invasive cardiac testing to assess the likelihood of obstructive coronary artery disease (CAD). We evaluated data received as a part of genetic testing to identify diagnostic costs among non-acute symptomatic patients presenting to cardiologists.

METHODS: The IMPACT-CARD Trial (NCT01251302) prospectively enrolled 88 patients without known CAD who presented with chest pain and related symptoms and were referred to one of six cardiologists. The cardiologist's diagnostic strategy was evaluated before and after GE testing, and diagnostic testing in a matched historical cohort of 83 patients was extracted from medical records. The GE is a previously validated, blood-based diagnostic test that determines the likelihood of obstructive CAD, with a negative predictive value of 96% among low GE (≤15) patients. We estimated per-procedure costs from commercially insured patients in a large, national health claims database. We applied these costs to the tests performed in the matched historical cohort and recommended in the prospective arm post-GE to calculate the cost of diagnostic evaluation in the trial. Given the rule-out nature of the GE, we focused this economic analysis on low GE patients.

RESULTS: There were no statistically significant differences in the total cost of cardiac diagnostic testing in these patients was lower than in the S2 matched controls ($2,450 versus $1,735 per patient, inclusive of the GE cost, p=0.23), though the difference was not statistically significant. This finding represents 29% savings ($715 per patient) in cardiovascular disease (CVD) risk groups.

CONCLUSIONS: Physician use of the GE may be associated with reductions in diagnostic testing costs in low score patients. These savings reflect the potential economic utility of the GE in the diagnosis of obstructive CAD.

PCV119 IMPACT OF ACCESS TO TRANSCATHETER AORTIC VALVE REPLACEMENT ON THE INOPERABLE AORTIC STENOSIS MORTALITY IN THE CANADIAN HEALTHCARE SYSTEM

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OBJECTIVES: Transcatheter Aortic Valve Implantation (TAVI) is a cost-effective life-saving therapy for patients suffering from severe aortic stenosis (SAS) who are unlikely to tolerate surgical procedures and the potentially unavoidable deaths occurring each year from capacity shortages. METHODS: We developed a population-based 5-year and 10-year simulation model using Microsoft EXCEL to quantify the prevalence and incidence of SAS, capacity to perform TAVI procedures, SAS associated longevity with and without TAVI and avoidable deaths from lack of access under various capacity-building scenarios for the provinces of Ontario, Quebec, British Columbia and Alberta. Our model was populated with data from published peer-reviewed articles in the implementation of the Canadian Cardiac Catheterization and Cardiac Care Network. RESULTS: We estimate that there is a severe shortage of capacity to perform TAVI procedures in relation to population needs that will result in 2,882 avoidable deaths over the three years from 2014 to 2017. The gap between need and capacity is greatest in Ontario. CONCLUSIONS: An increase in the capacity to perform TAVI procedures is needed to reduce the number of access-related mortality in Ontario, Quebec, British Columbia and Alberta.

PCV120 ECONOMIC IMPACT OF INSERTABLE CARDIAC MONITORS FOR DIAGNOSIS OF UNEXPLAINED SYNCOPES ON THE CANADIAN HEALTHCARE SYSTEM

