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Creating Elasticity and Improving Handoffs Increases Throughput on an Emergency Psychiatry Service

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# 9th Annual National Update on Behavioral Emergencies Conference (NUBE) in Las Vegas, Nevada (December 12-14, 2018)

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**Results:** We will present the consensus-building process and multidisciplinary group formation used at our institution to develop standardized tools, resources, a clinical protocol and a clinical practice guideline. This includes a review of our value stream map as part of incorporating LEAN methodology in our process. We will review current evidence in SSRD practice, including data gathered from a statewide survey on practice. We will share our clinical protocol that outlines a detailed approach to suspect and confirm diagnoses of SSRD starting in the ED setting, as well as principles and contents from an interdisciplinary, hospital-wide clinical practice guideline with several associated clinical resources for practical application of the practice guideline and protocol.

**Conclusion:** Our institutional and statewide data align closely with existing evidence that indicates SSRDs are common, that providers, both medical and psychiatric, have little training or education on these conditions, that these conditions often present in emergent settings, and that patients and families often seek an overly physical conceptualization to their symptoms that is devoid of mental health involvement, which often leads to unnecessary and significant healthcare utilization. Initial results from our institutional approach, resulting in consensus-based practice guidelines, protocol and resources, suggest a model that can be used in ED and inpatient settings to address the needs of this pediatric population.

## 3 Pediatric Patients with Behavioral Emergencies: Who's Coming in and What Happens While They're Here?

AR Sanchez, J Sterris, EZ Shoemaker/ Keck School of Medicine of the University of Southern California, Los Angeles, California

**Introduction:** Children and adolescents evaluated in the emergency department (ED) represent a vulnerable population, especially when presenting for psychiatric symptoms. For these patients the ED environment may be stressful and lacking in needed resources. Data describing children seen within the ED are currently limited; this study aims to describe the pediatric patient population treated for mental health concerns within one ED, which may promote better-tailored treatment and support resources in the future.

**Methods:** The study describes 339 visits generated over two months in 2017 at LAC+USC Medical Center. We reviewed charts to determine each child's stated age and gender, as well as whether the patient belonged to one or more vulnerable subpopulations. The factors of interest included involvement with the social services and legal systems, history of psychological trauma, diagnoses of post-traumatic stress disorder (PTSD) or autism spectrum disorder (ASD), and whether the patient required a "behavioral code" during his or her visit.

**Results:** The study determined that 76.1% of the charts included at least one risk factor assessed during our review. Males were more likely than females to present by the age of 11, while the opposite was true for patients age 12-17. We also determined that 38% of patients had been involved with child protective services, or a regional center (system for individuals with developmental disabilities), or the juvenile justice system, and that 5.6% were involved with multiple systems. Two hundred twenty-five patients had experienced psychological trauma, with 30 patients carrying an official diagnosis of PTSD. Of behavior codes called, 23% were for ASD patients, with these patients being far more likely to display dangerous behaviors in the ED compared with neurotypical children.

**Conclusion:** This study demonstrates that a majority of children evaluated in our ED for psychiatric concerns also belonged to at least one vulnerable subpopulation. Especially striking was that behavioral codes were far more likely to be called for ASD patients than neurotypical patients, implying that EDs that work with this population may benefit from extra training in preventing and managing agitated behavior in children with ASD.

## 4 Creating Elasticity and Improving Handoffs Increases Throughput on an Emergency Psychiatry Service

DJ Fein/ University Medical Center-New Orleans, Louisiana

**Introduction:** As the population of New Orleans continues to increase, psychiatric services at its main safety-net hospital, the relatively new University Medical Center New Orleans (UMCNO), have had to increase with it. At UMCNO, psychiatric patients in the emergency department (ED) are ideally managed in the behavioral health emergency room (BHER) until either admission, transfer, or discharge. The BHER holds 26 beds, but staffing limitations prevent all 26 from being open continuously. Historically, there are fewer discharges from inpatient psychiatric units citywide on weekends, which then causes overflow of the BHER into the main ED and slows throughput throughout the hospital. Because of this, elasticity in the system and effective reassessments by the emergency psychiatry consult service are key to minimizing lengths of stay and saturation events.

