with in-hospital mortality (odds ratio 1.53, 95% confidence interval [CI] 0.37, 6.29; p = 0.55). There was no difference in discharge disposition or time to hospital readmission by corticosteroid treatment. There was a possible increase in time to death following discharge in patients receiving corticosteroids (Figure). DISCUSSION/ SIGNIFICANCE OF IMPACT: Conclusions: This study suggests that treatment of acute exacerbations of interstitial lung disease with corticosteroids does not improve short-term outcomes, including in-hospital mortality, all-cause non-elective re-hospitalization or death within 6 months of discharge. Further research in larger cohorts is needed to more definitively assess this relationship.

3371

The Devil is in the Details: Unbalanced Gains in Healthcare Access and Affordability in the Health Insurance Exchanges

Uriel Kim[1], Johnie Rose and Siran Koroukian
[1]Case Western Reserve University

OBJECTIVES/SPECIFIC AIMS: Evaluate how access and affordability has changed before and after the implementation HIEs in three subpopulations. The subpopulations are individuals who are currently insured through the HIE but were previously: 1. Insured through Employment-based insurance (PEBI subpopulation) 2. Insured through Private Insurance (PPI subpopulation) and 3. Uninsured (PU subpopulation). The three access and affordability measures are: Outcome measure 1. Did not fill a prescription in the past year due to cost Outcome measure 2. Could not get needed medical exam in the past year due to cost and Outcome measure 3. Had problems paying medical bills in the past year. METHODS/ STUDY POPULATION: We analyzed the de-identified public use data from the 2012 and 2015 Ohio Medicaid Assessment Survey (OMAS). Sponsored by the Ohio Department of Medicaid, Ohio Department of Health, and the Ohio State University, the OMAS is a representative cross-sectional survey of non-institutionalized Ohio residents, regardless of their Medicaid status. In order to "longitudinalize" the 2012 and 2015 cross-sectional data of the OMAS, we employed a propensity score-based approach. We started with the 2015 OMAS, and carefully characterized each of the PEBI, PPI, and PU subpopulations along 17 demographic, health utilization, health behavior, and health status covariates using a propensity score model. Then, we identified controls for the three subpopulations within the 2012 OMAS data using the propensity scores. Finally, we estimated the odds ratios for the three outcome measures between 2012 and 2015. RESULTS/ANTICIPATED RESULTS: In 2015 there were approximately 201,381 adults (unweighted count = 996) who were insured through the HIE in Ohio. Of those individuals, 17.7% fell into the PEBI subpopulation, 17.6% fell into the PPI subpopulation, and 53.3% fell into the PU subpopulation; the balance of the respondents (11.4%) reported previously having Medicaid, or "Other" insurance. There are several key differences in the covariates at baseline between the three subpopulations. In general, the PU subpopulation tended to younger, more minority, more socioeconomically disadvantaged, and more likely to not have a primary care provider compared to both the PEBI and PPI subpopulations. In the 2012 data, we were able to identify 170 controls for the PEBI subpopulation, 167 controls for the PPI subpopulation, and 516 controls for the PU subpopulation. Compared to 2012, in 2016 (after the implementation of the HIEs):. Outcome measure 1: The PEBI subpopulation was more likely to report not filling a prescription in the past year due to cost (there were no significant changes in the PPI or PU subpopulations). Outcome measure 2: The PEBI subpopulation was more likely to report not getting a needed medical exam or medical supplies in the past year due to cost. The PPI subpopulation was less likely to report not getting a needed medical exam or medical supplies in the past year due to cost. There were no significant changes for the PU subpopulation for this outcome measure. Outcome measure 3: There were no changes in the "had problems paying medical bill in the past year" outcome across the three subpopulations. DISCUSSION/SIGNIFICANCE OF IMPACT: This is among the most detailed studies of health insurance exchanges known to the investigators. Analyzing outcomes at the subpopulation level illustrates that there have been unbalanced gains in access and affordability as a result of the HIEs. In general, those who were previously insured through employer-based insurance saw their access and affordability decrease; those previously insured through private insurance saw modest increases to access and affordability; and perhaps most surprising, those that were previously uninsured saw no changes to their access and affordability. Future studies will incorporate 2017 OMAS data (when it becomes available) to see if these trends persist over time. During this time of rapid health systems and health policy change, our study adds an important contribution to the discussion surrounding how to best deliver highly effective and efficient health care.

