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Gaining knowledge of Ontario's community mental health and addictions system: linking community-based health services data with administrative health data in Toronto, Ontario, Canada

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Introduction

In most developed countries, a significant amount of mental health and addictions care occurs in community settings. Data reflecting populations served by community-based mental health and addictions providers and the types of services provided are not available, resulting in an incomplete reflection of the entire mental health and addictions system within existing administrative data.

Objectives and Approach

The Community Business Intelligence (CBI) initiative is a data collection project that captures information on adults receiving community-based mental health, addictions, and support services in Toronto Central Local Health Integration Network (LHIN), located in Ontario, Canada. Leveraging administrative health data and data linkage capacity at the Institute for Clinical Evaluative Sciences (ICES), along with engagement of external stakeholders knowledgeable of CBI and the community health sector, we linked the 2015/16 CBI dataset to administrative health data. Demographic characteristics, health-service utilization, primary care attachment, and 30-day emergency department (ED) revisits were calculated for individuals accessing community health services.

Results

There was an 80.8% linkage rate, of which 36.9% linked deterministically via health card number, while 43.9% linked probabilistically. After study exclusions, 37,688 individuals in the CBI dataset used community health services between April 2015 and March 2016. Compared to Toronto Central LHIN, a greater proportion in the CBI dataset were female, older than 65 years of age, and living in a low income neighbourhood. Furthermore, 95.5% of individuals had at least one outpatient physician visit, 51.3% had at least one ED visit, and 21.7% had at least one hospitalization in the past year. Few individuals in

the CBI dataset were without primary care attachment (4.5%); however, a larger proportion had a 30-day ED revisit, particularly those receiving community addictions services (19%).

Conclusion/Implications

The availability of community health services data in the CBI dataset and its successful linkage to the administrative health data held at ICES identified health service intersections and outcomes that were previously unknown. This linkage project demonstrates a successful framework for sector-wide performance measurement to address a critical infrastructure gap.