



Drivers and Trends among Repeat Psychiatric Visits in a Community Hospital's Pediatric Emergency Department

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Site Information:

Anne Arundel Medical Center (www.aahs.org)

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The site mission: To enhance the health of the people we serve.

Introduction

Anne Arundel Medical Center's (AAMC) Pediatric ED has seen a rapid increase in mental health visits for pediatric patients since the opening of the combined unit in 2015. This is consistent with trends seen across the nation with increasing ED visits for mental health concerns where mental health visits have been estimated to five to seven percent of all Pediatric ED visits (Kalb et al., 2019). My research focused on the drivers and trends of repeat mental health visits in order to improve the quality of care given.

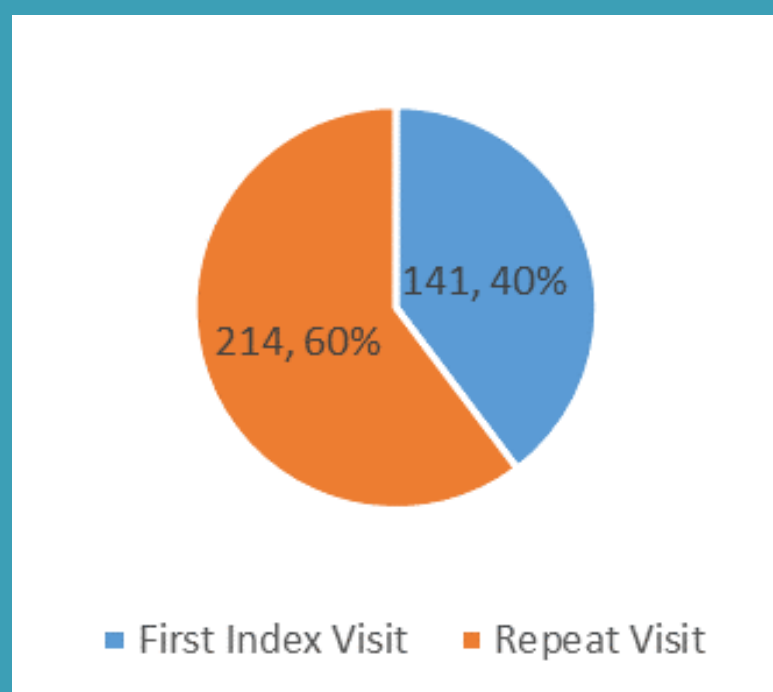


Figure 1. Breakdown of visit type

Materials

To conduct a retrospective chart review materials enlisted included EPIC software, excel, and literary resources. EPIC is a private healthcare system that holds medical records for each patient.

Methods

Data was evaluated from Data Bay between January 2018-March 2019 for patients age 0-17 with more than one visit during that time. A retrospective chart review was conducted from EPIC, electronic medical records, for patients meeting inclusion criteria. 141 patients with 355 visits were included. Visits were then analyzed with rate-based methodology in Excel to determine drivers and trends among the population.

Results

The top 5 diagnoses of the population were determined to be Major Depressive Disorder, Suicidal Ideation, Conduct Disorder, Anxiety Disorder, and Bipolar Disorder. Figure 2 analyzes these diagnoses in terms of gender. Of patient visits with a single diagnosis of Major Depressive Disorder, 69% were female.

