Ministry of Health

RAI-HC Clinical Standards

and "Best Practice" Guidelines

May 25, 2016

BRITISH COLUMBIA | Ministry of Health

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Purpose of this document

The main purpose of this document is to outline provincial clinical standards, including documentation standards, for use of the Resident Assessment Instrument-Home Care (RAI-HC) assessment system in home and community care (HCC) settings. These standards/guidelines should be used in conjunction with the BC Provincial HCC Policy Manual, relevant ministry legislation and regulations, health authority guidelines and policies, and CIHI standards.

HCC Policy 2.D, Client Access, Assessment, stipulates that health authorities must ensure that a health professional completes an assessment of all new clients and develops an individualized care plan, in collaboration with the client, their caregivers, family physician and members of the health care team as appropriate, as a basis for provision of home and community care services, and that the assessment, among other things, must include completing a RAI-HC assessment in accordance with the RAI-HC Clinical Standards and "Best Practice" Guidelines.

Clinical practice standards, in partnership with "best practice" guidelines and other decision support tools, are intended to complement the clinical judgment, knowledge, skills and experience of health professionals in their clinical decision making.

Background / Introduction

The Ministry of Health (the Ministry) mandated implementation of the RAI-HC assessment system in 2005, and the RAI MDS 2.0 assessment system (for use in residential care) in 2009 in B.C. These are standardized, comprehensive and validated instruments developed by interRAI, an international research collaborative dedicated to developing comprehensive seamless assessment system for vulnerable persons (www.interrai.org). In addition to providing comprehensive information for identifying an individual's clinical and safety needs for care planning and tracking progress over time, assessment data from these instruments also allows care providers, health authorities and the Ministry to monitor quality outcomes, ensure accountability, understand case mix, prioritize service allocation, and support local and provincial planning and policy development (see Figure 1).

BC has committed to the submission of RAI-HC data to the Home Care Reporting System (HCRS) and residential care data to the Continuing Care Reporting System (CCRS) at the Canadian Institute for Health Information (CIHI) to allow pan-Canadian comparisons on home health and residential care clients and services (see Appendix D for a figure depicting the data flow from point of care to national analysis).

Overview of the RAI-HC [1]

The RAI-HC assessment system was developed by interRAI to provide a common language for assessing the health status and care needs of frail elderly and adults with disabilities living in the community. The RAI-HC has been designed to be a user-friendly, reliable person-centred assessment system that informs and guides comprehensive care and service planning in community-based settings around the world. It focuses on the person's functioning and quality of life by assessing needs, strengths, and preferences. It also facilitates referrals when appropriate. When used on multiple occasions, it provides the basis for an outcome-based assessment of the person's response to care or services.

The system was designed to be compatible with the Long Term Care Facility system that was implemented in US nursing homes in 1990-91. According to interRAI, the RAI-HC was initially developed in 1993-94, and was revised in 1999 (Version 2.0), at which time items were dropped, modified, or added, and the period of observation (timeframe) for most assessment items was decreased from 7 to 3 days.

On their website, interRAI suggests that the RAI-HC can be used to assess adults with chronic needs for care, as well as those with post-acute care needs who will require long-term service (e.g., after hospitalization). The RAI-HC has been designed to be compatible with the suite of interRAI assessment and problem identification tools. Such compatibility advances continuity of care through a "seamless" assessment system across multiple health care settings, and promotes a person-centred evaluation rather than fragmented site-specific assessments.

The RAI-HC assessment remains current through regular reviews and updates through the interRAI research group.

At the time of writing these guidelines (2016), the RAI-HC assessment being used in BC was based on the CIHI RAI-HC User's Manual, Canadian Version, 2010.

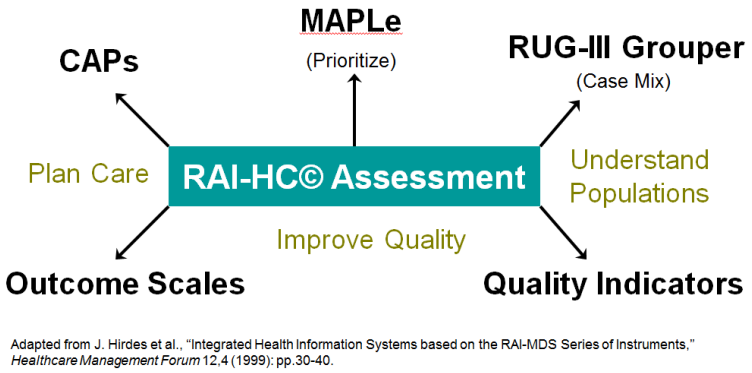
Benefits of Using the RAI-HC

There are many benefits for clients and their families, clinicians, service providers, health authorities and the Ministry in using the RAI-HC, which are listed in detail in Appendix B and based on information from interRAI' s website.

