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Comparison of Emergency Department 14-Day Recidivism Rates in Emergency Behavioral Health Patients: EmPath Versus Standard ED Care

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at the hospital and where he was earlier in the day. After initial evaluation it became clear he had no recollection of the past 3 months. On chart review, the patient previously presented to a separate hospital two weeks prior with admission for sepsis, rhabdomyolysis, acute renal failure requiring HD, and brachial plexus injury. Prior to that admission, he was found down at home after ingesting cocaine and MDMA. Notably, staff at that facility reported he was in clear mentation and had no signs of memory loss or confusion prior to discharge. Further discussion at the current ED visit resulted in a staff member stating the patient recognized the term schizophrenia and the patient agreed that he had been previously diagnosed. He was admitted to the inpatient psychiatric unit for further evaluation of an acute schizophrenia exacerbation. He was unable to provide collateral nor did he have any recollection of prior hospitalizations, including the recent admission two weeks prior. His MoCA on admission was 8/30. Upon discussion over the next few days, the patient expressed frustration at his memory loss but was able to say his last well-formed memory was finding some cocaine in a house I was cleaning and using it. Initial CT without contrast showed no evidence of acute territorial infarct, intracranial hemorrhage, or mass lesion. MRI showed diffuse and heterogenous hyperintensities throughout the white matter in both cerebral hemispheres. This finding raised suspicion for a toxic component to the patient's memory loss. He received an extensive medical workup evaluating metabolic and clinical manifestations of toxic leukoencephalopathy. Over the course of one week, he showed slight improvement in memory and cognition. His MoCA improved to and peaked at 14/30. As mentation improved, he denied any previous psychiatric illness and did not recall stating he has schizophrenia. At this time, he is continuing to be evaluated for mild clinical improvement and counseled on a new baseline for memory retention and cognition in the setting of delayed toxic leukoencephalopathy due to substance use. This case illustrates the benefit in an expanded differential diagnosis in the setting of confusion and bizarre behavior. Although toxic leukoencephalopathy is rare and the understanding of pathophysiology is incomplete, its prominence is expanding in a society with increasing access to severely leukotoxic agents.

## 10 Risk Assessment Clinical Pathway

*Amber Pastusek, Sylvia Muzquiz, Luming Li*

A comprehensive risk assessment should encompass suicide and violence risk factors, protective factors, and mitigating factors to help determine the level of risk and subsequently drive clinical care to arrive at a safe treatment plan. The psychiatric emergency setting requires a thoughtful suicide and violence risk assessment by the clinical team. Using a variety of published resources coupled with input from the clinical team (psychiatrists,

nurses, social services), a suicide and violence risk assessment tool was created in the Electronic Health Record (EHR) for implementation across all treatment settings to be used by any clinically trained staff (psychiatrists, nurses, social services). Depending on the risk assessment findings, clinical staff is then able to determine the next steps in the clinical pathway to best support the patient, treatment plan with specific focus on least restrictive interventions. There are several benefits to establishing a risk assessment clinical care pathway. First and foremost, the patient is not subjected to unnecessary hospitalization(s) that can be traumatic and overall damaging to his/her treatment. The risk assessment accounts for all contributing factors along with protective and mitigating factors to provide the best care for that patient at that moment in time. Next steps involve assessing the level of acute and chronic risk (ie. Low, moderate, high) to determine the clinical care formulation. High risk levels and/or Red flags require an enhanced response that may involve considering emergency evaluation for psychiatric hospitalization. However, the risk formulation for low and moderate results may involve performing safety plans, psychoeducation, outpatient therapy, and/or more intensive monitoring with Intensive Outpatient Programs (IOP) or Partial Hospitalization options. The risk assessment yielding chronic risk levels focuses on long term treatment options to work on suicide focused strategies, engage the patient in treatment, and providing a variety of resources to support that patient. Moreover, a standardized risk assessment tool and clinical care pathway can trigger a therapeutic and individualized response to patients presenting in crisis focusing on the recovery model. By making this tool and clinical pathway available to all clinical team members (ie. Psychiatrists, nurses, social services), more patients can be served with appropriate determinations on the next level of care. In addition, standardizing the risk assessment and clinical care pathway provides consistent reliable care that aligns with Safe, Timely, Effective, Efficient, Equitable, Patient-centered (STEEEP) principles. While the psychiatric emergency setting is one touchpoint along the continuum of care, the risk assessment and clinical pathway is applicable to any clinical setting (ie. Primary care, OB/Gyn, etc.) when indicated. Lastly, evaluation of the systems of care available at the community level opens up a vast array of resources available for patients that can have a positive impact on patient outcomes, population health, and reduction in healthcare costs.

