### Abstracts

randomised trial of general practitioner practices. Patients were over 74 years old, living in the community, in the UK. Costs and outcomes were discounted (3.5% recommended UK rate). Missing data for censored cases were imputed by survival analysis. Missing data due to missing observations were imputed by characteristic of patient. Data were adjusted for age, gender and cluster randomisation. Costs and LYGs were bootstrapped. Net benefit statistics were estimated. Cost-effectiveness acceptability analysis used willingness to pay thresholds (GBP0 to GBP50000). Sensitivity analysis assessed the impact of structural factors and assumptions. RESULTS: 109 GP practices were assigned to (a) assessment method: UA = 55 (21,762 patients) TA = 54 (21,457 patients); (b) management method: GM = 55(22,216 patients); PC = 54 (21,003 patients). Preliminary analysis indicated a net cost to TA (GBP296; 2.5-97.5 percentile GBP140-GBP448) versus UA and a net saving to PC (-GBP41; 2.5-97.5 percentile -GBP192-GBP107) versus GM. LYGs were TA (0.006; 2.5-97.5 percentile -0.006-0.19) and PC (0.016; 2.5-97.5 percentile 0.004-0.28). The probability of net benefit was 0-0.50 for TA across the willingness to pay thresholds. The probability of net benefit for PC was 0.70-1.00. Sensitivity analysis indicated the results for targeted assessment, but not PC, were sensitive to method of imputing missing data and timeframe. CONCLUSIONS: The cost-effectiveness of targeted assessment is uncertain. PC management appears cost effective in the primary and sensitivity analyses. The small cost and effect differences between strategies indicate cost-effective configuration of services may be driven primarily by local considerations.

### PIH5

# SENIORS' PHARMACEUTICAL EXPENDITURES IN THE CZECH REPUBLIC

### Davidova J, Praznovcova L, Vlcek J

Charles University in Prague Faculty of Pharmacy in Hradec Kralove, Hradec Kralove, Czech Republic

**OBJECTIVES:** Analysis of participation on drug costs in seniors in the Czech Republic in connection with seniors' social status (e.g. financial, household conditions). METHODS: Quotasampled questionnaire-based interview with 450 respondents visiting pharmacy; Ratio men: women approximately 1:2; Age 60 years old and elder; 3 regions of the Czech Republic. **RESULTS:** Most of respondents (60%) live in households with their partners. Respondent's income was retirement pension in 80%. Its average level was between 5001 and 7499CZK. Respondents used together 1651 medicines on physician's prescription in last four weeks. Overall co-payment for medicines was 31,944 CZK, e.g. 70 CZK per patient. Only 27% of respondents used fully reimbursed products. Respondents used together 273 OTC drugs in value of 12,900 CZK, e.g. 29 CZK per patient. Average respondents spent on medicines 100 CZK in last four weeks, e.g. between 2 and 1.3% of their income. There were respondents, about 10%, searching for the level of co-payment in several pharmacies and 8% of respondents, who had to refuse dispensation of medicines due to co-payment. CONCLUSIONS: Our study demonstrates that there are patients who may fail to access medication due to co-payment. The financial participation on health care costs is generally low in the Czech Republic (8.6% of total health expenditures) but there were differences in copayment levels in patients ranging from 1 CZK to thousands CZK. This might be caused by the absence of any instrument limiting the individual financial participation for example in 12month period as in Sweden. In our study co-payments were lower in smaller communities where respondents reported better communication between physicians and patients or physicians and pharmacists.

A53

PIH6

### **GRUMPY OLD MEN OR HAPPY YOUNG WOMEN: THE COMPARATIVE HEALTH STATUS OF SWEDEN AND THE UK** Bingefors K<sup>1</sup>, Isacson D<sup>1</sup>, Koltowska-Haggstrom M<sup>2</sup>, Kind P<sup>3</sup>

<sup>1</sup>Uppsala University, Uppsala, Sweden; <sup>2</sup>Pfizer Health AB, Stockholm, Sweden; <sup>3</sup>Outcomes Research Group, York, UK

