able fee for a given procedure) and obstetricians/gynecologists (+31.9%), while the lowest rate of sales were billed by pathologists (+16%) and radiologists (+30%).

CONCLUSIONS: This study confirms that Open DAMIR data can provide a more nuanced estimation of the cost of certain care services than is commonly used for health economic assessment in France. While the publication of this database represents an important step forward, it is important to consider the inclusion of additional data and variables that would further increase its usefulness in health economic assessment.

**PHP101**

IN GREECE, DURING 2009-2014, PUBLIC PHARMACEUTICAL EXPENDITURE UNDOUBTEDLY FELL; BUT ON WHOSE BACKS?

Athanasakis K1, Kyrillos P1, Karakolos A1, Manios N2, Kyrillos P1, Giallamos M2

1National School of Public Health, Athens, Greece, 2MED Greece, Athens, Greece, *MINITI, ATHENS, Greece*

OBJECTIVES: Entering the fiscal adjustment program in 2010, one of the primary mandates for the Greek government was to reduce public pharmaceutical expenditure from the then current 2.2% of GDP to 1%. Within this context, a series of policies (increased copays, price-cuts, delisting, rebates, clawbacks etc) were enforced. As a result, public pharmaceutical expenditure did reach 1% of GDP, but following a significant increase in consumption to 1.5% of GDP in 2014. We estimated that the macroeconomic trends in pharma expenditure during 2009-2014 and estimate the public/private mix of contributions. METHODS: Aggregate data on outpatient sales by the Greek National Medicines Agency for 2009-2014, formed the basis of the analysis. To account for price changes, expenditures were adjusted to 2014 constant prices, by estimating and using the weighted average price/box for 2014 as deflator. Expenditures were allocated to public or private payers according to official macroeconomic reports of the third-party payers for 2009 and via publicly available subaccounts for 2014. RESULTS: Pharmaceutical expenditure totaled €6.12 billion in 2009 (€5.1 billion public, €0.99 billion rebates, €0.91 billion private) and €3.57 billion in 2014 (€2.92 billion public expenditure, €0.42 billion in rebates/clawbacks, €0.14 billion private). Average price per box sold fell by 36.2% during 2009-2014. Thus, when adjusting for prices, the respective figures are €3.90 and €3.57 billion. Public/private mix was 85%/15% in 2009 and 76%/24% for 2014 (excluding the shift towards patients and companies €564million towards patients and €366million as additional rebates/clawbacks) resulted in achieving the fiscal target of 1% of GDP for 2014 public pharmaceutical expenditure. CONCLUSIONS: Despite the rhetoric and the reforms implemented, cost containment of outpatient pharmaceutical expenditure was achieved during 2009-2014. Fiscal adjustment was achieved by shifting cost to private payers, primarily to patients, raising concerns about equity in access and social solidarity.

