

OBJECTIVES: Antihypertensive medication and lifestyle modification are crucial for adequate control of hypertension in the vast majority of patients with this condition. Poor adherence to one or both of these treatment modalities, however, oftentimes prevents achievement of goal blood pressure. The primary objective of this study was to examine predictors of receiving and adhering to antihypertensive medication and lifestyle modification for the treatment of hypertension.

METHODS: This study included adult respondents from the 2009 Behavioral Risk Factor Surveillance System who reported being diagnosed by a health care provider as having hypertension (n=38,474). A multivariable logistic regression model was estimated to identify independent predictors of receiving and taking antihypertensive medications as prescribed, as well as receiving and adhering to a lifestyle modification advise from a healthcare provider, including modification of eating habits, physical exercise, reduction of alcohol consumption and salt intake. The following potential predictors were examined: respondent's sex, education, employment, marital status, health status, health insurance access, cigarette use, and geographic location. **RESULTS:** Black and older (≥ 65 years) patients were more likely to be hypertensive by healthcare providers to take medications for management of their hypertension compared to White and younger patients (O.R. = 1.71 and OR=11.2, $p=0.003$ and $p<0.0001$ respectively). All minority patients (Black, Native Americans, Asians, and Hispanics) were more likely to receive a recommendation about low-sodium diet and reduction of alcohol consumption compared to Whites ($p<0.001$). With respect to adherence to medication management and life-style modifications, minority patients appeared to be similar or even more adherent than White patients after controlling for respondent characteristics. **CONCLUSIONS:** Our results indicate demographic differences with regards to adherence to therapeutic medication and lifestyle-modification for treating hypertension which may, in part, be a consequence of differences in how providers counsel and treat patients based on their socio-demographic characteristics.

PCV114

PRESCRIBING PATTERNS OF ANTIHYPERTENSIVE MEDICATIONS AMONG DIABETIC PATIENTS IN THE UNITED STATES

Mountford WK, Covington D
PPD, Wilmington, NC, USA

OBJECTIVES: Risk of cardiovascular disease death is 2-4 times higher in diabetics than non-diabetics, and control of hypertension reduces this risk by up to 50%. While there are numerous drug classes available for hypertension treatment, the American Diabetes Association (ADA) specifically recommends ACE inhibitors or ARBs because they offer additional vascular benefits in diabetics. Further, the ADA suggests that multi-drug therapy is usually required to achieve blood pressure targets. The objective of this study is to examine the prescribing patterns of antihypertensive medications among diabetics relative to the ADA recommendations.

METHODS: Data from the 2008 National Ambulatory Medical Care Survey (NAMCS) was utilized to identify office visits involving diabetic patients. This nationally representative sample of US physician-patient office visits utilizes a multi-staged sampling technique to collect several demographic and clinical parameters on patient visits as well as information on up to eight continuous or newly prescribed medications. Diabetes was identified by a physician questionnaire regarding presence of patient comorbidities and medications were identified using US National Drug Codes. **RESULTS:** Of the 28,741 office visits collected, 2,955 were among diabetic patients and 49.3% (n=1,456) of the diabetic patients were prescribed at least one antihypertensive medication. ACE inhibitors were the most frequently prescribed (40.9%), followed by beta blockers (39.4%), diuretics (30.2%), and calcium channel blockers (20.5%). ARBs were less frequently prescribed (20%). Over half (51.9%) were prescribed 2 or more hypertensive medications. **CONCLUSIONS:** Based on data from the National Ambulatory Medical Care Survey, it appears that ADA recommendations for hypertensive therapy in diabetics are being followed with regard to ACE inhibitors and polytherapy. ARBs, however, appear less common in the population with other antihypertensive classes being prescribed more frequently. Future studies involving longitudinal data are needed to evaluate trending in the adherence to ADA recommendations for hypertensive therapy.

PCV115

READMISSION RATES AMONG PATIENTS WITH ACUTE MYOCARDIAL INFARCTION AND TREATED WITH ASPIRIN WITH OR WITHOUT CLOPIDOGREL DURING HOSPITALIZATION

Zhao C, Zhang Q, Davies MJ, Chen E
Merck Sharp & Dohme Corp., Whitehouse Station, NJ, USA

OBJECTIVES: Readmission rates in the US following acute myocardial infarction (AMI) remain high despite intensive medical therapy. This study evaluated the association between antiplatelet therapy, aspirin \pm clopidogrel and the short and long term readmission rates in patients who were hospitalized for AMI. **METHODS:** Patients with an index hospitalization for AMI in 2007-2009 and also received in-hospital aspirin \pm clopidogrel were selected based on diagnoses and pharmacy records from 122 hospitals in a US electronic medical record database (Cerner's Health Facts). Readmission for any reason or recurrent AMI within 30 days and 1 year following index AMI discharge was assessed based on hospital records. Multivariate logistic regression was used to estimate the association between readmission and in-hospital antiplatelet therapy, adjusted for age, gender, comorbidities, AMI type, and coronary revascularization during index hospitalization. **RESULTS:** Among 23,394 patients diagnosed with AMI during index hospitalization (mean age 68.7 years; 58% male), 35% received aspirin alone and 65% received aspirin + clopidogrel in hospital. Patients on aspirin + clopidogrel were younger, had more STEMI diagnosis, higher rates for hypertension, dyslipidemia, diabetes, and PCI/stent

placement, but lower rates for atrial fibrillation, congestive heart failure, and cerebrovascular disease than patients on aspirin alone (all $p<0.001$). Patients who received aspirin + clopidogrel had lower rates of readmission for any reason at 30 days (11.5% vs. 14.7%; adjusted odds ratio (OR) = 0.89 [95% CI: 0.82, 0.97]) and at 1 year (33.2% vs. 37.3%; OR = 1.06 [1.00, 1.13]) compared to aspirin alone. AMI-related readmission rates were similar between in-hospital treatment regimens. **CONCLUSIONS:** Both 30-day and 1-year readmission rates remain high post AMI discharge, despite antiplatelet therapy using aspirin \pm clopidogrel. In-hospital dual antiplatelet therapy was associated with a reduction in short-term readmission rate overall but not for long-term or recurrent AMI in this cohort.

