CIHI

The interRAI Suite
interRAI Home Care

Alberta First Nations

Presentation 2

Jan 2026

Speakers

Vicki Scott, Project Lead – Canadian Institute for Health Information (CIHI)
Vicki Scott is a Project Lead on CIHI's Specialized Care Development and Data Request team, leading strategic projects that advance CIHI's priorities across long-term care, home care, and inpatient rehabilitation sectors. Her work includes supporting the Alberta First Nations project by advancing Indigenous health data partnerships and readiness for IRRS implementation, with a focus on advancing data strategies grounded in principles of data sovereignty and health equity.

Maria Klar, Clinical Specialist – Canadian Institute for Health Information (CIHI)
Maria Klar has been a clinical specialist at CIHI for the past 7 years. Maria is currently helping support the pan-Canadian transition to the newer interRAI suite of instruments and provides education to both home care and long-term care nurses on completing these assessments. Maria's background includes working in long-term care, home care, and the government of Alberta Ministry of Health before moving to CIHI.

Land acknowledgement

As CIHI works toward better health for all people in Canada, we acknowledge that we live and work on the traditional territories of First Nations, Inuit and Métis Peoples. Our work is grounded in cultural safety and humility, respectful engagement, and Indigenous-driven processes and partnerships.

The world’s best health systems are powered by data.

CIHI is a vital source of Canada-wide health data that Canadians rely on to inform health policy, care, management and research. It’s our job to ensure that health data is trusted, connected, accessible, timely, contextualized, relevant and comprehensive.

We are building a future where every Canadian gets the care they need — when and where they need it.

Better data. Better decisions. Healthier Canadians.

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Objectives

Familiarize yourself with the interRAI assessment, with a deeper look at the interRAI Home Care

Have a basic understanding of the assessment outputs for clinical and administrative use

Showcase outputs in practical applications

Standardized Assessments

Consistency across the continuum of care

Common assessment system

- Community health
- Home care
- Long-term care
- Community mental health
- Mental health
- Palliative care

Common Outputs

Outcome Scales
Clinical Assessment Protocols
Quality Indicators
RUGs and Case Mix System

