Timely, Connected and Person-Centred: How the Integrated interRAI Reporting System is Supporting Senior Care in Canada

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Abstract

The Integrated interRAI Reporting System (IRRS) supports timely, connected and person-centred senior care in Canada. IRRS enables system-to-system communication and near real-time data submission for the home care and long-term care sectors. It houses new interRAI data standards that offer improved commonality and standardization of language. With IRRS, users can explore organizational-level data, compare results across jurisdictions and see trends over time in a dynamic and user-friendly interactive business intelligence tool. IRRS will better support the sectors' ability to respond to emerging pan-Canadian needs to analyze, benchmark and compare data.

Introduction

Almost one-fifth of Canadians are aged 65 years and older (Statistics Canada 2024a), and the latest projections show this population is expected to increase at the fastest pace almost every year until, at minimum, 2073 (Statistics Canada 2024b).

Moving forward, a greater number of Canadians will require access to home care and long-term care. The need for person-centred care, along with timely and accurate health data, has never been more critical to improve Canadians' quality of life and system sustainability.

As part of the Canadian Institute for Health Information's (CIHI's) newest data platform, the Integrated interRAI Reporting System (IRRS) uses the latest technology and modern exchange standards. This allows for system-to-system communication and near real-time data submission for the home care and long-term care sectors. Access to timelier data, along with CIHI's modernized reporting services, will enhance each sector's ability to respond to emerging pan-Canadian needs to analyze, benchmark and compare data.

Why IRRS?

IRRS is used to collect information pertinent to a person's care from home care and long-term care into a single system. This includes demographic, administrative and clinical assessment data.

Compared to IRRS' predecessors that were siloed systems (i.e., Legacy Home Care Reporting System [https://www.cihi.ca/en/home-care-reporting-system-metadata] and Continuing Care Reporting System [https://www.cihi.ca/en/continuing-care-metadata]), IRRS' singular platform houses multiple datasets. IRRS supports data collected from these new data standards:

- interRAI Contact Assessment (interRAI CA);
- interRAI Home Care (interRAI HC); and
- interRAI Long Term Care Facilities (interRAI LTCF).

IRRS offers a variety of benefits.

1. *A near real-time data submission model* that validates information coming from the point of care and provides immediate results of the submission, allowing for timelier reporting and the ability to address data quality issues "in the moment."

   Compared with requirements when submitting to IRRS' predecessors, jurisdictions will no longer need to manually batch assessments, format them and submit them to CIHI once every quarter before receiving feedback and validation after quarter end. With IRRS, assessors will have more time to dedicate to resident care.
2. *Longitudinal analysis capabilities within and across care settings* to support a deeper understanding of care trajectories, inform care planning and guide policy development to improve health outcomes and capacity planning.
3. *Improved commonality and standardization of language* across new assessment standards, which include revised and newly developed outcomes scales from interRAI to better support person-centred care.
4. *Usage of the latest industry standards* to facilitate moving and sharing data, and to provide opportunities to integrate with other electronic health repositories for integration of a resident's data and improve understanding of their care journey.

This includes use of Health Level Seven, Fast Healthcare Interoperability Resources, Systematized Nomenclature of Medicine - Clinical Terms and Representational State Transfer application programming interface that are housed in CIHI's Canadian-hosted cloud.

> The thing I have really appreciated with using IRRS is the ability to submit each assessment individually when it's completed. The system has a quick response time (less than 1 minute) to know if the assessment is rejected or accepted. No longer having to do batch entries has been a blessing in reducing my workload sufficiently.
>
> (Debbie C., Grandview Lodge Long-Term Care Home, Dunnville, Ontario)

IRRS secure reporting

With IRRS, high-quality data is readily available to support decision making at all levels.

CIHI's secure reporting platform offers a dynamic and user-friendly interactive business intelligence tool for viewing data. Data submitters can explore organizational-level data, compare results across jurisdictions and see trends over time.

For example, in Figure 1 we can deduce that province/territory A had an overall higher risk-adjusted rate for "residents on antipsychotics without a diagnosis of psychosis" quality indicator than province/territory B, and that in Q4 2022–2023, facility B had a higher risk-adjusted rate than any other facility chosen for comparison. (CIHI. IRRS Long Term Care Secure Reporting. Accessed May 23, 2025.)

IRRS secure reporting allows approved individuals to customize reports related to quality indicators, outcome scales, resource utilization and contextual measures. Users can select and compare jurisdictions, facilities, corporations and fiscal quarters for specific indicators and metrics. Users can download a variety of visuals to display the data.

IRRS secure reporting is refreshed monthly, leading to more updated and accurate data for decision making and planning.

