PHP21
QUALITY ASSESSMENT OF AN AMBULATORY CARE CLINIC BASED COLLABORATIVE CARE APPROACH FOR ACHIEVING THERAPEUTIC GOALS
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OBJECTIVES: The objectives of this study were to: 1) assess the quality of patient care provided by 6 Medication Therapy Management (MTM) pharmacists who were working collaboratively with physicians in 6 ambulatory care clinics in the Minneapolis, MN metropolitan area; and 2) determine the MTM pharmacists’ ability to identify and resolve drug therapy problems.
METHODS: The quality of therapeutic determinations made by pharmacists within this collaborative practice of MTM was studied using a 9-member panel of physicians (6) and pharmacists (3). The panel reviewed the care provided to nine randomly selected patient records from the 2,216 MTM patients who were Blue Cross/Blue Shield Blue Plus members. A structured implicit review process was used by the reviewers to specify their level of agreement with the therapeutic decisions made by the MTM pharmacists. The reviewers used a 7-point Likert scale to specify their level of agreement with each therapeutic decision.
RESULTS: There were 6,444 therapeutic review determinations made by the review panel. The 9 reviewers expressed agreement with 90.7% of the decisions. They expressed disagreement with only 2.8% of the decisions. For each therapeutic decision, two-thirds or more of the reviewers agreed with the decision made in 99.9% of the cases. There was no difference in the mean ratings of the 9 patients based on an ANOVA (p = 0.906). Regarding drug therapy problems (DTP’s), there were 20 DTP’s identified during the initial patient visits. All but 5 DTP’s were resolved by the second visit. CONCLUSIONS: The decisions made by MTM practitioners working in collaboration with physicians are clinically credible based on the ratings and comments of a peer review panel. This study provides information on the quality of care provided by pharmacists in the collaborative practice of medication therapy management.

PHP22
MEDICATION AND SOCIO-ECONOMIC STATUS IN A POPULATION-BASED COHORT STUDY
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OBJECTIVES: Presently, statements on associations of socioeconomic status (SES) and use of medication are based on few and contradict or empirical data. Within the framework of the ongoing Heinz Nixdorf Recall study (HNRS), we can examine medication use and SES in detail. METHODS: The HNRS is a population-based cohort study to assess the predictive value of new risk factors for coronary artery disease. A random sample of 4,518 men and women aged 45–74 years was recruited from the German cities of Bochum, Essen, and Mülheim between 2000-2003. We assessed the seven-day prevalence of any medication-use from 4,519 subjects. Age, gender, highest school degree, highest professional training and income served as determinants of medication prevalence. Logistic regressions were used to estimate multivariate associations. RESULTS: A total of 11,500 drugs were taken by 3,449 (76%) subjects, with ACE-inhibitors (9%), beta-blockers (8%), sexual hormones (6%), and statins (5%) ranked first. As expected, the prevalence of drug use increased with age, women reported a higher use than men (83 vs. 70%). For participants with the lowest compared to participants with the highest professional training an odds ratio (OR) of 2.04 (95% CI: 1.60–2.60) for taking medication was calculated. Adjusted for age and gender, this significant difference between social classes disappeared. Otherwise, gender specific analyses showed an age-adjusted OR for women with the lowest educational level of 2.0 (1.31–3.05) compared to women with the highest educational level and for men a higher use of psychopharmacetics in the lowest compared the highest income group (1.92; 1.02–5.05). CONCLUSIONS: The association of SES on drug use is still not clear and seems to alter with the construct of social status, gender and drug groups. In particular, the challenging task to differentiate between the influence capability of SES on medication, medication on health/ disease and vice versa has to be considered.

PHP23
ANALYSIS OF CLINICAL INTERVENTION DOCUMENTATION BY PHARMACISTS
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OBJECTIVES: At LBK Hamburg, pharmacists started 1995 with patient orientated drug distribution named PAV (Patientenbezogene Arzneimittel Versorgung). In 2004 nearly 1300 patients in 48 wards are served daily with the Unit Dose System. Every patient’s medication profile is recorded electronically. All medication orders are reviewed by pharmacists prior to delivering medication. In this way continuing pharmaceutical consultation is linked with the routine process of drug therapy. Medication errors and resulting costs have been reduced, acceptance of guidelines has been increased. On the base of ex-ante controlling and pharmacoeconomic consultation decreasing of costs should be reached. METHODS: On the base of the Problem-Intervention-Documentation-System (PiDoc) of Humbold University, Berlin the system was developed specifically for hospitals. The goal was to analyse pharmaceutical interventions on medication errors and the rational use of drugs. For a period of two months all interventions were recorded by pharmacists. RESULTS: In the 2 months of the study 3010 interventions were recorded. A total of 2035 (67.6%) of the interventions are categorized as medication errors, including anamnesis and documentation errors and 975 (32.4%) of the recorded interventions are associated with optimization of drug therapy and cost-effective use of drugs. In this category, the main part was the successful adoption of the patients medication to the specific formulary of the hospital (24.5% (738)); Decreasing the number of special drug orders which are linked with extra process cost, the saved direct cost has been calculated. CONCLUSIONS: Pharmacists have a valuable role in preventing medication errors, improve patient care and cost-effective use of drugs. The analysis of pharmaceutical interventions highlights trends and patterns in prescription and medication errors. These results are to be used to improve effectiveness of pharmacists involvement in preventing medication errors and economic outcomes.

PHP24
ANALYSIS OF “INNOVATOR” DRUGS FINANCED BY SPANISH NATIONAL HEALTH SERVICE OVER THE PERIOD 1996–2003
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OBJECTIVES: The Spanish National Health System (NHS) systematically introduces new and, obviously, higher-priced medi-