

MENTAL HEALTH**MENTAL HEALTH—Methods and Concepts**

PMH28

METABOLIC OUTCOMES OF ANTIPSYCHOTICS IN SCHIZOPHRENIA: A MARKOV MODELSorensen SV¹, Leaderer M², Harrison DJ², Prasad M¹, Hollenbeak CS¹, Revicki D¹, Dugar A², Cheli A², Remák E³¹MEDTAP International Inc, Bethesda, MD, USA; ²Pfizer Inc, New York, NY, USA; ³MEDTAP International Inc, London, UK

OBJECTIVES: To model the long-term metabolic costs and consequences of antipsychotic therapy for chronic schizophrenia. **METHODS:** We developed a Markov model to simulate long-term treatment courses of 10,000 chronic schizophrenia patients using annual cycles over a 10-year period. The model was developed with psychiatrists, an endocrinologist, and a cardiologist and simulated individual patients. Patient health status (comorbidities, lipid levels, body mass index, and blood pressure) could change as a function of treatment-related events. Probabilities were determined from published pooled analyses of clinical trial data. Costs and resource utilization patterns were obtained from published data and standard costing sources. The model estimated costs of long-term consequences of weight gain, such as diabetes and coronary heart disease. We used data from the Framingham Heart Study and Nurses' Health study to assess risks for weight gain-induced diabetes and cardiovascular events. Outcomes included total number of patients with metabolic events and associated costs. **RESULTS:** Fewer patients treated with ziprasidone developed diabetes compared with other atypical antipsychotics. The greatest difference was observed between ziprasidone and olanzapine: costs for the entire cohort were \$12.3 million vs \$32.9 million for ziprasidone vs olanzapine, respectively. Increased diabetes risk and lipid levels translated into higher risk for CHD. At 10 years, an additional 235 olanzapine-treated patients developed CHD vs ziprasidone. Costs were again lowest for ziprasidone compared with other atypical antipsychotics. **CONCLUSIONS:** Adverse events common to some atypical antipsychotics (ie, weight gain) can have a deleterious long-term metabolic impact and should be considered when prescribing an agent for the treatment of schizophrenia.

MEN'S AND WOMEN'S HEALTH**MEN'S AND WOMEN'S HEALTH—Cost Studies**

PMW1

ECONOMIC EVALUATION OF THE ADMINISTRATION OF FOLLITROPIN-Å WITH A PEN DEVICE COMPARED WITH ADMINISTRATION OF MENOTROPIN BY CONVENTIONAL SYRINGEBruijnesteijn K¹, Van Genugten ML¹, Hoomans E², Limbourg M³, Van Loon J¹¹Mapi Values, Houten, Netherlands; ²Organon Nederlands BV, Oss, Noord Brabant, Netherlands; ³Organon Belgium, Brussels, Belgium

OBJECTIVES: To perform an economic evaluation of Puregon Pen and the conventional syringe system with menotropin in the treatment of IVF/ICSI by comparing the process-utilities and the costs for the current Dutch situation. **METHODS:** A conjoint analysis (CA) was performed to express the preference of women for the different administration forms of FSH as process-utilities ranging from 0 to 1. In the CA, women were asked to give their preference for the different administration forms that were described by the levels of five attributes. A decision analytic model was developed to estimate the costs of an average IVF

cycle in The Netherlands from the societal perspective. Epidemiologic and costing data were drawn from the available literature or were provided by experts. **RESULTS:** The process-utility was estimated to be 2.6 ($p < 0.05$) higher for Puregon Pen compared to the conventional syringe containing menotropin. On a scale from 0 to 1, the process-utility was 0.96 (CI between 0.94 and 0.97) for Puregon Pen and 0.36 (CI: 0.30–0.46) for the conventional syringe, resulting in an incremental process-utility between 0.57 and 0.61. The additional costs per cycle for this increase are estimated to be €60–194. **CONCLUSIONS:** Compared with the conventional menotropin administration form, the added value of Puregon Pen was 2.6 times higher at an extra cost per cycle of €60–194. The comparison shows that the utility-gain is substantial and that the additional costs are minimal. Therefore, it can be concluded that Puregon Pen is a cost-effective administration form.

PMW2

HOW MUCH DOES UNINTENDED PREGNANCY COST THE UK HEALTH CARE SYSTEM?Sonnenberg F¹, Price M², Neslusan C³¹UMDNJ Robert Wood Johnson Medical School, New Brunswick, NJ, USA; ²Janssen-Cilag, High Wycombe, Buckinghamshire, UK; ³Johnson & Johnson Pharmaceutical Services, New Brunswick, NJ, USA

OBJECTIVES: Unplanned pregnancy can have a significant impact on the individuals involved. With around one-third of pregnancies being unplanned, it is a significant problem for health care systems and society. The objective of this analysis was to estimate the cost of unintended pregnancy from a UK National Health Service perspective using a decision-analytic modelling approach. **METHODS:** The cost of unintended pregnancy was evaluated using a decision-analytic Markov model. A review of medical literature and government statistics was undertaken to identify probabilities of alternative pregnancy outcomes. The model was then used to predict the likelihood of these outcomes: ectopic pregnancy; spontaneous abortion; induced abortion; vaginal delivery; C-section; full term/pre-term delivery. Costs were derived from NHS reference costs and the literature and inflated to 2002 prices. Post-natal costs were excluded. To obtain a stable estimate of costs, we simulated a cohort of 100,000 women using oral contraceptives (OC's) over a 2-year period. **RESULTS:** The model predicts that in this cohort of 100,000 OC users there would be 14,211 pregnancies over two years (approximately 7% per annum). The most common outcomes were vaginal delivery (53%), elective abortion (26%) and C-section (12%). The annual cost of these events was 10.3 million pounds (GBP), with an average event cost of 1460 GBP, varying from 2448 GBP for C-sections to 452 GBP for spontaneous abortions. Assuming that 30% of the 764,000 conceptions that occurred in 2001 were unplanned, this would equate to a total annual cost of 335 million GBP in the UK. **CONCLUSIONS:** Unintended pregnancy places a large financial burden on the NHS. Investment in interventions that reduce unintended pregnancy rates are needed.

PMW3

IMPROVING THE DELIVERY OF CHILD AND MATERNAL HEALTH CARE IN A POOR SETTING: COSTS AND BARRIERS TO BE CONSIDERED IN THE IMPLEMENTATION OF WHO MOTHER-BABY PACKAGE IN MORELOS, MEXICOCahuana L¹, Sosa S², Bertozzi S¹¹National Institute of Public Health, Cuernavaca, Morelos, Mexico;²University of York, Heslington, York, UK

OBJECTIVES: Analyze the incremental cost that would be incurred if the WHO Mother-Baby Package standards were