the use of other antibiotics. We conducted a subsequent study to determine the impact of the policy on resistance rates.

PIN10

THE ALLOCATION OF HIV PREVENTION FUNDS

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OBJECTIVE: It has been asserted that "decisions regarding the allocation of public HIV prevention funds represent the single most important set of HIV prevention decisions made," (Ruiz et al., 2000; p.19). As a result, several approaches to allocating these funds have been proposed. However, the application of these models is limited because the measurements of performance are usually not quantifiable in real practice. This research outlines a resource allocation model that can be used to assist decision-makers in allocating HIV prevention funds. **METHODS:** The current process of allocating HIV prevention funds within various states was reviewed in detail. Specifically, population subgroup, intervention, and geographical issues were considered. In addition, measures of successful intervention implementation were identified. After this thorough review, parameters (i.e., prevalence, infectivity, input from local planning groups) deemed to be important in determining the proper allocation of funds were identified. These parameter choices were guided by the need to be able to estimate parameter values from available data systems. Using linear programming techniques, a model based on our parameter choices was developed for used by decision-makers that incorporates a quantifiable measure of success. This model also includes funding and equity constraints. **RESULTS:** An allocation of funds can be made such that several system constraints can be considered and the model can be validated through prospective data collection. The model was programmed in Microsoft Excel® with a user-friendly interface and was prototyped within a state health department's allocation system.

PIN11

DYSLIPIDEMIA MANAGEMENT AMONG HIV-INFECTED PATIENTS TREATED WITH PROTEASE INHIBITORS (PI)

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OBJECTIVES: Current guidelines recommend pravastatin or atorvastatin, and not lovastatin or simvastatin, to avoid drug interactions in PI-treated HIV+ patients requiring dyslipidemia treatment. Because limited data are currently available on the historical management of dyslipidemia within the PI-treated HIV+ population, we examined the annual utilization trend of non-recommended HMG-CoA reductase inhibitors (statins)

within this population. **METHODS:** This was a retrospective, cross-sectional analysis using pharmacy claims from 1998–2001 from a managed care organization (MCO) of about 3.5 million lives. Patients with at least 2 claims for antiretroviral therapy with a cumulative days' supply >30 and concurrent statin-PI utilization during the same calendar year were included. Logistic regression was used to evaluate whether age, gender, or physician specialty were associated with non-recommended statin use. **RESULTS:** There were 4 non-mutually exclusive yearly cohorts with 492 unique HIV+ patients with concurrent statin-PI therapy (1998: n = 141; 1999: n = 224; 2000: n = 231; 2001: n = 250). Mean ages ranged from 45.7–47.3 years and >95% were male. There were 58 occurrences (6.9%) of concurrent simvastatin-PI utilization between 1998–2001. No concurrent lovastatin-PI was identified. Most patients (72.5%) received their statins and PI from the same physician. Patients receiving these medications from different physicians were significantly more likely to have concurrent simvastatin-PI utilization (OR: 2.01, 95% CI: 1.13–3.58). Although no overall trend in simvastatin-PI utilization was observed, a significant decreasing trend was seen among infectious disease (ID) physicians (p = 0.04). **CONCLUSIONS:** As this patient population and its longevity grow, the quality of their management becomes increasingly important. Since simvastatin and lovastatin were not on this MCO's formulary, the prevalence of non-recommended statin use was low. Nevertheless, we found a proportion of patients who received concurrent simvastatin-PI and a decreasing utilization trend among ID physicians as guidelines became better established. Awareness, however, among non-ID physicians may still need to be improved and greater coordination established between different physician prescribers of statin and PI therapy.

PIN12

IMPLICATIONS OF APPLYING DIFFERENT NATIONAL GUIDELINES ADDRESSING SURGICAL ANTIBIOTIC PROPHYLAXIS: A CROSS SECTIONAL STUDY OF 386 PATIENTS UNDERGOING TOTAL HIP REPLACEMENT SURGERY

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OBJECTIVES: To assess potential implications of applying four competing national guidelines addressing antibiotic prophylaxis of Total Hip Replacement (THR) surgery. **METHODS:** Four guidelines were applied to a random sample of 386 medical records of patients who underwent THR surgery from January 1999 to December 2000. Setting: Orthopaedic surgery wards in a 2200-bed French teaching hospital. Main outcome measure: Compliance of physician practice with the French guideline (French National Agency of Accreditation and Health

