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(Abstracts in alphabetical order by first author’s last name)
Purpose: Spontaneous reporting of adverse events is an important mechanism for monitoring drug safety, but under-reporting limits these data. The objective of this study was to examine how well reporting rates in the FDA Adverse Event Reporting System (FAERS) reflect expected rates of known adverse drug events (ADEs).

Methods: We selected three groups of drugs to reflect varying sensitivities to reporting, including statins, biologics, and narrow therapeutics index drugs (NTI). The statins were meant to reflect commonly used drugs that are generally felt to have a benign adverse drug event (ADE) profile, biologics were meant to reflect a group of injectable drugs with high sensitivity to serious ADEs, and NTIs were meant to reflect a group of drugs with dose sensitive ADEs. The numbers of ADEs in FAERS were divided by utilization estimates from ambulatory health care data (NAMCS/NHAMCS) to calculate a reported proportion. Z-tests compared the proportion of ADEs reported to an expected ADE proportion derived from drug labels, reference databases, and peer-reviewed papers.

Results: The majority of drug-ADE pairs showed significant under-reporting. For example, roughly 0.01% to 45% of statin events were reported (z-test P<0.0001). Biological and NTI drugs had higher reporting rates compared with statins. For the biologics infliximab and etanercept the reported proportion of malignancies fell within the expected range. Similarly, the reported proportion of dermatological events for lamotrigine (an NTI drug) fell within the expected range. Roughly 20% to 33% of the minimum number of expected serious events were reported with other biologics and NTI drugs.

Conclusion: This study supports prior evidence of under-reporting of ADEs in spontaneous reporting data. But, under-reporting varies considerably by the type of drug and the severity of ADEs.
THE PROVISION OF PHARMACEUTICAL CARE SERVICES IN ONCOLOGY SETTINGS IN EGYPT
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PATIENT FACTORS ASSOCIATED WITH NONADHERENCE TO ORAL HYPOGLYCEMIC MEDICATIONS IN AN OKLAHOMA MEDICAID POPULATION
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Background/Objective: As the Center for Medicare and Medicaid (CMS) star ratings become important for measuring quality in pharmacy, and with potential expansion of the star ratings to include Medicaid, it is necessary to review factors potentially associated with decreased quality outcomes. The objective of this research is to identify patient factors associated with nonadherence to oral hypoglycemic medications in adult Oklahoma Medicaid (MOK) beneficiaries.

Methods: This is a cross-sectional analysis of data gathered from a database of MOK beneficiaries who have taken at least one oral hypoglycemic medication during calendar year 2015. Factors to be assessed are age, gender, race, residence (urban vs. rural), and a modified Charlson index as well as presence of obesity, mental illness, substance abuse, and hypercholesterolemia. Subjects are identified as nonadherent if their proportion of days covered (PDC) for oral hypoglycemic medications is less than 0.8. Factors associated with nonadherence will be assessed using multivariable logistic regression.

Expected Results: Preliminary results are pending. Previous research assessing patient factors associated with nonadherence has found characteristics such as age, gender, race, residence, presence of obesity, presence of mental illness, presence of substance abuse, presence of hypercholesterolemia, and Charlson index to be associated with nonadherence. The current average PDC for MOK beneficiaries is 0.68 with 41.2% adherent.

Conclusions: With the growing importance of quality measures, verification of these findings or discovery of new findings in this population would be useful to pharmacists serving similar populations. These results would assist pharmacists in identifying patients in their own practice that may be more likely to be nonadherent to their oral hypoglycemic medications and allow them to assist those patients in improving their adherence. Outcomes will also inform future research using both qualitative and quantitative methods to better understand barriers to patient adherence to medications.
RELIABILITY AND VALIDITY OF THE MEDICAL OUTCOMES STUDY SHORT-FORM HEALTH SURVEY VERSION 2 (SF-12V2) AMONG ADULTS WITH SELF-REPORTED CANCER USING MEDICAL EXPENDITURE PANEL SURVEY (2003-04)
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http://www.rsap.org/article/S1551-7411(16)30050-X/abstract
MEDICATION ADHERENCE AS A PREDICTOR OF SWITCHING ORAL ANTIPSYCHOTIC USERS TO LONG-TERM INJECTABLES

