Conclusions: Continuous QI around a variety of measures can identify disparities and targets for sustained anti-racist improvements in emergency department care. This study will guide further intervention and education around inequities in care in our department and has prompted further consideration of, when restraints are deemed necessary, preferentially using less invasive measures like the restraint chair over 4-point restraints. Although decision-making around chemical and physical restraints for mental health emergencies is complex and difficult to study, EDs should carefully examine their use through continuous QI in order to optimize patient-centered outcomes.

6 Emergency Department Use of a Restraint Chair is Associated with Shorter Restraint Periods and Less Medication Use than the Use of 4-point Restraints

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Background: Physical and chemical restraints are commonly used in the emergency department, but ongoing quality improvement is needed to improve patient experience by minimizing their use and ensuring equity in their administration. Prior research in inpatient settings has suggested that restraint periods are shorter, fewer adjuvant medications are used, and staff perceptions of patient experience are improved when a restraint chair is used as compared to 4-point restraints.

Methods: We prospectively collected data for all patients who had a behavioral code called in the emergency department of our Level-1 Trauma Center over a 3-month period. We recorded their demographics, visit characteristics, and certain aspects of restraint use including type of restraint, length of restraints, and medication use. In addition to tracking these metrics, employee perceptions of the psychiatric mental health emergencies were polled and evaluated.

Results: Out of 175 behavioral codes, 35.4% of patients were not placed in restraints, 34.9% were placed in the restraint chair, and 29.7% were placed in 4-point restraints. Average time in restraints was 56.1 minutes for those in the restraint chair (IQR 30-62.5 minutes) and 91.6 minutes for those in 4-point restraints (IQR 54.5-115.5 minutes). Medications were given to 70.8% of those who were not restrained, 82.0% of those placed in the restraint chair, 90.4% of those placed in 4-point restraints. Repeat medications were given to 32.3% of those who were not restrained, 21.3% of those in the chair, and 30.8% of those in 4-point restraints. In a follow up questionnaire of all emergency department staff of varying job classifications involved in behavioral codes, 89.6% reported that the restraint chair is a better patient experience than use of 4-point restraints.

Conclusions: This quality-improvement project at our Level-1 Trauma Center suggests that the use of a restraint chair during behavioral codes is associated with shorter times in restraints for patients than when standard 4-point restraints are used. Patients who are placed in the restraint chair also required less initial and repeated medication than those who are placed in 4-point restraints. In addition, the impression of a majority of emergency department staff involved in behavioral codes is that that patient experience is better in with use of the restraint chair than 4-point restraints. This project did not account for confounders of patient presentation that may influence care providers, decisions to use restraints or medications in behavioral codes or to call them in the first place.

7 Virtual Schooling and Pediatric Mental Health During the COVID-19 Pandemic

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Introduction: The first six months of the COVID-19 pandemic saw a nearly 50% increase in pediatric mental health emergencies. Specific factors contributing to this rise remain poorly characterized. One frequently cited contributor is pandemic-related interruptions of in-person schooling. Early studies indicate that students have experienced significantly greater psychological distress during such disruptions. We set out to investigate what correlation, if any, exists between school modality (ranging from exclusively virtual to exclusively in-person) and pediatric mental health status.

Methods: This is a retrospective, descriptive study combining patient chart review and parental telephone survey, exploring the prevalence and severity of mental illness among inpatients at a single urban, academic, midwestern tertiary care center. The study population included all patients ages 6-18 admitted to the study site during the 2015-19 and 2020-21 school years who received Psychiatry and/or Psychology consults and/or were admitted to the inpatient psychiatry unit. Parents/guardians of participants from 2020-21 were surveyed regarding their child, educational experiences. We describe and compare participants between school years prior to and during the pandemic using descriptive demographic data and clinical data highlighting monthly admission rates and proxies for illness severity. We then assess for any correlation between these measures and recent virtual schooling.

Results: Total mental health-related admissions rose from an average of 1070 during pre-pandemic school years to 1111 in 2020-21. Patients admitted in 2020-21 were more likely to be female, non-white, and from ZIP codes with higher median income. Primary diagnosis was more likely to be a mood or eating disorder. Patients were less likely to present primarily for suicidal ideation or self-harm. Proxies of illness severity, including utilization of PRN antipsychotics/benzodiazepines and readmission rates, rose in 2020-21. 255 of 800 (31.9%)