Community Business Intelligence

Integration of Primary and Community Care Data

Stephanie Carter

Why we need business intelligence

In 2012, the Toronto Central Local Health Integration Network wanted to answer the following questions:

1. What is the real time capacity and utilization for all community funded services?
2. What are client wait times?
3. Where are people living who are accessing services?
4. Who is using services, when and which services and for how long?
5. What combination of services are they using?

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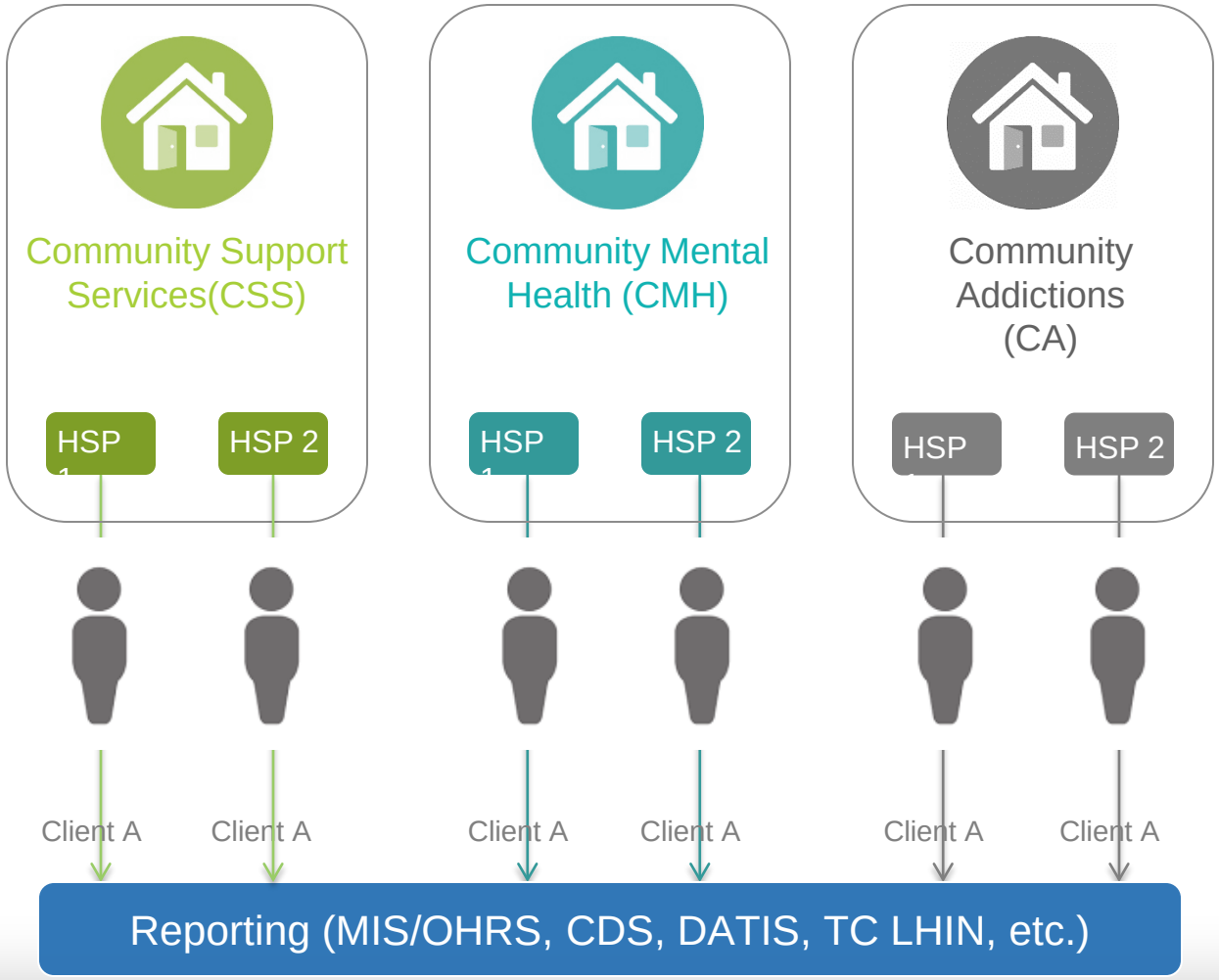
Reconnect and CBI