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OBJECTIVES: Common medicare and medicare advantage accounts for 3% of all visits to the emergency departments (ED), hospitalizations and falls, and is associated with high morbidity and mortality of quality-of-life. Convensional testing strategies fail to diagnose underlying causes in more than 1/3 of cases, leading to repeat episodes and costly health care system interactions. We sought to better understand the burden of unexplained syncope on four Provincial health care systems in Canada and evaluate the impact of adopting testing strategies centered on Insertable Cardiac Monitors (ICM) as an alternative to current practice. METHODS: We evaluated the economic burden and implications of alternative strategies for the provinces of Ontario, Quebec, British Columbia and Alberta using a multi-cohort Markov-based simulation model developed in Microsoft Excel. Our model was populated with data from peer-reviewed papers, Canadian Institute for Health Information and Canadian Cardiac Catheterization and Cardiac Care Network. RESULTS: We estimate that between 2014 and 2023, syncope will affect 223,000 people each year across the four provinces, and account for 97,000 ED visits, 13,000 hospitalizations and 6,000 falls annually in this period. A total of 1.5 million diagnostic tests will be performed under conventional strategies, compared to 626 thousand tests if every syncope patient would be assigned ICM following an initial, Brampton, ON, Canada, (CA) patient visit (43% reduction). The ICM strategy would also eliminate 12% of blackouts, 9% of falls, and 21% of ED visits and hospitalizations related to Syncope events. The proportion of patients diagnosed would increase from 15% to 47% at 36 months, and the strategy would be large cost-neutral with an average annual reduction of $434 per year in Syncope related expenditures. CONCLUSIONS: We find that the burden of unexplained Syncope on Canadian health care systems is substantial, and wider utilization of ICMs in diagnosis could reduce this burden while improving the patient experience.

PCV121 REAL WORLD DATA: A TOOL FOR DECISION MAKING IN HEALTHCARE Management, E.P., Vai, F., Feira, C., Junqueira, M. New York/Medinight – Grupo Resulta, São Paulo, Brazil

OBJECTIVES: This study aims to stimulate the use of secondary data in health economic analyses, based on a better understanding of available possibilities using Brazilian patient database (DATASUS) and to develop a case study focused on the treatment of patients with acute myocardial infarction (AMI). METHODS: This study was conceived of as a retrospective observational study of the available public databases, including outpatient and inpatient information. Conducting studies using real world data is possible due to the identification of the individual under treatment. This identification does not allow determining the patient's identity, but allows tracking individual care. The total cost of care and time of hospital stay in the outpatient and inpatient settings have been analyzed. Besides, a case study was developed focusing on patients hospitalized due to AMI. The quantity of treatments and the cost of care were calculated from the available data set. High volume centers (HVCs) were compared to low volume centers (LVCs). RESULTS: In the outpatient setting, about 3 million patients were treated in 2011 resulting in expenses of approximately 8.7 billion dollars. In the inpatient setting, more than 9 million patients were treated, resulting in expenses of approximately 13.1 billion dollars. In 2012, 57,133 hospitalizations due to AMI were identified in 2,138 centers. Eighty per cent of the hospitalizations occurred in 25% of the centers. In the HVCs an average of 23 AMI hospitalizations were recorded, whereas in the LVCs the average was 2. The mortality rate due to AMI was lower in the HVCs when compared to the LVCs (14.9% vs 15.8%; p<0.05) and the average length of stay was higher (8.7 vs 5.2 days). CONCLUSIONS: Health managers should use the thorough analyses based on real world data/innovation status for decision making and to better allocate scarce resources in health care.

PCV122 A NEW FRONTIER: USING PHARMACY CLAIMS WITHIN THE EHR TO CONDUCT MEDICATION RECONCILIATION IN PRIMARY CARE PRACTICE

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OBJECTIVES: Medication reconciliation is a necessary process for the delivery of optimal patient care, yet we do not have a tool to do it in a primary care office due to limited time and resources. Dramatic improvements in health information technology may facilitate accurate and real-time medication reconciliation. The purpose of this project was to determine the impact of linking商业地产-based pharmacy claims with the primary care electronic health record (EHR) to inform medication reconciliation in primary care practice. METHODS: We conducted a retrospective cohort study in patients that were prescribed a new antihypertensive between January 2011 and September 2012. Medication discrepancies were recorded as related in the primary care electronic health record (EHR) to inform medication reconciliation in primary care practice. RESULTS: We evaluated the economic impact of linking pharmacy claims data available through the EHR. Only medications that were active in the 120 days prior to the new antihypertensive were considered. Medications that appeared in one data source but not the other were categorized as discrepancies. The primary outcome was the presence of at least one discrepancy. Predictors of discrepancy risk were calculated through logistic regression. RESULTS: A total of 609 patients qualified for study. Among the patients, 494 (81%) were linked to the pharmacy as recorded in the primary care electronic health record. CONCLUSIONS: A high rate of medication discrepancies was found amongst patients, along with significant predictors of occurrence. The use of linked pharmacy claims was able to show a more complete picture of a patient’s medications. Further automatic solutions could be used to screen available data sources to uncover discrepancies and identify patients who may benefit from tailored clinical interventions.