3232

Translational Science 2019

Paul C Adjei[1], Michael R. Jordan, Jennifer Chow and Janis Breeze
[1]Tufts Medical Center

OBJECTIVES/SPECIFIC AIMS: We hypothesize that VL testing varies by geographic sub-region, country, age, gender, mode of transmission, year of diagnosis, and country of origin; and also that a higher prevalence of VL testing may be associated with higher prevalence of population-level VL suppression. Our primary aim is to determine country- and regional-level factors that are associated with viral load testing amongst HIV patients. Our secondary aim is to explore the association between prevalence of viral load testing and viral load suppression at the population level. METHODS/ STUDY POPULATION: This is a retrospective analysis of de-identified individual-level data reported to the European Surveillance System (TESSy). The TESSy is a database of communicable diseases (including HIV) for the ECDC and WHO European Regional Office. It captures data from 31 European Union/European Economic Area (EU/EEA) countries and 23 non-EU/EEA countries. Stored data is from year 2000. TESSy is used for data analysis and production of outputs for public health action. The patient cohort include adults older 18 years, whose last clinic attendance was reported in 2014 or later, or whose viral load test was reported in the year of the visit or the year before the year of their last reported clinic attendance. Patient demographic data include age, sex, mode of transmission, country of origin (migrants), country of diagnosis, geographic region, last clinic attendance, viral load and therapy status. Geographic region will be categorized into East, West and Centre as per WHO guidelines. Countries will be categorized and analyzed according to their European Union (EU)-, European Economic Area (EEA)- and income (GDP)-status, using current World Bank and International Monetary Fund (IMF) guidelines. All statistical analysis will be performed in R-Studio and R i386 3.0.2. Missing data will be characterized in terms of quantity (how much is missing) and pattern (random versus non-random) and impact on covariates to be tested. Multiple data imputations would be used in cases where

missing data is found to be at random. Data from external sources like UNAIDS, World Bank and IMF will also be used for comparison and validation of TESSy data for imputation of missing data. Continuous variables will be analyzed through appropriate parametric and non-parametric tests while categorical variables will be analyzed through methods of proportion. Multivariate logistic regression methods will be used to explore the associations between VL testing and VL suppression separately with age, sex, year of diagnosis, country of origin (migrants), mode of transmission, in the total population, then at country- and regional-level. The same associations will be explored using a country's EU and EEA status (EU versus EEA versus non-EU/EEA), and income status (high versus upper middle versus lower middle versus low). DISCUSSION/ SIGNIFICANCE OF IMPACT: Even though this is a retrospective analysis of a database with likely significant missing data that may affect analysis of data and interpretation of results, our study will impact all levels of HIV policy across Europe. The strengths of this study likely outweigh the limitation imposed by missing data and include potential regional-, country- and demographic-specific public health, epidemiologic and ART program policy initiatives. Also our analysis of pattern of missing data may inform a more efficient and meaningful data collection and input into TESSy database.

3142

U.S. Counties with High Opioid-Overdose Mortality and Low Capacity to Deliver Medications for Opioid Use Disorder: an Observational Study

Rebecca Haffajee[1], Lewei Allison Lin, M.D., M.S,
Amy S.B. Bohnert, Ph.D., M.H.S. and Jason E. Goldstick, Ph.D.
[1]University of Michigan School of Medicine