- Reconnect convened a table of stakeholders to scope and decide on an approach,
- A process to select and define data elements was completed
- A recommendation was made to the Toronto Central LHIN
- Reconnect was asked to implement CBI

Why there is a need for Community Business Intelligence (CBI)

- Limited capacity for analysis and reporting
- No ability to track client(s) within or between sectors
- Inconsistent data quality
- Duplicate reporting



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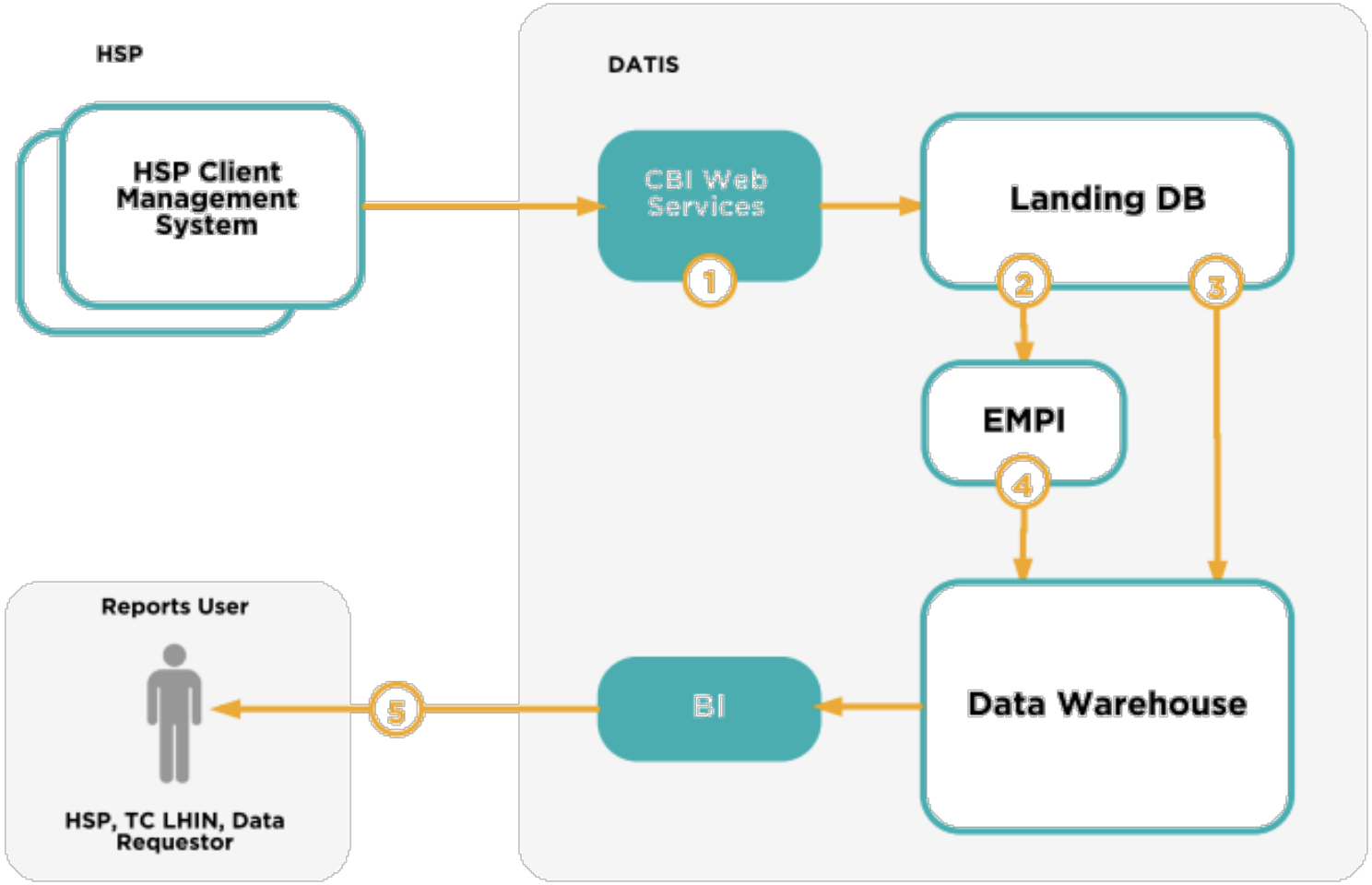
Toronto Central LHIN Current State