PCV116

HOSPITAL READMISSIONS IN PATIENTS WITH HEART FAILURE IN ARIZONA

Perera P, Skrepnek GH
College of Pharmacy, The University of Arizona, Tucson, AZ, USA

OBJECTIVES: To determine 30-day readmissions in patients with heart failure in Arizona and to assess the association of sociodemographic characteristics, primary payer, and case-mix risk adjustment with hospital readmissions. **METHODS:** The 2005 Agency for Healthcare Research and Quality (AHRQ) Healthcare Cost and Utilization Project (HCUP) State Inpatient Database (SID) for Arizona was used. The HCUP revisit files were utilized to identify 30-day same diagnosis-related group (DRG) readmissions for heart failure and shock (DRG 127). Hospital discharges were included if age ≥ 65 years with patient residence in Arizona, and excluded if a diagnosis was missing or was for end stage renal disease (ESRD). Index events to determine readmissions were identified if there was no DRG for heart failure and shock in the 30-days prior to admission. Readmissions were reported at both patient-level and index-event level. The association of sociodemographic, primary payer, and case-mix risk adjustment (i.e., Charlson index) on patient level hospital readmissions were evaluated using multivariate logistic regression. **RESULTS:** In 2005, some 7828 discharges among 6688 patients were included in the analysis. A total of 6,333 discharges qualified as index events. Patients were, on average, 79.9(± 7.9) years with a Charlson index of 2.6(± 1.4). The majority were white (83.5%) and female (53.0%). Inpatient mortality was 3.1%(n=210). Mean discharges were 1.2(± 0.5) per patient and ranged from 1-7. The proportion of patients with at least one readmission was 5.3% (n=355) and 5.6% (n=355) of 6,333 index events resulted in a readmission. From the multivariate regression, only the Charlson index was significantly associated with patients with ≥ 1 readmission (OR=1.3; 95%CI: 1.3, 1.4). **CONCLUSIONS:** This investigation of hospital readmissions for heart failure suggests that case-mix risk adjustment is a significant predictor of 30-day readmission. To better understand the influence of index events future analysis will consider predictors of readmissions with an index event level analysis.

PCV117

IDENTIFICATION OF HOSPITAL GUIDELINES FOR PREVENTION OF VENOUS THROMBOEMBOLISM (VTE) IN HOSPITALIZED NON-SURGICAL MEDICALLY-ILL PATIENTS IN THE UNITED STATES

Fisher MD¹, Stephenson JJ¹, Reilly K¹, Fu AC¹, Klaskala W²
¹HealthCore, Inc., Wilmington, DE, USA, ²Janssen Research & Development, LLC, Raritan, NJ, USA

OBJECTIVES: This survey investigated the implementation of hospital guidelines for VTE prevention and protocols for VTE management/risk assessment and thromboprophylaxis in hospitalized non-surgical, acutely-ill medical patients as recommended by the American College of Chest Physicians. **METHODS:** As part of a study of VTE in medically ill patients, identified from the HealthCore Integrated Research Database, involving a random sample of 504 patients with medical charts, a telephone survey of the 275 facilities in which these patients were hospitalized was conducted between June and September, 2011. An attempt was made to contact Quality Management/Improvement (QM) coordinators at targeted institutions. The survey consisted of a brief questionnaire (14 closed and 3 open-ended questions) regarding the presence of hospital guidelines and risk assessment protocols. Results were summarized descriptively. **RESULTS:** We reached out to hospital operators at all 275 facilities. Many of contacted persons, however, had difficulty in identifying the QM department. Even when the correct department was reached, approximately 90% of calls were routed directly to voicemail and repeated calls (up to 3 calls at different times/days of week) were not returned. We were able to directly speak with 30 (11%) QM coordinators, of whom, only 8 (27%) completed the survey; 7 by telephone and 1 by email. Of the 8 (3%) hospitals that provided responses, 76% had VTE-specific clinical guidance in place. Our low survey yield of 2.9% (8/275) is comparable with the response rate of 1.45% (21/1448) responding to pertinent supplementary questions on VTE prevention in non-surgical patients that were included in the survey conducted by the Joint Commission on Accreditation for Healthcare Organizations (JCAHO) in 2009. **CONCLUSIONS:** QM departments in these hospitals are often unknown to hospital operators and QM coordinators are generally hard to reach. Opportunities for improvement in the implementation of VTE prophylaxis guidelines for hospitalized medically-ill patients exist.

PCV118

CHARACTERISTICS OF PATIENTS TREATED WITH THIENOPYRIDINES FOLLOWING ACS-PCI

Nordstrom B¹, Simeone JC¹, Zhao Z², Molife C², Mccollam PL², Ye X³, Efron MB²
¹United Bio-Sound Corporation, Lexington, MA, USA, ²Eli Lilly and Company, Inc., Indianapolis, IN, USA, ³Daiichi Sankyo, Inc, Parsippany, NJ, USA

OBJECTIVES: To identify patient characteristics associated with filling a thienopyridine prescription (clopidogrel or prasugrel) following acute coronary syndrome (ACS) and percutaneous coronary intervention (PCI) in US health plans.