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Background: Maintaining appropriate levels of therapy are critical when treating psychosis with antipsychotic (AP) therapy in order to avert expensive relapses. Poor medication adherence is one of the major barriers to maintenance of AP therapy. Long-acting injectable APs have been promoted as one method of addressing poor adherence and improving patient outcomes.

Objective: The objective of this study was to assess the association between poor adherence with oral AP medications and the likelihood physicians will switch patients to long-acting injectable APs.

Methods: A retrospective case-control study was conducted using Mississippi Medicaid administrative claims data from January 1, 2013 through June 30, 2015. Cases were identified as beneficiaries initiating therapy with oral APs and switching to injectable APs after 6 months or more. The date of switching was considered the index date. Cases were matched with controls (beneficiaries not using injectables) based on the month they started oral therapy and duration of oral therapy. Multivariable logistic regression was used to assess the association between adherence and likelihood of switch to injectable therapy while controlling for other factors.

Results: The final sample consisted of 435 cases and 870 controls. After adjusting for age, gender, race, and other comorbidities, beneficiaries with poor medication adherence were 7 times more likely to be switched to injectable therapy as those with good medication adherence (Odds Ratio = 7.027, 95% Confidence Interval 5.326 – 9.272).

Conclusion: The results indicate that poor medication adherence is a strong predictor of physicians switching patients on APs to injectable therapy. Considering the higher cost of injectable APs, it may be more cost-effective to address poor adherence through a patient management program. Managed care plans could make failure in a patient management program a prerequisite for switching to injectable APs.
PREDICTORS OF INTENTION TO FIRST-TIME USE OF E-CIGARETTES IN ADOLESCENTS USING A STRUCTURAL EQUATION MODELING APPROACH

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http://www.rsap.org/article/S1551-7411(16)30051-1/abstract
PSYCHOMETRIC EVALUATION OF THE SF-12V2 FOR INDIVIDUALS WITH RHEUMATOID ARTHRITIS AND DEPRESSION
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Background: The 12-item Short Form (SF-12v2) is a generic health-related quality of life (HRQoL) instrument and has been widely used in a variety of chronic conditions.

Objectives: To study the SF-12v2 psychometric properties in adults with rheumatoid arthritis (RA) who also had depression.

Methods: The data used in this study were from the Medical Expenditure Panel Surveys (MEPS), 2003-2013. Internal consistency reliability of the SF-12v2 was tested using Cronbach’s alpha. Test-retest reliability was evaluated using intra-class coefficient (ICC) from MEPS rounds 2 and 4. Construct validity was tested using structural equation modeling (SEM) approach. Model fit indices included 1) Comparative Fit Index (CFI) >0.9; 2) Non-normed fit index (NNFI) >0.9; and 3) Root mean Squared error of Approximation (RMSE)
STUDENT PHARMACIST PERCEPTION OF PURSING GRADUATE EDUCATION IN THE PHARMACEUTICAL SCIENCES UPON COMPLETION OF THE DOCTOR OF PHARMACY DEGREE
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MOTIVATIONAL INTERVIEWING AND OUTCOMES IN RANDOMIZED CONTROLLED TRIALS WITH T2D ADULTS
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Background: Motivational Interviewing (MI) is a patient-centered mode of communication with proven effectiveness in health behavior change. CAPE Outcomes Guide for Standards indicates MI as a communication skills set available for student pharmacist training.

Objectives: Chronic disease management involves complex treatment regimens and behavior change to achieve optimal health outcomes. This study aimed to systematically explore MI interventions and outcomes in a chronic disease (T2D), where several behavior changes are needed and pharmacist are involved in disease management.