The graphic below for the RAI-MDS (RAI-HC) was developed by Dr. John Hirdes, professor at University of Waterloo and interRAI Fellow to demonstrate the various outputs from the RAI-HC instrument.[2] This figure highlights the multiple beneficial uses stemming from the RAI-HC assessment data. At the center is the assessment of the client; branching from this assessment includes: Clinical Assessment Protocols (CAPs) for clinical care planning, Outcome Scales and the MAPLe, case mix Resource Utilization Groups (RUGs), and HCRS Quality Indicators.

[1] Information obtained from interRAI's website, http://www.interrai.org/home-care.html)
[2] http://piecescanada.com/RAI-MDS_PIECES_JobAidGuide_20100206_v1.0_LTCHCAP.pdf)

Figure 1: RAI-HC Assessment: the Foundation for Improved Care



Adapted from J. Hirdes et al., "Integrated Health Information Systems based on the RAI-MDS Series of Instruments," *Healthcare Management Forum* 12,4 (1999): pp.30-40.

As noted earlier, these outputs contribute to providing person-centred care as well as to understanding population needs, service prioritization and monitoring quality of care

Please note: These guidelines will evolve as work with the RAI-HC assessment system continues across British Columbia and Canada.

Part 1: Guiding Principles

The following principles were used in developing this document and are expected to guide the use of the RAI-HC in HCC settings:

- Focus on person-centred care
- Use of a standardized assessment tool informs, but does not replace, clinical decision-making
- Alignment with provincial HCC Policy and CIHI standards
- Use of evidence-based /evidence informed Best Practice lens
- Promotion of efficiency and effectiveness
- Use of the RAI-HC Assessment as intended: at the point of care with the client, utilizing a mobile device with real-time access to RAI-HC outputs, CAPs and outcomes scales

Part 2: Definitions and Key Terms

Assessment is an evaluation, conducted by a health authority (HA) professional, of an individual's overall health status, goals and capabilities, leading to a decision regarding the priority needs to be addressed, and supporting development of a care plan[3].

Assessor, for the purposes of this document, is the HA health professional completing the RAI-HC assessment.

[3] Policy 2.A, General Description and Definitions, HCC Policy Manual

Canadian Institute for Health Information (CIHI): CIHI is responsible for supporting the use of the RAI-HC and the RAI MDS 2.0 assessment systems in Canada. CIHI manages the Home Care Reporting System (HCRS) and the Continuing Care Reporting System, to capture data from these interRAI assessments from jurisdictions across Canada including B.C.

Clinical Assessment Protocols (CAPs) are an output of the RAI-HC assessment standard, and contain general guidelines for further assessment and individualized care planning for home care clients. CAPs focus on a person's function and quality of life, and are designed to help guide the plan of care to reduce a person's risk of decline or increase his or her potential for improvement.

Continuous home health services are services provided on a long-term basis (usually longer than three months) that typically fall into one of the following client groups as defined by the CIHI in the Home Care Reporting System:

- Long Term Supportive: The client who is at significant risk of institutionalization due to unstable, chronic health conditions, and/or living condition(s) and/or personal resources.
- Maintenance: The client with stable, chronic health conditions, stable living conditions and personal resources, who needs support in order to remain living at home[4].

Home and Community Care (HCC) means home and community care services, and include publicly subsidized home health services, assisted living services and residential care services as defined in the HCC Policy Manual and are provided primarily to adults.

Health professional is, unless otherwise stated, a registered nurse, registered psychiatric nurse, licensed practical nurse, occupational therapist, physiotherapist or social worker whose profession is regulated under the *Health Professions Act* [5].