**OBJECTIVES:** Comparison of population health is a matter of concern for national governments and for international agencies. This paper reports on the analysis of data collected by in national surveys conducted in Sweden (S) and England & Wales (EW) using the same health status questionnaire, administered by post during 2002 and 2003. METHODS: Data were collected from 1945 respondents in Sweden and 1001 in England & Wales. Both datasets were weighted to be representative of their respective national populations. RESULTS: Age-standardised EQ-5Dvas was systematically higher for men than for women in both surveys, however this position is reversed for women aged 70+ in the EW survey. Differences in age/gender-standardised EQ-5Dvas between the 2 national surveys were small (typically <5). Despite this apparent convergence, the age-standardised rates of reported problem on the 5 EQ-5D dimensions varied significantly both by gender and by survey. The rates of problem on usual activities, for example, were 2.3% and 6.2% for men and women aged 20-44 in the Swedish survey. The corresponding rates in the EW survey were 12.1% and 13.1%. Within-survey regression models were constructed using EQ-5Dvas as the dependent variable and recoding the 5 dimensions to 0/1 dummy variables (no problem/any problem). Both models appear to fit the data reasonably well (r2 > 0.450) with roughly equivalent constants (87.9 and 89.5) however, the value decrements given by the beta coefficients indicate large differences in the importance associated with each dimension. The highest decrements in the Swedish survey are for mobility (15.7) and pain/discomfort (12.0). The highest decrements in the EW survey are for usual activities (11.4) and anxiety/depression (9.5). CONCLUSION: The study explores some possible causes of the differences (and similarities) noted in the analysis and propose a series of standard tables for use in reporting data on comparative population health.

PIH7

## QUALITY OF LIFE OF ITALIAN GENERAL POPULATION AGED 40 TO 79 YEARS OLD

<u>Mantovani LG</u><sup>1</sup>, Scalone L<sup>1</sup>, Perelli Cippo P<sup>1</sup>, Filippi A<sup>2</sup>, Brignoli O<sup>2</sup>, Poli A<sup>3</sup>, Cricelli C<sup>2</sup>, Tragni E<sup>4</sup>, Catapano A<sup>3</sup>

<sup>1</sup>Center of Pharmacoeconomics, University of Milan, Milan, Italy; <sup>2</sup>Italian Society of General Practitioners (SIMG), Florence, Italy; <sup>3</sup>Service for preventive epidemiology and pharmacology (SEFAP), Milan, Italy; <sup>4</sup>Service for Preventive Epidemiology and Pharmacology (SEFAP), Milan, Italy

**OBJECTIVE:** Quality of life (QoL) evaluation allows to understand people's health state perception and to compare wellbeing between different (sub)populations. No data with EQ-5D existed for the Italian population. Our objective was to evaluate QoL of the Italian general population aged 40–79 years old. **METHODS:** Data was collected from a population-based survey of people aged 40–79 years. Subjects randomly sampled from electronic General Practitioners (GP) lists, and accepting to participate (16 individuals per GP, with random replacement in case of refusal), underwent medical examination, blood sampling, resource utilization interview, and filled in the EQ-5D. Participation of GP's to the EQ-5D sub-study was voluntary. Results are reported as comparing data of 5th, 6th, 7th and 8th age decades. **RESULTS:** A total of 1956 individuals (50.0% males) from 128 GP's (approximately half of the invited GP's participated) were enrolled. Subjects reporting any problem in "mobility" were 4.3%, 9.2%, 15.6% and 32.5%; in "self-care" 1.2%, 1.0%, 3.4% and 8.5%; in "usual activities" 3.7%, 7.2%, 11.2% and 20.5%; in "pain/discomfort" 27.3%, 38.9%, 49.0% and 54.8%; in "anxiety/depression" 38.8%, 45.4%, 46.0% and 46.6%. Average EQ-VAS was 79.6, 75.7, 72.8 and 67.1, EQutility scores with UK tariffs were 0.88, 0.84, 0.80, and 0.77, those with Catalan tariffs were and 0.92, 0.89, 0.86 and 0.82. In general women reported lower levels of QoL than men of the same age. **CONCLUSION:** These are the first results available on the Italian general population's QoL with EQ-5D. Older and female subjects show more complains than younger and male ones. The most compromised areas of wellbeing are those concerning the perception of physical pain or discomfort and the perception of anxiety or depression.