Methods: Relevant databases were searched, including MEDLINE, CINAHL, PsycINFO, and PsycARTICLES. Randomized controlled trials published from January 1990 to October 2014 that investigated the effects of MI-based intervention on outcomes of T2D were retrieved. Inclusion criteria included RCTs that assessed effects of MI-based interventions on behavioral (healthy eating, being active, smoking cessation, and/or alcohol reduction) and clinical (A1C, weight loss/Body Mass Index (BMI), blood pressure, and/or total cholesterol) outcomes.

Results: Of the initial 159 studies identified, 14 were retained. For the behavior change outcomes, the MI group had significantly better results in five of the ten studies that targeted healthy eating. Non-significant differences were reported for being active (n=10), smoking cessation (n=4) and alcohol reduction (n=2). For the clinical outcomes, in five of the 14 studies A1C was significantly reduced in the MI group compared to the control group, and A1C was reduced but not significantly in two additional interventions. One of eight studies targeting BMI showed significant differences for the MI group. Non-significant results were reported in five studies targeting blood pressure and cholesterol.

Conclusions: MI was most effective in modifying dietary behavior, and clinical outcomes were most promising for A1C and weight management. Frequent MI-Based interactions were associated with better outcomes.
OVER-THE-COUNTER MEDICATION INFORMATION NEEDS IN COMMUNITY PHARMACIES
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COST-EFFECTIVENESS OF H2RAS VERSUS PPIS FOR STRESS ULCER PROPHYLAXIS IN CRITICALLY ILL PATIENTS
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Background: Many critically ill patients are at risk for developing upper gastrointestinal mucosal damage that may progress to stress-related mucosal bleeding (SRMB).

Objective: To determine the cost-effectiveness of stress ulcer prophylaxis (SUP) with histamine-2 receptor antagonist (H2RA) compared with proton pump inhibitor (PPI) therapy.

Methods: A decision analytic model examined costs and effectiveness measures between H2RA and PPI therapies for SUP. A base case that combined observational study (OS) and meta-analysis (MA) data, OS case, and MA case were evaluated. Costs were expressed in 2015 U.S. dollars, evaluated from the institutional perspective, and combined medication regimens and untoward events associated with SUP: pneumonia, Clostridium difficile infection, and SRMB. Costs and development of and mortality from complications came from published sources. Outcomes were expected and incremental costs, mortalities, and complication rates. Univariate sensitivity analyses evaluated for determinants of incremental cost, mortality, and complication rates. Monte Carlo simulations evaluated for second-order uncertainty.

Results: In the base case scenario, the costs, rate of complications, and mortality were $9,039, 17%, and 2.5% for H2RAs and $11,249, 22%, and 3.4% for PPIs, indicating that H2RAs dominated PPIs. The OS-based model provided similar results; however, in the MA-based model based, H2RAs had a cost of $8,364 and a mortality rate of 3.2% compared to $7,676 and 2.0% for PPIs. At a willingness-to-pay threshold of $100,000 per death averted, H2RA was superior or preferred in 96.7%, 73.5%, and 29.36% for the base case, OS, and MA scenarios, respectively.

Conclusions: Providing SUP with H2RA therapy reduces costs and increases survival and complications avoided compared with PPI therapy. Appropriate use of SUP may reduce financial burdens already placed on the healthcare system and yield better patient outcomes.
PHARMACY STUDENTS' AWARENESS OF AND ATTITUDES TOWARD IMMUNIZATION INFORMATION SYSTEMS

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THE MODERATING POWER OF IMPULSIVITY: A THOROUGH LITERATURE REVIEW EXAMINING THE THEORY OF PLANNED BEHAVIOR
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Background: The Theory of Planned Behavior (TPB) states that behavioral intention is the best predictor of actual behavior change. Of specific interest is the question of which variables can be leveraged to moderate or mediate the TPB in order to aid health promotion interventions utilizing the tenets of behavioral economics (delay discounting, commitment contracts, and others). Impulsivity has been postulated to fill this role, and is uniquely suited to application in behavioral economics.

