THE EFFECTS OF NICE APPRAISALS ON PRESCRIBING AND COST-SHARING BEHAVIOR IN THE US
Sapphire B, Doyle J
Quadrant Consulting, Hawthorne, NY, USA
**OBJECTIVES:** As US health care increasingly looks towards proven clinical effectiveness for reimbursement decisions, we hypothesized that HTAs published by NICE would influence drug prescribing and patient cost-sharing expenditures in the US according to the nature of the published guidance. The primary objective was to determine whether trends in prescription volume (TRx) and the proportion of drug costs paid out-of-pocket (%OPC) of 10 drugs appraised by 7 HTAs since 2007.

**METHODS:** Seven NICE HTAs since 2007, evaluating a total of 10 drugs, were analyzed. No data were available for 4 drugs. Statistical analyses were performed using one-way ANOVA; statistically significant results had P < 0.05.

**RESULTS:** Comparing the periods before and after HTA publication, three drugs with positive guidance showed significant increases in prescription volume (P < 0.05). However, two drugs with advised use for restricted populations, and one with a negative guidance also showed significant increases. Interestingly, two drugs with positive guidance showed significant decreases in TRx. Only entecavir showed a significant decrease in %OPC, while all others failed to show a significant difference. CONCLUSIONS: NICE HTAs decisions appear to be associated with mixed effects on prescription utilization and expenditures in the United States. Though prescribing behavior was changed in the periods analyzed, further research is warranted to determine the true nature of that change. With increased cost-sharing in the health care environment in the US, it will be interesting to monitor the forces that might precipitate changes in OPC, whether related to HTA publications or not.

VANCOMYCIN UTILIZATION EVALUATION IN A TEACHING HOSPITAL BETWEEN FEBRUARY 2007 AND MAY 2008 IN IRAN
Solaymani F
Tehran University of Medical Science, Tehran, Iran
**OBJECTIVES:** Increasing antimicrobial resistance is now a major problem in the world. Especially wide spectrum antibiotics resistance germs like vancomycin-resistant enterococci (VRE) should be dealt as soon as possible as an emergency conflict. Our study tries to reveal the amount of inappropriate use of vancomycin in a teaching hospital.

**METHODS:** The study was conducted in a university hospital between February 2007 and May 2008. The hospital has 15 specialties and 5 subspecialty wards. A comprehensive questionnaire was designed. We random selected inpatients who received vancomycin. RESULTS: Forty out of 45 patients had inappropriate indication and dose of vancomycin (97.7%). The most usage of vancomycin was recorded in hematology—oncology ward (71.1%) and then Intensive Care Unit (81.6%). Leukemia’s including Acute Myelogenous Leukemia (AML) and Acute Lymphoblastic Leukemia (ALL) were the most common reason of admission among patients. Culture was negative (8.88%) despite great clinical evidence of infection.

**CONCLUSIONS:** Vancomycin inappropriate use was high compared to other countries and it could be concerned as an area for implement educational and regulatory strategies by health policy makers to deal. However more detailed researches are needed to reveal other aspects of this problem. Implementing of antibiotic protocols and standard treatment guidelines are recommended.

THE COMMERCIAL EFFECTS OF REFORMULATIONS OF EXISTING DRUGS
Sapphire B, Vincent L, White C
Quadrant Consulting, Hawthorne, NY, USA
**OBJECTIVES:** Given the high cost of creating a complete NME, it is not surprising that sixty percent of NDAs submitted to the FDA during the 1990s were for drugs based on an existing molecule (FDA, 2004). These products generally use three strategies for life cycle management (LCM): chemical reformulation, new drug combinations, and delivery reformulation. One company was chosen to examine the impact of LCM on compliance profile due to improved potency, tolerability, and duration of action. The objective of this study is to investigate the commercial effect of these LCM strategies.

**METHODS:** Retail sales and prescription volume (TRx) of well-known reformulations (venlafaxine to desvenlafaxine, citalopram to escitalopram, troxide and decreased release, and paroxetine controlled-release) and reformulated combinations (isepretropn/naproxen and fluticasone/salmeterol) were analyzed. Annual sales and TRx data were obtained since 2002 using SDI VONA. RESULTS: Interestingly, the two branded combinations that were analyzed had significant differences in TRx and its data (%OPC) annually after the patent expiration of their original components, which showed significant decreases in annual sales and TRx (P < 0.05). The four reformulated products showed smaller changes than the combination products sales and TRx increased in the new branded products. Similarly, the utilization and sales decreases of the original components were smaller in the reformulated products than in the combinations. **CONCLUSIONS:** Given the higher cost of branded drugs, their unfavorable tier placement by payers with respect to their generic counterparts and the increased pressure to reduce drug spending, it may not be surprising that reformulated generic products still enjoy sustained utilization. However, the premium for combination products that may increase patient adherence has not deterred utilization according to the present findings.

