

ponent score (MCS). Linear regression analysis was conducted with PCS and MCS scores as dependent variables. Age, race and sex were included as baseline variables in all models while incorporating Charlson/D'hoore, Elixhauser, and HRQoL-CI measures one at a time. Adjusted R² were compared to assess the comparative performances of risk-adjustment measures. **RESULTS:** The mean age was 68±13 years, with 80.63% non-Hispanic whites. The average PCS and MCS for HF patients were 45.53±12.28 and 30.64±11, respectively. HRQoL-CI (R² = 0.2083) outperformed Elixhauser (R² = 0.1784) and Charlson/D'hoore (R² = 0.1359) in predicting PCS. Whereas, Elixhauser (R² = 0.2184) had the best prediction of MCS compared to HRQoL-CI (R² = 0.1920) and Charlson/D'hoore (R² = 0.0918). **CONCLUSIONS:** No single comorbidity measure was best in predicting both PCS and MCS in HF patients; HRQoL-CI performed best in predicting PCS whereas Elixhauser measure had the best prediction for MCS. Selection of risk adjustment method should be based on the type of dimension used to evaluate HRQoL.

CARDIOVASCULAR DISORDERS – Health Care Use & Policy Studies

PCV87

IMPACT OF AN INTERACTIVE CARE PLAN ON PATIENT ACTIVATION IN HEART FAILURE INPATIENTS

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OBJECTIVES: Re-hospitalization in heart failure (HF) patients is often the result of a patient's inability to adequately self-manage the condition. The objective of this study is to determine if engaging inpatient care through technology is a solution to improving patient self-management. **METHODS:** Two hundred seventy-five patients with HF completed the HF interactive care plan while an inpatient at one of six hospitals throughout the United States. A pretest posttest design was used to evaluate a patient's activation using the 13-item Patient Activation Measure (PAM-13), a valid and reliable instrument to measure a patient's knowledge, skill, and confidence to perform self-management of their chronic disease(s). After completing the baseline PAM-13 following admission for a HF diagnosis, all 275 patients completed a self-paced set of interactive, educational modules throughout their inpatient stay. These modules were typically completed 3 or 4 days after admission, and then patients would complete the PAM-13 prior to discharge. The PAM-13 places individuals into activation levels 1 (lowest) through 4 (highest) based on an individual's responses. **RESULTS:** A two-tailed t-test between baseline and posttest scores of all participants showed a difference of 0.38 levels of activation ($p < .001$). Because 168 of the 275 participants were at level 4 on the PAM-13 at baseline, these individuals were removed and secondary analysis was performed on the remaining 107 individuals. A two-tailed t-test revealed a difference of 1.05 levels of activation ($p < 0.001$) after patients completed the interactive solution. **CONCLUSIONS:** Providing education through an interactive solution while in the hospital can improve activation scores in HF patients.

PCV88

EVALUATING OUTCOMES RELATED TO HYPERTENSION IN TOLEDO-LUCAS COUNTY CARENET PATIENTS

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OBJECTIVES: To determine blood pressure goal attainment levels and the factors influencing them for a low-income, uninsured population with hypertension. **METHODS:** A retrospective, cohort study was carried out by reviewing patient charts at three different sites where patients from CareNet, a Toledo based safety-net organization, received primary care. Eligible subjects were at least 18 years old and were CareNet members for a minimum duration of one year between the study period of January 1, 2003 to December 31, 2008. Descriptive statistics were utilized to determine goal attainment. Chi-square analysis was used to determine variables that had significantly different goal attainment. A binomial logistic regression model was used to predict goal attainment. Goal attainment at the last recorded visit served as the dependent variable and was classified as 'Yes' and 'No' (determined based on JNC-VII guidelines). Age, gender, race/ethnicity, BMI, tobacco use, number of primary care visits, and pharmacotherapy treatment were used as predictor variables. **RESULTS:** A total of 269 patients were included in the final analysis; 92 of these patients had diabetes while 177 didn't have diabetes as co-morbidity. The overall goal attainment was found to be 42.39% (n=39) in the patients with diabetes as co-morbidity and 60.45% (n=107) among the members without diabetes as co-morbidity. Chi-square analysis found patients the variables of co-morbidity ($p=0.05$) and number of visits ($p<0.01$) had significant differences in goal attainment. Patients who had primary care visits between 6-10 times were found to be significantly more likely (OR=3.705; CI: 1.670-8.218) to attain goal when compared to those who had just 1-5 visits. Notable trends were observed for other variables (co-morbidity, race/ethnicity, tobacco) but the effect was not significant. **CONCLUSIONS:** Goal attainment among CareNet members was found to be comparable to other studies and national statistics. Encouraging regular utilization of primary care services may further improve the clinical outcomes for a population utilizing a safety-net organization.