Objectives: To determine if impulsivity moderates the association between intention and actual behavior, and to discover what other variables may moderate or mediate this association.

Methods: A thorough literature review was conducted using PubMed and PsychINFO online databases. Google Scholar was utilized via a snowballing method. Studies written in English and utilizing a systematic review, meta-analysis, cross-sectional survey, pre-post, time series, cohort, case-control, other quasi-experimental, or randomized controlled design in peer-reviewed journals published prior to November 2015 were selected.

Results: Three main concepts emerged from this review: 1) impulsivity moderates intention and behavior change; 2) self-efficacy moderates intention and behavior change; and 3) planning and self-efficacy contribute to moderated mediation.

Conclusions: This review demonstrates a gap in the literature regarding the application of the TPB to medication adherence and prescriber providing habits. Future studies in behavioral economics may leverage the variables of impulsivity, self-efficacy, and planning to predict follow-through in these areas. This will then allow for the development of targeted change initiatives using tailored commitment contracts or other novel incentivized actions.
PROPOSAL FOR A CROSS-SECTIONAL SURVEY TO EXPLORE PREFERENCES FOR AND PERCEPTIONS OF MEDICATION ADHERENCE INCENTIVES AMONG PATIENTS TAKING MEDICATION FOR A CHRONIC DISEASE

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ASSOCIATIONS OF HERB AND NON-VITAMIN DIETARY SUPPLEMENTS (NVDS) USE WITH CLINICAL OUTCOMES AMONG PATIENTS WITH ASTHMA IN THE UNITED STATES
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http://www.rsap.org/article/S1551-7411(16)30054-7/abstract
THE EFFECT OF MEDICARE STAR RATINGS ON PHARMACIES: A CONSIDERATION OF POTENTIAL PAYER RESPONSES TO PHARMACY QUALITY MEASURES
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Introduction: Recently, plans have begun to introduce strategies to boost pharmacy performance ratings in lieu of Medicare Star Rating bonus incentives. There are some reports on how plans are starting to incentivize or punish pharmacies based upon quality measures used with the Star Ratings. However, an in-depth look at both the already verified and potential responses that plans may utilize is lacking. The purpose of the current research is to identify the potential incentives and punishments that MA-PD payer may utilize to boost plan star ratings.

Methods: A full literature review along with interview conducted with policy directors at plans with Medicare beneficiaries will be used to identify all potential strategies that plans might use to boost plan Star Ratings through pharmacies. A survey will then be distributed through policy directors to discern the frequency that various strategies are being utilized by plans. Targeted quality performance ratings and average thresholds for strategies will also be determined through the study.

Results: Literature review and preliminary discussions with plans has illuminated many different strategies that plans are utilizing. The three primary systems that are being utilized include Pay for performance (P4P), Quality based network (QBN), and value-based contracting. Within these systems are several different types of strategies that are being utilized to boost plans' performance scores through pharmacies. Ongoing research from the study should further explain all potential strategies being implemented as well as which strategies are the most frequently used.

Conclusion: Future research is needed to reveal the responses that healthcare plans are currently utilizing or plan to utilize in response to pharmacy quality measures. Doing so will provide insight for future researchers, payers, and pharmacy managers to utilize as the healthcare landscape continues to shift toward reimbursements based upon quality measures.
ELECTRONIC HEALTH RECORDS IMPLEMENTATION IN SUB-SAHARAN AFRICA: A REVIEW OF THE LITERATURE
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OUT-OF-POCKET HEALTHCARE EXPENDITURES AMONG SUBJECTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE
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BACKGROUND: In light of the importance of medication adherence in management of COPD and its association with out-of-pocket (OOP) expenditures, it is important to examine how insurance coverage impacts health-related financial burden among patients receiving treatment for COPD.