### LIFESTYLE, PHYSICAL ACTIVITY AND EQ-5D HEALTH STATUS IN A OVER 65 YEARS POPULATION

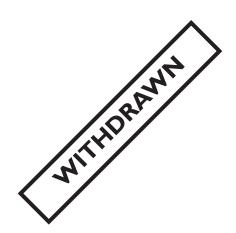
## <u>Cavrini G</u><sup>1</sup>, Pacelli B<sup>2</sup>, Pandolfi P<sup>3</sup>, Zoli M<sup>1</sup>, Muscari A<sup>1</sup>, Mattivi A<sup>1</sup>, Mezzetti F<sup>2</sup>

<sup>1</sup>University of Bologna, Bologna, Italy; <sup>2</sup>Health Authority of Bologna, San Lazzaro di Savena (Bologna), Italy; <sup>3</sup>Health Authority of Bologna, San Lazzaro di Savena (Bologna), Italy, Italy

**OBJECTIVE:** Although there is clear scientific evidence that regular physical activity has positive effects on both psychological and physical well being, 41.9% of Italian over 65 is classified as sedentary. We believe that programs that can facilitate the increasing of physical activity among the aging population are crucial to improve their quality of life. Our purpose is to investigate physical activity and health-related status in aged over 65 years in Northern Italy. METHODS: We want to estimate through the EQ-5D the perception of health in this population and, in particular, the changing in the subjects who increased their physical activity. This study has started in January 2004 and will finish in December 2008. The research comprises two parts. The first part consists of a baseline evaluation of an old population and in the promotion of an increase of the physical activity. The second part is a follow-up after 3 and 5 years and consists in a case-control study on a limited subgroup of subjects. The sampled people received a postal questionnaire containing demographical data, anthropometrical information, smoking and alcohol intake, quantification of the physical activity through instrument PASE, functional ability through instrument ADL and IADL, self-reported chronic conditions, drugs assumption and, finally, appraisal of health state through the EQ-5D. The study population consisted of 5.255 subjects. Mean age was 74.5 years (SD = 7.1; 65–102 years). The mean VAS score of the sample was 63.9 (SD = 20.4). RESUTLS: We have performed the Binary Regression Model (BRM) and the Multinomial Logistic Model (MNLM) to assess the relationship between health status (defined through the EQ-5D's health profiles) and the other variables. CONCLUSION: There is evidence that people who practice physical activity are more probable to preserve their healthy status.

PIH8

PIH10



# COST-EFFECTIVENESS STUDY OF ASSISTED REPRODUCTIVE TECHNIQUES IN SPAIN

#### Prieto L<sup>1</sup>, Ruiz-Balda JA<sup>2</sup>, López JM<sup>3</sup>

<sup>1</sup>Serono Iberia, Madrid, Spain; <sup>2</sup>Hospital 12 de Octubre, Madrid, Spain; <sup>3</sup>Fundación de Ciencias del Medicamentoy Productos Sanitarios, Madrid, Spain

**OBJECTIVES:** There has been an increasing demand for Assisted Reproductive Techniques (ART) in the last few years. High health care and pharmaceutical costs are barriers to its implementation. Recombinant hormones used to induce ovarian stimulation are more expensive than those therapies obtained from human fluids. However, expensive as they are, they are also more efficient. We compared follicle-stimulating hormone (FSH) and human menopausal gonadotropin (hMG) extracted from human urine in order to establish which one yielded a better cost-effectiveness profile. METHODS: A cost-effectiveness analysis was carried out using data on 24.765 ART cycles considered for follow up. A Markov model was built and a cohort of 60,000 patients were randomly assigned to each treatment (N = 120,000). Consumption of resources and accompanying costs were obtained from a study on ART-specialized private health facilities in Spain. RESULTS: A total of 420,346 ART cycles were completed, with an average of 3.5 cycles per patient. In total, 106,735 pregnancies and 59.238 births were obtained. Average cost per pregnancy ran from €17,766.23 (women under 36 treated with hMG) to €28,239.30 (patients over 36 treated with hMG), whereas healthy live births showed average cost between €30,615.55 (women under 36 treated with FSH) and €61,510.59 (patients over 36 treated with hMG). CONCLU-SIONS: Alternative recombinants for ART improve safety and efficacy of the treatment. Moreover, it poses lower costs and reduces the number of cycles necessary to successfully give birth.