From Clinician to Cabinet:
The Use of Health Information Across the Continuum

Better care. Improved quality and safety. More effective allocation of resources.

Organizations in Canada that deliver mental health, continuing care and home care services are reaping these benefits through a standardized approach to point-of-care data capture—an approach that also supports clinical, management and funding decisions.
Data Flow

In eight provinces and territories in Canada, as well as around the world, information about individuals receiving health services in hospitals and community settings is being collected in a standardized way using the interRAI Resident Assessment Instrument (RAI).

The RAI was developed in the early 1990s to support quality of care in nursing homes. International research resulted in the development of an integrated suite of assessment instruments using common concepts and measures across the health care continuum, including acute care, facility-based continuing care, home care, mental health care and palliative care.

Using the RAI, clinicians assess individuals and capture information electronically at the point of care including:

- Health, functional and cognitive status
- Nutrition, continence and skin condition
- Mood, behaviour and communication
- Social supports, environment and caregivers
- Treatments, procedures and medications

Care providers then receive real-time reports on the assessed individuals’ health status, progress and risks which support care decisions.

With no additional data collection effort, the data then flows to the Canadian Institute for Health Information (CIHI). CIHI de-identifies the data, conducts analyses using this information and produces aggregate-level reports for managers and funders at organizational, regional and provincial/territorial levels.

About interRAI

interRAI is a not-for-profit network of researchers and clinicians in more than 30 countries worldwide. interRAI develops and maintains the assessment instruments and decision support tools.

About the Canadian Institute for Health Information

The Canadian Institute for Health Information (CIHI) is an independent not-for-profit organization that provides essential information on Canada’s health system and the health of Canadians. CIHI provides support for submission and use of interRAI data in Canada.
Nova Scotia uses RAI data to make evidence-informed investment decisions.

The Ministry of Health in Nova Scotia mandated implementation of the RAI–Home Care© (RAI-HC) in 2002 to support quality of care and system planning. Since then, Nova Scotia RAI-HC data has been used for front-line care and key resource allocation decisions, enabling strategic investments where they are needed most.

When the province decided to build more than 1,000 new nursing home beds, it used RAI data to determine numbers and types of beds, as well as the appropriate distribution across the province.

When the ministry wanted to fairly allocate more than $3 million annually in new rehabilitation resources among communities, it used evidence generated from the RAI data. The ministry also employed RAI data to build a business case for Nova Scotia’s innovative Caregiver Benefit Program. This program was designed to reduce institutionalization of individuals who have complex needs by supporting their informal caregivers at home. Using provincial RAI data, the ministry projected the potential reach and impact of the program and monitored implementation to ensure that scarce resources were targeted at those with the greatest need.

“One thing is for sure: because we used client needs profiles from the RAI data, along with population demographics and other stats, we were able to present evidence-based recommendations to Cabinet, enabling the members to clearly see the rationale and providing them with the evidence to explain to their constituents and others why the new nursing homes were being built and where they were assigned.”

—Donna Dill, Director, Monitoring and Evaluation Continuing Care Branch, Nova Scotia Department of Health and Wellness

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Who Benefits—and How

Clients and Families

With standardized assessments, electronic transmission of information can occur across care settings. This reduces the burden for clients and families of providing basic information to multiple providers.

The RAI information enables clients and families to have more meaningful conversations with clinicians around the most appropriate plan of care.

Clinicians and Other Caregivers

Interdisciplinary collaboration and continuity of care are enhanced through the use of a common language and electronic sharing of information across service settings and care providers.

With real-time interRAI assessment clinical summaries and protocols, health system workers have access to international best practices where they need it most: at the point of care. These tools support the provision of the right care in the right place for a person’s needs, all of which is based on sound evidence.

Clinical Assessment Protocols
alert clinicians in real time when individuals may be at risk of decline or failure to improve.