- Ability to track clients through the system
- Understand service utilization and capacity across sectors
- Enhanced data quality based on consistent definitions and fields

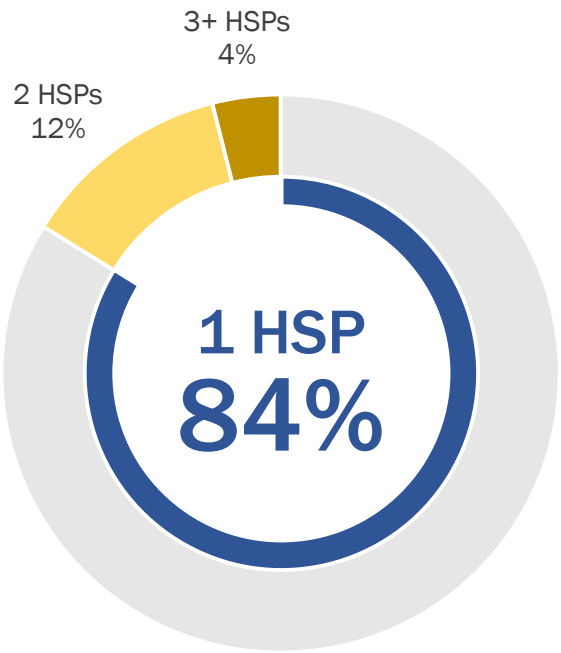
CBI Approach and Benefits



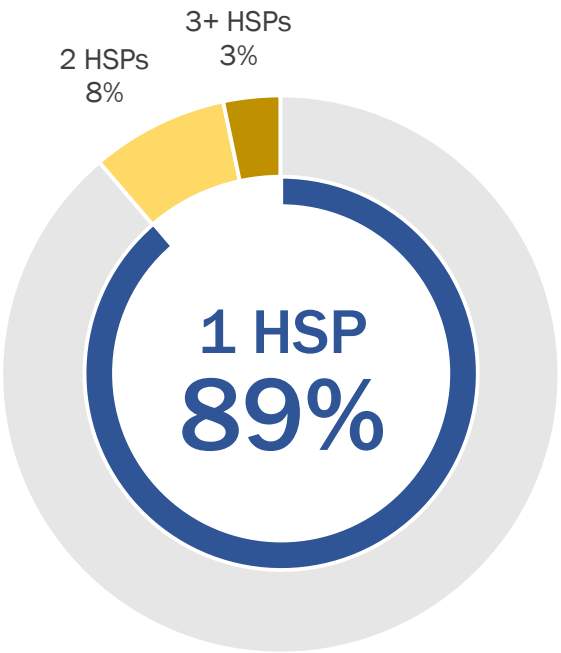
- Minimizes the burden on service providers
- Developed for the community by the community
- Supports multi-vendor approach
- Supports improving data quality
- Multi-view capability (provincial, LHIN, health service provider, etc.)
- Real-time reporting and trend reports
- Allows for data integration