PCV123 PORTRAYAL OF STEREOTYPES IN DIRECT-TO-CONSUMER ADVERTISING OF PSYCHOTHERAPY: A SCANNING STUDY

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OBJECTIVES: Pharmaceutical companies adopt distinctive marketing strategies to advertise drugs for hypertension and psychosis. This study explored the variance in stereotypes related to gender disparity and activity status (passive and active) used in video direct-to-consumer advertisements for anti-psychotics and statins class of drugs. METHODS: Fifty-eight unique video DTCA aired on NBC and CNN evening news were analyzed. The Vanderbilt TV News Archive Database was utilized to obtain random samples from each year which constituted to final sample of nine advertisements. In contrast, a male character with active status was significantly greater than female in the AMI class of drugs. RESULTS: In hypertension DTCA, a male character was significantly greater in advertising for antihypertensives compared to ads for antipsychotics (79.59% vs. 22.22%, p<0.0016). However, the proportion of female character was significantly greater in ads for antipsychotics compared to statins (88.89% vs. 48.98%, p<0.034). In addition, a female character with passive status was significantly higher in antipsychotic ads compared to statins (66.67% vs. 32.65%, p<0.05). In contrast, a male character with active status was significantly greater in statins compared to antipsychotics (78.78% vs. 43.75%, p<0.007). Gender and activity status stereotypes are quite prevalent in both anti-depressants and cardiovascular drugs. Males with active status were more likely to be featured in hypertension whereas female characters with passive status were more likely to be featured in anti-psychotics. Stereotypes in DTCA may potentially bias the decision making ability and prescribing behavior of physicians.

PCV124 A RETROSPECTIVE, CROSS SECTIONAL STUDY ON THE REAL-WORLD VALUES OF CARDIOVASCULAR RISK FACTORS USING A HEALTH CARE DATABASE IN JAPAN

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OBJECTIVES: In order to investigate real-world values data, blood pressure, LDL-c, and HbA1c, in Japan from various perspectives and to assess the degree to which health condition in Japan is reflected in database, we conducted a comparative assessment using three databases: Minacare database, a large database containing health care checkup results from employment-based health insurance recently developed and the publicly available two nation-wide databases. Minacare database is retrospective, cross sectional study using the Japanese health care checkup data base developed by MinaCare Co. Ltd. was designed to investigate the distribution of subjects with health care checkup results in 2011 MinaCare database. The propor tion of subjects having BP, LDL-c, and HbA1c was moderate or high (CHADS2VASc ≥ 2). Among the MinaCare database was mostly comparable to MHLW-SH and MHLW-H&N databases. However, some notable differences were seen for MHLW- H&N compared to MinaCare and MHLW-SH in the values of BP and lipid parameters. CONCLUSIONS: Analysis of MinaCare database indicated that substantial proportion of subjects have BP, LDL and HbA1c levels that are not well controlled in accordance with the Japanese guidelines. The results were generally consistent to the national databases. In light of the characteristics of MinaCare database such as the low selection bias, large sample size, wide age distribution, and high flexibility in the analysis of subject-level data, the database is highly valuable in studying the health status of the population insured by the employment-based health insurance.

