



PHARMACEUTICAL CARE NETWORK EUROPE

Working Conference 2013 – Abstract

Collaborative pharmaceutical care in research and practice

Title/Name	: Wioletta Polak	Phone	: +48 12 62 05 519
Institute	: Jagiellonian University Medical College Faculty of Pharmacy Department of Social Pharmacy	Fax	: +48 12 62 05 519
Street	: Medyczna 9	Skype	: -----
Postal code + City	: 30-688 Krakow		
Country	: Poland	Email address	: wpolak@cm-uj.krakow.pl

The above mentioned participant in the PCNE WC 2013 wishes to submit following abstract for a poster or oral communication. If accepted and presented, the abstract will be published in the International Journal of Clinical Pharmacy. Please make sure the abstract is no longer than 350 words, excl. author-details.

Title: Cost-effectiveness analysis of pharmaceutical care in hypertension in Poland - Markov model	
Author(s): Polak, Wioletta; Skowron, Agnieszka	
Type of abstract <input checked="" type="checkbox"/> Research <input type="checkbox"/> Practice development <input type="checkbox"/> Practice implementation	
Aim of project/study To assess effectiveness and costs of pharmaceutical care in Poland	
Method The cost-effectiveness analysis is conducted from the national payer and society perspective. Alternatives compared are: pharmaceutical care (PC) and standard medical care (SMC). The costs and effects of SMC were assessed in 3 outpatient clinics. PC was conducted based on Strand and Hepler definition of pharmaceutical care. The inclusion criteria were: adults with hypertension at least 3 months after first prescription for antihypertensive medicine, able to communicate with others, with full legal capacity. Patients with myocardial infarction or stroke during 6 months before inclusion, depression, schizophrenia, dialysis, after transplantation of organs or tissues, visually impaired, drugs, alcohol or medicines dependent were excluded. The cost-effectiveness analysis is based on Markov model. Time horizon is 360 days and the cycle length - 30 days. The basic model consists of 4 health states: proper blood pressure (according to polish guidelines), improper blood pressure, cardiovascular death or non-cardiovascular death.	
Result(s) The probabilities of transitions are derived from data on 53 transitions in 13 PC patients and 84 transitions in 46 SMC patients. Mean age of PC patients was 62,3 years ($\pm 14,7$), SMC - 65,6 years ($\pm 12,8$). Women consisted of 61,5% of PC patients and 52,2% SMC patients. PC patients had mean 0,7 additional circulatory system diseases ($\pm 0,8$) compared to 1,8 in patients SMC ($\pm 1,5$). PC patients used 2,2 medicines for hypertension ($\pm 1,3$) and 0,5 medicines for other circulatory system diseases ($\pm 0,9$) compared to SMC patients: 2,1 medicines for hypertension ($\pm 1,3$) and 1,2 medicines for other circulatory system diseases ($\pm 1,3$). Baseline systolic blood pressure in PC patients compared to SMC patients was 140 (± 14) vs. 145 (± 21). Baseline diastolic blood pressure	

in PC patients compared to SMC patients was 84 (± 10) vs. 87 (± 12).

The probabilities of maintaining proper blood pressure in next cycle is 0,8285 for PC and 0,5889 for SMC. The probabilities of normalizing blood pressure is 0,1996 for PC and 0,3793 for SMC.

Probability of cardiovascular death is 0,0013 and probability of non-cardiovascular death is 0,0005.

Cohort modeling indicates that after 12 cycles 52,7% of PC patients would achieve proper blood pressure, compared to 47,1% of SMC patients.

+++ NB: PhD students still pay the early bird fee for their abstract if their abstract is accepted ++++