Majority of Unique Clients Receive Services from 1 HSPs

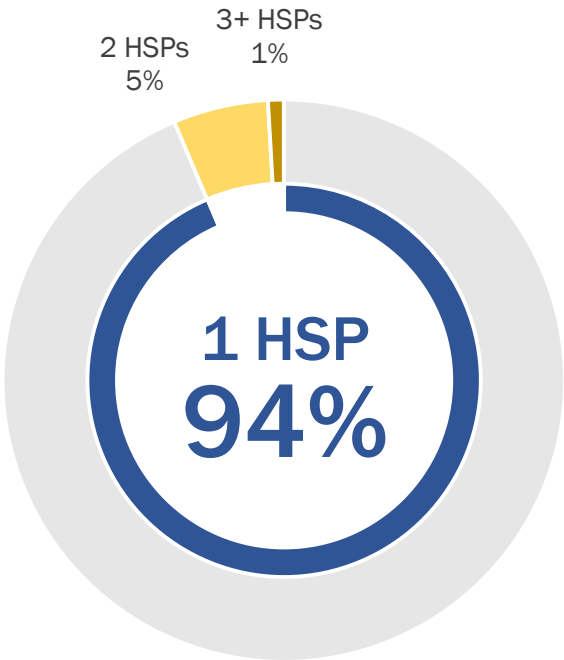
Community Addictions



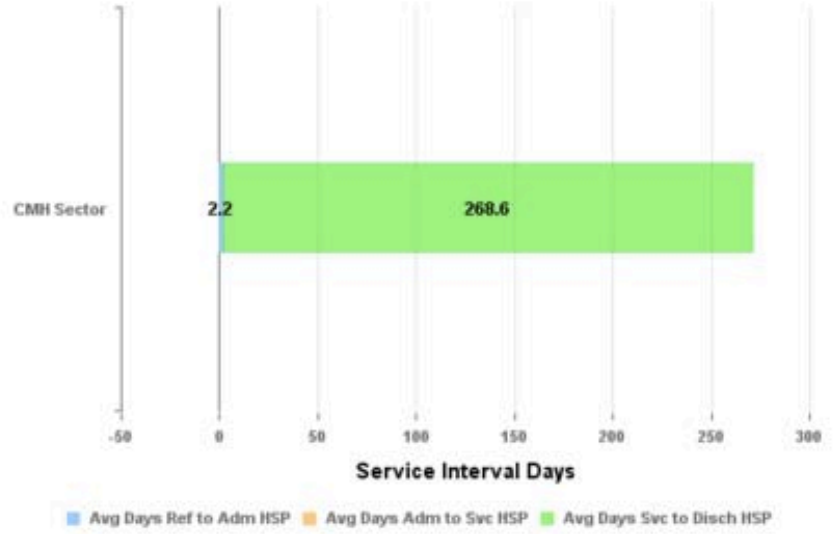
Community Mental Health

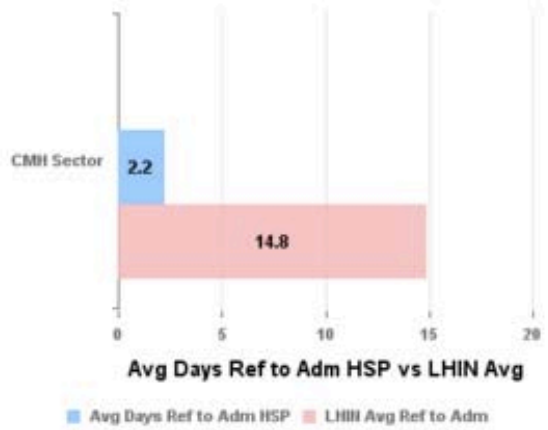


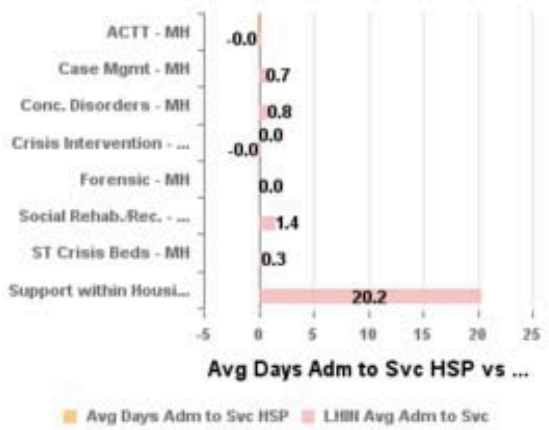
Community Support Services



Key Service Date Analysis/Wait Times

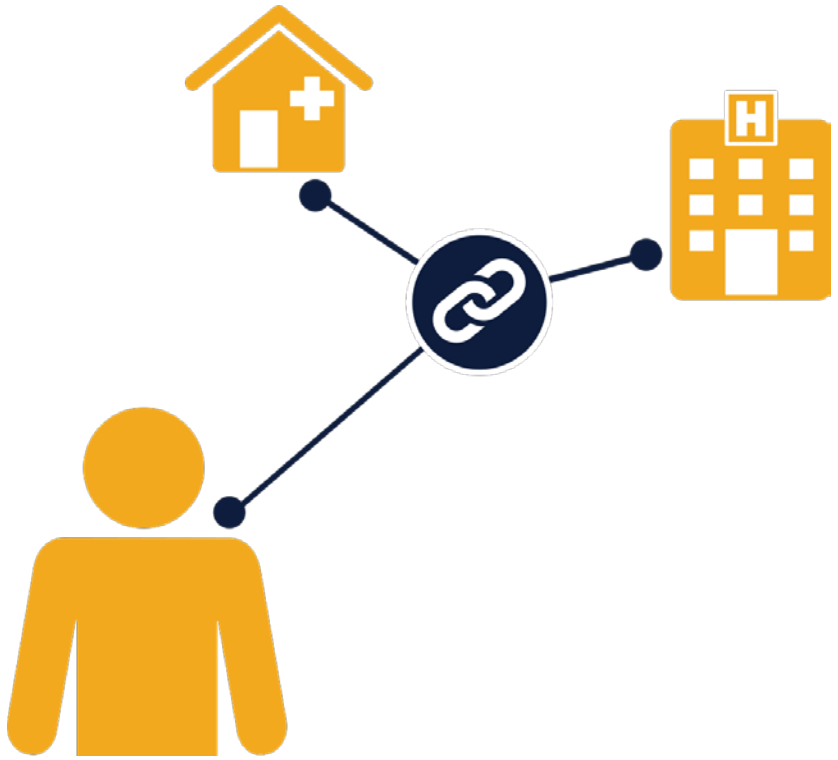




