meters (e.g., test sensitivities/specificities) were collected from literature and expert opinion. Medical service costs were estimated using published Medicare statistics, or paid amounts from a large claims database covering approximately two million lives in the US. Cost analyses were conducted both from Medicare’s perspective and private third party payers’ perspective. Breakeven prices of BMIPP were calculated. All costs were adjusted to 2003 USD using CPI. RESULTS: Compared to pre-admission standard of care, SPECT with BMIPP has lower false positive and false negative rates. Equivocal ACI patients tested by SPECT with BMIPP spend 19 hours less per visit in ED/CPU. The break-even price of BMIPP is $927 per test from private third party payers’ perspective; and $534 from Medicare’s perspective. The likelihood of malpractice litigation associated with ACI misdiagnosis is 60% less for SPECT with BMIPP. CONCLUSIONS: Adoption of SPECT with BMIPP for the diagnosis of ACI in ED/CPU may reduce health care costs to third party payers and employers, decrease patient time spent in ED/CPU, improve the efficiency of ED/CPU, and reduce malpractice litigation risk. It may also significantly reduce costs and risks associated with chest pain patients admitted to the hospital following equivocal diagnosis in the ED/CPU setting.

ACUTE CORONARY SYNDROMES: ONE YEAR COSTS AND OUTCOMES

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OBJECTIVES: Acute coronary syndromes (ACS) are a major cause of morbidity and mortality in Western Europe, imposing significant costs on health care providers. This study aims to estimate costs (including medications prescribed, intervention rates and hospital utilization) and health outcomes of ACS during the first year following diagnosis. Perspective of the health care provider is used throughout. Countries examined were the United Kingdom (UK), France, Germany, Italy and Spain. METHODS: Treatment pathways for ACS patients, including investigations, revascularisation and medical management, were developed. Resource use was multiplied by the unit cost of the resource for all interventions and, since these factors vary between countries, country-specific inputs (where possible) from 2002 data were used. RESULTS: Estimated number of deaths in the first year following ACS diagnosis ranged from around 22,500 in Spain to over 90,000 in Germany. Although the number of patients undergoing percutaneous coronary intervention (PCI) is lower in the UK (9%) than the rest of Western Europe (Germany was highest at 62%), differences are narrowing, as the UK’s PCI rate is increasing more rapidly than that of other countries. Largest contributors to total costs are hospital stay (particularly intensive and coronary care units) and revascularisation procedures. Pharmaceuticals were estimated at 14–25% of ACS total cost. Models were most sensitive to changes in ACS incidence, death rate before hospitalization, and hospital unit costs. Total cost of ACS in the UK is estimated around 1.8 billion, compared with 1.36 billion in France, 3.2 billion in Germany, 2.9 billion in Italy and 1.06 billion in Spain. CONCLUSION: Morbidity and mortality, and cost of ACS are substantial. ACS contributes a large proportion towards total health care expenditure of Western European economies. Differences in expenditure between countries can be accounted for by disparities in population, incidence and resource use.

PCV2

UTILIZATION OF RECOMMENDED DRUG THERAPY IN ACUTE CORONARY SYNDROME

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OBJECTIVE: Consensus treatment guidelines recommend most patients with acute coronary syndrome (ACS) receive antiplatelet therapy, statins, and beta-blockers for prevention of secondary events. The goal of this review was to examine prescribing patterns of these agents from published naturalistic studies and compare to guideline recommendations. METHODS: An OVID Medline search was conducted from 1995 to 2004 to identify published naturalistic studies of ACS treatment that contained detailed drug utilization data. Drug utilization patterns were examined for two aspects: associated therapeutic strategy (medical therapy or percutaneous coronary intervention [PCI]) and initiation of drug therapy (acutely or as chronic therapy after hospital discharge). RESULTS: Four sources that contained sufficient details on drug utilization were identified. Data were from US and worldwide studies. Beta-blockers had the highest overall utilization (50–87% acute; 41–77% chronic). Statins were administered to 43–57% of patients acutely and 44–68% chronically. Insufficient data were available to examine associated therapeutic strategy for beta-blockers and statins. Clopidogrel use, with or without aspirin, ranged from 16–30% acutely. In the subgroup of patients who received PCI, clopidogrel use in the hospitalization period ranged from 51–83%. The percentage of ACS patients who received clopidogrel chronically was 38–66%, however in the subgroup of patients who underwent PCI, up to 83% received clopidogrel after hospital discharge. Insufficient data were available to examine duration of therapy. CONCLUSIONS: Recent treatment guidelines recommend use of beta-blockers, statins, and antiplatelet therapy in ACS patients. Some of the data reviewed here predates the most recent guidelines but they suggest a gap between the usual care setting and treatment guidelines. The largest discrepancy appears to be with chronic statin use and clopidogrel use in ACS patients who do not undergo PCI. Few data regarding duration of therapy are available. Continued guideline education and reinforcement along with quality improvement measures are needed.

PCV3

LONG-TERM THIENO PYRIDINE THERAPY IN ACS PATIENTS RESIDING IN THE UNITED KINGDOM

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OBJECTIVES: Long-term antiplatelet therapy is typically considered standard of care for secondary prevention of cardiac events in acute coronary syndrome (ACS) patients. The European Society of Cardiology consensus treatment guidelines in 2002 support the use of clopidogrel in many of these patients. The goal of this descriptive study was to examine clopidogrel patterns of use in ACS patients in the UK. METHODS: The data source was the IMS Health, Disease Analyzer Medisius—UK database. This database contains nearly two-million de-identified patient records and over one-million prescriptions continuously collected from approximately 560 participating general practices. The study time period was January 01, 1999 to November 30, 2003. The index ACS event was identified using ICD-10 codes for unstable angina and acute myocardial infarction. Patients were included if they had at least six-months of data both before and after the index ACS event, and at least one prescription for clopidogrel after the event. RESULTS: A total of 9591 patients were included in the ACS cohort and 1110 had at