PCV131

EVALUATION OF SURGICAL ANTIMICROBIAL PROPHYLAXIS IN ICUS OF A PRIVATE TERTIARY CARE HOSPITAL

Tiwari P[1], Mothe R[2], Malhotra S[3]

[1]*National Institute of Pharmaceutical Education and Research (NIPER), S.A.S. NAGAR, India,* [2]*National Institute of Pharmaceutical Education and Reaserch, Mohali, India,* [3]*Fortis Hospital, Mohali, Punjab, India*

OBJECTIVES: The prophylactic use of antimicrobial agents is recommended for the prevention of a variety of post-operative infections, which represent 25% of all nosocomial infections in hospitals. Inappropriate antimicrobial prophylaxis adds to the pressure on microbial ecology within the hospital, and increases the risk of antimicrobial resistance. Several factors can account for 'antimicrobial inappropriateness'. The aim of this study was to evaluate the appropriateness of surgical antimicrobial prophylaxis in a private tertiary care hospital. **METHODS:** The data on surgical prophylactic antimicrobial utilization was collected retrospectively from Surgical Intensive Care Unit (SICU), Surgical orthopaedic ICU-1 (SPICU-1), Surgical orthopaedic ICU-2 (SPICU-2), Neuro Surgery ICU (NSICU) and *Obstetric ward* (gynae surgery). The assessment was done on the basis of choice of antibiotic, the time it was administered and the duration for which it was given, in accordance with the hospital guidelines. **RESULTS:** A total number of 478 patients were analyzed in different surgical ICUs and Obstetric ward. The percentage of appropriateness in selecting antibiotics was found to be 98.5% in SPICU-2, followed by 84.6% in NSICU, 74.5% in SPICU-1, 71.6% in SICU and least in Obstetric ward with 52.6%. The timing of antibiotic administration was best in SICU (83% appropriateness) and least in Obstetric ward (26% appropriateness). The appropriate duration of prophylaxis was found to be 100% in SPICU-1 and Obstetric ward, while inappropriate duration of prophylaxis 96.6% in SPICU-2. **CONCLUSIONS:** Overall the percentage of appropriate selection of AMAs and their timing of administration was fair. The appropriateness of surgical prophylaxis with respect to duration was best in SPICU-1 and Obstetric ward. These results are encouraging and will help the hospital to achieve 'completely appropriate' surgical prophylaxis.

PCV132

RECEIPT OF ANGIOTENSIN-CONVERTING ENZYME INHIBITORS AND ANGIOTENSIN RECEPTOR BLOCKERS AMONG MEDICARE BENEFICIARIES WITH DIABETES AND HYPERTENSION

Surbhi S, Wang J

The University of Tennessee Health Science Center, Memphis, TN, USA

OBJECTIVES: One medication adherence measure for Medicare Part D programs by Centers for Medicare and Medicaid Services is the receipt of angiotensin-converting enzyme inhibitor or angiotensin receptor blocker (ACE/ARB) among patients with diabetes and hypertension. The objectives of this study were: 1) To determine the rate of receiving ACE/ARB among Medicare beneficiaries with diabetes and hypertension, and 2) To identify the predictors of receiving ACE/ARB in this population. **METHODS:** The study population was Medicare beneficiaries diagnosed with diabetes and hypertension from the National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey-Outpatient Department, from 2007 to 2009. Predictors of receiving ACE/ARB were determined using bivariate and multivariate logistic regression analysis. The Andersen's Behavioral Model of Health Services Utilization was used to identify patient characteristics for the multivariate analysis. **RESULTS:** Of the 6311 Medicare outpatient and physician office visits with a diagnosis of hypertension and diabetes, 40.7% visits received an ACE/ARB. Bivariate analysis found higher rate of receiving ACE/ARB for visits made to primary care physician compared to non-primary care physician visits (62.9% vs. 37.1%; $P<0.05$). Adjusted multivariate analyses indicated that patient visits made to the primary care physicians were more likely to receive ACE/ARB compared to non-primary care physician visits (Odds Ratio [OR]: 1.96; 95% Confidence Interval [CI]: 1.59-2.43), and visits by patients belonging to zip codes with median household income within Quartile 2 ($32,794-$40,626), were more likely to receive ACE/ARB compared to visits by patients belonging to zip codes with median household income within Quartile 1 (< $32,793, OR: 1.45; 95% CI: 1.13-1.87). **CONCLUSIONS:** Fewer than half of the outpatient visits by Medicare beneficiaries with diabetes and hypertension received ACE/ARB. Promoting evidence-based medicine and increasing access to primary care may have the potential to increase the rates of receiving ACE/ARB for Medicare beneficiaries with diabetes and hypertension.

