

6,204.77. Number of employees who had an inpatient visit increased from 3 to 7, with no recurrence of pre-visit events. A decrease in total health care expenditures by over 14% was observed. Preliminary analysis for the second objective shows that on average employees spent \$406.97/patient/year more when they dropped out of the program than if they stayed enrolled. **CONCLUSIONS:** Pharmacist led MTM-program helped reduce health care expenditure for the employer. Improving retention for the program could help substantiate these cost savings.

PCV101

EXPLORING GENDER DISPARITIES IN PREVENTIVE CARE UTILIZATION AMONGST THE UNITED STATES POPULATION

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OBJECTIVES: To identify existing gender differences in utilization of preventive care services in the United States (US) population using a national database. Few studies have pointed towards role of gender in determining utilization of preventive care service but the issue hasn't been explored using a nationally representative population. **METHODS:** A retrospective, cross-sectional study using 2008 MEPS (Medical Expenditure Panel Survey) data, a nationally representative survey of US population, which reports their pattern of medical care utilization. Guideline recommendations widely used in clinical practice, such as NCEP, American Dental Society, JNC-VII etc., were used to determine appropriate utilization of preventive care services. Descriptive statistics were used to describe the population characteristics while multivariate logistic regression model was built to predict the utilization of the various preventive care services (blood pressure check up, lipid screening, dental check up, sigmoidoscopy/colonoscopy and flu vaccination), using gender as the primary predictor variable, while controlling for age, income, race/ethnicity etc. **RESULTS:** Out of 33,066 respondents, 20,336 met the inclusion criteria for blood pressure check up, 23,058 met the inclusion criteria for dental check up, 19,543 met the inclusion criteria for flu vaccinations, 2,986 met the inclusion criteria for lipid screening, and 4,195 met the inclusion criteria for sigmoidoscopy/colonoscopy screenings. Gender was found to predict utilization of preventive care services. Males were found less likely to utilize blood pressure check up (OR = 0.327, CI = 0.297 - 0.359), lipid screening (OR = 0.768, CI = 0.694 - 0.85), dental check up (OR = 0.634, CI = 0.599 - 0.671), and flu vaccination (OR = 0.680, CI = 0.637 - 0.726). In case of sigmoidoscopy and colonoscopy screenings, the disparities were not significant, though utilization was still found to be higher in females. **CONCLUSIONS:** The study helped determine gender disparities in utilizing preventive care services in US population. Utilization of preventive care services needs to be encouraged in males.

PCV102

COMPLICATIONS ARISING DURING HOSPITALIZATION FOR HEMORRHAGIC OR ISCHEMIC STROKE: EVIDENCE FROM A LARGE ADMINISTRATIVE DATABASE

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OBJECTIVES: Limited data exist regarding the economic burden of complications arising during stroke-related hospitalizations. This study sought to document the rate of complications arising during hospitalization (i.e., defined as diagnoses recorded upon discharge but not observed at admission) for hemorrhagic (HS) or ischemic stroke (IS), and describe characteristics of complicated hospitalizations. **METHODS:** Data for hospitalizations with a primary diagnosis of HS (ICD-9-CM codes 430.xx, 431.xx, or 432.xx) or IS (433.x1, 434.xx, or 436.xx) in the 2008 HCUP Michigan State Inpatient Database were analyzed. Incidence of complications developed during hospitalization among patients with a primary diagnosis of HS or IS were assessed, and resource-based outcomes (e.g., total cost, length of stay [LOS]) among, and other characteristics of, stays with complications, compared to uncomplicated hospitalizations, analyzed. **RESULTS:** Of the 1.3 million hospitalizations occurring in Michigan in 2008, 19,065 had a primary diagnosis of HS or IS. Among these, 20.6% (n=3,922) had evidence of ≥ 1 complications arising during the stay. No differences in patient age (mean: 70.4 versus 70.7 years; $p=0.3293$) or gender distribution (53% versus 54% female; $p=0.3476$) between complicated and uncomplicated hospitalizations were observed. The top-5 most frequently observed complications were urinary tract infection, site not specified; hypotension; acute respiratory failure; pneumonitis due to inhalation of food or vomitus; and acute kidney failure, unspecified. Compared to uncomplicated hospitalizations, mean LOS and total costs for complicated stays were significantly greater: 10.5 versus 4.5 days ($p<0.0001$) and \$28,608 versus \$10,747 ($p<0.0001$), respectively. Patients with ≥ 1 complications spent 2.8 (SD=6.4) days in an ICU, and a greater proportion with complications than without died during hospitalization (11.4% versus 6.6%; $p<0.0001$). **CONCLUSIONS:** The cost of stroke-related hospitalizations with complications is significant, ~3 times greater than stroke-related hospitalizations without complications. Efforts to improve inpatient stroke management strategies may help lower the incidence of complications, reduce associated costs, and improve patient outcomes.

