

Data Quality Framework

Applying the CIHI Information Quality Framework to DATIS/Catalyst



Timeliness

Ensuring Catalyst data are current at time of reporting and are available to different users within a reasonable time period



Accuracy

The degree to which Catalyst data are correct and describe the reality it was designed to measure



Comparability

Ensuring Catalyst data are consistent over time and entered using standard conventions



Accessibility

Catalyst data can be readily accessed, used, and understood



Relevance

Catalyst data can meet the needs of current and future users



Timeliness

Key Characteristics

Data currency - Amount of time between when data are entered and data are available

Documentation currency - Data quality documentation is available and recent

DATIS / Catalyst Context

- Catalyst enables regular data submissions (e.g. as an online application that is available to clinicians 24/7)
- DATIS encourages agencies to submit data within 15 days of client contact (recommended best practice to support mandatory reporting)
- Catalyst is designed to be used by agencies as their primacy tracking system
- Data quality documentation is updated regularly and available to agencies (e.g. agency-run data quality reports, this framework)



Accuracy

Key Characteristics

Comprehensive - Catalyst and its data cover all populations of interest

Complete - All eligible records are included and complete

Precise - Procedures are in place to minimize error and ensure data are correct

DATIS / Catalyst Context

- All publicly funded agencies providing addictions services can access Catalyst and DATIS
- Catalyst facilitates accurate data entry through automated business rules (e.g. drop-down lists and auto-fill responses)
- DATIS supports agencies (e.g. service desk) and provide resources (e.g. training materials) to facilitate accurate data collection



Comparability

Key Characteristics

Consistency - Definitions of the data elements and data collection processes are standardized

Linkages and Equivalency - Standardization of elements to allow linking and mapping over time

Historical comparability - Changes made to the data system over time are documented and accessible

DATIS / Catalyst Context

- DATIS Data Dictionary defines each element in minimum dataset to ensure all clinicians capture client experiences in the same way
- DATIS provides training materials to help standardize data collection practices
- Catalyst-generated client key for tracking
- DATIS documents changes to data system through service desk and knowledge base websites



Accessibility

Key Characteristics

Interpretable - Users can provide feedback and receive updates from DATIS

Accessible - Data are available based on policies and procedures

Documented - Historical and current data quality documentation is available

DATIS / Catalyst Context

- DATIS builds relationships with agencies, collects feedback, and provides training
- DATIS communicates regularly with agencies (e.g. broadcast communications, Twitter, newsletters)
- Agencies can use Catalyst data for reporting and client tracking (e.g. users can run agency- and client-level reports with interpretive notes)
- DATIS provides data reports on request and has dedicated portals for Ministry of Health and Long-Term Care and Public Health sectors



Relevance

Key Characteristics

Adaptable - Stakeholders are informed of relevant developments

Value - DATIS supports health information needs in community sector

DATIS / Catalyst Context

- DATIS services are expanding to develop new databases (e.g. new harm reduction database)
- DATIS minimum dataset standardizes clinical data collected by publicly funded addictions service providers in Ontario to support clinical services, program/sector integration, and healthcare reporting
- DATIS is launching new accessible and user-friendly online knowledge base

This framework is based on two documents: the Canadian Institute of Health Information (CIHI) Information Quality Framework (2017) and Ontario's Better Outcomes Registry & Network (BORN) Data Quality Framework, which applied the CIHI framework to their own data system.

Want to learn how to apply data quality frameworks to your own agency? Take a look at the Agency Data Quality Checklist to find out more

Definitions

Catalyst - Client management system and reporting software; owned and operated by DATIS for community addictions service providers in Ontario

DATIS - Drug and Alcohol Treatment Information System; A program located in the Provincial System Support Program at the Centre for Addiction and Mental Health (CAMH)

DATIS Minimum Dataset (MDS) - A standardized dataset containing 75 mandatory data elements collected from clients receiving publicly funded community addictions services

References

BORN Ontario. (2013). Data quality framework. Retrieved from https://www.bornontario.ca/en/data/resources/Documents/B ORN-Ontario-Data-Quality-Framework.pdf

Canadian Institute for Health Information. (2017). CIHI's data source assessment tool. Retrieved from https://www.cihi.ca/sites/default/files/document/cihi-data-source-assessment-tool-en.pdf

Canadian Institute for Health Information. (2017). CIHI's information quality framework. Retrieved from https://www.cihi.ca/sites/default/files/document/iqf-summary-july-26-2017-en-web_0.pdf

Canadian Institute for Health Information. (2009). The CIHI data quality framework. Retrieved from https://www.cihi.ca/sites/default/files/data_quality_framework_2009_en_0.pdf

