Background
Diagnostic overshadowing is a misdiagnosis of a patient’s condition due to the misattribution of physical symptoms to their pre-existing mental illness. Although mental health illness has been known to overshadow other health problems and can affect how patients are assessed and treated, little is known about other factors that may contribute to overshadowing.

Description
This project seeks to understand the underlying health problems that coexist with mental health illnesses for patients who visit the Emergency Department (ED), some of whom are admitted to the Mental Health Inpatient (MHI) unit. We also want to know if there are different patterns of visits and how they are related to health problems. The process of identifying other health problems with mental illness is complex and involves reviewing hospital records for evidence (e.g., test results, medications and notes from healthcare providers). Overall, we are looking for evidence of diagnostic overshadowing that may occur in the ED and/or MHI. We hope this study will provide healthcare professionals with insights on physical health problems that contribute to frequent visits and raise awareness about any biases that may influence patient care.

Aims
To analyze how the overshadowing of mental health illnesses impacts quality of assessment and treatment, to identify factors that contribute to overshadowing.

Demographics
Southlake Regional Health Centre is a 34 hospital ED in Ontario (largest province in Canada) with 1064 mental health in-patient visits per year—an ED that is the busiest ED in Ontario ( Largest province in Canada) with the greatest number of repeat patients visits; fewer repeat ED visits from healthcare providers. Overall, we are looking for evidence of diagnostic overshadowing that may occur in the ED and/or MHI.

Process
Patients underlying non-mental health conditions and quality of assessment and treatment were identified based on:

- Conduct literature review
- Design research questions
- Plan project

Most Responsible Diagnoses for Patients Admitted to MHI n=4432

![Admissions to ED and Mental Health Inpatient stays](image)

Figure 1. More male patients in the younger age groups and proportion of male to female similar in older age groups.

![Number of Multiple ED Visits by Fiscal Year](image)

Figure 2. Prevalence of multiple ED visits by Fiscal Year. FY14-15 - greatest number of repeat patients visits; fewer repeat ED visits in subsequent years. From 10 to 14 repeat visits decreased over time. The number of 15 or more repeat visits (red) slightly increased over time.

![Number of Multiple MHI stays by Fiscal Year](image)

Figure 3. Prevalence of multiple MHI stays by Fiscal Year. The number of repeat inpatient stays was greatest in the FY15-16 and similar for other years. Number of MHI stays was relatively similar by group every year except for patients with 6 or more inpatient stays that decreased somewhat over time.

References