Cross-Sectoral Data Linkage: Tracking Mental Health Service Utilization from Childhood into Adulthood

Schraeder, K¹, Cairney, J², Carter, J³, Vingilis, E⁴, Neufeld, R⁴, Barwick, M⁵, Kurdyak, P⁶, and Tobon, J²

¹University of Calgary
²McMaster University
³Vanier Children’s Services
⁴Western University
⁵The Hospital for Sick Children
⁶Centre for Addiction and Mental Health

Introduction

Of the 15-18% of children and youth in Canada with a mental health disorder, some receive specialized mental health (MH) services and need additional treatment as young adults. Lack of a shared database across child and adult sectors has prevented examining predictors of future MH health service use.

Objectives and Approach

We examined predictors of mental health service utilization in adulthood, and compared a sample of youth who received specialized MH treatment and age-, sex-, and region-matched controls. Patient-level administrative data from five MH agencies funded by the Ministry of Children and Youth Services (MCYS) in Ontario, with population health sector datasets held at the Institute for Clinical Evaluative Sciences (ICES). We expanded previous definitions of coding a MH visit by including codes specific to long-lasting childhood MH diagnoses (e.g., Attention Deficit-Hyperactivity Disorder).

Results

Our match rate for linking the MCYS treated youth with their population health data was 77%. Youth who received MH treatment (N= 2957) were twice as likely as matched controls (N= 8891) to have a MH visit in the medical system in adulthood (i.e., after age 18). The most common diagnostic codes for the first visit were anxiety, depressive disorders, and ADHD. The median survival time (when 50% had a visit) from age 18 to first MH visit was 3.3 years. In adjusted Cox regressions, significant predictors of having an adult MH visit included service use history in both medical and MH systems during childhood and adolescence (e.g., ongoing pattern of children’s MH service use).

Conclusion/Implications

This study represents the first longitudinal, case-control cohort study in Canada to examine MH service utilization in the medical sector by youth treated for MH problems. The linkage of information from multiple datasets allowed for a broader understanding of MH service utilization across sectors of care, specific to children and youth.