Outcome scales
summarize clinical and functional status and help decision-makers understand the needs of individuals and populations.
Summary information from outcome scales helps system managers at organizational, regional and provincial/territorial levels **design services and programs** that meet the evolving needs of their populations.

Comparable quality indicators allow them to **benchmark their performance** with that of their peers in a quest for continuous improvement in the areas of quality and safety. These measures also serve to demonstrate accountability through public reporting by organizations such as Health Quality Ontario.

Grouping methodologies help funders **align resources with population needs** and allocate limited funds across regions or provider organizations.

**RAI grouping methodologies** allow use for evidence-informed staffing and funding decisions.
There is incredible potential for the RAI data to be used to assist with strategic planning, operational management and quality improvement across the Winnipeg Health Region. This project is a strong first step towards realizing this potential. It also has great potential for engaging staff and families in efforts to further enhance quality of care for seniors in our long-term care facilities.”

—Réal Cloutier,
Chief Operating Officer,
Winnipeg Regional Health Authority

Using RAI data, a Manitoba nursing home reduces the use of antipsychotic medications by more than 20%.

RAI quality indicators showed that there was variation in the rate of antipsychotic use across the 38 personal care homes in the Winnipeg Health Region, suggesting opportunities for improvement. In response, a regional quality improvement project led by Winnipeg Regional Health Authority managers Joe Puchniak and Cynthia Sinclair was developed and implemented.

In just six months, Middlechurch Home in Winnipeg, a 197-bed facility dedicated to the care of the elderly, achieved a reduction of more than 20% in antipsychotic medication use among the residents who were on the medication when the project began. This was achieved without any increase in behavioural symptoms or physical restraint use among this group of residents. These results represent a remarkable improvement with significant implications for resident safety, quality of life and cost. In addition, care teams are now working more collaboratively and creatively, and are beginning to use the data as never before, while management is now eager to continue quality improvement efforts and to look at other RAI quality indicators.
“Implementing standardized assessments and the Integrated Assessment Record across the Greater Toronto Area cluster is an important step in helping health service providers to deliver more patient-centric care within our communities.”

—Mimi Lowi-Young, CEO, Central West Local Health Integration Network

Ontario’s Health Based Allocation Model uses RAI data to inform funding.

Since 1996, Ontario’s Ministry of Health and Long-Term Care has used the wealth of RAI data collected at the point of care to support evidence-based distribution of available funds for continuing care in hospitals. The province’s Health Based Allocation Model is a sophisticated decision-support tool that uses RAI assessment data and other information to understand the expected demand and expenditures for health services across the continuum.

The Integrated Assessment Record enables health service providers to access assessment data in a secure electronic environment.

Ontario’s Integrated Assessment Record project leverages electronic records to share assessment information, including RAI data, among care providers in hospitals and community agencies. This unique initiative gives all providers within a client’s circle of care access to assessment information, regardless of service setting. It supports collaboration across sectors, enhancing quality and continuity of care. Currently under development is a data repository for use by data providers and by the ministry for planning and quality improvement.
The Way Forward

The benefits of the RAI are already being realized across Canada and around the world. interRAI assessments are designed for electronic data capture and sharing across care settings. They also provide clinicians with real-time clinical decision support, driving best practice in care delivery.

RAI tools inform health system uses—including planning, funding, quality monitoring and accountability—with accurate and reliable information.

Canada’s opportunity going forward will be to fully leverage the rich data now being captured by interRAI assessments. Ground-breaking analysis of health system performance is already under way. The knowledge gained from the use of this information will be essential in our quest for quality care, improved health and a sustainable health system for the future.

The appropriate use of high-quality information on health services and outcomes is critical to the future of Canada’s health system. Clinicians need information to support their care planning decisions. Health system managers need information for planning, quality monitoring and accountability. Policy-makers and senior decision-makers need information for system management and accountability. This product is one in a series designed to showcase the use and value of information at these various levels.

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