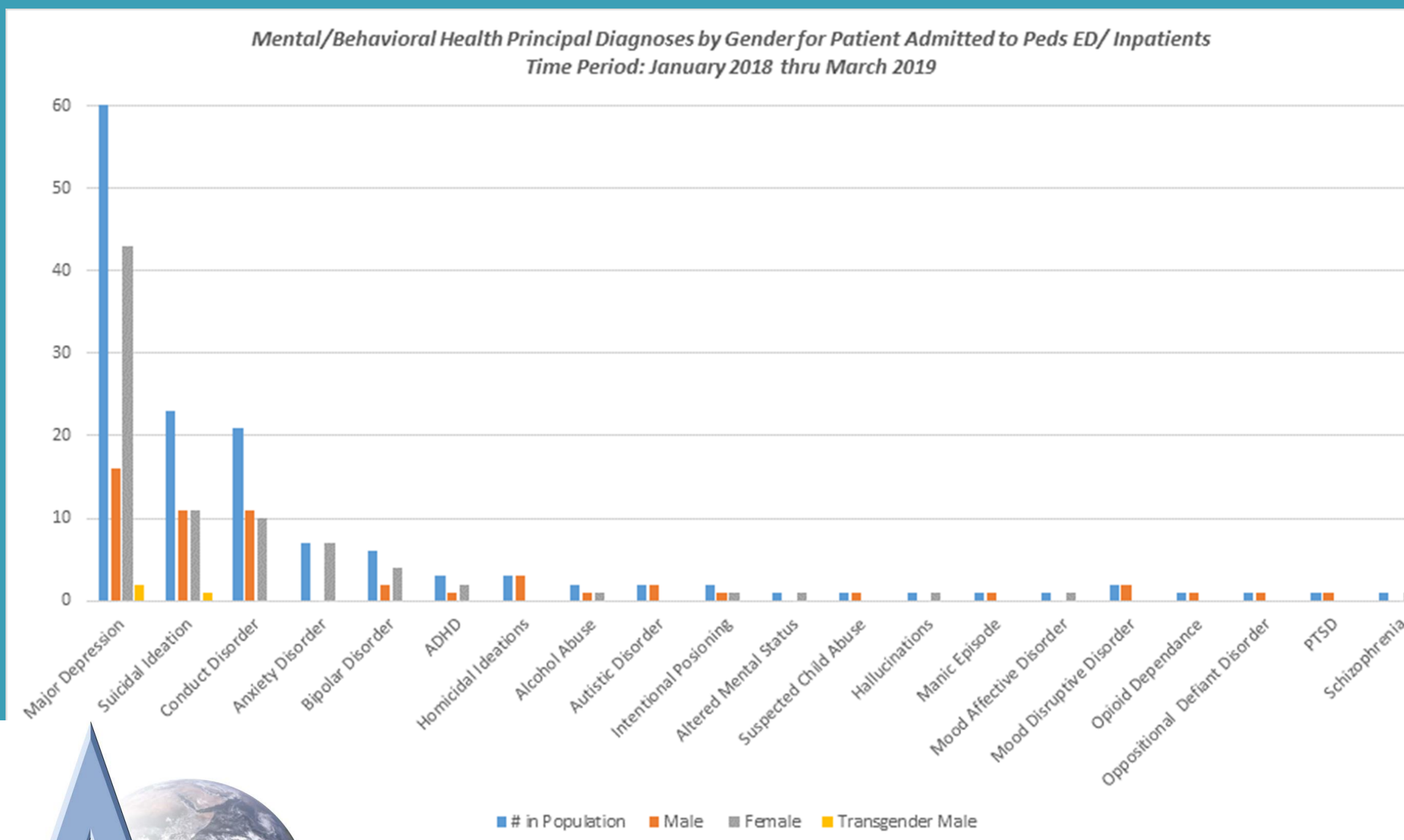


Figure 2: Breakdown of mental health diagnosis by gender

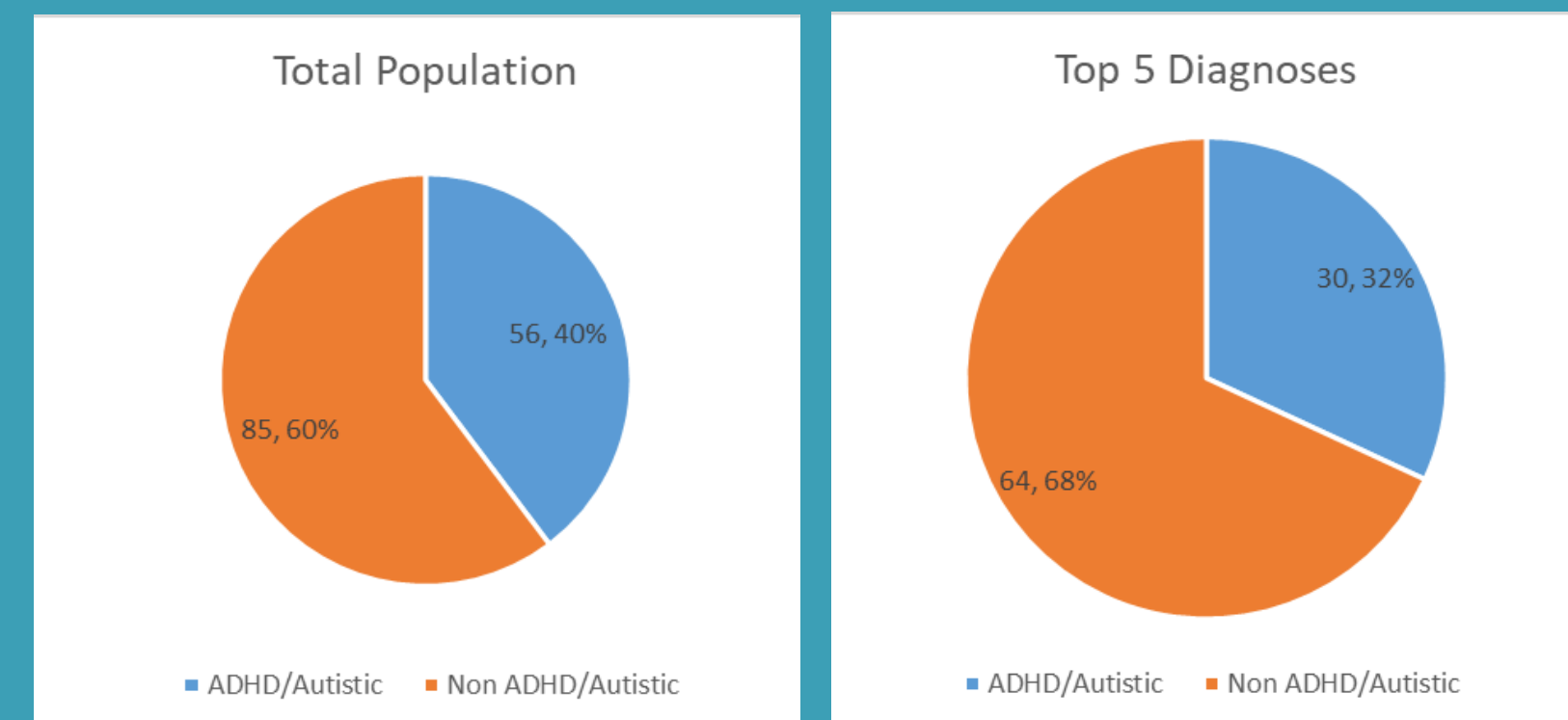


Figure 3: Percentage of patients diagnosed with autism (left) and percentage of patients with a top 5 diagnosis that also had a diagnosis of autism (right).

Of the total population, 40% (n=56) had an additional diagnosis of ADHD/Autism. These patients were then compared against the mental health diagnosis given at each visit. Of those with a top 5 diagnosis identified in Figure 2, 32% of these patients had an additional diagnosis of ADHD/Autism (Figure 3).

Medications for mental health patients was analyzed. The medications were categorized under anti-depressants, anti-psychotics, mood stabilizers, and ADHD medication. If the patient was currently prescribed the medication during the ER visit, they were marked as prescribed. Medication often changed between each visit; therefore medication was recorded on a visit to visit basis and not by patient. Of the total visits, 52.1% of patients were prescribed antidepressants, 36.1% were prescribed antipsychotics, 23.4% were prescribed mood stabilizers, and 30.1% were prescribed ADHD medication (Figure 4). Changes to medications between each ER visit was also documented for all repeat visits. Those who had changed medications were marked as changed and occurred during 45% of repeat visits.

