analysis highlighted methodological drivers. **RESULTS:** CMS initially proposed four methods of computing practice expense in 2007. Three potential data sources were identified: the Socioeconomic Monitoring System (SMS); the Medicare Economic Index (MEI); and the Clinical Practice Expert Panel (CPEP). The four proposed methods utilized various combinations of these sources. Each proposed formula was based upon a series of allocations that resulted in different percentages assigned to different subcomponents of the relevant methodology. Comparative analysis revealed significant differentials. Payments for drug administration in the physician's office would be reduced by all four proposed methods. Two primary methodological drivers were identified: allocation between direct expense and indirect expense within each formula and the volume-based allocation method, whereby specialty impacts are recognized but are then weighted by specialty-specific volume. **CONCLUSIONS:** Many physician fee schedule payment rates in 2007, including drug administration procedures, may be significantly impacted by proposed changes to the practice expense computation methods. It is vital for service provider decision-makers to monitor and understand relevant CMS proposals. Otherwise, if significant underpayment occurs in 2007, patient access may be negatively affected.

PMC17

MONITORING OF PHARMACEUTICAL COST OF REIMBURSED MEDICINES BY COMBINING OFFICIAL PHARMACY INVOICE DATA WITH COMMERCIAL IMS SALES DATA

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OBJECTIVES: In Belgium reimbursement submissions must contain scientific and financial elements. The financial part relies on budget impact (BI) estimates from the payer's perspective for the next 3 years. Real cost monitoring is difficult because official cost data become available with a substantial delay while commercial IMS data measure total sales. Our aim was to develop a method to monitor pharmaceutical expenses in Belgium and compare the outcome with the expected costs of the BI- estimation: a method combining both data sources allowed to monitor in a timely manner only the reimbursed pharmaceutical cost. **METHODS:** The method was applied on the class of cholesterol lowering drugs representing 9% of ambulatory expenses. BI-estimations were provided in the applicant's dossier. Monthly IMS-sales data (=S, IMS-Health) and official cost data (=C, Riziv) were extracted from the respective databases. **RESULTS:** All correlations between historical monthly product data from both sources yielded an $R^2 > 0.75$ which was considered as a cut-off to apply the method (minimal $R^2 = 0.8164$). Expected reimbursement pharmaceutical cost was calculated as: Expected $C = S/k$ where k is the average monthly ratio of S to C during a common 12 month period. The expected C calculation extends real C data by 6 months. Quality control of the method was assessed by comparing the expected C and real C yielding a mean monthly error lower than 5% with a 3 month cumulated error of less than 2%. BI-estimates were inferior to expected and real C. **CONCLUSIONS:** A method was developed to predict 3rd payer's pharmaceutical cost combining recent commercial sales data and official but less recent cost data ensuring reliable application of this method for control of estimates of BI.

PMC18

USING DISTANCE LEARNING TO UNDERSTAND DISCRETE EVENT SIMULATION

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OBJECTIVES: The many benefits of pharmacoeconomic modeling using Discrete Event Simulation (DES) have increased interest in this methodology. A paucity of courses applied to medical problems however, combined with busy schedules prohibit many professionals from familiarizing themselves with the technique. Meeting these needs requires training that can be conducted over the internet. **METHODS:** A distance learning course was developed to provide a basic understanding of DES. Using Flash technology, an internationally accepted web standard, learning materials were organized into discrete Lessons of online information. Each Lesson is a collection of video, narration, and text explaining a particular aspect of DES such as its theoretical underpinnings, examples of implemented DES solutions, and in-depth explanations of model logic. While Lessons are grouped together in Modules which address a specific range of concepts, each Lesson can also stand on its own. This allows the student to approach the course at their own pace and navigate the curriculum according to personal interest and experience level. This granular organizational method also enables individual lessons to serve as reference materials. **RESULTS:** The interactive course allows students to manipulate flowchart exercises, self-certify their knowledge through instantly processed quizzes, and contact course administrators with questions. Accessing the course requires only a broadband internet connection, a standard web browser and the Flash player plug-in. **CONCLUSIONS:** When considering the time and expense of attending geographically dispersed educational seminars, as well as the difficulties associated with participating in large group lectures, the advantages of a tailored, interactive online course become clear. Combining an interactive multimedia presentation approach with a deep curriculum and an at-your-own-pace learning process, the online DES course provides students with an effective and convenient solution for learning about DES in the pharmacoeconomic field.

CANCER

PCN1

THE EPIDEMIOLOGIC, HEALTH-RELATED QUALITY OF LIFE, AND ECONOMIC BURDEN OF GASTROINTESTINAL STROMAL TUMORS

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OBJECTIVES: Gastrointestinal stromal tumors (GIST) is the relatively new term for gastric and intestinal smooth muscle tumors arising from mesenchymal or connective tissue. Knowledge of the epidemiologic, health-related quality of life (HRQL), and economic burden of GIST is important from payer, provider, and patient perspectives and may help guide coverage and treatment decisions for treatments recently available. **METHODS:** PubMed and six scientific meeting databases were searched for studies of GIST and epidemiology, HRQL, or economics. Relevant publications were assessed as to whether they provided original empirical research. **RESULTS:** Eleven publications met the review criteria: eight provided data on GIST incidence, and one each on prevalence, HRQL, and cost. Incident cases were identified by medical record review or through extant databases with prospective confirmation by immunohistochemical staining in six studies. The annualized incidence of GIST (cases per million) was: United States (U.S.) (6.8), Iceland (11.0), The Netherlands (12.7), Italy (13), Taiwan (13.7) Sweden (14.5), Finland (10–20), and France (20.4). Prevalence was estimated at 129 cases per million in Sweden. On the Functional Illness of Chronic Therapy-fatigue instrument, GIST patients scored 40.0 compared to 23.9, 37.6, and 43.6 in anemic cancer, non-anemic