## 11 Comparison of Emergency Department 14-Day Recidivism Rates in Emergency Behavioral Health Patients: EmPath Versus Standard ED Care

*Austin MacKenzie, Craig Bilbrey, Stephanie Mullennix*

**Introduction:** Emergency Psychiatric Assessment, Treatment, and Healing (EmPATH) units are an emerging and

innovative care model designed to treat patients with psychiatric emergencies in an acute hospital setting while prioritizing rapid stabilization of the acute crisis in a calm, dignified, and safe environment. They have been found to reduce the cost of care, patient boarding, and psychiatric admissions. Another potential quality marker to evaluate the impact of EmPATH units and improve processes for implementing EmPATH care in Emergency Department (ED) settings is the rate of patient return to the ED, known as ED recidivism. This study analyzes the difference in 14-day ED recidivism rates for ED patients with an EmPATH Sensitive Primary Diagnosis (ESPD) ICD 10 code who were dispositioned after standard care in the ED versus those who were dispositioned after treatment in the EmPATH unit. We hypothesize that patients admitted to the EmPATH unit will have a lower recidivism rate than patients dispositioned following ED management.

**Methods:** For this project, an ESPD includes Adjustment Disorders, Anxiety Disorders, Attention Deficit/Conduct Disorders, Impulse Control Disorders, Mood [Affective] Disorders, Nervousness, Personality Disorders, Schizophrenia and Other Psychosis, Suicide, and Intentional Self-Injury. This study retrospectively analyzes 14-day recidivism rates for adult patients in two relevant ED populations: all ED patients with an ESPD admitted to the EmPATH unit and those not admitted to the EmPATH unit. The 4-bed EmPATH unit of the single study site is adjacent to an adult ED of an urban tertiary care center with an annual patient volume of 105,000 visits. Analytics were processed from data securely stored within d2i, a third-party database that uses the business objects platform. Statistical analysis of recidivism rates was performed using a two-proportion Z-test. Visits primarily related to alcohol use disorder were excluded. 13 months of data were analyzed from July 2021 through July 2022.

**Results:** During this period, 622 patients with an ESPD were dispositioned from the EmPATH unit, and 2447 patients with an ESPD were dispositioned from the ED directly. 100 patients were dispositioned from the EmPATH unit and 526 were dispositioned following emergency department management and returned to the emergency department within 14 days. Patients dispositioned from the EmPATH unit had a 14-day ED recidivism rate of 16.08% and ED patients with an ESPD not admitted to the EmPATH unit had a 14-day ED recidivism rate of 21.50%, 95% CIs [13.19%, 18.96%] and [19.87%, 23.12%]. Patients dispositioned from the EmPATH unit during this period had a statistically significantly lower 14-day ED recidivism rate than patients dispositioned following emergency department management,  $z = 2.94$ ,  $p = 0.003$ .

**Conclusion:** ED patients admitted to the EmPATH unit had lower ED recidivism rates than those not admitted to the EmPATH unit. These findings suggest an additional metric that may be useful in quality improvement processes related to management of EmPATH units. It also suggests an additional benefit of implementation of EmPATH units with respect to cost

and patient-centered outcomes. However, additional research in this area is needed.

## 12 Acute Agitation Management in Patients with Schizophrenia or Bipolar Disorder in Emergency Departments in the United States - A Retrospective Chart Review

*Mae Kwong, Sonja Hokett, Marc Martel, Rebecca C. Rossom, Gary Vilke, Michael P. Wilson*

**Introduction:** Access to behavioral health care can be limited, leaving patients with mental illness few options. Oftentimes, patients must seek care at medical emergency departments (ED) which may not be ideally designed to manage the needs of patients with mental illness. Over half of psychiatric ED visits are associated with agitation and nearly 50% of patients need medication. Therefore, appropriate management of uncontrolled agitation is important to avoid further escalation. When de-escalation techniques are unsuccessful, medication is typically used to acutely manage agitation. The objective of this study was to understand how patients with schizophrenia or bipolar disorder with agitation are managed in the ED setting.

**Methods:** Using best practices for retrospective reviews, adult patients (aged 18-75) with schizophrenia and related disorders or bipolar disorders who presented to the ED with acute agitation were identified using EPIC electronic health records across four US hospitals. Qualifying records were identified for visits between January 2019 and December 2020, and segregated into two cohorts: individuals with schizophrenia, individuals with bipolar disorder. Data abstracted included medications used to acutely manage agitation, including route of administration; time to certain care points from admission through discharge disposition; psychiatric consultation if requested; and physical restraint use. Descriptive statistics were utilized.

**Results:** Data on 202 patients were extracted, including 121 (60%) individuals with schizophrenia and 81 (40%) individuals with bipolar disorder. The median patient age was 38 years, and most were male (58%). Diagnosis at the time of presentation to the ED included schizophrenia and related disorders (38%), bipolar disorder (27%), other diagnosis (17%), and 18% had a missing diagnosis. The accompanying conditions were agitation (54%), agitation including intoxication (19%), or other (13%). For both cohorts, the most commonly administered medications were lorazepam intramuscular (IM) injection (20%), haloperidol lactate IM injection (17%), olanzapine IM injection (17%), lorazepam oral tablet (16%), and olanzapine oral disintegrating tablet (15%). The differences in elapsed times from presentation to ED to certain care points between the schizophrenia and the bipolar disorder cohort were not clinically meaningful. Overall, the median time that elapsed between presentation