PCV133

NEW ORAL ANTICOAGULANTS VERSUS WARFARIN FOR STROKE PREVENTION IN ATRIAL FIBRILLATION: DEVELOPMENT OF COVERAGE DECISION FRAMEWORKS

Lee KM[1], Shukla V[2], Oxman AD[3], Wells G[4]

[1]*Canadian Agency for Drugs and Technologies in Health, Ottawa, ON, Canada,* [2]*University of Ottawa, Ottawa, ON, Canada,* [3]*Norwegian Knowledge Centre for the Health Services, Oslo, Norway,* [4]*University of Ottawa, Ottawa, Ontario , Canada*

OBJECTIVES: With the introduction of new methods such as indirect comparison and complex economic modeling, the presentation of evidence on effectiveness, safety and cost effectiveness to decision makers, who have different levels of understanding of these methods, can be challenging. The CCNMA developed a framework for presenting such complex evidence from a report on *New Oral Anticoagulants (NOACs) versus Warfarin for Stroke Prevention in Atrial Fibrillation.* The purpose of the framework is to provide a concise summary of best available research evidence to inform judgments about reimbursement recommendations. **METHODS:** A systematic review of the effects of NOACs compared to warfarin was performed using standard Cochrane methods. This information was used to conduct adjusted indirect comparisons (i.e. Bayesian mixed-treatment comparison network meta-analysis), which were used in an economic evaluation to assess cost effectiveness. The effect estimates and assessments of the certainty of the evidence for each outcome were summarized in GRADE evidence profiles (using GRADEpro 3.6). This information together with results of the economic evaluation were summarized in frameworks for coverage decisions. This was done in collaboration with the GRADE Working Group and the DECIDE project. The frameworks also included information about the severity of the condition being treated, the relative importance of outcomes, the total cost (impact on budget), impacts on health inequities, and inappropriate use. In addition, the frameworks include judgments about each criterion, judgment about the overall balance of the desirable and undesirable consequences, justification for the recommendation, and implementation considerations. **RESULTS:** The frameworks were used for making reimbursement recommendations. **CONCLUSIONS:** Decision frameworks have the potential to provide understandable summaries of complex analyses to inform coverage decisions, to help ensure that key criteria are considered, to structure discussion and identify reasons for disagreements, and to make the basis for decisions transparent to those affected.