Home Care Reporting System (HCRS) is the reporting system at the Canadian Institute for Health Information that manages the interRAI-CA and RAI-HC standards and the data from these standards that flows from participating jurisdictions. Information from the interRAI tools and the HCRS provide clinicians, managers, policymakers and the public with high-quality information on persons receiving privately and publicly funded home care services.

inter*RAI* is a collaborative network of researchers in over 30 countries committed to improving health care for persons who are elderly, frail, or disabled. Their goal is to promote evidence-based clinical practice and policy decisions through the collection and interpretation of high quality data about the characteristics and outcomes of persons served across a variety of health and social services settings.

[4] Policy 4.A, General Descriptions and Definitions, HCC Policy Manual
[5] Policy 2.A, General Description and Definitions, HCC Policy Manual

inter*RAI* Assessment System: A mature "system" for use at the point-of-care consists of:

- **A Minimum Data Set (MDS) form/instrument** – contains over 200 assessment items that includes a combination of demographics and clinical assessment items.
- **A user manual** – the *RAI-Home Care (RAI-HC) Manual*, Canadian version that provides education and instructions for the completion of the assessment elements contained in the RAI-HC assessment standard.
- **Clinical Assessment Protocols (CAPs) –** general care-planning guidelines for problems, risk factors and areas of potential benefit (see detailed description above).
- **Triggers**– the specific combinations of the RAI-HC assessment elements that initiate CAPs.
- **Status and Outcome measures** – a series of scales and indices that are embedded within the assessment instrument (RAI-HC) that can be used to evaluate the status of a client or group of clients. Changes in clinical status of clients can also be evaluated and compared with that of other clients when they are re-assessed over time.

Method for Assigning Priority Levels (MAPLe): MAPLe differentiates clients into five priority levels, based on their risk of adverse outcomes. Research has demonstrated that the five priority levels are predictive of risk of adverse outcomes. MAPLe is a predictor of risk of institutionalization and caregiver stress.

Outcome Scales: A series of Outcome measures that assist clinicians to understand the characteristics of a client's health status. The scores for these measures/scales are generated from the completed RAI- HC assessment. Examples include Cognitive Performance Scale (CPS), Depression Rating Scale (DRS), ADL Performance Scales, IADL Outcome Scales, Changes in Health, End Stage Disease, Signs and Symptoms Scale (CHESS), interRAI Pressure Ulcer Risk Scale (PURS), the Pain Scale and the Detection of Indicators and Vulnerabilities for Emergency Room Trips (DIVERT) Scale.

Personal Health Profile (PHP): A two page summary of client information from the RAI-HC assessment that combines the outputs and significant health information. There are three types of PHP's, Primary Care Clinicians, Community Care Providers and Facility Based Care that have been designed to enhance communication among health professionals[6].

Quality Indicators: These indicators may be used to evaluate the quality of specific areas of clinical practice and can be used for comparative analysis across health authorities, provincially or nationally.

RAI-HC Outputs: All standardized algorithms derived from the RAI-HC assessment. Technical specifications for the RAI outputs are provided through CIHI.

[6] Guthrie et al. BMC Geriatrics 2014, 14:81.
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4083131/pdf/1471-2318-14-81.pdf ; McDaniel, J.G. (2009). *Advances in Information Technology and Communication in Health*. IOS Press, p.157

RAI-HC Recipients: Health professionals who are not RAI assessors, who receive client health information from the RAI-HC assessment.

Resident Assessment Instrument - Home Care (RAI-HC) is an internationally validated person-centred assessment standard for people with chronic and post-acute care needs that informs and guides comprehensive care and service planning in home and community-based settings. The RAI-HC focuses on the person's functioning and quality of life by assessing needs, strengths and preferences and provides the basis for an outcome-based assessment of the person's response to care or services.

Resource Utilization Groups (RUGS): is a case mix classification to categorize clients into groups based on similarity of resource utilization. There are seven main groups and 23 sub-categories.

Time-limited home health services are services provided on a short-term basis (usually less than three months), except for palliative care services, that typically fall into one of the following client groups as defined by the CIHI in the Home Care Reporting System:

- Acute: The client who needs immediate or urgent time-limited (within three months) interventions to improve or stabilize a medical or postsurgical condition.
- End of Life: The client for whom death is anticipated within six months.
- Rehabilitation: The client with a stable health condition that is expected to improve with a time-limited focus on functional rehabilitation[7].