CIHI has heard from organizations that IRRS secure reporting has significantly improved their ability to customize accurate and timely data graphs and charts for briefings with their leadership and board of directors.

FIGURE 1.

"Residents on antipsychotics without a diagnosis of psychosis" quality indicator, risk-adjusted rate, Q4 2020–2021 to Q4 2023–2024

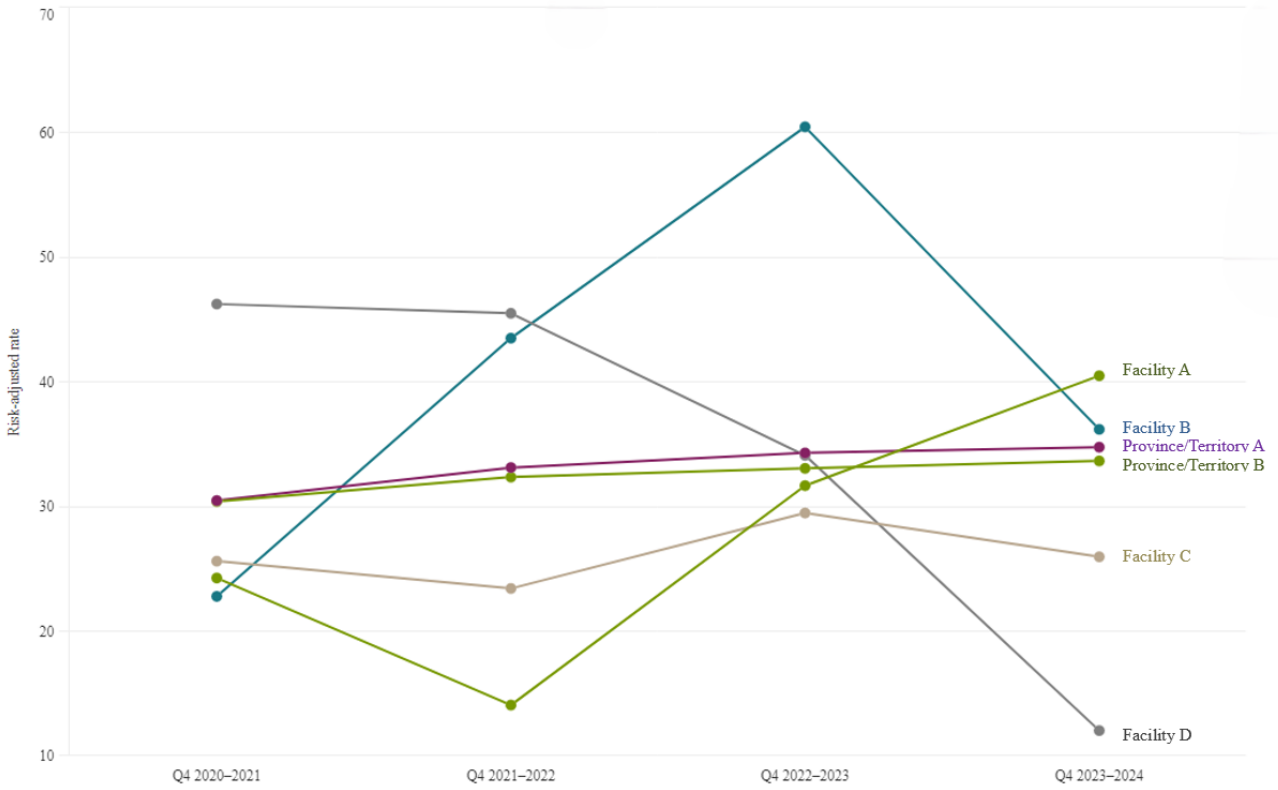


Figure 2 shows an example of a horizontally stacked bar graph showing resource utilization (RUG-III plus category) for multiple provinces/territories. In this figure, Province/Territory B has a higher percentage of special rehabilitation cases – information that can be used for capacity planning. When a user is in the IRRS secure reporting platform, they can hover over each section in the graph to show specific statistics (e.g., specific percentage of reduced physical function cases). (CIHI. IRRS Long Term Care Secure Reporting. Accessed May 23, 2025.)

At a time when data are paramount to evidence-based decision making, IRRS secure reporting can provide the data necessary for facilities to improve resident care, corporations to determine strategic priorities and jurisdictions to determine system-level needs.

New interRAI assessments

InterRAI assessments are used worldwide, and their usage will align Canada with international standards, offering the ability for comparisons and driving health improvements globally. To ensure that Canadian contexts are met, CIHI works closely with interRAI to adapt the standards appropriately.

