PCD16

COST-EFFECTIVENESS OF TIROFIBAN PLUS HEPARIN AS COMPARED WITH HEPARIN ONLY IN TREATING UNSTABLE ANGINA

Shi L, Hay J
Department of Pharmaceutical Economics and Policy, School of Pharmacy, University of Southern California, Los Angeles, CA, USA

Anti-thrombotic therapy improves the prognosis of patients with unstable angina. Two clinical trials have evaluated the clinical efficacy of tirofiban or tirofiban plus heparin in the treatment of unstable angina. However, high price for tirofiban prompts the question of whether the additional effectiveness is worth the additional drug cost. **OBJECTIVE:** This medical decision analytic model is to investigate the cost-effectiveness of tirofiban plus heparin in treating unstable angina relative to heparin only. **METHOD:** Parameters of treatment efficacy used in the cost-effectiveness model were primarily from the report of PRISM-PLUS (the Platelet Receptor Inhibition in Ischemic Syndrome Management in Patients Limited by Unstable Signs and Syndrome) trial. Other parameters (cost, life expectancy, and quality of life) were cited from the published literature. The time frame for this model is 1-month initial episode of unstable angina and 1-year follow-up. It was assumed that there was no additional cost difference between two groups after one-year follow-up. Effectiveness was measured as quality adjusted life years (QALYs). **RESULTS:** A patient in tirofiban plus heparin group had both higher total costs ($25,467 versus $24,805) and a lower mortality rate (5.89% versus 6.83%) than a patient in heparin only group. The incremental cost-effectiveness ratio was $10,417/QALY at 3% discount rate. In the sensitivity analysis, the incremental cost-effectiveness ratio was only sensitive to the tirofiban acquisition cost. **CONCLUSION:** Treating unstable angina with tirofiban plus heparin is cost-effective compared with the traditional heparin-only therapy.

PCD17

THE EFFECTS OF PAYOR STATUS ON PROCEDURE USE AND OUTCOMES OF PATIENTS WITH CONGESTIVE HEART FAILURE

Kroch E[1,2,3], Loh E[3], Schwartz JS[3], Shah R[3], Fisher D[3]
[1]Villanova University, Villanova, PA, USA; [2]Care Management Science Corporation, Philadelphia, PA, USA; [3]University of Pennsylvania, Philadelphia, PA, USA

Whether insurance status affects medical care is a question with particular relevance for the large US population segment treated for congestive heart failure (CHF). **OBJECTIVE:** To understand the evaluation and effects of insurance status on resource use (costs and procedure intensity) and other outcomes (length of stay and inpatient mortality) experienced by in-patients with CHF. **METHODS:** Multivariate analysis of hospital records (UB-92 abstracts) of patients under age 65 from acute care facilities in fourteen states across the US. Unique regression-based risk adjustment methods control for clinical, demographic, and selection factors in order to isolate the effects of insurance status on the variables of interest. Also inferred are the insurance-status specific marginal effects of CHF as a secondary diagnosis on the outcomes and resource use for those patients admitted for other conditions. **RESULTS:** The effects of insurance status on resource use (vs. adverse outcomes) are significant. With the exception of traditional Blue Cross virtually all private insurance pay-outs and lengths of stay were significantly lower than public payors. Comparing high-intensity procedures (e.g. cardiac catheterization) to lower intensity tests (e.g. ultrasound) indemnity insurers and PPOs displayed the greatest intensity, while public payors showed the lowest intensity rates. The marginal effects of CHF are substantial, raising length of stay and treatment cost by 25% to 40%, depending on insurance status. **CONCLUSION:** Insurance status is correlated with treatment of CHF, but effects are complicated. For example, even though public payors tend to have patients with longer lengths of stay and higher costs, they also tend to get lower treatment intensity. Some of these effects can be explained only by noting that certain relevant patient attributes not controlled by the risk analysis (such as access to ambulatory care) must vary systematically with insurance status.

PCD18

THE PERCEPTUAL EFFECTIVENESS INDEX: A NEW APPROACH FOR EVALUATING OUTCOMES OF ANTI-HYPERTENSIVE THERAPY

Leidy NK[1], Flynn J[1], Zyczynski TM[2]
[1]MEDTAP International, Inc., Bethesda, MD, USA; [2]AstraZeneca, Wayne, PA, USA

OBJECTIVES: For patients with hypertension, successful pharmacologic treatment depends on the efficacy of the drug as well as its tolerability. The purpose of this study was to develop and test a rating system that characterizes an agent's effectiveness in terms of clinical efficacy relative to patient perception of tolerability. The Perceptual Effectiveness Index (PEI) is a 4-point ordinal scale, where 0 indicates the agent is not effective in controlling blood pressure, regardless of side effects, and 1 indicates optimal effectiveness, i.e., blood pressure control with minimal to no side effects. **METHODS:** The PEI was tested in 243 patients participating in an 8-week, multicenter, double-blind trial comparing the efficacy, safety and tolerability of candesartan cilexetil versus amlodipine. **RESULTS:** Mean age of the sample was 53 years (+12); 54% were male. Of the 202 who achieved control of their hypertension, 62 (31%) experienced side effects that were classified as moderate to high impact; 33 (16%) experienced side effects with moderate impact, and 29 (14%) fell into the high impact group. There was a statistically significant relationship between these PEI categories and global HRQL ($P < 0.001$), utility (visual analog scale-transformed) ($P < 0.001$), and satisfaction