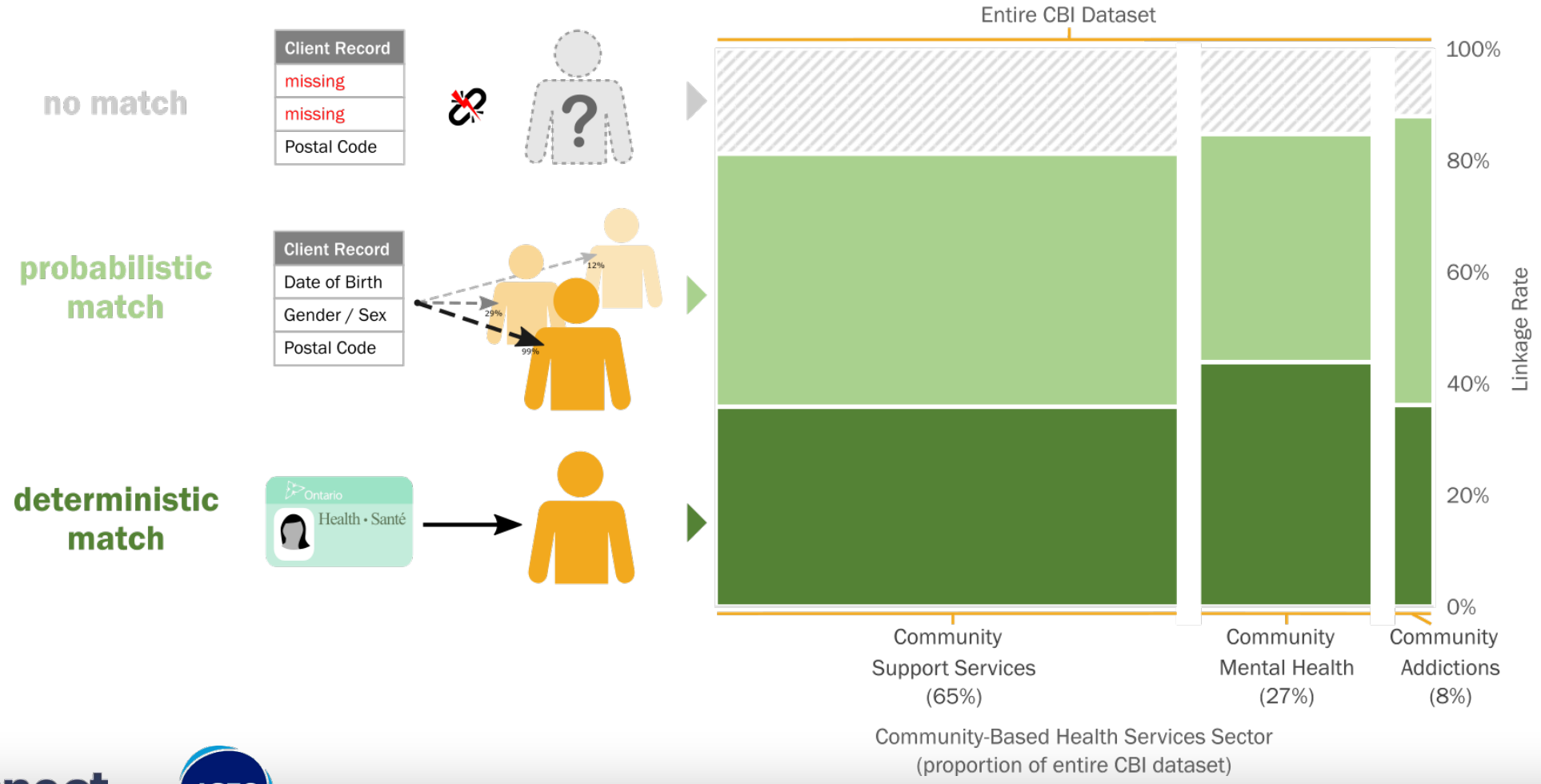


Institute for Clinical Evaluative Sciences (ICES)

- Data partnership between CBI and ICES
- CBI captures client encounters with community-based programs
- ICES capture contact with the primary care sector (hospital, emergency department, and physician visits)
- improved understanding of how clients are using both community-based and primary care services