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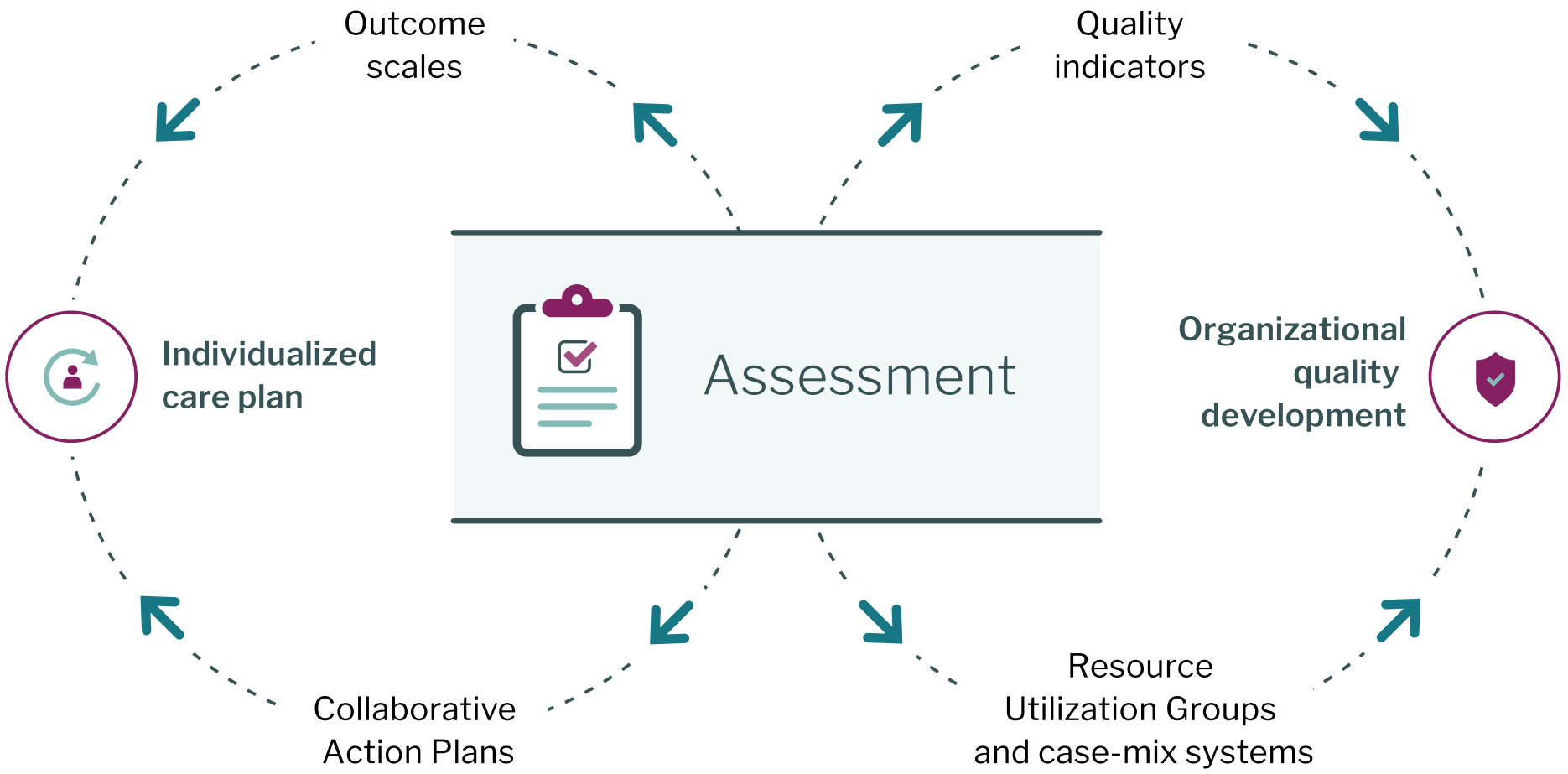
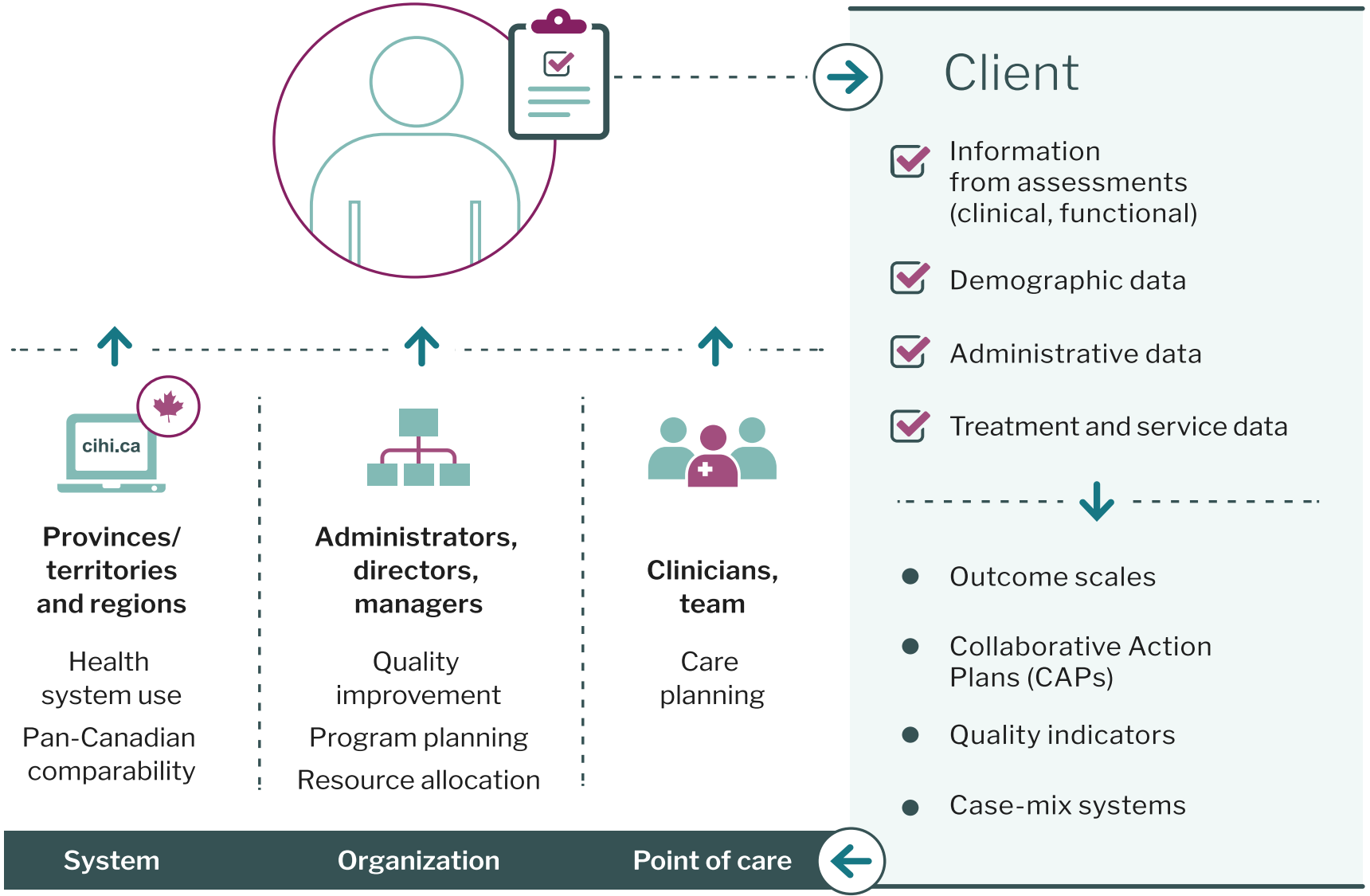
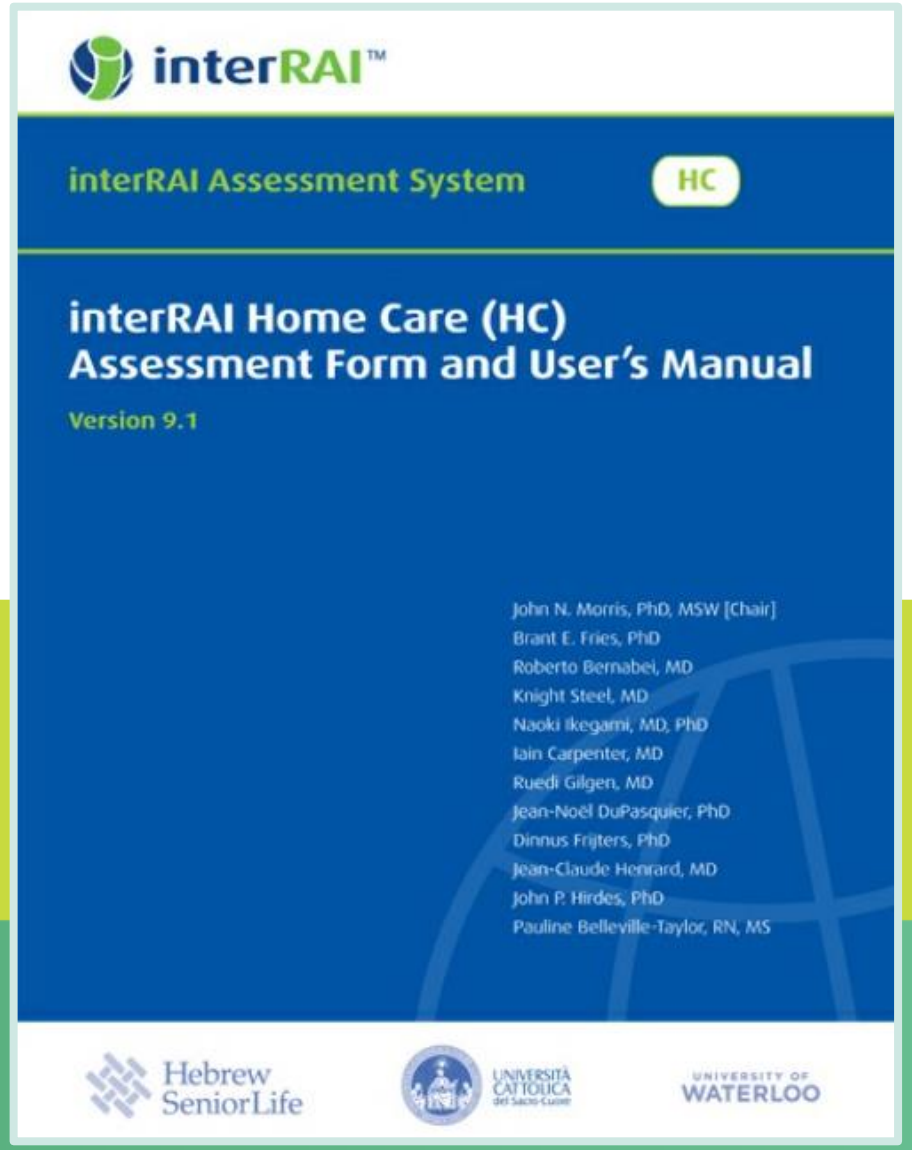
Standardized assessments drive better care and outcomes