PCV125 COMPARISON OF ATRIAL FIBRILLATION DECISION SUPPORT TOOLS AND GUIDELINES USED TO GUIDE ANTICOAGULATION THERAPY FOR PATIENTS WITH NONVALVULAR ATRIAL FIBRILLATION

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OBJECTIVES: College of Cardiologists, the European Society of Cardiology guidelines, and published decision support tools by LaHaye and Casciano offer recommendations to guide oral anticoagulant (OAC) treatment in patients with atrial fibrillation (AF). The aim of our study is to compare the predictive value of the net clinical benefit when OAC use is concordant/discardant with each of the aids. METHODS: A cohort study using the 2006–2013 Lifelink claims data was used to compare the net clinical benefit (NCB) of OAC treatment. NCB is the difference in event rates of composite endpoints (thromboembolic stroke and major bleeds events per 10,000 persons years) between patients who are concordant and those who are discordant with the guideline/tool recommendation. Cox proportional hazard models were used to assess the relative risk of composite endpoints by contrasting the net clinical benefit when OAC use is concordant with each of the aids. RESULTS: A total of 11,315 AF patients contributing 27,801 person-years met the study inclusion criteria. The NCB of patients concordant with recommendations of the LaHaye tool (8.41 [CI: 5.94-11.88]) was highest followed by American guidelines (22.75 [CI: 21.34-24.17]), Casciano tool (16.99 [CI: 15.57-18.40]) and European guidelines (3.94 [CI: 2.52-5.35]). By restricting the definition of composite events to ischemic stroke and intracranial hemorrhage, the NCB of patients concordant with American guidelines increased to 22.88-25.52], and European guidelines increased to 15.57-18.40]. LaHaye tool [14.30 [CI: 12.99-15.62]] and European guidelines [11.25 [CI: 9.93-12.57]] were not significant. There was no significant difference in the risk of composite endpoints associated with discordant OAC use/no-use for any of the decision aids after multivariate adjustment. CONCLUSIONS: These results suggest that OAC use/no-use consistent with any of the tools led to net clinical benefits but the rank order depended on the composite outcomes selected. However, the benefits of OAC after multivariate adjustment were large even at a small number before any of the OAC decision aid can be recommended to routinely guide OAC treatment decisions.

PCV126 COMPARISON OF THE GUIDELINES AND DECISION TOOL RECOMMENDATIONS FOR ORAL ANTICOAGULANT USE AMONG PATIENTS WITH ATRIAL FIBRILLATION

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OBJECTIVES: Published atrial fibrillation (AF) guidelines and decision tools offer oral anticoagulant (OAC) recommendations however they don’t consider stroke and bleed risk differently. The aim of our study is to (i)empirically compare the treatment recommendations by the American College of Chest Physicians guidelines, and two published decision tools published by Casciano and LaHaye and (ii) to compare the concordance of OAC use with their recommendations. METHODS: A cross sectional study using the 2006–2013 Lifelink claims data was used to contrast the treatment recommendations of these AF-OAC decision aids. CHADS2VASc and HAS-BLED algorithms were used to stratify 11,315 AF subjects into 9 stroke and bleed risk groups to study the variation in treatment recommendations. The concordance of actual OAC use with each of the decision aids and their treatment recommendations was computed for each risk group. The European guidelines recommended OAC most often (84.96%) and a conserva tive LaHaye tool recommended warfarin OAC the least often (13.41%). None of the decision aids recommended OAC for subjects with low risk (CHADS2VASc < 0). The European guidelines recommended OAC most often (84.96%) and a conserva tive LaHaye tool recommended warfarin OAC the least often (13.41%). None of the decision aids recommended OAC for subjects with low risk (CHADS2VASc < 0). The European guidelines recommended OAC most often (84.96%) and a conserva tive LaHaye tool recommended warfarin OAC the least often (13.41%). None of the decision aids recommended OAC for subjects with low risk (CHADS2VASc < 0). However, OAC treatment recommendations varied considerably when stroke risk was moderate or high (CHADS2VASc ≥ 2). For example, the LaHaye tool never recom mended warfarin OAC for persons with CHADS2VASc=1 irrespective of bleed risk, however, the other guidelines preferred low risk patients to receive OAC and a HAS-BLED-3. Actual OAC use was most consistent with the Casciano tool (49.43%) and was least consistent with the LaHaye tool (44.52%). CONCLUSIONS: OAC prescribing could be improved as actual OAC use/non-use was often discordant with all the recommendations. There is considerable variability in OAC treatment recommendations by the AF guidelines and decision tools when ischemic stroke risk increases. Additional research was needed to compare the outcomes of OAC treatment recommendations by each of these decision aids before implementing one of these to inform clinical decisions.