PCV103

PHARMACIST INTERVENTIONS WITHIN A COMMUNITY PHYSICIAN BASED MEDICAL HOME PRACTICE: DIABETES CLINICAL OUTCOMES

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OBJECTIVES: The patient-centered medical home has been touted as a way to improve patient care and reduce overall healthcare costs. Pharmacists are qualified to provide many of the services that are core to the medical home concept as part of the physician-directed team; however, the pharmacist's role in the medical

home has received little attention. **METHODS:** Medical record review was performed on all patients referred to the pharmacist from 7/1/2009 to 12/1/2010 within a community-based, medical home, primary care practice. Patients referred included those non-compliant to prior physician recommendations for lifestyle modifications and/or those not achieving therapeutic goals. Pharmacist interventions included disease state education, therapeutic lifestyle modification and medication counseling, and recommendations for therapy optimization. Primary analyses examined pre/post changes in the subset of patients with diabetes. Outcomes assessed were changes in hemoglobin A1c (HbA1c), lipid fractions, body mass index (BMI), weight, and goal attainment for HbA1c and low-density lipoprotein cholesterol (LDL-C), utilizing paired t-tests, Wilcoxon signed-rank and McNemar's tests as appropriate. **RESULTS:** One hundred-seven patients were referred to the pharmacist, 49 with diabetes. Diabetes patients had a mean age of 57 ± 9 years; 53% were male. HbA1c values decreased from 8.7% to 7.4% ($\Delta = -1.3\%$; 95% CI = -0.5% to -2.1% ; $p=0.003$). The percentage of patients achieving HbA1c levels below 8% rose from 50% to 75% ($p=0.021$) and below 7% rose from 28% to 47%, although this was not statistically significant ($p=0.109$). Statistically significant decreases were observed in diastolic blood pressure, LDL-C, total cholesterol, triglycerides, BMI and weight. The percentage of patients achieving LDL-C levels <100 mg/dL increased from 30% to 74% ($p=0.002$). **CONCLUSIONS:** Pharmacist involvement in this community based medical home was associated with positive improvements in clinical markers for these diabetic patients. These pilot study results support the inclusion of pharmacists as healthcare team members in future medical home demonstration projects.

PCV104

REAL-WORLD SIDE EFFECT DATA ON CHOLESTEROL MEDICATIONS - OUTPUTS FROM AN ONLINE PATIENT COMMUNITY

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OBJECTIVES: To compare side effect data reported from members of a patient-registry to information contained in the product labeling of four different cholesterol medications each representing a different therapeutic class. **METHODS:** A random sample of U.S. MediGuard.org members who reported taking niacin (Niaspan), fenofibrate (Tricor), simvastatin (Zocor), or colesvelam (Welchol), were invited to complete a validated online treatment satisfaction survey that includes questions related to side effects. MediGuard.org is a free medication monitoring service that provides information to over 2.5 million members in the US, UK, France, Germany, Spain, and Australia. A comparison list of adverse effects and frequencies reported during clinical trials was extracted from the branded package insert for each medication. **RESULTS:** Feedback was obtained from 56 colesvelam, 108 niacin, 216 fenofibrate, and 660 simvastatin patients. Niacin patients had the highest prevalence of side effects (62%), primarily flushing (55%) and pruritus (14%). 23% of colesvelam members reported side effects: the most common were constipation (14%) and bloating/gas (2%). For patients treated with fenofibrate, 16% reported side effects with myalgia (4.2%) and arthralgia (1.4%) being the most common. Similar to fenofibrate, 16% of simvastatin patients reported side effects and again, myalgia (6.2%) and fatigue (2.1%) had the most mentions. Finally, 2% of niacin, 22% of fenofibrate, 29% of simvastatin, and 36% of colesvelam patient reports included side effects not included in the product labeling. **CONCLUSIONS:** On-line patient communities are an emerging resource for confirming adverse events reported during clinical trials and for capturing previously undocumented signals. In tandem to the current post-marketing spontaneous adverse event reporting system, longitudinal patient registries can provide insight not only on the number of adverse events, but also a prevalence rate of those who experience versus those who do not experience side effects.

PCV105

THE INITIATION AND EXTENT OF DOSE TITRATION OF ACE INHIBITORS AND B-BLOCKERS POST ACUTE MYOCARDIAL INFARCTION: A PROSPECTIVE AUDIT

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OBJECTIVES: The objectives of this audit are: (1) to determine the percentage of patients who are discharged on secondary prevention medication following acute myocardial infarction (AMI) including: aspirin, clopidogrel, ACE inhibitors (ACEi), β -blockers (BB), and statins; (2) to identify what dose each patient is discharged on regarding ACEi and BB and when they are initiated; (3) to explore the relationship between blood pressure and ACEi dose titration; (4) to explore the relationship between heart rate and BB dose titration. **METHODS:** A prospective audit was carried out at the London Chest Hospital (LCH) from June 15-June 28, 2009. All patients who were admitted to the coronary care unit (CCU) with a final diagnosis of AMI were included. Patients were excluded if they died prior to hospital discharge. Patients' demographics, vital signs, drug history, past medical history, drugs during hospital stay and at discharge were collected. **RESULTS:** 33 patients were included in this audit (mean age 59.7 ± 12.7 years, 79% males, 21% females) with an average length of stay of 2.2 days. 88% of the patients were started ACEi and BB on day 2 of hospitalization. For patients receiving ACEi and BB only 41% were titrated towards the optimal dose. 78% of the opportunities to titrate ACEi according to blood pressure and 55% of the opportunities to titrate BB according to heart rate were not taken. At discharge, 100% were prescribed aspirin, statins, and BB; while 97% were prescribed ACEi and clopidogrel. **CONCLUSIONS:** This audit reveals high use of secondary prevention medication at the LCH following AMI. Although there are opportunities for further dose titration prior to discharge, further work is required to establish reasons for missing these opportunities.