Overview of data flow and usage



interRAI Home Care and associated outputs



Basic Principles of the interRAI-HC

The purpose is to complete the comprehensive assessment with the goal of:

- Maximizing functional capacity and quality of life
- Addressing health problems
- Ensuring individual remains in home as long as possible

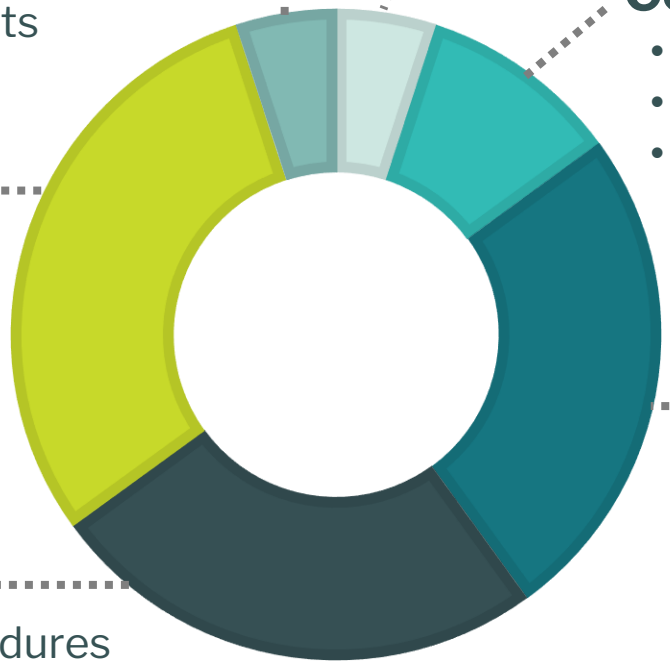
Do this by:

- Identifying functional, medical and social issues that are limiting or will become limiting through an accurately coded assessment
- Identify person's strengths and preferences

Information can be used:

- As basis for further evaluation of unrecognized or unmet needs
- Guide in the development in a comprehensive care plan

interRAI HC



Quality of Life
- Psychosocial well-being
- Social supports

Administrative items

Cognition and Mental Health
- Cognitive functioning
- Mood
- Behaviours

Clinical Management
- Health conditions
- Diseases
- Nutrition
- Skin Condition
- Medications

Physical functioning
- Communication
- Vision
- Hearing
- IADLs
- ADLs

Formal Services
- Treatments and procedures
- Formal care
- Hospital and emergency use

Examples of assessment items

SECTION C. Cognition

1. COGNITIVE SKILLS FOR DAILY DECISION MAKING
Making decisions regarding tasks of daily life — e.g., when to get up or have meals, which clothes to wear or activities to do

- **0 Independent** — Decisions consistent, reasonable, and safe
- **1 Modified independence** — Some difficulty in new situations only
- **2 Minimally impaired** — In specific recurring situations, decisions become poor or unsafe; cues / supervision necessary at those times
- **3 Moderately impaired** — Decisions consistently poor or unsafe; cues / supervision required at all times
- **4 Severely impaired** — Never or rarely makes decisions
- **5 No discernible consciousness, coma [Skip to Section G]**

2. MEMORY / RECALL ABILITY
Code for recall of what was learned or known

0 Yes, memory OK **1** Memory problem

a. **Short-term memory OK** — Seems / appears to recall after 5 minutes
b. **Procedural memory OK** — Can perform all or almost all steps in a multitask sequence without cues
c. **Situational memory OK** — Both: recognizes caregivers' names / faces frequently encountered AND knows location of places regularly visited (bedroom, dining room, activity room, therapy room)

3. PERIODIC DISORDERED THINKING OR AWARENESS
[Note: Accurate assessment requires conversations with staff, family, or others who have direct knowledge of the person's behaviour over this time]

- **0** Behaviour not present
- **1** Behaviour present, consistent with usual functioning
- **2** Behaviour present, appears different from usual functioning (e.g., new onset or worsening; different from a few weeks ago)

a. **Easily distracted** — e.g., episodes of difficulty paying attention; gets sidetracked ☐
b. **Episodes of disorganized speech** — e.g., speech is nonsensical, irrelevant, or rambling from subject to subject; loses train of thought ☐
c. **Mental function varies over the course of the day** — e.g., sometimes better, sometimes worse ☐

4. ACUTE CHANGE IN MENTAL STATUS FROM PERSON'S USUAL FUNCTIONING — *e.g., restlessness, lethargy, difficult to arouse, altered environmental perception* ☐

0 No **1** Yes

5. CHANGE IN DECISION MAKING AS COMPARED TO 90 DAYS AGO (OR SINCE LAST ASSESSMENT IF LESS THAN 90 DAYS AGO) ☐

- **0** Improved
- **1** No change
- **2** Declined
- **8** Uncertain

Examples of assessment items

SECTION D. Communication and Vision

1. MAKING SELF UNDERSTOOD (Expression)
Expressing information content—both verbal and nonverbal

- **0 Understood**—Expresses ideas without difficulty
- **1 Usually understood**—Difficulty finding words or finishing thoughts BUT if given time, little or no prompting required
- **2 Often understood**—Difficulty finding words or finishing thoughts AND prompting usually required
- **3 Sometimes understood**—Ability is limited to making concrete requests
- **4 Rarely or never understood**

2. ABILITY TO UNDERSTAND OTHERS (Comprehension)
Understanding verbal information content (however able; with hearing appliance normally used)

- **0 Understands**—Clear comprehension
- **1 Usually understands**—Misses some part / intent of message BUT comprehends most conversation
- **2 Often understands**—Misses some part / intent of message BUT with repetition or explanation can often comprehend conversation
- **3 Sometimes understands**—Responds adequately to simple, direct communication only
- **4 Rarely or never understands**

3. HEARING
Ability to hear (with hearing appliance normally used)

- **0 Adequate**—No difficulty in normal conversation, social interaction, listening to TV
- **1 Minimal difficulty**—Difficulty in some environments (e.g., when person speaks softly or is more than 2 metres [6 feet] away)
- **2 Moderate difficulty**—Problem hearing normal conversation, requires quiet setting to hear well
- **3 Severe difficulty**—Difficulty in all situations (e.g., speaker has to talk loudly or speak very slowly; or person reports that all speech is mumbled)
- **4 No hearing**

4. VISION
Ability to see in adequate light (with glasses or with other visual appliances normally used)

- **0 Adequate**—Sees fine detail, including regular print in newspapers / books
- **1 Minimal difficulty**—Sees large print, but not regular print in newspapers / books
- **2 Moderate difficulty**—Limited vision; not able to see newspaper headlines, but can identify objects
- **3 Severe difficulty**—Object identification in question, but eyes appear to follow objects; sees only light, colours, shapes
- **4 No vision**