Part 3: Who Receives an RAI-HC assessment? (target population)

HCC Policy 2.B, *Client Access, Eligibility* establishes general criteria for accessing HCC services including citizenship, residency, age, health condition and third party liability.

HCC Policy 2.D, *Client Access, Assessment*, sets out all the components that should be included during an assessment visit, including the use of the RAI-HC for adults with a chronic or ongoing health condition, and then references this document.

The RAI-HC will be used to assess clients receiving, or for whom need is being assessed, for **continuous HCC** services, such as home support services, adult day services, assisted living services, family care home services, and access to residential care services.

For adults who are being assessed with the RAI-HC and are in an institutional setting (e.g. hospital, private pay facility), please refer to CIHI coding practice.

The RAI-HC may be used in other circumstances based on health authority guidelines.

[7] Policy 4.A, General Descriptions and Definitions, HCC Policy Manual

Part 4: Who Administers an RAI-HC assessment?

Assessments must be completed by assessors that are educated based on CIHI standards and have demonstrated competency in the completion of RAI-HC assessments.

New Assessor

Health authorities must deliver comprehensive education for assessors to ensure coding accuracy, interrater reliability and meaningful clinical use.

Curriculum Content

- Coding as per CIHI conventions;
- outputs as related to care planning;
- learning software and electronic documentation for the RAI-HC; and
- applying RAI-HC information to support clinical decision-making and caseload management.

Mentorship

Health authorities must ensure that:

- an experienced and competent RAI-HC assessor provides mentorship to new assessors based on the learning needs of the new assessor;
- mentorship occurs during the new assessor's initial education and orientation period; and
- each new assessor completes three new assessments under the supervision of their mentor.

On-going and Returning Assessor Education

Health authorities will, in a timely manner:

- provide on-going education opportunities to support clinical practice standards and use of the RAI-HC;
- ensure CIHI updates are communicated to assessors; and
- ensure that assessors returning from leave or transferring from another health authority complete a competency evaluation (e.g. AIS, see below), and receive education based on their evaluation score and learning needs.

Competency and proficiency

Health authorities will develop guidelines for using AIS learning software and other measures to evaluate competency for new and experienced assessors. In order to maintain proficiency, an assessor must complete a minimum of 10 RAI-HC assessments per year.

A competency evaluation (e.g. AIS) is required at least annually for each assessor.

RAI-HC Educators

Health authorities must:

- have dedicated a RAI-HC educator(s) who will manage the education process for RAI-HC assessors and recipients;
- provide RAI-HC educators with the opportunity to liaise with CIHI and other RAI educators to promote quality and consistency; and
- ensure that RAI-HC educators meet competency standards and participate in CIHI educational opportunities to remain current in RAI-HC standards and to meet the learning needs of assessors and recipients.

Part 5: Timing of RAI-HC: Initial Assessment

The RAI-HC assessment is completed to determine the client's need for continuous HCC services. As guided by the CIHI/InterRAI standard, the initial RAI-HC assessment will be completed within 14 days of date accepted for service for ***case management services or any continuous HCC service (e.g. long term home support).*** Aiming for this standard, assessors will continue to prioritize and schedule clients according to clinical need.

Assessors will prioritize RAI-HC assessments for clients with the characteristics listed below[8]:

> Not Independent with Cognitive Skills for Daily Decision Making **OR** Received supervision or physical help with any Activities of Daily Living (e.g. bathing, personal hygiene, indoor mobility)
>
> ***AND*** one or more of the following risk factors:
>
> - Family Overwhelmed or Caregiver distressed or no caregiver.
> - Client self-reported mood is sad, depressed, hopeless.
> - Received supervision or physical help with personal hygiene.
> - Has been in hospital or emergency department in the past 30 days.

Health authorities need to develop processes to monitor compliance with this standard.

Part 6: Subsequent Assessment

Assessors will complete a RAI-HC assessment for all clients receiving case management or continuous HCC services annually at a minimum, *and* with a change in health status as described below.

[8] The characteristics of clients that are associated with priority need are aligned with the Assessment Urgency Algorithm in the interRAI Contact Assessment.

Assessments due to Change in Status

A re-assessment using the RAI-HC is indicated if the client experiences a clinically meaningful change that is not self-limited (e.g. greater than 90 days), that affects the client's health status, and that requires review or revision of the care plan to ensure appropriate care. For example:

- change in primary caregiver status;
- change in living arrangements; or
- change in client health status that impacts functional abilities (either improvement or worsening).