OBJECTIVES: To describe OOP healthcare expenditures and to determine if OOP expenditures differ by insurance status among subjects with COPD.

METHODS: Adults (≥18 years) with COPD diagnosis who received COPD services at least once in 2012 were included from the 2012 Medical Expenditure Panel Survey (MEPS) data. The dependent variable was annual OOP expenditures and the independent variable was health insurance type. Descriptive statistics, regression for complex sampling design, and Two-Part Model (TPM) analyses were conducted using SAS and STATA.

RESULTS: Subjects’ (N=587 unweighted; N=5,982,925 weighted) total mean±SE OOP COPD expenditures were $236.2±45.1. TPM analysis showed that there was no difference in having OOP expenditures versus no OOP expenditures by insurance status. Among those with OOP expenditures, compared to subjects with private insurance, those with no insurance had 5.7 times higher OOP expenditures (OR; 95% CI: 5.6996 (2.3203, 14.0090)). Inpatient OOP expenditures and ambulatory care visit OOP expenditures were significantly higher for subjects with no insurance ($4,631.7±1,753.7 and $77.9±14.0, respectively) than for those privately insured ($186.9±167.8 and $35.0±5.3, respectively). Regarding prescription expenditures, there were no differences in OOP expenditures and insurance status.

CONCLUSIONS: Compared to insured subjects, those with no insurance had higher OOP expenditures for COPD-related total, inpatient and ambulatory care services and similar OOP expenditures for prescriptions. Reducing the OOP prescription costs among the uninsured may result in better disease management and cost-savings due to reduced inpatient and outpatient expenditures.
PAYER PERSPECTIVES ON PREEMPTIVE PHARMACOGENETIC TESTING
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Background: Pharmacogenetic testing is the identification of genetic variants to determine response phenotypes in individuals to tailor treatments and dosing of pharmaceuticals. This can be divided into somatic and germline pharmacogenetics. The former generally refers to genetic mutations in malignant tumors that affect the choice of anticancer agents, while the latter identifies genomic variations that influence alterations in the drug's pharmacokinetics. Most germline testing has occurred in a reactive/point-of-care method. This means that a diagnosis is made, the test is ordered, the results are retrieved, and the clinical decision is made. A newer form, preemptive pharmacogenetics, works by testing hundreds to thousands of genetic variants prior to diagnosis with the results being made available in the patient's EHR to guide clinician decision making. Payer coverage and reimbursement for many types of genetic testing, including pharmacogenetics, has been low. Payers cite a lack of demonstrated clinical utility, comparative effectiveness, and cost-effectiveness as the main drivers of this non-payment. However, there has been no research to date on the perspectives of payers toward preemptive pharmacogenetic testing.

Objective: The primary objective and purpose of this research is to investigate the third-party payer perspective on coverage and reimbursement policies for preemptive pharmacogenetic testing through a series of in-depth interviews

Methods: This will be a qualitative study using a screener survey and in-depth semi-structured interviews to answer the research question. The payers will be accessed through a panel provided by Medical Marketing Economics, LLC. The participants will be Medical and Pharmacy Directors at the organization in a decision making capacity. They will represent a variety of plan types and sizes. One screener survey question to assess familiarity with pharmacogenetics will be used as a inclusion/exclusion criteria. Approximately 15 payers will be interviewed.
Objective: The objective of this study was to measure time spent, based on type of activity, by hospital staff pharmacists in a setting utilizing computerized provider order entry (CPOE) and a setting in which CPOE was not utilized. Then, using the data collected, complete a comparative analysis of productivity and time usage between CPOE and non-CPOE settings.