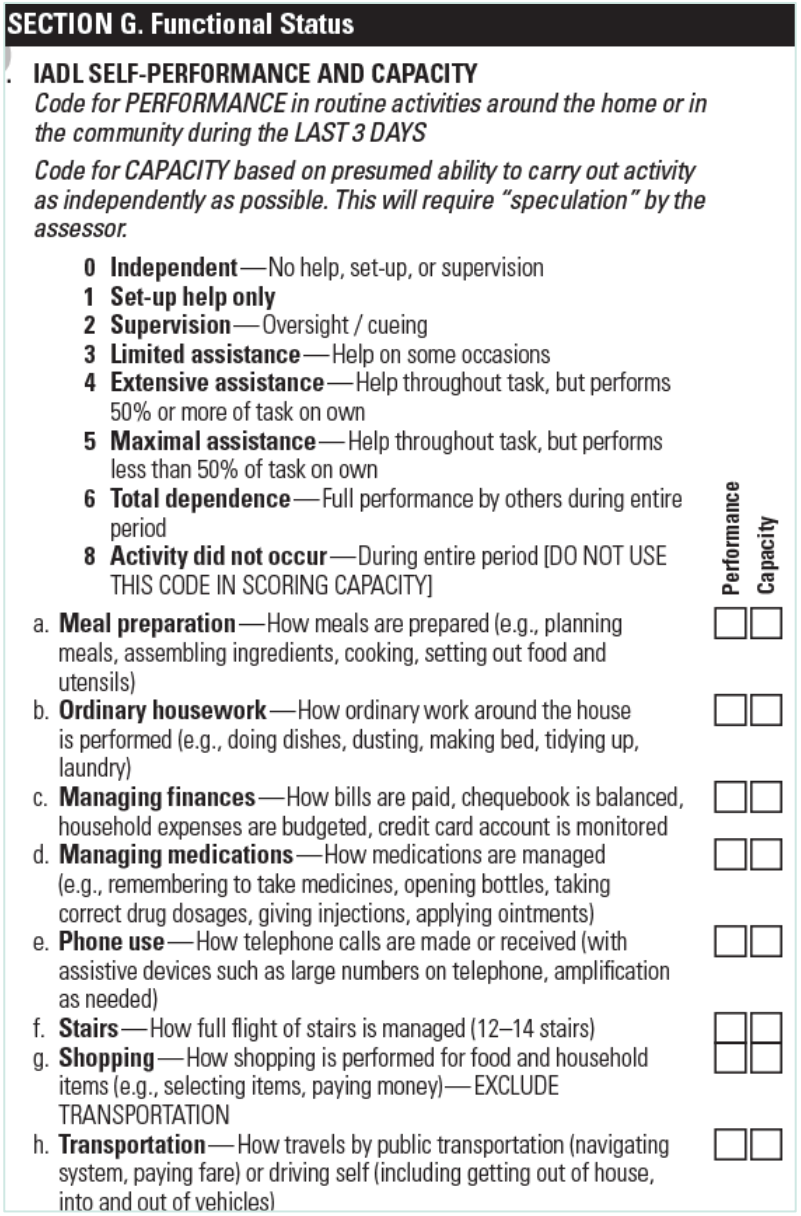
Examples

Each of the IADLs asks questions about the persons performance of normal activities around the home or in the community in the last 3 days.

Items are scored in two categories:

Performance — Measures what the person actually did within each IADL category in the last 3 days.

Capacity — Code based on the person's presumed ability to carry out the activity.



SECTION G. Functional Status

IADL SELF-PERFORMANCE AND CAPACITY

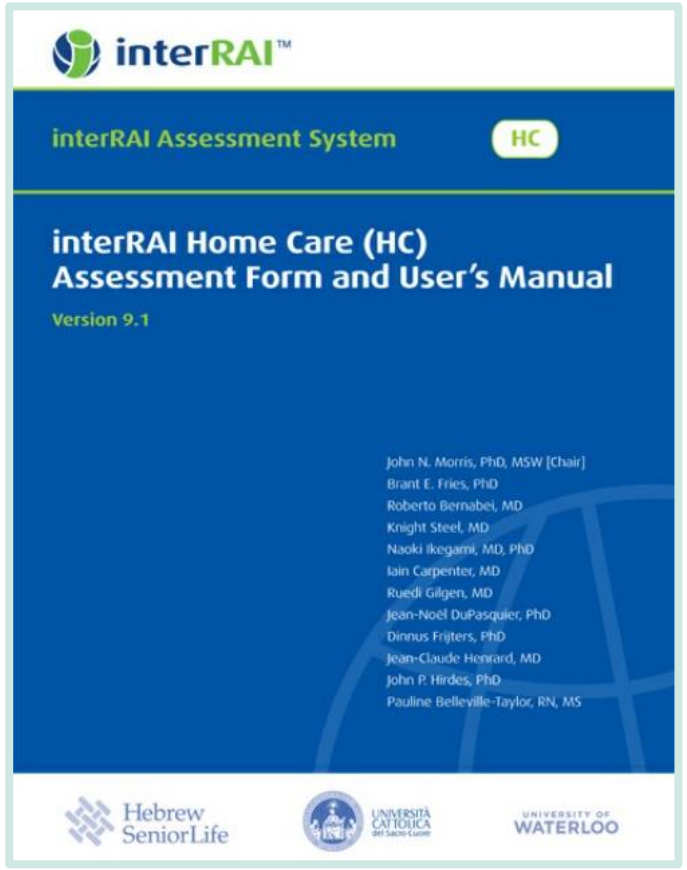
Code for PERFORMANCE in routine activities around the home or in the community during the LAST 3 DAYS

Code for CAPACITY based on presumed ability to carry out activity as independently as possible. This will require "speculation" by the assessor.

