

strengthen prescribing guidelines and care transition models for patients after critical illness. **OBJECTIVES/GOALS:** The majority of patients in intensive care units (ICU) receive opioids during admission, and up to 25% receive a prescription at discharge. However, transitions of care and prolonged use after discharge remain unknown. We aim to characterize risk factors for prolonged opioid use after an ICU stay. **METHODS/STUDY POPULATION:** A retrospective study using insurance claims from Optum Clinformatics® Data Mart was conducted for opioid-naïve adult patients (18-64 years) with an ICU admission from 2010 to 2019. The primary outcome was new persistent opioid use, defined as a continued prescription fill 91-180 days after discharge, in addition to a fill in the first 90 days. The primary exposure was an opioid fill at discharge. The ICU admission was characterized using the Clinical Classification System from the Agency of Healthcare Research and Quality, based on patients' primary diagnosis code. Diagnoses were combined into 11 groups highlighting the affected organ system/mechanism of injury. Logistic regression evaluated the associations of patient demographic and clinical characteristics with the probability of persistent opioid use. **RESULTS/ANTICIPATED RESULTS:** In this cohort of 90,721 patients discharged from the ICU, 3.3% continued to fill opioids at 6 months. An opioid prescription fill (OR 3.1; 95% CI 2.8 - 3.3) and benzodiazepine prescription fill (OR 1.6; 95% CI 1.4 - 1.8) within 3 days of ICU discharge were each significantly associated with the development of new persistent opioid use. Patient diagnosis groups of Musculoskeletal/Trauma (OR 2.3; 95% CI 2.0 - 2.6), Neoplasms (OR 1.6; 95% CI 1.5 - 1.9), and GI/Hepatobiliary (OR 1.5; 95% CI 1.3 - 1.8) were significantly more likely to develop new persistent use when compared to the Cardiovascular diagnosis group. **DISCUSSION/SIGNIFICANCE OF FINDINGS:** Opioid prescriptions at discharge after an ICU stay increase the odds of prolonged opioid use. These results will inform efforts to strengthen prescribing guidelines and care models after a critical illness. Further work will characterize the trajectory of prescribing and patient exposure to high-risk prescribing after ICU discharge.

52528

### Implementation of Web-Based Patient-Reported Outcome Measures (PROMs) in the Clinical Care of Systemic Lupus Erythematosus (SLE): A Multi-Center Prospective Cohort Study

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**ABSTRACT IMPACT:** The integration of patient-reported outcome measures into clinical care is feasible and can facilitate patient-centered care for individuals with systemic lupus erythematosus. **OBJECTIVES/GOALS:** Patient-reported outcome measures (PROMs) are powerful tools which can facilitate patient-centered care by highlighting individuals' experience of illness. The aim of this study was to assess the feasibility and impact of implementing web-based PROMs in the routine clinical care of outpatients with systemic lupus erythematosus (SLE). **METHODS/STUDY POPULATION:** Outpatients with SLE were enrolled in this longitudinal cohort study at two academic medical centers. Participants completed PROMIS computerized adaptive tests assessing multiple

quality of life domains at enrollment and prior to two consecutive routinely scheduled rheumatology visits using the ArthritisPower research registry mobile or web-based application. Score reports were shared with patients and providers before the visits. Patients and rheumatologists completed post-visit surveys evaluating the utility of PROMs in the clinical encounters. Proportions with confidence intervals were calculated to evaluate survey completion rates and responses. **RESULTS/ANTICIPATED RESULTS:** A total of 105 SLE patients and 16 rheumatologists participated in the study. Subjects completed PROMs in 159 of 184 eligible encounters (86%, 95% CI 81 - 91), including 90% of visit 1's (95% CI 82 - 95) and 82% of visit 2's (95% CI 72 - 90). Patients and rheumatologists found that PROMs were useful (91% and 83% of encounters respectively) and improved communication (86% and 72%). Rheumatologists reported that PROMs impacted patient management in 51% of visits, primarily by guiding conversations (84%), but also by influencing medication changes (15%) and prompting referrals (10%). There was no statistically significant difference in visit length before (mean=19.5 min) and after (mean=20.4 min) implementation of PROMs (p=0.52). **DISCUSSION/SIGNIFICANCE OF FINDINGS:** The remote capture and integration of web-based PROMs into clinical care was feasible in a diverse cohort of SLE outpatients. PROMs were useful to SLE patients and rheumatologists and promoted patient-centered care by facilitating communication.

59473

### Clinical and demographic predictors of the need for pharmacotherapy in Neonatal Abstinence Syndrome (NAS)

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**ABSTRACT IMPACT:** This work has the potential to help clinicians decide which infants exposed to in utero opioids, will need to be treated early or can be discharged home early based on their risk, thus reducing prolonged hospitalization. **OBJECTIVES/GOALS:** To develop and validate a prediction model with inclusion of clinical and demographic risk factors to identify infants with NAS likely to need pharmacotherapy. **METHODS/STUDY POPULATION:** A pooled cohort of 761 infants from 5 different studies including 2 trials and 3 observational cohorts will be used to develop the model. All infants >than or equal to 37 weeks gestational age born to mothers with history of OUD will be included. Infants with congenital disorders and severe medical and surgical illnesses will be excluded. Multivariable mixed effects logistic regression modeling will be performed to predict the need for pharmacologic treatment for NAS. Candidate variables will be included based on clinical knowledge and previously published data. Model performance will be evaluated by measuring discrimination using Area Under the Curve (AUC) statistics and calibration. Model will be internally validated using boot strap validation. **RESULTS/ANTICIPATED RESULTS:** Pending data analysis. **DISCUSSION/SIGNIFICANCE OF FINDINGS:** Opioid Use Disorder in pregnancy has resulted in concurrent rise in NAS incidence. NAS affects opioid exposed infants variably and accurate prediction of its severity and need for treatment remains elusive. Known clinical and demographic factors can predict the need for NAS therapy in opioid exposed infants, aiding clinical decision making.