Community-Based Data Yield Strong Linkage Rates



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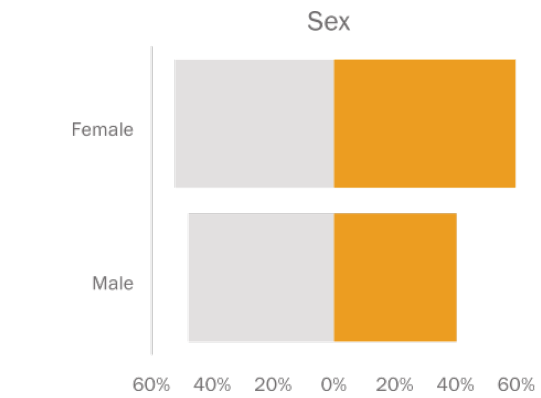
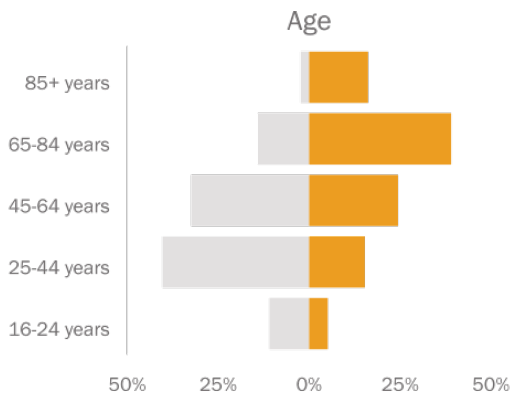
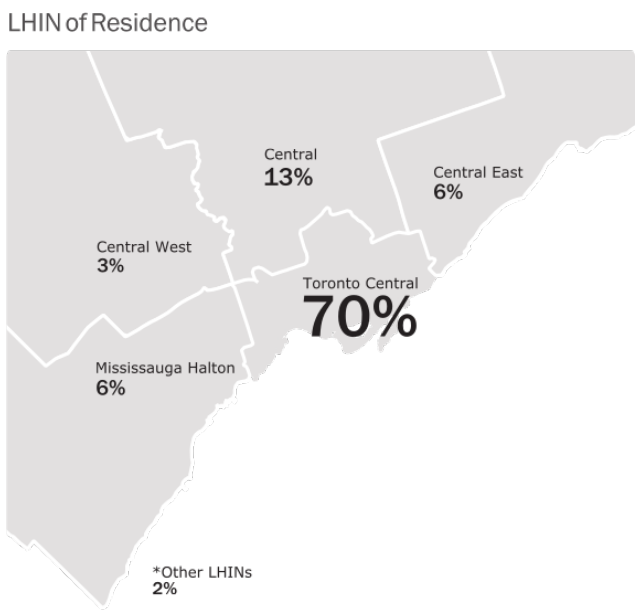
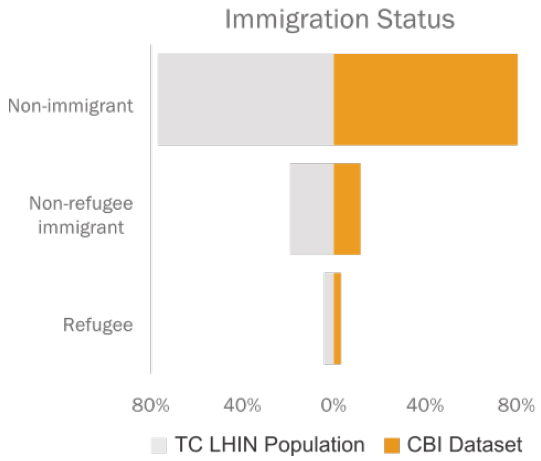
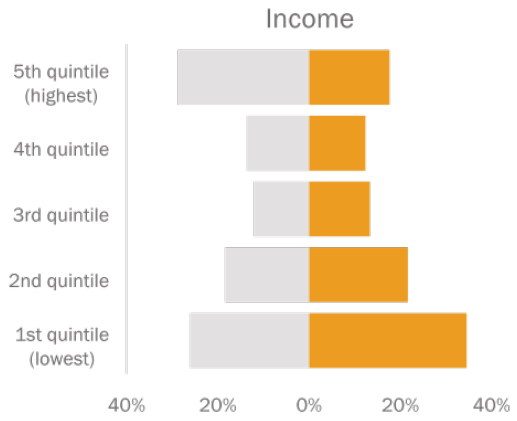
Clients Using Community-Based Services Have A Distinct Demographic Profile











