

tively short duration and therefore cannot directly measure the long-term impact of therapies.

OBJECTIVE: To develop a flexible and comprehensive tool to assist rapid outcome evaluation of potential interventions in stroke care in four countries: France, Germany, UK, US.

METHODS: Decision-analytic software was used to construct a Stroke Outcome Model, which consists of 4 inter-related modules: (1) primary prevention; (2) “bridge” to acute care; (3) acute care (ischaemic stroke only); and (4) long-term care/prevention of recurrence in stroke survivors. Stroke prevention was represented by Markov state transition processes, states being defined in terms of use of therapy, disability and occurrence of (further) stroke. Data sources included clinical trials and meta-analyses, and prospective cohorts: Framingham study, Oxford Community Stroke Project and North Manhattan Stroke Study. Resource use data were obtained from published sources, supplemented by in-country panels of clinical experts, and unit costs from relevant national sources.

RESULTS/DISCUSSION: The modelling approach has enabled the long-term consequences of acute or preventive therapy to be evaluated. Analyses have examined the cost-effectiveness of: antiplatelets in prevention of stroke recurrence; thrombolytic therapy in acute stroke; and stroke units. Results were sensitive to the duration of follow-up and the cost perspective chosen, in particular whether long-term care costs were included. The model enables users to explore issues such as the choice of effectiveness parameter or background event risks, and how risks are projected beyond the follow-up periods reported in trials or prospective studies. More data are required on long-term care, disability and quality of life/utility, and adjusted risks for (first) stroke.

PCV7

ECONOMIC EVALUATION OF TORASIMIDE IN CONGESTIVE HEART FAILURE IN GERMANY

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Studies with classical clinical endpoints indicated comparable efficacy and tolerability of the two loop diuretics torasemide and furosemide in congestive heart failure (CHF). However, differences in the pharmacological profiles suggested potentially different quality of disease control under real life conditions.

OBJECTIVE: The present study aimed at collecting data in a naturalistic setting and comparing overall cost and cost-effectiveness of torasemide and furosemide.

METHODS: Data on the course of the disease and on related resource utilization were collected retrospectively from a one-year treatment period of 200 torasemide-treated and 200 furosemide-treated patients. High comparability of the two patient groups was achieved by using the matched-pair method with nine demographic and medical matching criteria.

RESULTS: Disease control was better in the torasemide patients, as reflected by fewer hospital days due to CHF (324 vs. 62) and more patients with improvement of NYHA class (torasemide: 38.0% [31.25%–45.11%]; furosemide: 24.5% [18.71%–31.06%]) during the observation period. Comparing overall cost from the statutory health insurance’s perspective, torasemide treatment is less costly by 361 DEM per patient and year (1502 vs. 1863 DEM). Moreover, torasemide is clearly more cost-effective: The cost per patient with improved NYHA class is 3954 DEM for torasemide versus 7605 DEM for furosemide. Analyses from the societal perspective yielded similar results.

CONCLUSIONS: The data reveal substantial improvement of disease control and reduction of treatment cost with torasemide compared to furosemide. Furthermore, this study highlights the value of collecting naturalistic data from balanced populations to improve our understanding of drug effects on disease courses and health care cost.

PCV8

READINESS TO COMPLY AND OUTCOMES OF ANTIHYPERTENSIVE THERAPY

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Since noncompliance is a major factor in the outcomes of drug therapy for chronic conditions like hypertension, improving compliance improves the outcomes of therapy. Research with hypertensive patients has found more than 50% are noncompliant. Adherence to a medication regimen requires patients to change their behavior. Research on a range of behaviors from smoking cessation to adopting an exercise program has found behavior change is a process and individuals have different readiness to change.

OBJECTIVE: Examine how readiness to comply, processes of change, temptations to be noncompliant, and patients’ views of the pros and cons of compliance are related to self-reported compliance.

METHODS: Several compliance measures, including a readiness to comply scale, a pros and cons scale, a processes scale, and a temptation to skip medication scale were administered to 731 hypertensive patients, who also reported their compliance in the last four weeks.

RESULTS: Readiness to comply was highly related to reported compliance (contingency coefficient = .72, $p < .0001$). As readiness to comply increased, overall level of temptations decreased and patients rated the positive aspects of compliance or the pros higher and the negatives or cons lower and used different processes of change.

CONCLUSIONS: Behavior change compliance measures are related to self-reported compliance. Utilizing these measures will improve assessment of an individual’s readiness to comply and permit creation of customized interventions for individual patients.