PCV89

PATIENT-, HOSPITAL-, AND COUNTY- LEVEL PREDICTORS OF DISCHARGES AND READMISSIONS AMONG PATIENTS WITH CARDIOVASCULAR DISEASE

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OBJECTIVES: The role of patient- and hospital-level factors in predicting hospital readmissions in the cardiovascular disease (CVD) setting is established, while the contribution of community-level factors is less clear. We determine the contribution of county-level characteristics in predicting discharge and readmission outcomes. **METHODS:** This retrospective analysis of hospital discharge data included adult patients discharged alive from nonfederal acute care hospitals between 2000 and 2005. Merged hospital- and county- level data characterized the admitting hospital in terms of quality of care and the patients' residence county in terms of income, crime, medical social services, and private transportation. Multinomial logistic and logistic regression models examined, respectively, the likelihood of 1) 3 discharge outcomes (home, unauthorized discharge, or further medical care), and 2) 31-day same-hospital readmission. The likelihood ratio (LR) test and Akaike Information Criterion (AIC) compared 3 models: Model 1: patient-level, Model 2: patient- and hospital-level, and Model 3: patient-, hospital- and county-level. **RESULTS:** Application of inclusion criteria resulted in 348,572 discharges with a primary-listed discharge diagnosis of CVD. In the discharge outcomes models, results from the LR tests that compared Model 2 to Model 1, and Model 3 to Model 2 were statistically significant ($\chi^2 = 773.38$, $p < 0.0001$; $\chi^2 = 1346.80$, $p < 0.0001$), suggesting no data support for the implied restrictions in Models 1 and 2. The AIC for Models 1, 2, and 3 were 309139, 308378, and 307047, favoring Model 3. In the 31-day readmission models, results from the LR tests that compared Model 2 to Model 1, and Model 3 to Model 2 also were statistically significant ($\chi^2 = 34.73$, $p < 0.0001$; $\chi^2 = 89.62$, $p < 0.0001$). The AIC for Models 1, 2, and 3 were 144041, 144012, and 143931. **CONCLUSIONS:** Prediction models examining discharge and readmissions outcomes can benefit from the inclusion of patient-, hospital-, and area (e.g. county) - level measures.

PCV90

THE QUALITY OF ANTICOAGULATION THERAPY IN PATIENTS WITH ATRIAL FIBRILLATION

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OBJECTIVES: The aim of this research was to assess the quality of anticoagulation therapy of patients with atrial fibrillation (AF) in a real life setting and to identify the causal factors explaining anticoagulation quality deficits. Furthermore, clinical consequences of suboptimal anticoagulation therapy (strokes, TIA, bleedings, embolism, myocardial infarcts) are identified. **METHODS:** The INR values as well as other clinical events concerning AF patients recruited into a prospective cohort study (observation period of 12 month) were documented at every visit to the treating doctor. Using the Rosendaal linear trend method, the time in therapeutic range (TTR) of 2.0-3.0 was estimated. Additionally, the squared INR deviation was investigated. To identify causes of INR-values below/above 2.0-3.0, a logistic regression on the basis of a TTR < 60% as the dichotomous outcome was conducted. **RESULTS:** For 525 patients from 71 study centers, at least two INR values were available over a median observational period of 228.9 days (SD: 106.1 days). The average TTR was 68.1% (SD: 26.3%). The average deviation of INR value from the mean of the INR target range (2.5) was 0.44 (SD: 1.29). The results of the multivariate regression (R²=0.179) show that the most important factors explaining a poor quality of anticoagulation therapy are bridging periods and patients self-reported need of help regarding medication therapy without getting that help. In the group of patients with a TTR < 60%, the occurrence rate of clinical outcomes was higher ($p=0.031$) than in the group of patients with a TTR > 60%. **CONCLUSIONS:** Labile INR values lead to negative clinical outcomes. In order to improve the situation, the main identified causes of poor anticoagulation quality should be addressed.

PCV91

DEVELOPMENT OF METHODOLOGICAL RECOMMENDATIONS FOR COMPARATIVE EFFECTIVENESS RESEARCH ON THE TREATMENT OF ATRIAL FIBRILLATION

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OBJECTIVES: Atrial fibrillation (AF) has been identified by the Institute of Medicine as one of the top research priorities for comparative effectiveness research, yet there is limited methodological guidance on how to meet the evidentiary needs of patients, clinicians, and payers. The Center for Medical Technology Policy (CMTMP) managed a stakeholder-driven process to develop an effectiveness guidance document that issued guidance for trial designers on study design considerations to best answer decision-makers' needs in AF research. **METHODS:** The AF team reviewed the literature and conducted interviews with researchers, patients and methodologists to scope the project needs. Open-question interviews were conducted with 25 individuals from the clinical research, clinical practice, regulatory, payer, professional organizations, and patient communities. An eight-person multi-stakeholder technical working group worked in collaboration with CMTMP staff to establish and refine the recommendations. The methods recommendations were guided by the objective of achieving an acceptable balance across a number of desirable dimensions, including internal validity, relevance, feasibility and timeliness. The document was posted on CMTMP's website for a 30-day public comment period as part of the broader dissemination and translation strategy. **RESULTS:** The final recommendations provide guidance on the design of prospective studies in Atrial Fibrillation, rationale for their inclusion, specifics on implementation and data analysis/reporting considerations. The final list included five research design recommendations, and three priority research areas that would synergistically benefit stakeholders' evidentiary needs and improve health outcomes. **CONCLUSIONS:** The meaningful engagement of patients, providers, and decision makers to prioritize the questions and develop the methods to answer