0 **Independent**—No help, set-up, or supervision
1 **Set-up help only**
2 **Supervision**—Oversight / cueing
3 **Limited assistance**—Help on some occasions
4 **Extensive assistance**—Help throughout task, but performs 50% or more of task on own
5 **Maximal assistance**—Help throughout task, but performs less than 50% of task on own
6 **Total dependence**—Full performance by others during entire period
8 **Activity did not occur**—During entire period [DO NOT USE THIS CODE IN SCORING CAPACITY]

	Performance	Capacity
a. **Meal preparation**—How meals are prepared (e.g., planning meals, assembling ingredients, cooking, setting out food and utensils)	☐	☐
b. **Ordinary housework**—How ordinary work around the house is performed (e.g., doing dishes, dusting, making bed, tidying up, laundry)	☐	☐
c. **Managing finances**—How bills are paid, chequebook is balanced, household expenses are budgeted, credit card account is monitored	☐	☐
d. **Managing medications**—How medications are managed (e.g., remembering to take medicines, opening bottles, taking correct drug dosages, giving injections, applying ointments)	☐	☐
e. **Phone use**—How telephone calls are made or received (with assistive devices such as large numbers on telephone, amplification as needed)	☐	☐
f. **Stairs**—How full flight of stairs is managed (12–14 stairs)	☐	☐
g. **Shopping**—How shopping is performed for food and household items (e.g., selecting items, paying money)—EXCLUDE TRANSPORTATION	☐	☐
h. **Transportation**—How travels by public transportation (navigating system, paying fare) or driving self (including getting out of house, into and out of vehicles)	☐	☐

Any questions about the assessment?



interRAI HC Outputs

The interRAI-HC has embedded decision support outputs

These outputs summarize information from the completed assessment

Outputs can be compared over time to monitor changes

Can support both clinical and organizational decision making and care planning

- Outcome Scales
- Decision support algorithms
- Collaborative Action Plans
- Quality Indicators
- Case Mix RUGs

Outcome Scales for the interRAI-HC

These scales describes a person in specific clinical areas (i.e. cognitive performance, pain, ADLs, etc.)

Provides information to clinician for individualized care plans

Used to compare status over time - improvement/deterioration

The scales can be run using a limited set of interRAI items

Outcome Scales for the interRAI-HC

ADL Long Form, Short Form, and Self-performance Hierarchy	Deaf/Blind Severity Index Scale
ADL–IADL Functional Hierarchy Scale	Depression Rating Scale (DRS)
Aggressive Behavior Scale (ABS)	IADL Involvement, Difficulty and Capacity Hierarchy Scales
Changes in Health End-stage Disease and Signs and Symptoms (CHESS) Scale	Pain Scale
Cognitive Performance Scales (CPS)	Pressure Ulcer Risk Scale (PURS)
Communication Scale	

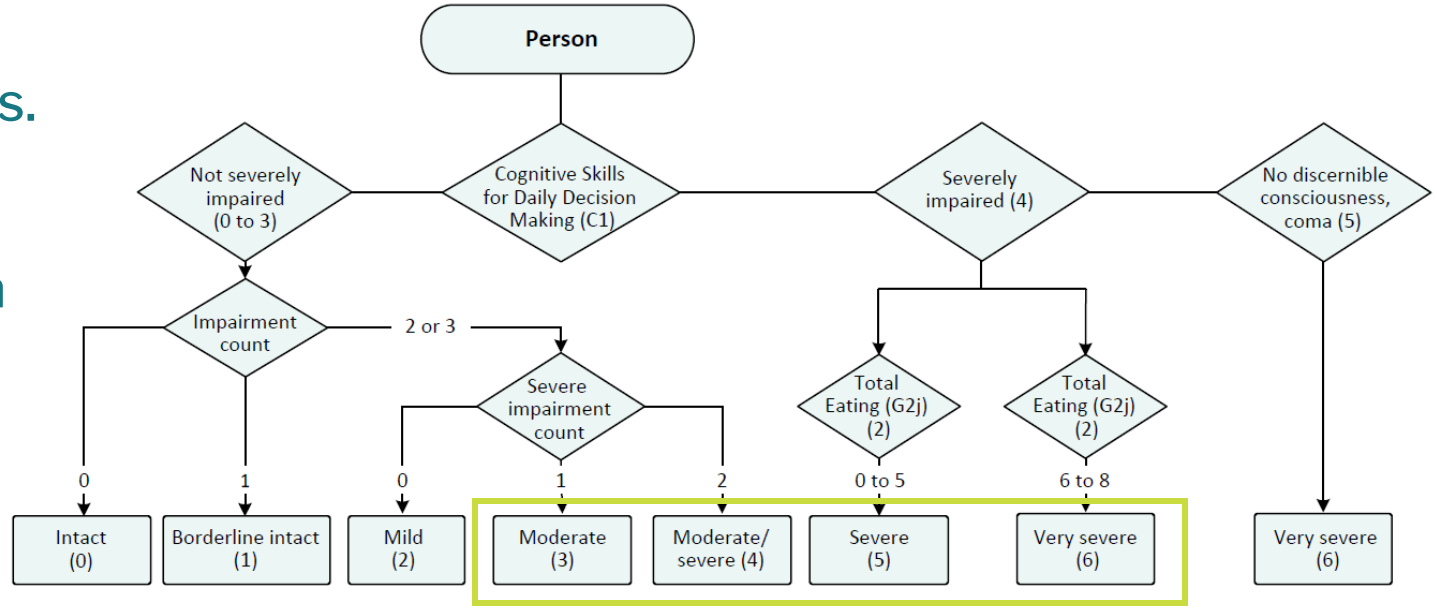
Use of HC Outputs – Cognitive Performance Scale

New Zealand Example

The CPS scale provides a ‘common language’ across settings and professions.

Enable individuals and services to be followed-up and compared across time in respect of their degree of cognitive impairment.

Utility in public health planning and research contexts without requiring additional tests outside of routine care.



https://www.mdpi.com/1660-4601/18/13/6708

Screening Algorithms for the interRAI-HC

The screening algorithms measure relative urgency of service needs or overall care complexity

The algorithms can be used as decision-support tools to promote consistent decisions among home care staff

This information can be used to support evidence-informed quality improvement initiatives, program planning and resource allocation

Screening Algorithms for the interRAI-HC
Crisis Identification and Situational Improvement Strategies (CRISIS)
Detection of Indicators and Vulnerabilities for Emergency Room Trips Scales (DIVERT)
Method for Assigning Priority Levels (MAPLe)
Personal Support Algorithm (PSA)
Vulnerable Persons at Risk Scale (VPR)