PCV135

CHARGE OF CATHETER ABLATION FOR PATIENTS WITH ATRIAL FIBRILLATION: EVIDENCE FROM A KEY INFORMANT INTERVIEW IN CHINA

Liu B, Yang H, Gao Y

School of Public Health, Fudan University, Shanghai, China

OBJECTIVES: The charge of catheter ablation for patients with atrial fibrillation (AF) in China remains unclear. The purpose of the current study was to examine the charge of catheter ablation for AF patients in top AF treatment centers across China. **METHODS:** The study was based on a key informant interview. Key informants were selected from 11 top AF treatment centers across 8 provinces of China. A total of 22 key informants were interviewed during the period between April 2011 and August 2011. Half of the key informants were senior AF specialists knowledgeable of catheter ablation, relevant nurses and staffs of hospital's medical insurance office accounting for the other half. The interview was conducted face to face by trained interviewer based on an interview outline focusing on the charge and related issues. Analysis of interview results followed standard qualitative analysis methods. **RESULTS:** Operation of catheter ablation for AF patients grew quickly since 2008 and the related clinical path was issued by the Ministry of Health of China in 2010. However, the charge of catheter ablation for AF patients varied largely across the selected AF treatment centers with a range of RMB 45,000 to 80,000 (i.e., around USD 7200 - 12800). Catheter itself was not well included in the current government-valorized list. Charge from those government-valorized items accounted for under 10% of total charge in most of AF treatment centers, which was associated with heavy cross-subsidization from the independent charge of catheters not packed in the government-valorized items. The choice of catheters was the key contributor to the variation of total charge. Charge of the second catheter ablation for recurrent AF also varied greatly because of catheter reuse. **CONCLUSIONS:** The current large variation of the charge of catheter ablation for AF patients in China was not very much in tandem with the issuance of clinical path and needs to be improved.

PCV137

CHARACTERIZING MEDICATION FILLS THROUGH LINKED ADMINISTRATIVE PHARMACY CLAIMS

Comer D[1], Couto J[1], Aguiar R[2], Ratledge E[3], Elliott D[2]

[1]*Jefferson School of Population Health, Philadelphia, PA, USA,* [2]*Christiana Care Health System, Newark, DE, USA,* [3]*University of Delaware, Newark, DE, USA*

OBJECTIVES: Recent studies have demonstrated that up to 30% of patients never fill an initial prescription for antihypertensive medication. This high rate of primary nonadherence has direct implications for the outcomes of clinical care. Dramatic improvements in the availability of administrative pharmacy claims in the electronic health record (EHR) may promote the identification of nonadherent patients. The objective of this study was to characterize pharmacy fill patterns for a newly prescribed antihypertensive. **METHODS:** We conducted a retrospective cross-sectional study on patients prescribed a new antihypertensive within a large primary care practice network from 2011-2012. Patients were included if they had a diagnosis of hypertension or elevated blood pressure at the time of the new prescription and at least one practice visit within the previous 18 months. We excluded patients who did not have an imported pharmacy fill history on or after the antihypertensive index date. Pharmacy fill claims were pulled for the subsequent 90 days after the index date. All fills of the antihypertensive were then linked to the antihypertensive as found in the EHR. **RESULTS:** A total of 131 patients and 133 medications were studied. Average age (SD) was 55.4 (14.9), 74.8% were female, 26.7% were black and 32.8% were white. Most patients were prescribed one antihypertensive; 2 patients were prescribed two. Of the medications studied, 112 medications were linked to a fill from the pharmacy claims. Of the linked medications, 73.2% were filled on the index date. Average number of days (SD) to first fill was 4.6 (12.1); 94.6% of linked fills were filled within the first 30 days. **CONCLUSIONS:** Nearly a quarter of patients do not fill newly prescribed antihypertensives within 90 days of initial prescription. Our preliminary data suggest that the real-time availability of pharmacy claims data could be useful to identify nonadherent patients.

PCV138

THE INFLUENCE OF RECOMMENDATIONS RELATED TO CARDIOVASCULAR DRUGS ISSUED BY AGENCY FOR HEALTH TECHNOLOGY ASSESSMENT IN POLAND (AOTM) IN YEARS 2005-2012 FOR THE REIMBURSEMENT DECISIONS

Ofierska-Sujkowska G, Jagodzinska-Kalinowska K, Matusewicz W
Agency for Health Technology Assessment in Poland (AOTM), Warsaw, Poland