Methods: Staff pharmacists were observed in two community teaching hospitals within the same healthcare system in Houston, TX - one CPOE (252 beds) and one non-CPOE (274 beds). A pre-validated instrument was used to record 37 different pharmacist tasks which were sorted into six different activity categories. Time spent by pharmacists on different activity categories were compared between the CPOE and non-CPOE settings. The Wilcoxon Two-Sample Test was used to test the significance of difference between the two samples for each of the six activity categories. Data analysis was completed using SAS version 9.3, with significance set at 0.05.

Results: A total of 77 hours of data were collected for each the CPOE pharmacy setting and for the non-CPOE pharmacy setting. The amount of time spent by pharmacists at the different settings were (mean number of minutes per hour ± SD CPOE, non-CPOE, p-value), distributive tasks (order entry): (17.6 ± 10.7, 29.6 ± 11.3, p<0.05); distributive tasks (order verification): (14.0 ± 8.6, 0.9 ± 1.8, p<0.05); all other distributive tasks: (16.0 ± 8.3, 13.8 ± 10.0, p<0.05); clinical (5.0 ± 4.2, 6.6± 6.4, p=0.41); administrative (5.4 ± 5.9, 5.6 ± 6.8, p=0.83), and miscellaneous (2.0 ± 2.9, 3.6 ± 4.3, p<0.05).

Conclusions: At the CPOE pharmacy less time was spent on order entry and more time was spent on order verification and distributive tasks. The presence of a CPOE system could have a dramatic effect on pharmacist workflow productivity and time spent on certain activities.
PREVALENCE AND ECONOMIC IMPACT OF COMORBID DEPRESSION AMONG HOSPITALIZED PATIENTS WITH CARDIAC EVENTS
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QUALITY OF LIFE IN PATIENTS WITH CUTANEOUS LUPUS ERYTHEMATOSUS
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Introduction: Cutaneous Lupus Erythematosus (CLE) is a chronic dermatologic autoimmune disease marked by photosensitive lesions that can vary in appearance depending on the subtype. The etiology of CLE is not fully understood, but it is speculated that genetic, hormonal, immunological abnormalities (e.g., cytokine, B-cells and T-cells dysfunction) and environmental factors (especially ultraviolet irradiation) might play a role. While dermatologic diseases, in general, have been shown to have a significant impact on quality of life, there is limited information as to the extent in which CLE affects a patient’s quality of life. Studies have reported that patients with dermatologic diseases are not only distressed about the disease itself but also how they are perceived by others as a result of their appearance. Consequently, dermatologic patients may experience higher rates of mental health conditions, especially anxiety and depression, with a prevalence ranging from approximately 20-40%, compared to 11-30% seen in the general population.

Rationale: CLE is a condition that can be managed but not cured; therefore patients are expected to visit their physicians regularly and are often placed on medications for a long period of time, many of which have serious side effects. As a result of the severity of the disease, CLE would have a significant and distinct impact on the quality of life of such patients. Given the impact of CLE on the quality of life of patients and the increasing prominence of patients’ involvement in their own care, it is important to assess outcomes from the patients’ perspectives.

Method: This was a qualitative study using a purposive sampling of CLE patients from an outpatient, University dermatology clinic in Dallas, TX. Three focus group (FG) sessions were conducted in spring 2016 with six to ten participants per session. Using a moderator guide, participants were asked open-ended questions to assess how CLE affects their overall quality of life (QoL), including their work life, daily activities, social life, personal relationships, and leisure activities as well as to determine the impact on photosensitivity, alopecia, mental health, and treatment outcomes.

The FGs were audio-recorded with notetaking. The recordings were transcribed, and the transcripts were content-analyzed to identify emerging themes related to overall QoL. Using Braun and Clarke’s approach for content analysis, categories were created and defined by counting the frequency of similar words and phrases throughout the transcript. The themes generated from this phase will be used to populate a CLE-specific QoL measure.