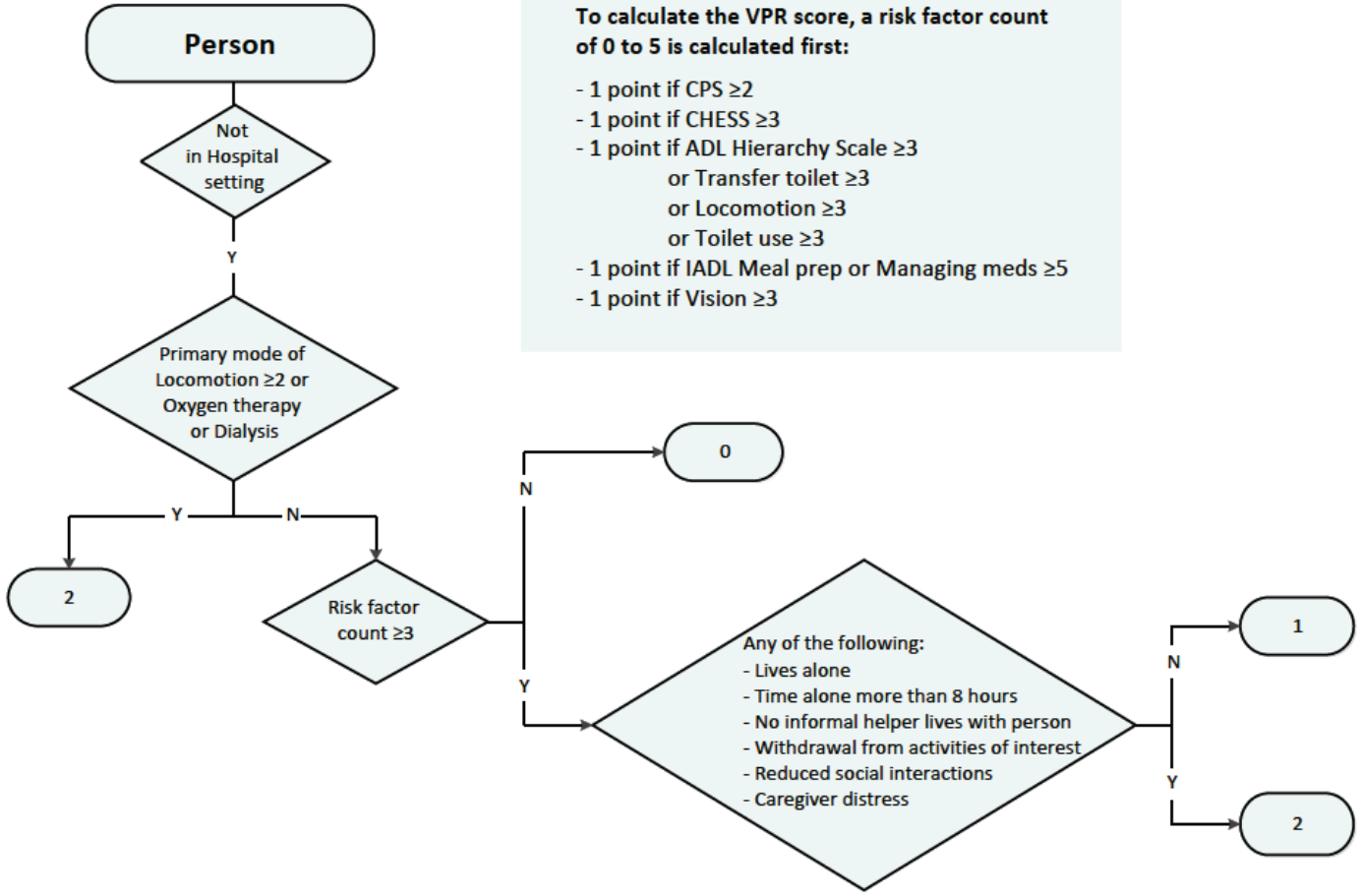
Use of HC Outputs - Vulnerable Persons at Risk

Island Health in B.C. uses the Vulnerable Persons at Risk (VPR) Scale to help identify at-risk clients during emergency situations to:

- Allocate adequate resources

- Ensure that individuals with ongoing health needs continue to receive necessary treatment

https://www.cihi.ca/en/case-study/supporting-the-public-health-systems-resilience-in-times-of-emergency



Use of HC Outputs - DIVERT

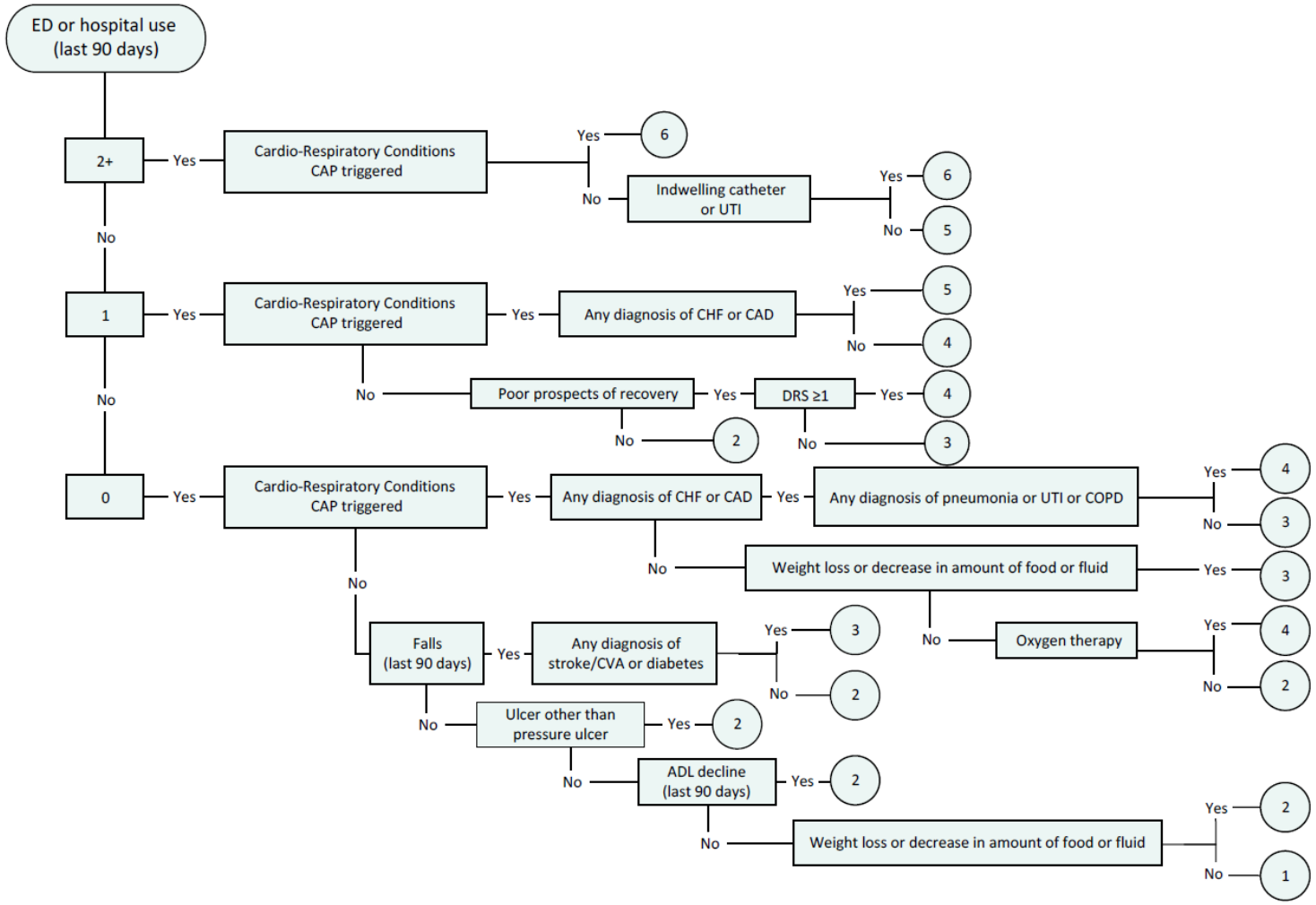
In Ontario, they created a DIVERT CARE project which made use of the **DIVERT (Detection of Indicators and Vulnerabilities for Emergency Room Trips) Scale.**