Evaluation), the Canadian guideline (Canadian Infectious Disease Society), the US guideline (Infectious Diseases Society of America), the South African guideline (South African Drug Action Programme) and the Belgian guideline (Belgian Hygiene Committee) was assessed by an independent investigator, according to the following criteria: antibiotic prophylaxis use, antimicrobial agent, dosage of first injection, time elapsed between first injection and incision, total duration of antibiotic prophylaxis. Interguideline agreement was assessed by using the Kappa coefficient. **RESULTS:** Overall compliance of physician practice varied widely from 69% of patients for the Canadian guideline to 16% for the Belgian guideline (compliance with the US guideline, the French guideline and the South African guideline was respectively: 62%, 53% and 19%) (Kappa = 0.36; $p < 0.01$). These variations were principally due to the differences between guidelines in the screening of Methicillin-Resistant Staphylococcus aureus (MRSA) carriage and in the choice of antimicrobial agent. **CONCLUSIONS:** Our findings emphasize substantial discrepancies between national guidelines from different countries. National experts should take into account evidence-based data when drawing up recommendations.

CHANGES IN ANTIRETROVIRAL (ARV) REGIMENS IN CLINICAL PRACTICE: RESULTS FROM THE STAR (SCHEMAS THERAPEUTIQUES-ANTIRETROVIRAUX) COHORT

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OBJECTIVES: Although figures on the evolution of prescriptions of ARV are now available, little is known about the dynamics and reasons of treatment changes. The STAR cohort was initiated in February 2001 across 3 French HIV Public Hospital to monitor and to explain the evolution of ARV therapies. **METHODS:** STAR is an observational study implemented to prospectively collect electronic data on anti-HIV treatments, immunological and virological status and medical cost of a random sample of patients. It aims at identifying therapeutic strategies in the setting of clinical practice. **RESULTS:** A total of 1177 patients (77% male) were included, of mean age 41 ± 9 years. A total of 290 patients (24.6%) had clinical AIDS. Mean CD4 counts and viral load were respectively $478 \pm 275/mm^3$ and $29,300 \pm 89,400$ copies/ml in February 2001 versus $506 \pm 283/mm^3$ and $15,300 \pm 55,600$ copies/ml in December 2002. Of the whole cohort, 17% were ARV naïve in February 2001, among whom 52.5% initiated an ARV treatment during the observation period. The most frequent association in February 2001 was 2 Nucleoside Reverse Transcriptase Inhibitors (NRTI) + 1 Protease Inhibitor (PI) with 24.2% of subjects, and in December 2002 2 NRTIs + 1 Non Nucleoside Reverse Transcriptase Inhibitor (NNRTI) with 21.4%. Among emerging treatment schemes, boosted PIs raised from 13.8% to 24.1%. Sixty percent of patients had their regimen changed at least once over the 21-month period. Main reasons of treatment changes were toxicity (22%) and failure (21%). Among treatment discontinuations, 32% were attributable to supervised treatment interruption, 24% to toxicity and 14% to patient's decision. **CONCLUSIONS:** These preliminary results obtained after 21 months of follow-up of the STAR cohort show significant trends in the changes of treatment regimens with more simplified regimens and more frequent multiple therapies. These findings could help policy makers in the elaboration of guidelines and the evaluation of adherence behavior.

POLICY EVALUATION FOR INFLUENZA VACCINATION OF ELDERLY IN JAPAN

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OBJECTIVE: This paper examines to analyze what determines the demand for vaccination in the elderly as a high risk group. Then, by using the estimation results, this paper evaluate how the law recommendation and/or subsidy affect their demand. **METHOD:** Original data were obtained from two surveys to the elders living with descendants and the elders living without descendants, conducted by the author. The survey contains the information about the elders, the household, experience of influenza during the last season and immunization during and hypothetical questionnaire about immunization for Conjoint Analysis. The three estimations are performed for actual behavior; Conjoint Analysis and Joint Estimation which combine the first two estimation. **RESULT:** Among estimation results, cost, number of immunization, immunization in night or weekend, and law recommendation heavily affect their demand. Experience of influenza and immunization in the last season are the most important determinants. Moreover, the superior of the Joint Estimation is confirmed. **CONCLUSION:** The estimation results imply that about 8.9 million elders will demand for vaccination if there is no cost and if there is a law recommendation. Conversely, it will reduce to 3.2 million if cost is 6000 yen (about $50 US dollars) and without law recommendation. The change from no cost to just 500 yen (about $4 US dollars) depresses the demand by 1.6 million elders. Law recommendation alone can push up 2.0 million elders.

ESTIMATING USAGE OF SELECTED ANTI-INFECTIVE DRUGS IN U.S. HOSPITALS

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