

cardial infarction, chest pain greater than 20 minutes and irregular specifications of EKG. The outcome measured was reduction in mortality at a 30-day follow-up. The study was based on a societal perspective, hence the cost measure included both direct costs such as cost of hospitalizations, drug acquisition, follow-up hospitalizations and physicians' fees, and indirect costs. We calculated the effectiveness measure, using life expectancy, as number of quality-adjusted life-years (QALYs) saved.

RESULTS: The expected total costs of t-PA treatment were \$16,885 and with streptokinase, the expected total costs were \$14,472. The number of QALYs saved for each therapy were 12.379 years for t-PA and 12.16 years for streptokinase. The ICE ratio was calculated to be \$11,171 per QALY.

CONCLUSION: Since the ICE ratio of \$11,171/QALY is less than the most popular cut-off ratio of \$40,000/QALY, we concluded that t-PA is more cost-effective than streptokinase in the treatment of acute myocardial infarctions.

PCVD4

AN ECONOMIC MODEL OF HYPERTENSION IN ONTARIO

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OBJECTIVE: To examine the costs and outcomes associated with the use of valsartan, an angiotensin II receptor blocker, compared to six different anti-hypertensive medications as second-line treatment for mild to moderate hypertension over 12 months.

METHODS: A decision analytic model was developed to evaluate the costs and outcomes associated with initiating treatment with seven different anti-hypertensive medications. A combination of meta-analysis and predictive logistic regression analysis was used to model effectiveness defined as the proportion of patients responding to anti-hypertensive treatment (response was defined as a reduction of diastolic blood pressure to below 90 mmHg or a reduction of greater than 10 mmHg). The meta-analysis was performed on an intent-to-treat basis. Two regression analyses were used, one to impute a response rate for those studies where only change in blood pressure was reported and a second to determine a dose-response relationship for each comparator. Costs for drugs, laboratory tests, and physician visits were obtained from publicly available Ontario sources. The analysis determined the cost per successful responder at 12 months for each initial comparator.

RESULTS: The analysis demonstrated that treatment patterns associated with each medication, particularly laboratory tests, played an important role in the overall cost and cost-effectiveness of each therapy as opposed to simply the drug acquisition cost.

CONCLUSIONS: At least two drugs from each class, angiotensin receptor blocker, angiotensin converting enzyme inhibitor, and calcium channel blocker, were evaluated and no evidence of class effects was seen.

PCVD5

DELPHI PANEL SURVEY ON CURRENT HYPERTENSION TREATMENT PATTERNS

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OBJECTIVE: Determine current clinical practice in the treatment of mild-to-moderate uncomplicated hypertension.

METHODS: Delphi panel survey of general practitioners and cardiologists in the United States. First round: 11 physician responders. Second round: 10 of 11 physicians responded. Consensus reached in the second round. Questions addressed the status quo, JNC-VI guidelines, initial therapy, and second-line therapy.

RESULTS: Diuretics and ACE inhibitors are more frequently prescribed than other drug classes. HCTZ is the most frequently used diuretic, atenolol and metoprolol are the most frequently used beta-blockers. A variety of drugs are prescribed from ACE inhibitors, calcium channel blockers and angiotensin-II inhibitors. When a patient is given combination therapy, the second agent is typically a diuretic. Physicians generally agreed with the JNC-VI guidelines, except that: 1) more drugs should be permissible as first-line therapy (seven physicians regularly consider classes other than diuretics or beta-blockers as initial therapy), and 2) comorbidities are a major factor in drug choice and the guidelines do not adequately address this. Follow-up after initiating drug therapy typically occurs at 1 month. New therapies will generally be titrated upward once or twice (depending on the drug) before the drug is discontinued due to lack of efficacy. Once a patient's hypertension is controlled, monitoring occurs every 3 to 4 months. It is extremely rare for a patient to be unresponsive to all five drug classes. Results from a series of case studies in which physicians were asked to select the class of medication they would prescribe depending on the patient's age, gender, initial blood pressure, and initial therapy will be presented.

CONCLUSIONS: This study gives researchers insights into the differences between clinical practice and clinical guidelines in hypertension treatment.

PCVD7

IDENTIFICATION OF COMORBIDITIES AMONG A HYPERTENSIVE POPULATION USING ADMINISTRATIVE CLAIMS AND MEDICAL RECORDS DATA

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