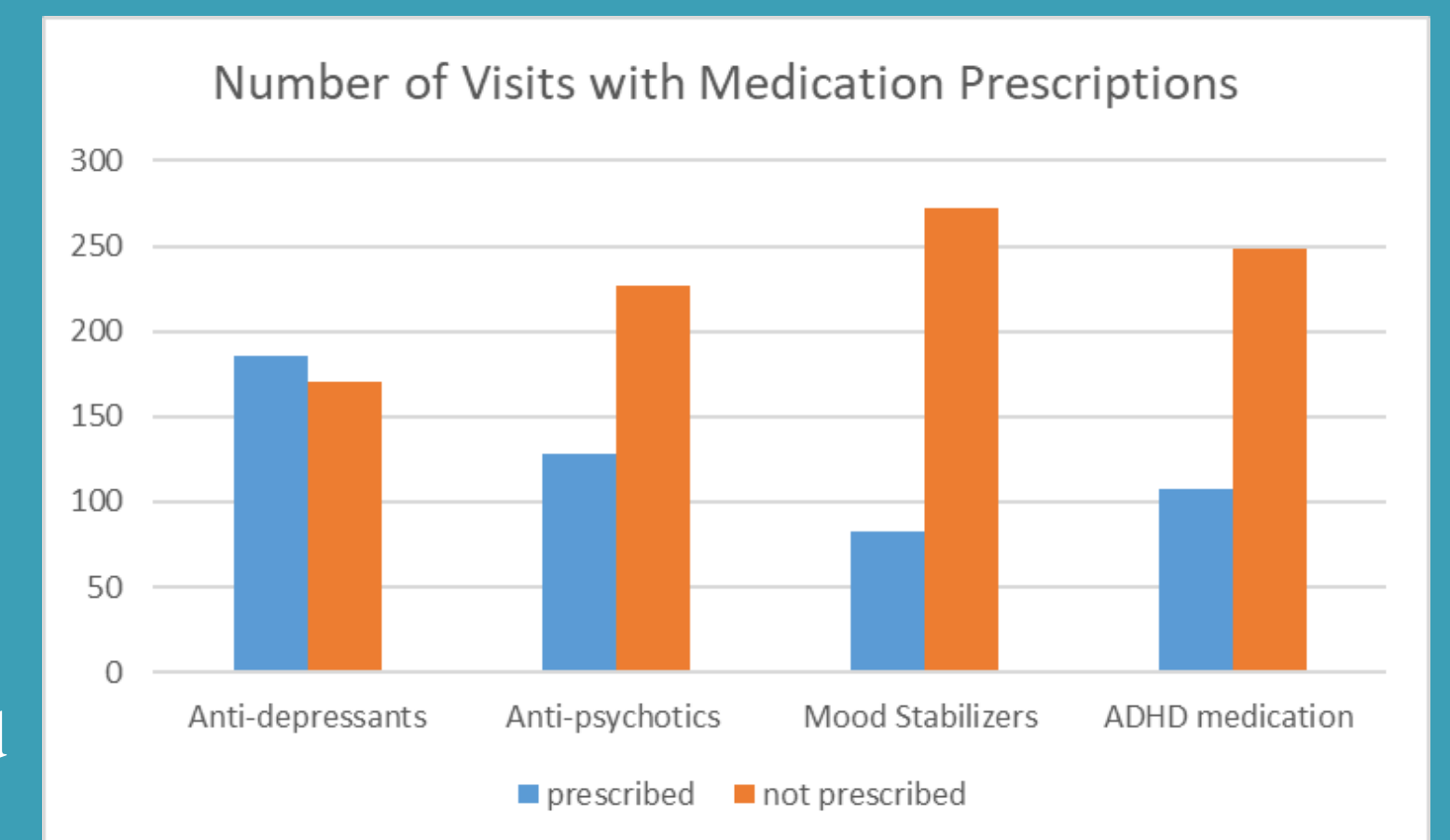


Figure 4: Breakdown of types of medication prescribed during each visit to the pediatric emergency department.