OBJECTIVES: To identify what was the influence of **ca**rdiovascular drugs recommendations issued by AOTM in years 2005-2012 for the reimbursement decisions taken by Minister of Health (MoH)**.** The main task of AOTM, established in 2005, is to prepare recommendations on financing all medical technologies from public funds for the MoH. For all new health technologies entering market full pharmacoeconomic evaluations are required before the reimbursement decisions are taken by MoH **METHODS:** Among recommendations of AOTM published until the end of 2012 we analyzed all related to cardiovascular drugs. The recommendations were identified and categorized into types of recommendations (positive or negative). We compared the outcomes with reimbursement list officially published by MoH (January 2013). **RESULTS:** Among 753 documents (recommendations, opinions, statements) issued by AOTM, only 38 (5%) applied to innovative, cardiovascular drugs. AOTM issued positive recommendations for reimbursement to 22 of 38 of cardiovascular drug submissions (58%). 16 of 38 (42%) were not approved and received negative recommendations. Having analyzed the reimbursement list we realized that only 10 of 38 (26%) drugs assessed by AOTM are occurred on the reimbursement list. 9 of 10 drugs(90%) were positive recommended by AOTM. Only 1 drug (10%) was assessed negative. **CONCLUSIONS:** The influence of recommendations issued by AOTM for cardiovascular drugs for reimbursement decisions taken by MOH were not significant with respect to place the drugs on the list. But we can realize that only 1 drug with negative AOTM recommendation exists on the list. The conclusion indicates that the medicine with negative recommendations probably will not be accepted (in 90%) for reimbursement from public sources. Contrarily, not every drug with positive recommendation issued by AOTM will be placed on the reimbursement list.

PCV139

EVALUATION OF ANTIHYPERTENSIVE DRUGS ON THE REIMBURSEMENT LIST FOR THE DELISTING POLICY IN KOREA

Klm J[1], Lee HY[1], Kim CH[2], Lee S[3], Lee YS[4], Sohn HS[5], Choi SE[1]
[1]*Seoul National University, Seoul, South Korea,* [2]*Inje Institute of Advanced Studies (IIAS), Seoul, South Korea,* [3]*College of Pharmacy, Suwon, South Korea,* [4]*Keimyung University, Daegu, South Korea,* [5]*Sookmyung Women's University, Seoul, South Korea*

OBJECTIVES: This study was performed to evaluate and provide a new positive list of antihypertensive drugs for reimbursement in the Korean national health insurance. **METHODS:** First, among total 1,226 items, 360 combination items were excluded from this evaluation and 25 essential drug items (ban-on-delisting drugs, orphan drugs, emergency drugs, and drugs without any alternatives) were to remain on reimbursement list without any evaluation. Next, clinical usefulness was evaluated by criteria from medical textbooks, guidelines, and WHO lists, and 1 item was to be delisted due to lack of clinical usefulness. In the third step, daily cost was calculated. Drugs which belong to bottom 25% in daily cost were defined as "relatively low-price drugs," which could remain on the list without subsequent evaluation. Other drugs were to be evaluated by cost-effectiveness. Clinical effectiveness was evaluated based on proxy outcomes (blood pressure) and final outcomes (mortality, morbidity) by reviewing clinical literatures and 6 assessment reports from overseas health technology institutions as well as opinions of clinical experts. **RESULTS:** There was no clear evidence depicting differences in clinical effectiveness. Therefore, the prices of hypertension drugs would have to be reduced to the lowest level of all hypertension drugs if a cost-minimization principle is applied. However, the lowest levels within each class were suggested instead in recognition of differences in adverse events and effects on co-morbidity among the classes. **CONCLUSIONS:** It was not proven that a particular class or ingredient among hypertensive drugs was superior to others. However, the policy based on this result has to be carefully implemented. It is important that practicability, fairness, and equity of the result as well as scientific accuracy have to be balanced since this type of study is commonly associated with interests of stakeholders.

PCV140

COMPARATIVE EFFECTIVENESS RESEARCH ON THE NEW ANTICOAGULANTS- IS IT WORTH IT?