PCV127 USE OF PRODUCT LIFE CYCLE (PLC) TO UNDERSTAND ADVERTISING STRATEGIES USED BY PHARMACEUTICAL COMPANIES: A PILOT STUDY

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OBJECTIVES: Pharmaceutical companies utilize various promotional strategies to advertise a drug during its patent life. Study purpose was to understand these strate gies by exploring the content of drug advertising using the framework of Product Life Cycle (PLC). During different stages of PLC, this study assessed drug ads for the following: (1) type of characters appearing in the ad, (2) source of information (500 words), and (3) ad visual strategies. Unique ad codes of Pfizer, Inc. Drug licensor (Astrazenica), aired during CNN evening news (from Jan 1st 96 – Nov 30th 11 [patent life of Lipitor]), were evaluated. The Vanderbilt TV News% Article provided the advertising content. PLC phases were defined as follows: introduction and growth (Phase-I: 1999-2002); maturity (Phase-II: 2003-2006); and decline (Phase-III: 2007-2011). Code sheet was developed using prior literature and pilot-tested for the final study. Four coders were trained in coding procedures. Reliability was measured with Cohen’s kappa. Data were analyzed using descriptive statistics and cross-tabulations. RESULTS: Twenty-one (phase-I: 2; phase-II: 7; phase-III: 12) unique product-specific ads were analyzed. Researchers of the ad vertised drug appeared more in phase-II (3 [43%] vs. 3 [25%] of phase III). Personnel with medical condition appeared more in phase-III (75%) of 3 vs 57% of 7 in phase-II). In all three phases an anonymous voice provided drug information. Researchers were a SOI in phase-II (3 [43%] of 7 ads) and a person with medical condition in phase-I (3 [43%] of 7 ads). The black background was compared to ads in phase-III [4 (57%) of 7 vs 5 (43%) of 12 ads]. CONCLUSIONS: Distinctive ad strategies were observed throughout the PLC of Lipitor. These different strategies should be explored further by using Phase-I and Phase-III PLC phases as the basis of the PLC. PLC.

PCV128 EVALUATION OF MEDICAL QUALITY BASED ON READMISSIONS WITHIN 30 DAYS AMONG BENEFICIARIES IN CENTRAL ILLINOIS

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OBJECTIVES: To evaluate the medical quality of a Central Illinois health care system by developing a predictive model to identify those patients who might be more likely to be readmitted with 30 days of discharge based upon their factors of demographic and chronic conditions. METHODS: Hospital readmission data was collected from the University of Arkansas for Medical Sciences, Little Rock, AR, USA and the American College of Chest Physicians guidelines, and had the objective of this study was to measure, among acute myocardial infarction (AMI) and heart failure (HF) to investigate the quality of care process and outcome measures to compare AMI and HF quality score yielded a 0.5% increase in Delta (p-value < 0.01). The model was developed, and the publicly available two nation-wide databases. Minacare database is retrospective, cross sectional study using the Japanese health care checkup database developed by MinaCare Co. Ltd. was designed to investigate the distribution of subjects with health care checkup results in 2011 MinaCare database. The proportion of subjects having BP, LDL-c, and HbA1c was moderate or high (CHADS2VASc ≥ 2). Among the MinaCare database was mostly comparable to MHLW-SH and MHLW-H&N databases. However, some notable differences were seen for MHLW-H&N compared to MinaCare and MHLW-SH in the values of BP and lipid parameters. CONCLUSIONS: Analysis of MinaCare database indicated that substantial proportion of subjects have BP, LDL and HbA1c levels that are not well controlled in accordance with the Japanese guidelines. The results were generally consistent to the national databases. In light of the characteristics of MinaCare database such as the low selection bias, large sample size, wide age distribution, and high flexibility in the analysis of subject-level data, the database is highly valuable in studying the health status of the population insured by the employment-based health insurance.