AF and the role of caregiver is very relevant for them. Generally, caregiver is a family member (informal) or an expert (formal), who takes care of a person suffering from a chronic disease. Most of AF patients follow an anticoagulant therapy and need a specific support to reach periodically hospital centers, as well as many others services. **METHODS:** FederAipa (Federation of Italian Anticoagulant Patient Associations) had conducted a survey among AF patients, aiming to analyze the direct non-health needs of patients with atrial fibrillation, focusing on welfare concerns and the economic impact of formal and informal caregiver. FederAipa provided surveys between May and July 2016, and received 364 responses. The responders were represented for 52.2% by men and 47.8% by women and the average age was 71.3 years. **RESULTS:** It has been observed that 19.2% of those interviewed need to pay for home care due to their limited autonomy condition, leading to a cost between 159 euro and 468 euro per week. Furthermore, the analysis showed that the average annual cost of caregiver can vary from 11,384.00 euro per patients without stroke to 15,897.00 euro per patients with stroke, considering the assumption of 18.14 euro per hour. Therefore, having a stroke increases the direct cost for caregiver assistance by + 39.6% than to those who did not have a stroke. **CONCLUSIONS:** The difference of the economic impact of formal and informal caregivers between patients with stroke and patients who did not have stroke among responders at the FederAipa questionnaire, resulted very high and significant.

CARDIOVASCULAR DISORDERS – Patient-Reported Outcomes & Patient Preference Studies

PCV105

REPRESENTATIVENESS OF ROUTINELY COLLECTED PATIENT-REPORTED OUTCOME DATA IN CORONARY REVASCULARIZATION PATIENTS?

Oinasmaa S[1], Heiskanen J[2], Hartikainen J[2], Hippeläinen M[2], Miettinen H[2], Martikainen JA[1], Roine RP[1], Tolppanen A[1]
[1]*University of Eastern Finland, Kuopio, Finland,* [2]*Kuopio University Hospital, Kuopio, Finland*

OBJECTIVES: Patient-reported outcomes (PROs), such as health-related quality of life (HRQoL), are currently considered as important tools for assessment of healthcare quality and effectiveness. However, although a representative sample is essential, it is rarely possible to convince all patients to respond to HRQoL surveys and, therefore, possible over- or underrepresentation of some patient groups can lead to biased estimates. Our aim was to find out how well the patient views obtained by routine collection of PROs in a cardiology unit represent the actual case mix. **METHODS:** The representativeness of the responses obtained to routine HRQoL data collection was studied in the Kuopio University Hospital Center which has since 2012, as part of the routine admission process of elective patients, collected HRQoL data using the 15D questionnaire. Elective coronary artery bypass grafting and percutaneous coronary intervention patients treated between June 2012 and August 2014 were included and the characteristics of the patients with a baseline (n=260 and 290 for CABG and PCI, respectively), or both baseline and follow-up HRQoL measurements (n=203 and 189 for CABG and PCI, respectively) were compared with those who did not respond (n=144 and 448 for CABG and PCI). Furthermore, the associations between patient characteristics and the likelihood of obtaining HRQoL data were investigated with logistic regression. **RESULTS:** Baseline questionnaires were less likely obtained from older CABG patients (OR, 95% CI 0.25, 0.28-0.91) and those with more severe disease (0.20, 0.05-0.79). Among PCI patients, women (0.69, 0.46-1.02), smokers (0.70, 0.49-1.02), and those with more severe disease (0.21, 0.08-0.52) or more hospital days were underrepresented. **CONCLUSIONS:** Routinely collected PROs in cardiac patients appeared to be biased towards younger and healthier patients. This needs to be recognized when evaluating the representativeness of such data and every effort should be made to guarantee a response rate as high as possible.

PCV106

LOW DENSITY LIPOPROTEIN CHOLESTEROL (LDL-C) TARGET GOAL ACHIEVEMENT RATE ACCORDING TO PHYSICIANS' COMPLIANCE TO ESTABLISHED CLINICAL GUIDELINES FROM NATIONAL CHOLESTEROL EDUCATION PROGRAM-ADULT TREATMENT PANEL (NCEP-ATP) AND AMERICAN COLLEGE OF CARDIOLOGY/AMERICAN HEART ASSOCIATION (ACC/AHA): RESULTS FROM KOREA CRISTAR STUDY

Chae I[1], Kim B[2], Lee J[3], Oh J[4], Cho B[5], Shin E[6], Nah D[7], Lee S[8], Bae J[9], Park J[10], Hong SJ[11], Hong SJ[11], Cha T[12], Cho Y[13], Shin W[14], Choi S[15], Lee K[16], Kim S[17], Cha J[18], Kim Y[18]
[1]*Seoul National University Bundang Hospital, Seongnam-si, Korea, Republic of (South),* [2]*Severance Hospital, Yonsei University Health System, Seoul, Korea, Republic of (South),* [3]*Kangbuk Samsung Hospital, Seoul, Korea, Republic of (South),* [4]*Samgsung Changwon Hospital, Gyeongsangnam-do, Korea, Republic of (South),* [5]*Kangwon National University Hospital, Gangwon-do, Korea, Republic of (South),* [6]*Ulsan University Hospital, University of Ulsan College of Medicine, Ulsan, Korea, Republic of (South),* [7]*Dongguk University Gyeongju Hospital, Gyeongbuk, Korea, Republic of (South),* [8]*Chonbuk National University Hospital, Jeollabuk-do, Korea, Republic of (South),* [9]*Chungbuk National University Hospital, Cheongju-si, Korea, Republic of (South),* [10]*Dong-A University Hospital, Busan, Korea, Republic of (South),* [11]*Korea University Anam Hospital, Seoul, Korea, Republic of (South),* [12]*Kosin University Gospel Hospital, Busan, Korea, Republic of (South),* [13]*Myongji Hospital, Goyang, Korea, Republic of (South),* [14]*SoonChunHyang University Hospital Cheonan, Cheonan, Korea, Republic of (South),* [15]*Ajou University Hospital, Suwon, Korea, Republic of (South),* [16]*Chung-ang University Hospital, Seoul, Korea, Republic of (South),* [17]*Seoul Metropolitan Government Seoul National University Boramae Medical Center, Seoul, Korea, Republic of (South),* [18]*Pfizer Pharmaceuticals Korea Ltd., Seoul, Korea, Republic of (South)*

OBJECTIVES: This aimed to compare low density lipoprotein cholesterol(LDL-C) target goal achievement rates of patients with cardiovascular disease risks by physicians' compliance levels to guidelines while lipid lowering management. **METHODS:** Korea-CRISTAR study, a cross sectional, observational study using a total of 2,409 outpatients treated with statin ≥6months, but ≤2years, was performed in nationwide-26tertiary hospitals from December 2014 to October 2015. In this analysis, we excluded 435patients from total patient pool because group classification by guidelines couldn't be determined(2 from NCEP-ATP and 433 from ACC/AHA). Physicians' compliance to NCEP-ATP and ACC/AHA was defined by LDL-C target goal setting and prescription of statin dose, respectively. Patients were further classified into 4 groups by physicians' compliance levels; total compliance(compliant to both guidelines), partial complianceI&II(compliant to either NCEP-ATP or ACC/AHA) and total non-compliance(compliant to neither NCEP-ATP nor ACC/AHA). LDL-C target goal achievement which was defined in NCEP-ATP was compared by compliance levels. **RESULTS:** Among a total of 1974patients, 33.8%(668patients) received total compliant treatment while 12.6%(248patients) was treated with total non-compliant lipid lowering management. 48.4%(956 patients) had statin therapy only compliant