Wisloff T, Hagen G
NOKC, Oslo, Norway

OBJECTIVES: To investigate whether or not elimination of decision uncertainty related to the new anticoagulants would be cost-effective, by calculating the added value of conducting an RCT comparing the new oral anticoagulants (apixaban, dabigatran and rivaroxaban) relative to each other and relative to warfarin for stroke prevention in patients with atrial fibrillation. **METHODS:** We developed a decision analytic model, designed as a probabilistic Markov model containing 200 different probability distributions. The model included eight health states; atrial fibrillation (AF), heart failure, moderate stroke sequela, severe stroke sequela, atrial fibrillation with previous acute myocardial infarction (AMI), atrial fibrillation with previous stroke, major gastrointestinal bleeding and dead. Epidemiological input data was gathered from registries. Data on Quality of Life were based on published EQ-5D data and costs were based on national tariffs. Efficacy data included the three major randomised controlled trials comparing each of the new oral anticoagulants (apixaban, dabigatran and rivaroxaban) to warfarin. Current efficacy estimates indicate that the new anticoagulants are efficacious on some, but not all, outcomes compared to warfarin. However, no direct evidence comparing any of these new anticoagulants with each other is yet available. **RESULTS:** Expected value of perfect information analysis on groups of parameters (EVPPI) for efficacy parameters was clearly much higher than EVPPI for other parameters (QALYs, costs and baseline risk epidemiological data). Population EVPPI for efficacy data was $ 1.3 billion in a population of 5 million, given an assumed threshold value of $ 100,000 per QALY gained. **CONCLUSIONS:** There is clearly an added value in conducting more research on the efficacy of new oral anticoagulants. Hence, new randomized controlled trial(s) comparing all of the new oral anticoagulants would probably decrease decision uncertainty considerably.

PCV141

DEMOGRAPHIC AND CLINICAL CHARACTERISTICS, AND TREATMENT OF CARDIOVASCULAR RISK FACTORS AMONG U.S. ELDERLY PATIENTS WITH HIGH-RISK VASCULAR DISEASE

Zhao Z[1], Zhu Y[1], Fang Y[2], McCollam PL[3]
[1]*Eli Lilly and Company, Indianapolis, IN, USA,* [2]*PharmaNet/i3, Indianapolis, IN, USA,* [3]*Eli Lilly and Company, Inc., Indianapolis, IN, USA*

OBJECTIVES: To examine the demographic and clinical characteristics, and cardiovascular treatment in patients with high-risk vascular disease (HRVD). **METHODS:** A large employer-based US administrative claims database was used to conduct this retrospective cohort study. Patients with HRVD (defined as cerebrovascular disease [CVD], coronary artery disease with diabetes [CADD], peripheral artery disease [PAD], or history of acute coronary syndrome [ACS] [≥30days through 365 days after discharge for ACS]) between October 1, 2008 to September 30, 2009, ≥65 years of age, were identified with minimum 12-month pre- and 24-month post-index health plan eligibility. Patients' baseline demographic characteristics, comorbidities, and medication use were examined and compared across groups with and without polyvascular disease. **RESULTS:** There were 525,893 HRVD patients identified with an average age of 77.2 years and gender of 51.0% male. Of the identified patients, 59.5% had hypertension, 32.9% had hypercholesterolemia, and 44.7% had diabetes. Patients were generally undertreated with statins (50.3% HRVD; range: 44.9% PAD to 64.0% CADD), antiplatelets (21.4% HRVD; range: 16.8% CVD to 49.7% ACS), beta-blockers (41.8% HRVD; range: 35.2% CVD to 67.1% ACS), and other evidence-based risk reduction therapies. Patients with >1 affected artery bed (18%) had numerically similar age (age: 77.1, 77.6, 77.0 for 1, 2, 3 affected disease beds), but had higher cardiovascular risk factors (for 1, 2, 3 affected disease beds, hypertension: 57.2%, 69.1%, 73.4%; hypercholesterolemia: 32.0%, 36.6%, 37.3%; diabetes: 40.5%, 61.2%, 83.9%), and used more cardiovascular-related medications (statins: 48.0%, 59.9%, 67.5%; antiplatelets: 18.3%, 33.8%, 48.8%; beta-blockers: 39.0%, 53.3%, 64.4%) compared to patients with only 1 affected disease bed ($p<0.01$). The average number of medications per patient was 9.1 for HRVD patients, ranging from 7.6 for CVD-alone patients to 17.7 for patients with ACS, CADD, CVD, and PAD (N=1456). **CONCLUSIONS:** In elderly HRVD patients, classic cardiovascular risk factors are consistent and common, but are undertreated in the U.S.