Results: Eleven themes emerged as important to patients with CLE: physical effects; mental effects; social effects; medication effects; disease effects; coping mechanisms; social dynamics; diagnosis odyssey; cutaneous effect/body image; photosensitivity; and unmet needs. Most patients reported a negative impact of CLE on their lives; however, some patients reported some positive aspects to having CLE.

Conclusion: Results from this study will provide physicians and other healthcare practitioners a better understanding of the impact of disease burden on QoL of CLE patients.
QUALITY OF CARE AND HEALTH CARE UTILIZATION AMONG CHILDREN AND YOUNG ADULTS USING ANTI-PYSCHOTICS ENROLLED IN MISSISSIPPI MEDICAID

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BACKGROUND: In March 2015, the Office of the Inspector General (OIG) issued a report concerning the use of antipsychotics. The OIG highlighted several quality measurement areas including indications for use, appropriate dosage and duration of use, monitoring, polypharmacy, side-effects and age appropriate use.

OBJECTIVES: The purpose of this project was identifying quality measures concerning these seven areas and testing measure performance in the eligible Mississippi Medicaid population.

METHODS: A retrospective analysis during the 2014 calendar year was conducted using Mississippi Medicaid administrative claims and beneficiary eligibility data. Individuals below age 21 years with at least one month of eligibility in Medicaid during the study period and antipsychotic prescription claims were included. Quality measures calculated included metabolic screening for new and existing antipsychotic prescriptions, availability of a supporting diagnosis, and antipsychotic polypharmacy. Measure specifications proposed by the National Collaborative for Innovation in Quality Measurement and developed by HEDIS were used to address OIG identified areas identified.

RESULTS: A total of 19,009 beneficiaries (51% female, 49% male, 54% African Americans, 44% Caucasians) were identified as taking antipsychotics during the study period. Overall, 67% of beneficiaries did not have a primary indication for antipsychotic use. Only 14.1% had one or more follow-up visits, 3% were using two or more antipsychotics concurrently, 14.1% had baseline metabolic screening performed prior to filling antipsychotic prescriptions, only 14.9% had both glucose and lipid levels tests performed during the year in which antipsychotics were prescribed. Only 0.11% of children < age 5 years had antipsychotic medications prescribed.

CONCLUSIONS: Study results indicate considerable opportunity for improvement in quality of care identified in the OIG report. Several challenges exist in this area include health care access, continuity of care, and awareness of quality measures amongst providers.
EXTENDED TECHNOLOGY ACCEPTANCE MODEL FOR PREDICTING INDIVIDUALS’ INTENTION TO USE SMARTPHONE FITNESS APPLICATIONS.

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Background: mHealth (Mobile Health) which includes the use of broad range of mobile technologies, is an integral part of ‘Do it yourself’ healthcare. There are currently several fitness applications for mobile devices on the market which help individuals in monitoring their fitness activities. However, it is essential to know which factors influence individuals’ decision to use these fitness applications and whether these applications play a role in improving fitness levels. For the purpose of this study, fitness applications are described as downloadable applications for a smartphone which intend to help in exercise.

Objective: To predict the individuals’ intention to use smartphone fitness applications, by using Extended Technology Acceptance Model (ETAM) and to determine if there is a significant difference in Body Mass Index (BMI) among users and non-users of smartphone fitness applications.

Methods: Design: Prospective cross-sectional study. Setting: Various locations in Houston, TX in 2015.

Participants: Convenience sampling of 104 adults in Houston area. Intervention: A pre-validated survey containing 31 items, evaluated on a 5-point Likert scale (1-Strongly Disagree to 5-Strongly Agree), which measured the ETAM variables. Main Outcome Measures: Predictors of intention to use smartphone fitness applications for individuals owning smartphones.