The new assessments offer comprehensive, standardized data that support decisions at all levels (i.e., facility, organizational and system level) and are part of a common assessment system across the continuum of care.

The assessments build on clinicians' existing assessment skills and experience – it is simply an extension of what is already part of the clinician's skill set.

The assessment items evaluate the needs, strengths and preferences of the resident and serve as specific triggers for care planning. The use of the assessment and clinical outputs allow clinicians to focus on priorities of care.

Following are some benefits of the new interRAI assessment suite:

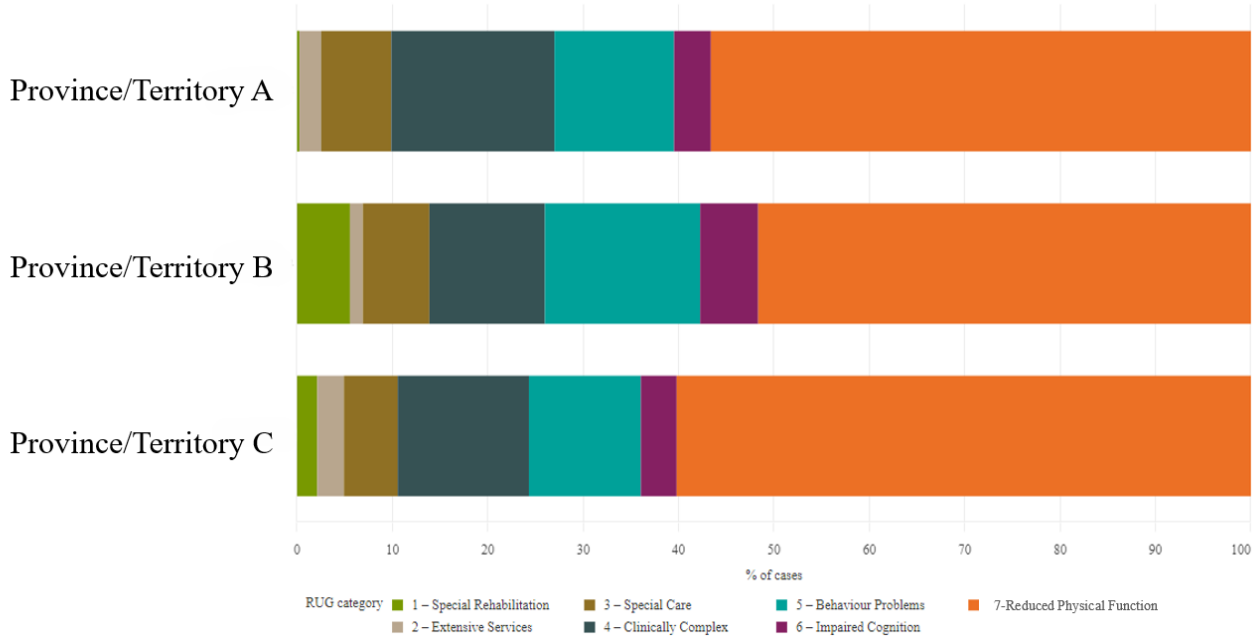
- consistent language, definitions and coding options;
- common, clinically relevant core elements and expanded response sets for greater accuracy;
- standard observation periods;
- reduction in the number of items, leading to shorter assessment periods;
- revised and added outcome scales and clinical assessment protocols;
- improved consistency in assessing areas that affect quality of life.

Looking to the future

With IRRS, CIHI has seen an increase in the adoption and use of interRAI assessments across home care and long-term care sectors across Canada, with more provinces and territories committed to submitting data to IRRS compared with what was previously available in our legacy systems.

Within the next two years, CIHI is expecting 85% of provinces and territories to submit interRAI LTCF and interRAI HC data into IRRS, along with over 65% of provinces and territories submitting interRAI CA data.

FIGURE 2.
Resource utilization (RUG-III plus category), percent of cases, 2023–2024



CIHI is working with governments and health professionals across the country to implement IRRS into their home care and long-term care sectors. As CIHI receives more data across the country, we will be able to provide more robust reports of quality indicators and more information regarding the status of home care and long-term care services experienced by Canadians today.

Our commitment to deliver trusted, high-quality data is actualized in the IRRS. We hope that IRRS better serves decision makers, front-line workers, researchers and policy makers in shaping the future of healthcare.

If you are interested in learning more about IRRS, subscribe to the CIHI's Specialized Care team for communication on the latest news and releases (https://www.cihi.ca/en/specialized-care-subscriptions), or contact us at specializedcare@cihi.ca. HQ

References

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About the Author

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