**Methods:** In April 2018, efforts were undertaken to create more elasticity in the BHER as well as more effective handoffs to easily identify what is needed for each patient to ensure a safe discharge. Changes included the following: actively anticipating the need to expand to 26 beds starting Sunday evening; creating a mindset of "continuously seeking an inpatient bed" during peak times; and using the electronic health record (EHR) for handoffs between providers. Lengths of stay (LOS) for patients in the BHER as well as hours on psychiatric saturation were tracked monthly before and after the changes were made, as were the

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total number of emergency psychiatry consults, discharge rates, and transfer rates.

**Results:** The number of consults per day has been increasing by about 13.8% a month over the last few years and is now around 16-17 a day. The service discharges about 45% of the patients consulted to us; and of those requiring admission, about 35% are transferred to other psychiatric unit, with the rest being admitted to UMCNO's 60-bed inpatient psychiatric unit. Looking at the seven months before and after the changes were made, the average LOS has decreased from 15.98 hours to 13.78 hours (a 17% decrease), and the number of hours on saturation decreased from 42.3 hours a month to 19.2 hours (a 55% decrease).

**Discussion:** While our goal of zero hours on saturation was not met, the data show that by planning for the increase in volume during the weekend with more staff starting Sunday evening to open all 26 beds, we were able to lower saturation hours, which helps throughput in the main ED and throughout the hospital. Furthermore, by increasing the hours of clerks on weekends (who are responsible for transferring patients when our inpatient unit is full), we were able to transfer more patients throughout the weekend than previously. And finally, by integrating our handoff within our EHR, we were able to quickly identify those patients who could potentially be discharged safely and what was needed to ensure that safe discharge. Combined, these efforts lowered the average of LOS in the BHER.

## 5 Potentially Avoidable Transfers of Veterans with Mental Health Conditions in the Veterans Health Administration

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**Objective:** Over 40% of the 2.4 million emergency department (ED) visits to Veterans Health Administration (VHA) hospitals are from veterans who live in rural areas, a population at increased risk of interfacility transfer. Veterans may undergo interfacility transfer to obtain emergent or urgent access to specialized health services, particularly mental health care. However, such transfers raise questions regarding appropriate use of resources, travel burdens for patients and families, and logistical challenges for ED staff and providers that may delay timely care. We sought to describe ED-based, interfacility transfer

rates within the VHA and to estimate the proportion of potentially avoidable transfers (PAT) of patients with mental health conditions relative to other diseases.

**Methods:** This observational cohort included all patients who were transferred from a VHA ED to another VHA hospital between 2012 and 2014. We extracted data from Clinical Data Warehouse administrative data. PAT was defined as discharge from the receiving ED without a procedure, or hospital length of stay at the receiving hospital  $\leq 1$  day without having a procedure performed. We conducted facility-level and diagnosis-level analysis to identify conditions for which an alternative to transfer, such as telehealth access to specialty care, could be developed and implemented in low-volume or rural EDs.

**Results:** Of 6,131,734 ED visits during the three-year study period, 18,875 (0.3%) were transferred from one VHA ED to another VHA facility. Rural residents were transferred three times as often as urban residents (0.6% vs. 0.2%,  $p < 0.001$ ), and 23.6% of all VHA-to-VHA transfers met the PAT definition. Mental health conditions were the most common reason for interfacility transfer (34% of all interfacility transfers), followed by heart disease (12%). Of transfers that met PAT criteria, 11% were for mental health diagnoses whereas 21% were for heart disease. Geographic analysis suggested that overall PAT proportion ranged across regions from 8-53% with mental health PATs between 2-42%.

**Conclusion:** VHA interfacility transfer is commonly performed for mental health diagnoses, and there is substantial regional variation in potentially avoidable transfers in a national sample of transfers. A significant proportion of these transfers may be potentially avoidable. Future work should focus on improving capabilities to provide specialty evaluation locally for these conditions, possibly using telehealth solutions. Additional work should also focus on measuring the timeliness of these transfers.

## 6 Reducing Emergency Department Length of Stay and Wait Times for Psychiatric Patients

JD Richter, D Blackhurst, P Moschella, KM Lommel/ Greenville Health System, South Carolina

**Introduction:** In the past 20 years there has been a significant decline in the number of inpatient psychiatric beds in the United States, while the number of patients seeking psychiatric treatment in the emergency department (ED) has increased over the same time period. Given the increase in demand for psychiatric services and decrease in availability of inpatient treatment the ED is becoming the de facto place of treatment for the majority of psychiatric crises. Psychiatric patients experience longer lengths of stay (LOS) when compared to non-psychiatric patients,