Discussion and Personal Impact

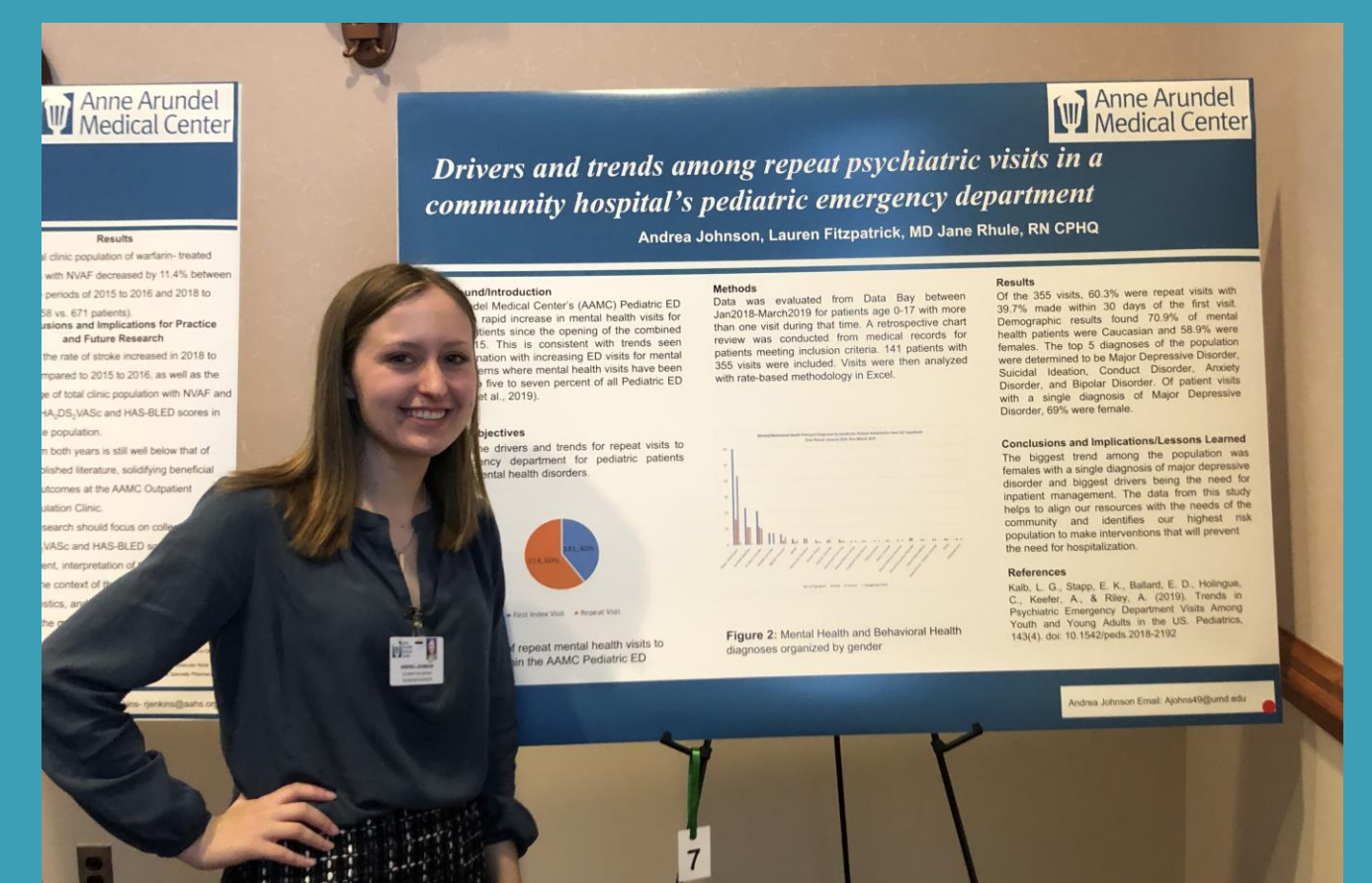
Our study identified trends among our patient population for repeat mental health visits to the pediatric ED. The biggest trend among the population was females with a single diagnosis of major depressive disorder. The biggest drivers being escalation of symptoms and the need for inpatient management. The data from this study helps to align our resources with the needs of the community and identifies our highest risk population to make interventions that will prevent the need for hospitalization. Being able to address gaps and problems that can help improve a patient's visit became something I enjoyed doing and taught me another side of the healthcare field I wasn't familiar with. This project allowed me to learn about patient care and improvement in a first-hand environment and gave me experiences that will allow me to grow as a health care professional, including presenting my research at the AAMC Quality Improvement Showcase.

Acknowledgments:

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References:

Kalb, L. G., Stapp, E. K., Ballard, E. D., Holingue, C., Keefer, A., & Riley, A. (2019). Trends in Psychiatric Emergency Department Visits Among Youth and Young Adults in the US. *Pediatrics*, **143**(4). doi: 10.1542/peds.2018-2192



Presenting my research at the Anne Arundel Medical Center's Quality Improvement Showcase on March 9, 2020.