OBJECTIVES/SPECIFIC AIMS: To identify characteristics of counties with persistently high opioid-overdose rates and low capacity to deliver medications for OUD (MOUD). METHODS/ STUDY POPULATION: Setting: County-level opioid-overdose death data, 2013-2016, and 2017 publicly-available treatment provider data for MOUD: buprenorphine-waivered providers, opioid treatment programs (OTPs), and extended-release naltrexone providers. Participants: Populations in 3,142 U.S. counties. 24,851 buprenorphine-waivered providers; 1,517 OTPs; and 5,222 extended-release naltrexone providers. Measurements: The outcome variable, "opioid high-risk county", was a binary indicator of high (above average) opioid-overdose rates with low (below median) MOUD availability rates. We used spatial logistic regression models to determine correlates of being a high-risk county. RESULTS/ ANTICIPATED RESULTS: 46.4% of all counties, and 71.2% of rural counties, lacked a publicly-available MOUD provider in 2017. In adjusted models, rural counties had 53% greater odds of being high-risk than urban counties. Counties in the East South Central, West South Central, and South Atlantic divisions had over twice the odds of being high-risk than counties in the West North Central division. Primary care provider density, greater traversability, and a higher proportion of the population under age 25 were all protective against a county being opioid high-risk. DISCUSSION/ SIGNIFICANCE OF IMPACT: Counties with both low MOUD provider availability and high opioid-overdose death rates are significantly more likely to be rural, have less primary care providers per capita, and in the southern regions. Strategies to increase MOUD must account for these factors.

Team Science

3359

A TL1 Team Approach to Clinician Perspectives on Hoarding Disorder

Rebecca R Henderson[1], Danielle Laine Cooke[1], Christian Archer[1], Joseph P. McNamara[1], Pete Collings[1] and Carol Mathews[1]
[1]University Of Florida

OBJECTIVES/SPECIFIC AIMS: By combining clinical knowledge of hoarding disorder (HD) with qualitative methods from cultural anthropology, we hope to build a patient-centered approach that will allow us to better understand the clinician perspectives on patient motivations and explanatory models of individuals with HD, and improve treatment outcomes. We describe the ways that these methodologies are productively merged in this project as a result of TL1 collaboration, and present a preliminary picture of methodological and theoretical issues uncovered as part of this processes. We further describe the analytical methods used for this project, and explore issues raised through the combination of psychological and anthropological data and insights. METHODS/STUDY POPULATION: This study represents an attempt to combine the qualitative methodologies of cultural anthropology with the clinical knowledge of psychology and psychiatry in order to better understand gaps between provider and patient beliefs and knowledge about hoarding disorder. This study will present preliminary methodological issues arising from interviews with hoarding experts. RESULTS/ANTICIPATED RESULTS: This study will discuss preliminary issues including shared language, strengths and limitations of both disciplines, and factors for consideration when combining these disparate methodologies. It will close with recommendations for consideration when moving forward with similar collaborations. DISCUSSION/ SIGNIFICANCE OF IMPACT: This project seeks to unite psychological and social factors that may contribute to the lived experience of individuals with HD in order to better understand the way that HD is manifested. It also unites disparate methodologies to provide us with a more holistic and complete picture of the experience of HD. While HD has been studied within psychiatry, it has never been assessed using the qualitative methods of anthropology. These methods provide the possibility of expanding knowledge about the ways that this disorder is experienced by individuals and their families, and potentially impacted by shared beliefs and cultures. Furthermore, qualitative data of this nature provides a patient perspective on the experience of HD as a psychiatric illness. This patient perspective can be used to better inform treatment, improve patient outcomes, and to allow providers and researchers to gain a fuller understanding of this complex population.

3475

A TL1 Team Approach to CNS-Localized Delivery of Neurotrophic Factors for Treatment of Parkinson's Disease

Adithya Gopinath[1] and Shaheen Farhadi
[1]University Of Florida Clinical and Translational Science Institute

OBJECTIVES/SPECIFIC AIMS: We present an alternative strategy to retain NTFs at an injected CNS tissue site by endowing them with binding affinity for carbohydrates that are abundant on the cell surface and within extracellular matrices. METHODS/STUDY