Results: Overall, the ETAM constructs showed fairly good reliability. Stepwise regression analysis showed that ETAM explained 58% of the variance in individuals’ intention to use smartphone fitness applications for individuals owning smartphones. Attitude towards use ($\beta=0.536$, $P<0.0001$), perceived ease of use ($\beta=0.287$, $P<0.0001$) and image ($\beta=0.141$, $P<0.05$) were significant predictors of individuals’ intention to use smartphone fitness applications. There was no significant difference observed in Body Mass Index (BMI) among users and non-users of smartphone fitness applications.

Conclusion: ETAM was useful in predicting individuals’ intention to use smartphone fitness applications.
CLINICAL AND ECONOMIC BURDEN OF MENTAL DISORDERS IN CHILDREN WITH CHRONIC PHYSICAL CONDITIONS IN THE UNITED STATES
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BACKGROUND: The incremental health and economic burden of mental health disorders among children with chronic physical conditions haven’t been well-studied. OBJECTIVES: We assessed the association between mental health disorders and chronic physical conditions. We also assessed if having mental disorders are associated with increased healthcare costs in children with chronic physical conditions.

METHODS: Children 5-17 with at least one chronic physical condition were selected from pooled 2008-2013 Medical Expenditure Panel Survey. Chronic physical conditions and mental disorders were identified using ICD-9-CM and/or Clinical Classification Codes. Multivariate logistic regressions were used to assess the relationship between mental disorders and chronic physical conditions in children. Generalized linear models with gamma distribution and log link were used to quantify the incremental costs associated with mental disorders among children with chronic physical conditions.

RESULTS: 42,130 children were identified, of which 4,640 had at least one chronic physical condition. After controlling for sociodemographic and access to care characteristics, we found that children with chronic physical conditions were 62% more likely to have mental health disorders as compared to children without physical conditions (OR: 1.62; 95% CI:1.38-1.91). Having mental disorders was a significant predictor of total healthcare cost. Among children with chronic physical conditions, mental health disorders resulted in significantly higher total all cause healthcare costs ($2612.28; p
HOSPITALIZATION BURDEN ASSOCIATED WITH CHRONIC INFLAMMATORY 
DEMYELINATING POLYNEUROPATHY IN THE UNITED STATES
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BACKGROUND: Limited information is currently available on the hospitalization burden associated with chronic inflammatory demyelinating polyneuropathy (CIDP), which is a severely disabling neurological condition.

OBJECTIVES: The purpose of this study was to determine the patient, hospital and discharge level characteristics associated with length of stay (LOS), total charges, mortality and receipt of treatment (intravenous immunoglobulin [IVIg] or plasmapheresis [PE] therapy) during CIDP hospitalization.

METHODS: Discharges of patients with CIDP age \( \geq 18 \) years were identified from the 2010-2012 pooled Healthcare Cost and Utilization Project (HCUP-NIS) database. CIDP related hospitalizations were matched with 4 control hospitalizations based on age and gender. PROC SURVEYREG was used to determine predictors of LOS and total charges. PROC SURVEYLOGISTIC was used to determine predictors of death and CIDP treatment (IVIg or PE). Study analyses were performed using SAS 9.4.

RESULTS: There were 31,451 (weighted) records of CIDP hospitalization in US from 2010-2012. A higher proportion of CIDP related hospitalizations occurred in urban (93%), large (70%), and private nonprofit (79.5%) hospitals, respectively. Roughly 18% discharge visits involved receipt of IVIg or PE treatment. CIDP related hospitalizations were associated with 50% longer LOS and higher total charges as compared to matched non CIDP related hospitalizations. Mean hospital charge associated with CIDP related hospitalization was $68,231. The total economic burden of CIDP hospitalizations was $2.1 billion from 2010-2012. Patient's age, hospital bed size, location and teaching status, discharge to long term care or skilled nursing facilities, presence of complications, administration of IVIG or PE therapy, higher diagnosis and procedures on records emerged significant predictors of hospitalization outcomes among discharges with CIDP diagnosis.

CONCLUSIONS: Although CIDP is a rare disease, it is associated with significant hospitalization burden.