**PHP102**

ECOLOGICAL IMPACT OF DRUG-RELATED MORBIDITY IN SWEDEN

Gylersten H

Karolinska Institutet, Stockholm, Sweden

OBJECTIVES: To study the direct costs of drug-related morbidity using three sources of data: experts opinion, medical records and survey responses from the general public. METHODS: Probabilities for clinical outcomes of drug-related morbidity were estimated based on expert opinions from 29 pharmacists and 19 physicians. Costs were assigned using Cost Per Patient register data to resource-use from drug-related morbidity identified in the medical records of 4970 randomly selected patients from three Swedish counties during a three-month period. A postal survey was sent to a random sample of the Swedish population. Resource-use resulting from drug-related morbidity reported during one month by 7099 survey respondents, and by the expert panel was assigned unit costs based on national costs statistics. All cost estimates were prevalence-based. RESULTS: The expert panel reported drug-related morbidity to be common, and to cause considerable health resource use representing up to 20% of all costs to the healthcare system. Drug-related morbidity was estimated to cause 1.5% of all drug costs and 9.5% of healthcare costs, and costs were considerable health resource use representing up to 20% of all costs to the healthcare system. Drug-related morbidity identified in medical records were estimated to cause 1.5% of all drug costs and 9.5% of healthcare costs, and costs which were unfeasible to assign costs caused 0.5% of all drug costs and 6.1% of all healthcare costs. Drug-related morbidity causing considerable resource use and harm in the general public, and throughout the healthcare system; in primary care, other outpatient care and inpatient care. CONCLUSIONS: The analysis showed that cost of the top-100 imported unlicensed medicines increased in every year from 232 billion TL to 747 billion TL between 2011 and 2013, respectively. According to the ATC code, L group (Antineoplastic and immunomodulating agents) had the highest number of active ingredients in top-100. In addition to this, the number of L group medicines rose from 37 to 55 between 2011 and 2013. Also the average cost per box increased from 2.837 to 5.308 TL in the same period. CONCLUSIONS: The cost of imported unlicensed medicines use increased every year. Some medicines (especially for antineoplastic medicines) should be taken to reduce this cost without risking the patients’ access to innovative medicines.

**PHP105**

GENERAL ASSESSMENT OF UNLICENSED MEDICINE USAGE IN TURKEY

Dogan E1, Kokcaya G2, Tuna E1, Venilemez FB1, Vural IM1, Akbulat A1, Arisan G1, Tatar M1

1Turkish Medicines and Medical Devices Agency, Ankara, Turkey, 2Health Economics and Policy Association, Ankara, Turkey, 3Hacettepe University, Ankara, Turkey

OBJECTIVES: The Turkish Medicines and Medical Devices Agency (TMMDA) gives permission by patient based evaluation to use unlicensed medicines under the conditions including ‘Turkish Pharmacists’ Association (TPA) can import the drugs based on the TMMDA’s permission. These medicines are reimbursed by the Social Security Institution (SSI), the main reimbursement agency in Turkey Until 2014 when wholesaler consumers, including ‘Turkish Pharmacists’ Association (TPA) can import the drugs based on the TMMDA’s permission. These medicines are reimbursed by the Social Security Institution (SSI), the main reimbursement agency in Turkey. To assess the trends in unlicensed medicine consumption between 2011 and 2013 and the TPA was the only authorized supplier. METHODS: Consumption data of the top-100 imported unlicensed medicines with the highest sales share in total expenses of imported over-the-counter was taken from the TMMDA computer database. Descriptive analysis was conducted. RESULTS: The analysis showed that cost of the top-100 imported unlicensed medicines increased in every year from 232 billion TL to 747 billion TL between 2011 and 2013, respectively. In addition to this, the number of L group medicines rose from 37 to 55 between 2011 and 2013. Also the average cost per box increased from 2.837 TL to 5.308 TL in the same period. CONCLUSIONS: The cost of imported unlicensed medicines use increased every year. Some medicines (especially for antineoplastic medicines) should be taken to reduce this cost without risking the patients’ access to innovative medicines.

**PHP106**

ECONOMIC BURDEN OUTCOMES IN STUDIES PUBLISHED IN 2014: WHICH DISEASE AREAS HAVE BEEN THE MAIN FOCUS OF CLINICAL RESEARCH?

Martin A, Crystalline Ltd., London, UK

OBJECTIVES: To determine the disease focus of all papers indexed in the PubMed database in 2014 according to the National Institute of Health (NIH) report published in 2014. METHODS: An evidence surveillance process was established based on a systematic search of PubMed, using key words relevant to the costs or resource use associated with healthcare or disease and limited to studies published in English, in human patients and animal data, and either clinical trials or observational, comparative or multicentre studies. The surveillance incorporated all studies published in 2010 and was updated weekly. Abstracts identified by the search of studies that reported data on an economic burden outcomes according to disease area, using the chapter categorisation from ICD-10 as a framework. To account for health economic assessment.