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Acute Care Usage Is High Among Clients Accessing Community-Based Services

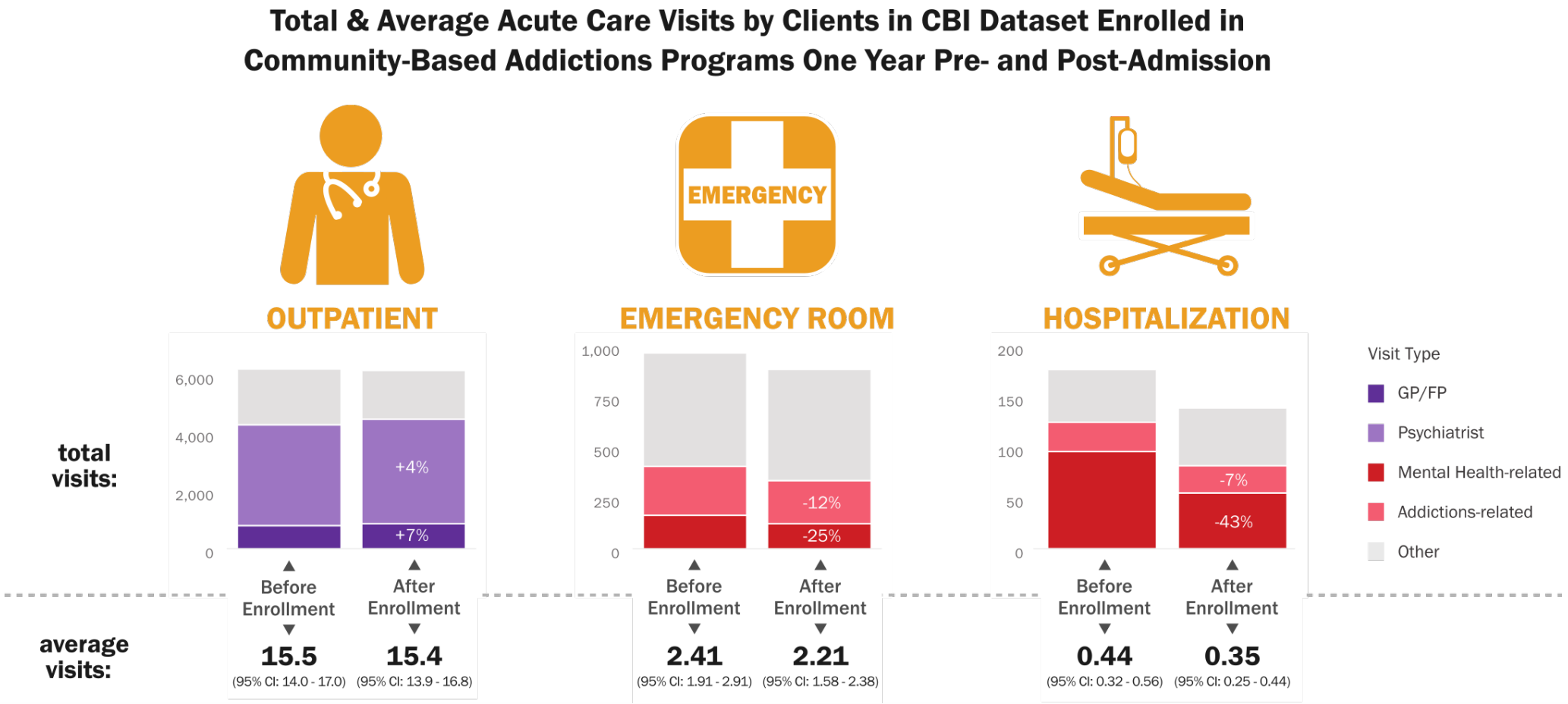
Acute Care Average Visits and Frequency from Clients in CBI Dataset Accessing Community-Based Care between April 1, 2014 and March 31, 2015 by Type