This algorithm helped identified clients at high risk of unplanned emergency department (ED) visits and hospitalizations.

Result was a reduction in ED visits by 20%.

https://pmc.ncbi.nlm.nih.gov/articles/PMC8111935/

https://interrai.org/wp-content/uploads/2023/09/DIVERT-Scale-Brief-Guide.pdf



Collaborative Action Plans (CAPs) for the interRAI-HC

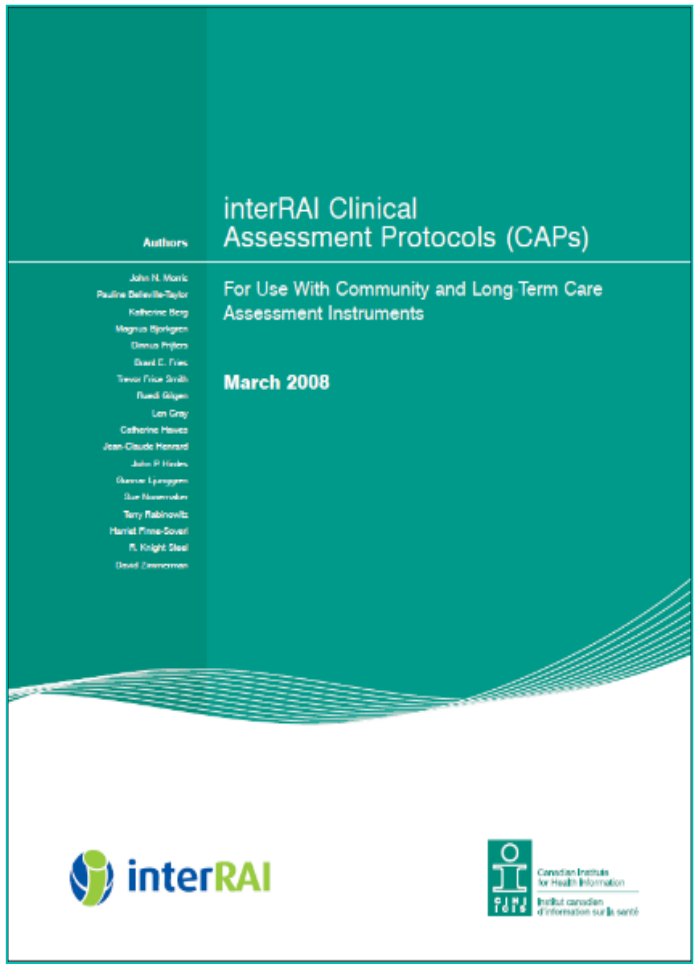
CAPs focus on a person's function and quality of life, assessing the person's needs, strengths and preferences

Links the information gathered in the assessments to individualized care plans

Guide the plan of care to resolve problems, reduce the risk of decline or increase the potential for improvement

Supports critical thinking and clinical decisions by providing a framework to analyze assessment information in a structured manner

Collaborative Action Plans (CAPs) for the interRAI-HC



Problem - 27 problem areas in four broad areas: Functional performance, clinical issues, cognition and mental health and social life

Trigger - Links the information gathered in the assessment to a basic problem and includes the possibility of problem resolution, reducing the risk of decline or increasing the potential for improvement

Guidelines - For those triggered, each CAP contains care guidelines to help think through the relevant underlying issues and move toward a plan of care

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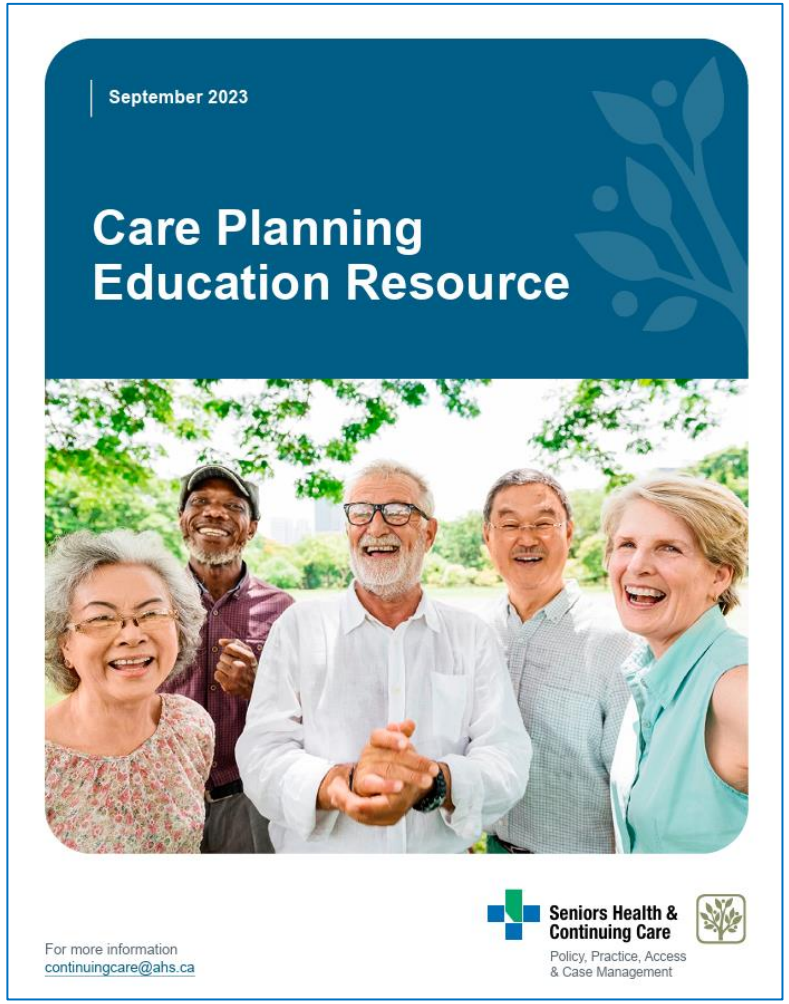
Use of HC Outputs – Collaborative Action Plans

Alberta Health Services – Care Planning Education Resource.

