

## Abstracts

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96,144 patients initiating sildenafil switched to another PDE-5 agent (57% tadalafil). Prior to switching, the majority of patients (64%) had only one prescription for sildenafil and only 4% of those initiated on a lower dose titrated to the 100 mg dose. Mean time to switch from last sildenafil dose was 67–77 days. After switching, about 38% and 34% of tadalafil and vardenafil patients refilled therapy, respectively. Between 22% of tadalafil and 27% of vardenafil patients switched back to sildenafil. **CONCLUSIONS:** The majority of patients who initiated sildenafil did not switch to a competitor. Among those who did, most either switched back to sildenafil or did not refill treatment.

PIH18

**DIRECT COSTS OF ERECTILE DYSFUNCTION IN A MANAGED CARE SETTING—EVIDENCE FROM A LARGE NATIONAL CLAIMS DATABASE**

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**OBJECTIVES:** To examine the direct costs of erectile dysfunction (ED) in a managed care setting. **METHODS:** A naturalistic and retrospective observational study was conducted with an ED cohort (285,436) of men age 18 or older and enrolled in 51 US health plans that covered 28 million lives from 1999 through 2001. Both annual costs of ED care per patient with ED and annual costs of ED care per user were measured for each category of ED-related care and treatments. **RESULTS:** On average, health plans spent \$83.91, \$95.41 and \$119.26 on ED care for a patient with ED in 1999, 2000, and 2001 respectively. In 2001, an ED patient spent \$44.22 on phosphodiesterase type 5 (PDE-5) inhibitor therapy, \$14.56 on ED-related physicians' evaluation and management, \$10.13 on ED-related diagnosis procedures, \$10.08 on ED-related testosterone therapy, \$2.70 on intracavernosal injection, \$1.49 on alprostadil pellet, \$3.27 on penile prosthesis implantation, \$0.72 on vacuum erection device, and \$0.13 on ED-related vascular surgery (see Figure 1). Among seven common ED treatments, PDE-5 inhibitor had the lowest average annual costs per user of a treatment (see Figure 2). From 1999 through 2001, a health plan with 100,000 members might spend \$320,865 (2000 dollars) on ED care, about one tenth of the costs forecasted by Tan (\$3,204,792 in 1998 dollars)<sup>1</sup>. The largest per member per month cost of ED treatment was for PED-5 inhibitor (\$0.48 in 2001), followed by testosterone therapy (\$0.11 in 2001). **CONCLUSIONS:** In 2001, ED imposed a modest financial burden on a health plan (\$122,699 for a plan with 100,000 members). Although the use of PDE-5 inhibitor therapy had the lowest annual treatment costs per user (\$121.7 in 2001), it constituted 37.08% of the annual financial burden of ED (2001), followed by testosterone therapy (8.45% or \$10,369).

## HEALTH—Women's

PIH19

**COST-EFFECTIVENESS OF PHARMACIST PRESCRIBING AUTHORITY FOR EMERGENCY CONTRACEPTION IN BRITISH COLUMBIA**

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**OBJECTIVES:** The purpose of this study was to estimate the health care cost savings in 2001 to the British Columbia Ministry of Health Services (MHS) as a result of the policy of autho-

rizing pharmacist provision of Emergency Contraception (EC) without a physician visit. A secondary objective of this study was to estimate whether, and at what price, a media campaign to increase public awareness and EC utilization to prevent unintended pregnancies in the province would be cost effective. **METHODS:** A decision analytic model was developed to compare the difference in incremental marginal costs and effects between the MHS policy of pharmacist prescribing authority for EC compared to the previous policy of no pharmacist prescribing authority for EC. A second model was developed to determine the costs and effects of increased EC utilization in British Columbia. The possible outcomes were: pregnancy, no pregnancy, induced abortion, spontaneous abortion and ectopic pregnancy. Cost and event data were obtained from MHS. A conception rate of 4.3% was used in both models. In the expanded use model, we assumed both a 28% increase in awareness and 10% increase in usage in the base case; these assumptions were varied in the sensitivity analyses. The analysis was conducted from the MHS perspective for calendar year 2001. Monte-Carlo simulations were conducted to determine confidence ranges for the results. **RESULTS:** The policy of pharmacist-initiated EC was estimated to have saved the MHS \$480,985 (95% CR: \$237,213, \$1,084,489). It was estimated that expanded EC use would save \$1,610,678 (95% CR: \$419,074, \$4,683,870). **CONCLUSIONS:** The results of this cost effectiveness analysis indicates that the policy of pharmacist provision of EC is cost saving. A media campaign to increase EC utilization costing less than \$0.42 million would be cost neutral or cost saving in the first year.

PIH20

**COST OF ILLNESS STUDY OF NAUSEA AND VOMITING OF PREGNANCY IN CANADA**

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**OBJECTIVES:** Nausea and vomiting of pregnancy (NVP) is the most common medical condition in pregnancy affecting an estimated 80% (50%–90%) of all pregnant women. Even with mild symptoms, NVP generates costs to society, patients and the health care system, and reduces quality of life. However, its costs are largely unknown. We estimated the total cost per woman-week associated with the onset of NVP in Canada, stratified by the self-reported severity (mild, moderate, severe) from the perspectives of society, Ministry of Health and Long Term Care (MoH), and patients. **METHODS:** Data were collected from 139 pregnant women, who called the Motherisk Program at the Hospital for Sick Children in Toronto. Motherisk is a teratology information and counseling service for all questions related to pregnancy. We collected the information about resource utilization for direct costs (drugs, physicians, hospitalizations) and indirect costs by telephone interviews. Costing was conducted with Ontario price lists and fee schedules. Indirect costs were calculated using the human capital approach and included absences from work and/or usual activities as well as reduced productivity at work. **RESULTS:** From the societal perspective, the costs per woman-week were \$124, \$334 and \$610 for mild, moderate and severe NVP, respectively. From the MoH perspective, the costs were \$4, \$36, and \$87, respectively. From the patient perspective, costs per woman-week were \$110, \$253 and \$375, respectively. Costs from all perspectives increased with increasing NVP severity. Lost productivity constituted the largest cost component. **CONCLUSIONS:** NVP in Canada is associated with substantial costs to patients,