EFFECTIVENESS OF ANTIBACTERIAL THERAPY OPTIMIZATION BY CLINICAL PHARMACOLOGISTS
Skleser E1, Lazarikaya L1, Solodobnikov V1, Gainullina Y1
Makhachkala State Medical University, Makhachkala, Russia; City Hospital #2, Vladivostok, Russia; 1City of Territorial Fund of Compulsory Medical Insurance, Vladivostok, Russia
**OBJECTIVES:** antimicrobials are vital medicines, although their excessive use leads to resistance. Impact of clinical pharmacologists on the rational use of antibiotics is worth freely encouraged. The aim of the research: to analyze the dependence of the antibiotic therapy rationality on clinical pharmacologist’s administrative authority.

**METHODS:** Segment of Territory Fund of Compulsory Medical Insurance database was analyzed including 31,128 informational units. Primarily we analyzed indications for separate antibiotics administration. Then rationality of antibiotic therapy according to nosologic classification was analyzed: pneumonia, chronic obstructive lung disease, acute cystitis, chronic pyelonephritis. The next step was a randomized analysis of antibacterial therapy rationality in three polyclinic groups. A clinical pharmacologist participated in antibiotic administrations in the 1st group of polyclinics. There was no clinical pharmacologist in the 2nd group. Clinical pharmacologist with administrative authority controlled antimicrobials administration in the 3rd group. RESULTS: Low rationality of inhibitor-protected aminopenicillins, cefipiroxol, cefalozin use was revealed. At the same time and among protected penicillin’s administration frequency has increased in 1.5 times, and amoxicillin administration frequency has decreased in 5 times. It was found that the difference had been reliable only in the 2 groups: the first group of polyclinics (without clinical pharmacist) and the 3rd group (participation of authorized clinical pharmacist) (P < 0.046). The clinical pharmacist’s administration was noted in patients with erysipelas (54.5%) and most rational antibacterial therapy was given to patients with acute cystitis (94.1%). Difference in physicians priorities is reliable (P < 0.037) only comparing the 1st and the 3rd groups of polyclinics. CONCLUSIONS: The highest rate of the rational antibacterial therapy was registered in polyclinics and nosologies if clinical pharmacist with administrative authorities had participated in antibiotic therapy. Our research makes it possible to substantiate additional administrative authorities for a clinical pharmacist. Authorized clinical pharmacologists will promote to enhance rationality of antibacterial therapy.

HEALTH CARE USE & POLICY STUDIES – Equity and Access
**PHP33**
RATIONALIZATION IN PRACTICE: EQUITY IN WAITING TIMES FOR ELECTIVE SURGERY IN SWEDEN
Thöng Q, Andersson D
Linkoping University, Linkoping, Östergötland, Sweden
**OBJECTIVES:** Health care can be rationed by various mechanisms. In publicly funded health care systems referring patients to the hospital is a common administrative way to ration care. However, there is little systematic knowledge on how rationing through waiting time actually affects access to care among different socioeconomic groups. And since rationing through waiting lists most often is done implicitly rather than explicitly there is an obvious risk that this powerful groups of patients get advantaged, resulting in a longer waiting time before being treated. The overall objective of this study was to explore the association between patients’ socioeconomic status, ethnic background and waiting time within non-acute surgical specialties. METHODS: Days on waiting list was used as dependant variable in a multiple regression model. This data was collected from the county council of Östergötland in Sweden (N = 4634). Data on disposable income, ethnicity and workforce activity were retrieved from national registers. RESULTS: Examining disposable income as a potential predictor, we found that lower disposable income was significantly associated with longer waiting time in orthopedics (P < 0.05) and general surgery (P < 0.05). In orthopedics, the lowest income group waited on average 28% longer than the highest income group. Examining ethnicity as a potential predictor, the only significant association found was in gynecology where patients with foreign origin surprisingly waited on average 40% shorter than patients with Swedish origin. For workforce activity, we found that patients excluded from the workforce were significantly associated with longer wait in ophthalmology. CONCLUSIONS: Our results reveal horizontal inequalities in access within several non-acute surgical specialties. However, the mere association between socioeconomic factors and inequalities in waiting times cannot alone support judgements about inequity. Hence, there is both a descriptive and normative question that needs to be assessed when investigating the reasonableness of rationing by waiting time.

PATIENT ACCESS TO INNOVATIVE MEDICINES IN HUNGARY
Kós Q, Kalonai Z, Duszony Z1,2
Meszaros Hungary, Budapest, Hungary; Totszé Loránd University, Budapest, Hungary
**OBJECTIVES:** Patient access to innovative medicines has critical importance from the societal perspective, pharmaceutical innovation contributes to increase in health capital. Delay in the pricing and reimbursement process limits access of patients