

## P-272 - PREDICTING CHILD PSYCHIATRY CLINICAL OUTCOMES BASED ON ADMISSION FUNCTION AND PROBLEM SEVERITY

K.Quach<sup>1</sup>, C.Wilkes<sup>2</sup>, D.R.Cawthorpe<sup>3</sup>

<sup>1</sup>Medicine, <sup>2</sup>Psychiatry, <sup>3</sup>Psychiatry, Community Health Sciences, University of Calgary, Calgary, AB, Canada

**Introduction:** The ability to predict clinical outcomes at the time of admission is an important consideration for treatment. Predicting clinical outcomes in children's mental health requires strategies for multivariable analysis using complex health information. Multinomial logistic regression was able to show that function and problem severity and Western Canada Wait List Child Mental Health Priority Criteria Score ([www.wcwl.ca](http://www.wcwl.ca); WCWL-CMH-PCS) among demographic and system variables gathered on admission predict patient outcomes at discharge.

**Methods:** Based on data (n= 2752) drawn from our regional access and intake registration system, three groups emerged for each of the two variables - function and problem severity, which included patients who were judged clinically at outcome to be worse, the same, or improved compared to their admission baseline measurement. System (e.g. repeat admissions, comorbidity, etc) and demographic variables (age and sex) in addition to the total WCWL priority score were included in multivariable logistic regression analysis.

**Results:** Compared to those who had no change or worsened in function or problem severity or both on discharge were distinct from the group that improved on discharge in one or both domains of function or problem severity in terms of admission WCWL-CMH-PCS. Additionally, neither demographic nor system variables contributed to the resulting model.

**Discussion:** Future research is needed to determine the accuracy of the different profile groups, as well as the effect of increased intervention on those flagged at risk of becoming worse or not changing in function or problem severity at discharge.