A hospitalization may or may not indicate a clinically meaningful change in status for the client.

Transfers between Health Authorities

When a client moves from one health authority to another, a new RAI-HC is required in their new home community. Client will be discharged from services in their originating community and new service will be initiated in their new community.

Part 7: Clinical Care Planning and Use of RAI-HC Outputs

Assessors will:

- use the RAI-HC outputs to develop an individualized care plan with the client and family at point of care;
- use clinical judgment to assess needs, strengths and preferences to prioritize CAPs;
- offer a copy (or a summary) of any HCC assessments to the client as per HCC policy 2.D; and,
- continue to use outputs to monitor care needs.

Assessors may use additional assessment tools at the point of care, if required, to augment the RAI-HC information.

Health authorities must provide assessors with up to date technology (hardware and software), mobile connectivity, and education to support them to document the RAI-HC assessment and utilize outputs at point of care.

Other Reports

Health authorities may produce reports, informed by RAI outputs that support care planning, resource management and quality improvements. These reports will be made available to assessors to understand the multi-level use of the RAI-HC and enhance practice.

RAI Outputs as Criteria

If health authorities use RAI outputs as criteria for decision support (e.g., to determine access to HCC services), there should be sufficient clinical rationale to support those chosen outputs. In addition, health authorities must have an efficient exception process. Health authorities will evaluate and monitor the impact of using the criteria and the exception process on clinical practice, client care and quality improvement. Health authorities will incorporate feedback from assessors during this process.

RUGs and Quality Indicators

Assessors should have a **broad** understanding of RUGs and Quality Indicators and how they are used by their health authority.

Part 8: Client Care Team: RAI-HC Recipients

Health authorities will ensure that RAI-HC information, clinical outputs, and care plans are made available to client care team members (including service providers) on a need to know basis. Health authorities will use standardized communication tools developed by CIHI (such as Personal Health Profiles) to share information.

Health authorities will provide their employees (excluding assessors) with learning opportunities to access and apply RAI-HC information to meet client care needs.

Health authorities must ensure that non-health authority RAI-HC recipients (e.g., contracted service providers, physicians) have access to resource materials that explain the RAI-HC information they receive.

Part 9: References

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Appendix A: Acknowledgements

The Ministry of Health gratefully acknowledges the collaboration and input of all the members of the Provincial interRAI HC Clinical Working Group listed below in the development of this revised set of guidelines, which carried out this work between October 2015 and May 2016.

Name	Position/Title	Organization
Christine Sorensen (Co-Chair)	Vice-President	BCNU
Karen Archibald (Co-Chair)	Director, Seniors Policy	MoH
Cheryl Beach	Client Affairs Manager, BC	CIHI
Teresa Erickson	RAI-HC Clinical Lead/Consultant	VCHA
Mary Herauf	Clinical Practices Standards Lead/HCC	NHA
Lisa Maxfield	Home Health Practice Lead, Integration and Strategic Services	IHA
Lorraine Chitty	Clinical Practice Leader - CCP, HHL, QRP, Newton Home Health/South Delta HH/Delta Hospital	FHA
Elaine Vance	RAI Educator	VIHA
Michelle Sordal	Regional Chair, South Fraser Valley	BCNU
Jennifer Mark	Labour Relations Officer	BCNU
MC Breadner	Research/Health Policy Officer	BCNU
Carly Poissant (Secretary)	Servicing Assistant	BCNU

Appendix B[9]: Benefits of Using the RAI-HC Assessment

Benefits for Clients

- Improves quality of care
- Improves client care outcomes
- Identifies client's strengths and preferences
- Improves safety through identification of client-specific risk factors
- Decreases malnutrition, dehydration, stasis ulcers, bowel/urinary incontinence, use of greater than 9 medications
- Improves psychosocial and physical function, management of pain, and reduces risk of falls
- Increases the comprehensiveness and accuracy of information in the client's health record

Benefits for Clinicians

- Improves job satisfaction through elimination of duplication of documentation and redundant assessments
- Outcome scales can replace previously used screening tools (e.g. Cognitive Performance Scale replaces MMSE[10]), reducing workload
- Data quality improves when clinicians use instrument for decision making, which is a win-win because then administrative level has good quality data to make informed decisions
- Improves continuity of care through use of common language between disciplines and other HCC areas such as residential care