PCV142

PHYSICIAN'S ADHERENCE TO THE 2009 AHA/ACC GUIDELINES IN ACUTE MYOCARDIAL INFARCTION (AMI) IN CARDIAC CARE UNIT OF A PRIVATE TERTIARY HEALTH CARE SETTING IN NORTHERN INDIA

Sunarikani R[1], Tiwari P[2], Malhotra S[3]
[1]*National Institute of Pharmaceutical Education and Reaserch, Mohali, India,* [2]*National Institute of Pharmaceutical Education and Research (NIPER), S.A.S. NAGAR, India,* [3]*Fortis Hospital, Mohali, Punjab, India*

OBJECTIVES: Less numbers of studies on cardiovascular diseases were found in Indian population. So, the results of present study may helpful in improving the consistency and quality of care in the management of AMI in Indian population. The objective of this retrospective observational study was to evaluate the physicians' adherence to 2009 American Heart Association (AHA) /American College of Cardiology (ACC) guidelines in the management of AMI. **METHODS:** Chi-Square test and student t-test were used for analysing the data. The adherence to early and late performance measures was assessed by comparing the performance measures actually given to the patients on admission and discharge with those recommended by the AHA/ACC guidelines for management of AMI. **RESULTS:** A total of 127 patients' with confirmed diagnosis of AMI were analysed in this observational study. Statistically significant difference was found between average ages of male and female patients (57.2±1.2, 66±1.7 respectively, $P<0.05$). The adherence to clinical performance measures like aspirin, antithrombin and thrombolytic therapy on admission and discharge was found to be 100%. Adequate AMI management was seen in 75.9% NSTEMI and 70.4% STEMI patients. No difference in the adequate management for AMI was found between STEMI and NSTEMI groups ($P>0.05$). Low adherence was seen for the prescription of b-blocker on discharge in both STEMI and NSTEMI patients (83.7%, 86.2% respectively) when compared to other performance measures. The adherence to all early performance measures in both the groups was found to be good. **CONCLUSIONS:** The overall adherence to early and late performance measures in AMI management in this North Indian study population was satisfactory. Adaptation and implementation of clinical practice guidelines in any health care sector will increase the consistency and quality of care.

PCV143

ANTITHROMBOTIC STRATEGIES IN ACUTE CORONARY SYNDROME AND ATRIAL FIBRILLATION: A COMMUNITY PERSPECTIVE

Chamberlain AM[1], Gersh BJ[1], Klaskala W[2], Mills RM[2], Alonso A[3], Weston SA[1], Roger VL[1]
[1]*Mayo Clinic, Rochester, MN, USA,* [2]*Janssen Research & Development, LLC, Raritan, NJ, USA,* [3]*University of Minnesota School of Public Health, Minneapolis, MN, USA*

OBJECTIVES: Atrial fibrillation (AF) commonly complicates acute coronary syndromes (ACS) and selecting antithrombotic regimen for these patients is complex. We describe the spectrum of antithrombotic use in a community cohort of patients with ACS, and identify predictors of the choice of strategies in