that the GP had referred them to another doctor for evaluation and treatment. Most women in the UK first discussed UI with a GP whereas in Germany most discussed UI with a specialist. In Spain and France about half the women first discussed their UI with a GP. CONCLUSIONS: GPs are involved to varying degrees in the initial management of UI in France, Germany, Spain and the UK. Even in countries where women have a choice of whether to see a GP or specialist about UI many choose to have their first contact with a GP.

**SUMMARIZING POPULATION HEALTH USING EQ-5D**

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**OBJECTIVES:** Summary measures of population health (SMPH) are used by national governments and international agencies for comparative purposes. Such measures have other uses, for example, in monitoring changes in health status over time. Competing approaches for calculating SMPH have been developed using different metrics: disability-adjusted life years (DALY) and quality-adjusted life years (QALY). This lack of standardization in approach might produce conflicting results. The present study was designed to measure disease burden in a US national population survey (MEPS) to test both approaches.  

**METHODS:** Two methods are compared here: first, the health expectancy method, computing health-adjusted life expectancy by combining health-related quality of life (HrQoL) and survival data; second, the health gap method, measuring disease burden by combining the losses due to premature mortality and non-fatal conditions. Both EQ-5D social preference weights and Global Burden of Disease disability weights are employed to assess the effect of different scoring systems. Four disease areas were studied: diabetes, stroke, coronary heart disease (CHD) and asthma.  

**RESULTS:** Using the health expectancy method based on EQ-5D values, the highest QALY loss of 3.67 years per person was associated with CHD, followed by diabetes (1.26), stroke (1.15) and asthma (0.57). The results based on disability weights had the same rank order among diseases but varied in magnitude by between 1% and 42% compared to EQ-5D estimates. Results were similar using the health gap method. Disability-weighted estimate for CHD was 8508 thousand DALYs, followed by diabetes (4378), stroke (3277) and asthma (1429); EQ-5D values produced the same rank order but variation was lower (2% to 15% lower).  

**CONCLUSIONS:** A single metric for measuring health status in clinical and population studies would help improve knowledge transfer between health care decision-makers. EQ-5D has potential value as a summary measure of population health.

**INFECTION**

**BUDGETARY IMPACT OF PNEUMOCOCCAL CONJUGATE VACCINATION OF NEWBORNS IN THE CONTEXT OF THE REGIONAL HEALTH CARE SYSTEM OF LOMBARDY**

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**OBJECTIVES:** Pneumococcal (Pnc) disease represents a major health care concern being associated with severe complications. Scope of this study was to evaluate the budgetary impact effect of providing vaccination with seven-valent pneumococcal conjugate vaccine (PCV) to newborns in Lombardy (Italy).  

**METHODS:** Budget impact analysis was applied to the 2004 cohort of newborns of Lombardy: efficacy data as number of pneumonia and acute otitis media (AOM) cases, and consumption of resources were derived from a large multicenter single-blind clinical study (results published) of vaccinated versus unvaccinated Italian children. Vaccinated children were administered 3 doses of PCV at 3, 5 and 11 months of age; Pnc morbidity was recorded until the 30th month of age. Economic analysis was performed in the perspective of the third party payer, considering direct costs (vaccine doses, administration costs, drugs, visits and hospitalisations for management of Pnc disease complications); unit cost of resources (2006 values) was retrieved from national reimbursement tariff lists and other published sources.  

**RESULTS:** The cost of vaccination was calculated as €1353 per patient; cost of pneumonia and AOM were calculated as €2258 and €31 per case. Vaccination of the whole newborns population of Lombardy would avoid about 6700 cases of AOM and 2700 cases of pneumonia. The economic effect of vaccination would be a net saving, ranging from €1 million 1.0 to 0.8 and 0.5 for respectively 100%, 80% and 50% vaccination coverage. These savings may be underestimated when considering the economic effects on cases of meningitis, the extension of vaccination benefits after the second year of age in the vaccinated infants and the effect of herd immunity on total population.  

**CONCLUSION:** Our analysis suggests that the use of PCV in infants is likely to be economically justified due to savings from pneumonia and AOM cases averted, in the population of newborns of Lombardy.

**EUROPEAN SURVEILLANCE OF ANTIMICROBIAL CONSUMPTION (ESAC): DEVELOPING VALID ANTIBIOTIC PRESCRIBING QUALITY INDICATORS FOR AMBULATORY CARE**

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**OBJECTIVES:** Indicators to measure the quality of health care are increasingly being developed and used both by health care professionals and policy makers. In the context of increasing costs related to antimicrobial use and resistance we aimed to develop valid antibiotic prescribing quality indicators for ambulatory care, producible on the basis of present ESAC (www.ua.ac.be/ESAC) data on antibiotic utilisation.  

**METHODS:** Experts from 15 countries participating in a European Science Foundation workshop in September 2005 proposed a set of 24 indicators and subsequently scored these indicators for their relevance to controlling antimicrobial resistance, patient health benefit, prescription cost-effectiveness and public health policy making using a scale ranging from 1 (completely disagree), over 5 (uncertain) to 9 (completely agree). The scores were processed according to the UCLA-RAND appropriateness method and each indicator was judged valid if there was consensus and the median score was not within the 1–6 interval.  

**RESULTS:** Twenty-two participants scored. Nine indicators were rated as valid antibiotic prescribing indicators on all four dimensions and three extra for their relevance at least to prescription cost-effectiveness. The 2004 indicator values of a valid set of 12 quality indicators of cost-effective antibiotic utilisation are available for 28 individual countries. The most informative indicator “total outpatient use” varied more than threefold between the countries with the highest (33.4 DDD per 1000 inhabitants per day (DDI) in Greece) and lowest (9.2 DDI in Russia).  

**CONCLUSIONS:** In line with the main objectives of antimicrobial use surveillance at the European level, this subset can be used to describe antibiotic use in ambulatory care in order to assess the quality of antibiotic prescribing and its cost-effectiveness. The indicator values allow individual countries to position themselves and to define their own benchmark,