**PH20**

**SMALL BENEFITS OF THIRD TRIMESTER CHECK-UP AMONG PREGNANT WOMEN POSITIVELY SCREENED FOR THYROID DISORDERS**

Bartáková J1, Jiskra J2

1 1st Faculty of Medicine Charles University in Prague, Prague 2, Czech Republic; 2 General Faculty Hospital in Prague, Prague 2, Czech Republic

**OBJECTIVES:** The guidelines of American Thyroid Association (ATA) 2011 recommend in hypothyroid women receiving levothyroxine (LT4) and in untreated women with subclinical hypothyroidism and/or positive TPOAb (antibodies against thyroid peroxidase) regular laboratory check-up every 4 weeks during the 1st half of pregnancy and at least once between 26th–32th weeks of gestation. Our aim was to verify whether thyroid check-up between 26th–32thgestation weeks is beneficial in terms of LT4 dosage changes. METHODS: We used a retrospective cross-sectional study in 2004–2014 in the Departments of Endocrinology of a university hospital and with laboratory assessment in a single center. The study population included all pregnant women from 2004 to 2014 who had had a positive TPOAb test in first trimester of pregnancy. They were followed and examined according to the recommended algorithm by ATA 2011. We assessed serum concentrations of TSH, FT4 and TPOAb and evaluated changes of LT4 dosage with regard to week of laboratory check-up. Finally, we calculated direct medical costs per LT4 dosage change. RESULTS: Of the 188 positively screened women in the first trimester, 104 (55.3%) were hypothyroid and 84 (44.7%) were euthyroid but TPOAb positive. Overall, 104 women (55.3%) underwent three laboratory check-ups, 57 (30.3%) four check-ups and 27(14.4%) five check-ups. The median entrance dose of LT4 was 50μg/day (range 0 –170μg/day). The Laboratory check-up between 26th–32th gestation weeks led to LT4 dosage change in 18/122 (13.6%) women comparison to 131/167 (77.5%) in 10th week. T4 increase was significant (p<0.001). Average costs per LT4 dose change per women were 34.7EUR in 10th week, 47.0EUR in 14th week, 65.1EUR in 20th week and 127.5EUR in 20thgestation week. CONCLUSIONS: Thyroid check-up between 26th–32th gestation weeks in women with hypothyroidism and/or positive TPOAb seems to be redundant in terms of LT4 dosage changes and produces inadequate high costs.

**PH21**

**MODELLING THE COST DETERMINANTS FOR OLDER PERSONS’ TRANSITIONS IN CARE (OPTIC)***

Khalidza RM, McCabe C, Cummings G

University of Alberta, Edmonton, AB, Canada

**OBJECTIVES:** The transfers of nursing home (NH) residents to the emergency department (ED) is costly for the healthcare systems. In this regard, the cost analysis can be a useful tool to provide evidence-based information to guide resource allocation. In this study, we analyze the cost at different stages of the transitions for Edmonton, Alberta, in Canada and evaluate the extent to which nursing home attributes, patients’ characteristics, hospital’s outcomes and the cost of the transfers are associated with the transfers cost. METHODS: We used a representative data collected in 2011 from 398 residents and 28 nursing homes in Edmonton, Alberta from multiple levels and sources (facility, residents, healthcare providers, health records, administrative databases, etc.). We conducted a preliminary study to describe the costs at different stages of the transitions. Statistical modeling was used to identify any significant predictors of the transfers cost and estimate the magnitude of their impact. We used a non-linear ordinary least squares (OLS) models, the GLM, and the mixed effects regression models for clustered data. Models are assessed based on standard goodness-of-fit tests. RESULTS: We find that hospitalization represents 48% of the transfers cost total cost, whilst the emergency nursing unit and the nursing-home cost account for 26% and 10% respectively. The emergency Medical-Services account for 10%, and the diagnostic cost represents 3%. The physicians plus consultations and the treatment costs represent 2% each. The estimation results further revealed that the hospitalization cost is independent of any other predictors. CONCLUSIONS: The study had given additional insight on the economic burden of self-medication in terms of community pharmacy as supplier of health care. The expenditure of NPM in Malaysia can be explained by empirical model that includes the purchasers’ socio-economic characteristic, health status, utilization behavior and the information regarding utilization of community pharmacy.

**INDIVIDUAL’S HEALTH – Patient-Reported Outcomes & Patient Preference Studies**

**PH24**

**MEDICATION ADHERENCE AND HEALTH EXPENDITURE COMPARISON OF ATENOLOL AND METOPROLOL IMMEDIATE AND EXTENDED RELEASE FORMS**

Adilshan M, Hastings T, Vaidya V

University of Toledo, Toledo, OH, USA

**OBJECTIVES:** The medication adherence of patients using widely prescribed beta blockers (Atenolol and Metoprolol) in their extended and immediate release salt forms was compared. Methods: Improving medication adherence has been shown to reduce health care costs. Analyzing the treatment having maximum medication adherence could reduce overall healthcare costs, offsetting the cost of the medication itself. The objectives of this study are to 1) compare the medication adherence of patients prescribed with Atenolol and Metoprolol in both immediate and extended release forms; 2) determine the difference in healthcare expenditure between those highly adherent to the beta-blockers under study. METHODS: Secondary data analysis using the Medical Expenditure Panel Survey data from 2009 to 2011. The medication adherence of the patients in the analysis may fit into a subsequent cost-effectiveness analysis for the transfers cost.

**PH25**

**A SYSTEMATIC REVIEW OF THE USE OF THE TIME PREFERENCE MODEL TO OPTIMIZE GENOTYPING COST-SAVER**

Mezeb M, Lovett AW

Mercer University, Atlanta, GA, USA

**OBJECTIVES:** Non-adherence to prescription medication has a significant impact on health, thus contributing to preventable mortality and unnecessary utilization of healthcare services. Previous literature has been inconsistent as to what factors affect a patient’s adherence to prescription medication. Time preference, the extent that individuals are willing to discount future benefits for immediate benefits, has recently been acknowledged as a framework

**PH23**

**ECONOMETRIC ANALYSIS OF NON-PRESCRIPTION MEDICATIONS EXPENDITURE AT COMMUNITY PHARMACIES IN MALAYSIA**

Mohammad Yahaya AI1, Shafee AA2, Hassali MA3

1Hospital Teluk Intan, Teluk Intan, Perak, Malaysia, 2Universiti Sains Malaysia, Penang, Malaysia, 3University Sains Malaysia (USM), Pulau Pinang, Malaysia

**OBJECTIVES:** The purpose of this study was to develop the econometric model predicting the non-prescription medications expenditure at community pharmacies in Malaysia. METHODS: This study used non-prescription medication expenditure data from 2009 to 2013, and compared between those who are highly adherent to each medication. Healthcare expenditures associated with higher adherence than atenolol. Also, the healthcare expenditure to support assumptions made in this model.

**CONCLUSIONS:** Genotyping could be cost-effective and even be cost-saving when genotyping costs drop. However, there is a need for more clinical evidence to support assumptions made in this model.