OUTPATIENT
average visits: 14.3
(95% CI: 14.1 - 14.5)

EMERGENCY ROOM
average visits: 1.78
(95% CI: 1.70 - 1.85)

HOSPITALIZATION
average visits: 0.48
(95% CI: 0.47 - 0.50)

Acute Care Usage For Clients In Addictions Programs Decreases Following Enrollment



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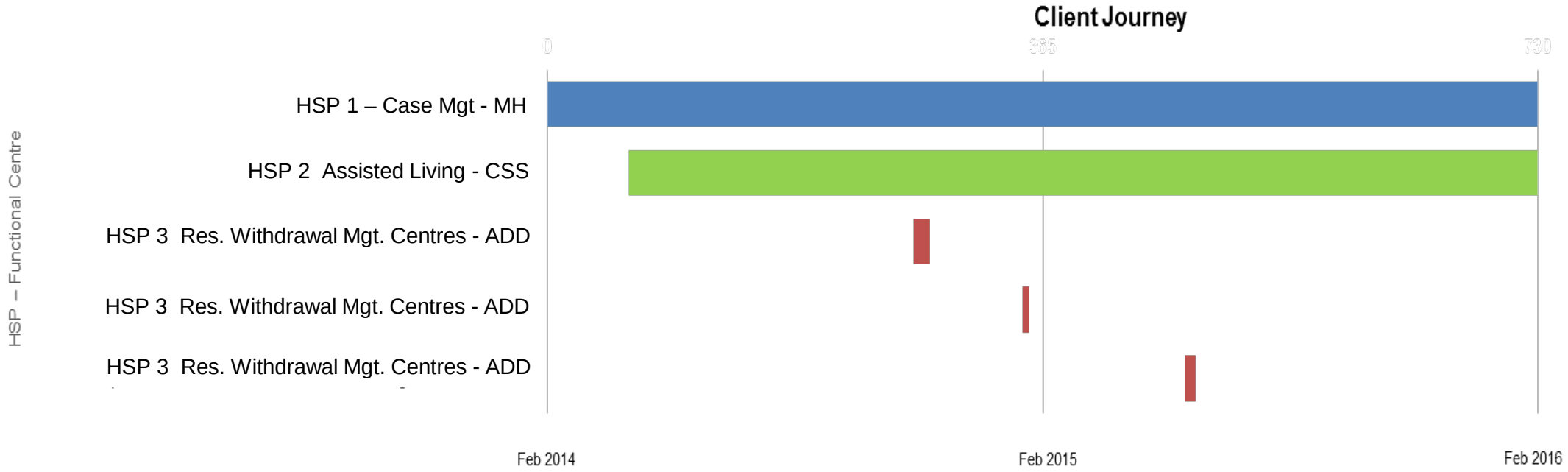
Next Phase: Data Sharing for Service Providers



- Data Sharing will go live on Sept. 30, 2016
- With client consent, the full community journey will be available to all contributing service providers.

Acknowledgements

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