What is a learning Health System?

A learning health system brings together information from healthcare practice and research and feeds it back to healthcare providers and teams in ways that are meaningful and useful to them. This leads to

Assemble relevant data

Deliver tailored Interpretations of the results of the re

practice change that improves care.

Our LHS is unique because it is grounded in our common commitment to health equity and the Model of Health and Wellbeing.

What are the benefits?

Through constant learning and sharing of knowledge, a deeper understanding of the populations we serve, rapid recognition and adoption of best practices, and continuous

improvement in care, a learning health system advances the Quadruple Aim of improvement in health care.



Elements of the Alliance Learning Health System



In a learning health system, committed and engaged **front-line staff** participate in learning and knowledge-sharing, and they implement and evaluate tools and processes. **Executive leaders** foster curiosity and make space for change. **Decision-support staff** provide coaching for improvement and change management. **Clients and community** shape the system's priorities.

In our LHS, **strategic guidance** will come from Alliance members, supported by Alliance staff, through our Equity, Performance, Improvement, and Change (EPIC) committee. All of this will be built on the solid foundation of our collective **Information Management Strategy**.

The Alliance Learning Health System in Action

The Alliance's recent **Mental Health and Addictions (MHA) study** provides an example the full learning cycle in practice.

Assemble Relevant Data	At the beginning of the study, a dataset was built that contained CHC clients' EMR data. The EMR data was linked to health system utilization data at the Canadian Institute for Health Information (CIHI) for one year.
Analyze Data	The MHA client data was then analyzed to examine the prevalence of mental health and addictions conditions and comorbidities, primary care visits, emergency department visits, and hospital admissions.
Interpret results	The study identified increased risk in MHA clients of Hepatitis C and COPD. High levels of poverty and isolation were also found in the study population.
Deliver Tailored Feedback	The MHA study continued to "go around" the learning cycle by producing a customized spreadsheet that enabled centres to see their own data in a user-friendly format and to have access to other centres' data for comparison and benchmarking.
Take Action to Improve	To complete the learning cycle, centres can take action, using the MHA study findings to drive improvement and help clients with MHA disorders experience less isolation and comorbidity.

The cycle would continue as individual centres, a practice-based learning network, or another group of researchers study the impacts of the above practice changes on health outcomes for clients receiving care for MHA disorders. Those researchers would gather and analyze new data and use it to deliver updated feedback and inform the next steps of improvement.

There are many ways to participate! Here are a few of them

- Collect sociodemographic data.
- Conduct client surveys (PREMs, PROMs).
- Share your data with the Alliance and our research partners (CIHI, ICES, and UTOPIAN).
- Work with your team and Regional Decision Support Specialist to find opportunities to improve.
- Engage with practice facilitation and professional development.
- Share your learnings with peers and OHT partners.
- Collaborate with peers through communities of practice.
- Support clinician/provider participation in our Practice-Based Learning Network (PBLN).