Benefits for Service Providers

- Provides ability to match resources to client needs through the use of RUGs
- Improves management decision-making - informed by evidence linking needs, inputs and outcomes
- Improves quality of home care through the use of quality indicators
- Facilitates benchmarking

Benefits for Health Authorities and Ministry

- Provides comprehensive data base for planning, monitoring and research
- Allows comparative analysis between local communities, health authorities, and other provinces/countries
- Improves information management capacity
- Improves system-level evidence based decision-making and capacity for strategic management

[9] Information obtained from InterRAI Website: http://www.interrai.org/home-care.htm and notes from Ministry of Health staff, 2005.
[10] MMSE is the Mini Mental State Examination, a screening tool used to measure cognitive impairment.

Appendix C: CIHI and AIS Learning Resources

HCRS RAI assessors page

RAI HC User manual

HCRS learning pathways

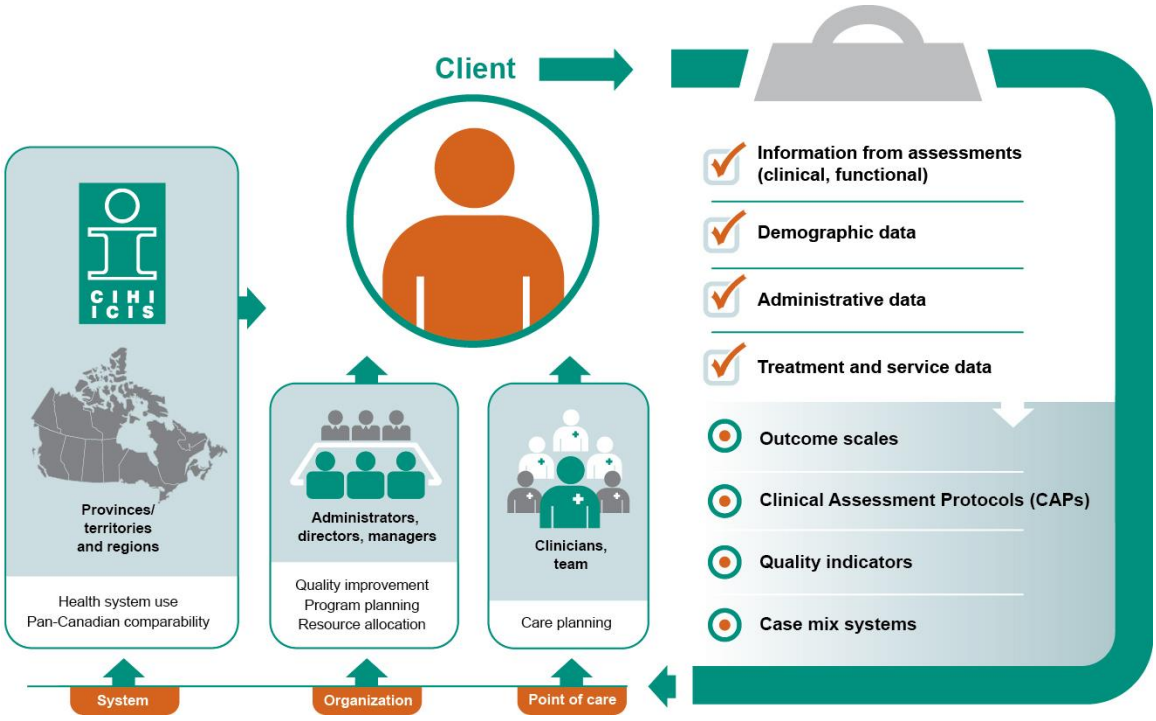
help@cihi.ca

AIS Homepage

Appendix D: The Path of Client Data at CIHI

As depicted in Figure 2 below, detailed client information is obtained and processed by CIHI to allow for effective care planning, program planning, resource allocation and continuous quality improvement throughout the health care system. Client data is also used to enable regional, provincial, territorial and national level comparisons among various data elements.

Figure 2. The path of client data, from the point of care to national analysis



Note. This figure has been used with permission from the Canadian Institute for Health Information.