Consists of identified categories/problems and the related reason for the concern, goals statements and interventions that will help the client reach the goal (care plan).

https://www.albertahealthservices.ca/assets/info/seniors/if-sen-cc-care-planning-education-resource.pdf



Quality Indicators (QIs)

Support quality initiatives, program evaluation, peer comparisons and benchmarking

They are comparable within and across jurisdictions

Regional and provincial reporting of adjusted and unadjusted quality indicators

Quality Indicators (QIs)

Quality indictors are an output of the interRAI assessment that:

- Provide a standard, quantitative basis for comparison
- Can be used to measure, compare and monitor performance over time in four key domains
- Can be used at the organization or system level to support quality initiatives, program evaluation, peer comparisons and benchmarking
- Use in CIHI public reporting

Physical	Psychosocial	Safety	Other Clinical Issues
• Instrumental Activities of Daily Living (IADLs) • Activities of Daily Living (ADLs) • Communication • Bladder Continence	• Cognition • Caregiver Distress • Social Isolation • Reduced Community Activity • Mood Decline	• Falls • Hospitalizations • Injuries and Breaks	• Pain: Inadequate Medication • Daily Pain • Weight Loss • No Influenza Vaccination

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Use of HC Outputs – Quality Indicators

Caregiver Distress

This quality indicator is publicly reported by CIHI.

It measures the percentage of long-stay home care clients whose unpaid caregivers report being distressed, angry, or depressed, or are unable to continue in their caring activities.

[Caregiver Distress | CIHI]

Resource Utilization Group (RUG) and Case Mix (CM)

Resource Utilization Group is a grouping methodology used to categorize data into groups based on the clinical and resource-utilization similarities of the individuals assessed.

Each RUG group is associated with a Case Mix Index value that provides an indication of the average daily resource use for individuals assigned to a particular group.

RUGs and CMI values can be used to better understand the characteristics and needs of client populations. These tools provide research-based evidence for planning, quality improvement and resource allocation.

Resource Utilization Groupers (RUGs) and Case Mix

There are 7 RUG-III categories with 23 groups in Home Care.

Each clinical category has between 3 and 5 RUG-III groups.

Categories are ordered in a clinical hierarchy from most resource-intensive (Special Rehabilitation) to the least resource-intensive (Reduced Physical Function) category.

Use of HC Outputs - RUGs

Integrated Home Care for the Calgary Zone of AHS used RUG groupers to formulate service guidelines.

These guidelines:

Support individual resource allocation decisions made by case managers, and

Provide a consistent and transparent method of allocating limited resources.

[Service guidelines based on Resource Utilization Groups Version III for Home Care provide decision-making support for case managers - PubMed]

	SG Categories Based on RUG-III/HC			
	Category One (CA1, BA1, PA1, PA2)	**Category Two (RA1, RA2, IA1, IA2, BA2, CA2)**	**Category Three (CB, IB, BB, PB, PC)**	**Category Four (RB, SE3, SE2, SE1, SSA, SSB, CC, PD)**
Client description	Client/family may: • Be in the early stages of disease trajectory where numerous small losses are beginning to accumulate • Be stable and require monitoring for mild ADL and IADL loss • Have mild cognitive impairment or behaviour problems • Require prevention of caregiver fatigue	Client/family may: • Be advancing along the disease trajectory • Need a mixture of case management, professional and support services for mild to moderate ADL/IADL impairment or moderate cognitive impairment or behaviour problems • Require prevention of caregiver fatigue	Client/family may: • Have high needs for case management, professional and support services • Be unstable with high risks for institutionalization and for secondary care • Have moderate loss of ADL and/or behaviour problems and/or cognitive impairment • Have high needs for respite services	Client/family may: • Have exceptionally high needs for case management, professional and/or support services • Require high rehabilitation services • Be clinically unstable • Be frail or at the end of life • Be priority for placement • Have late or at least moderate ADL loss combined with at least one of suctioning, ventilator or tracheotomy
Total hours of service available (excluding overnight respite)	Professional services = up to 10 h/mo Support services = up to 38 h/mo	Professional services = up to 10 h/mo Support services = up to 74 h/mo	Professional services = up to 10 h/mo Support services = 112 h/mo	Professional services = up to 10 h/mo Support services = 142 h/mo
Case management	The role of case management is to assess client health needs, care plan and monitor health status and outcomes. The case manager seeks opportunities to promote health and prevent illness, to prevent institutionalization, to ensure the client's appropriate access and utilization of services, to support the family/informal caregiver and to communicate and coordinate services. Based on assessment, professional judgment and home care standards, CCCs determine how frequently and by what method they will be in contact with their clients.			
Interventionist service including RN, LPN, OT, PT, RRT, RD, SW, SP&L	Daily interventionist services up to twice daily. Provision of additional hours of interventionist service requires consultation with the supervisor. Client may require additional short-term interventionist services to manage clinical exacerbations or short-term medical needs or to shift RN/LPN to manage the chronic disease trajectory when approaching the end of life.			
Personal care services	Up to 2 h/week for bathing deficit or Up to 1 h/day with assessed IADL (meals and medication) deficits and ADL deficits (to a maximum of 28 h/4 week)	0–2 h/day with assessed deficit in specific IADL (includes meals and medication) and ADL (maximum of 56 h/4 wk)	0–3 h/day with assessed deficits in specific IADL (includes meals and medication) and ADL (maximum of 84 h/4 wk)	0–4 h/day with assessed deficits in specific IADL (includes meals and medication) and ADL (maximum of 112 h/4 weeks)
Homemaking	0–2 h/month based on assessed need for personal care	0–2 h/ month based on assessed need for personal care	0–4 h/month based on assessed need for personal care	0–6 h/month
Personal care: respite	Up to 2 h/week	Up to 4 h/week	6 h/week and If homebound, may convert the daily cost of ADSP to hours of in-home respite	6 h/week and If homebound, may convert the daily cost of ADSP to hours of in-home respite
Companion (social support only)	Consider volunteer services	Consider volunteer services	Consider volunteer services	Consider volunteer services
Adult day support	Up to 2 days/week	Up to 2 days/week	Up to 2 days/week	Up to 2 days/week
Facility-based overnight respite	2 weeks annually	3 weeks annually	4 weeks annually	4 weeks annually

Other practical application of outputs

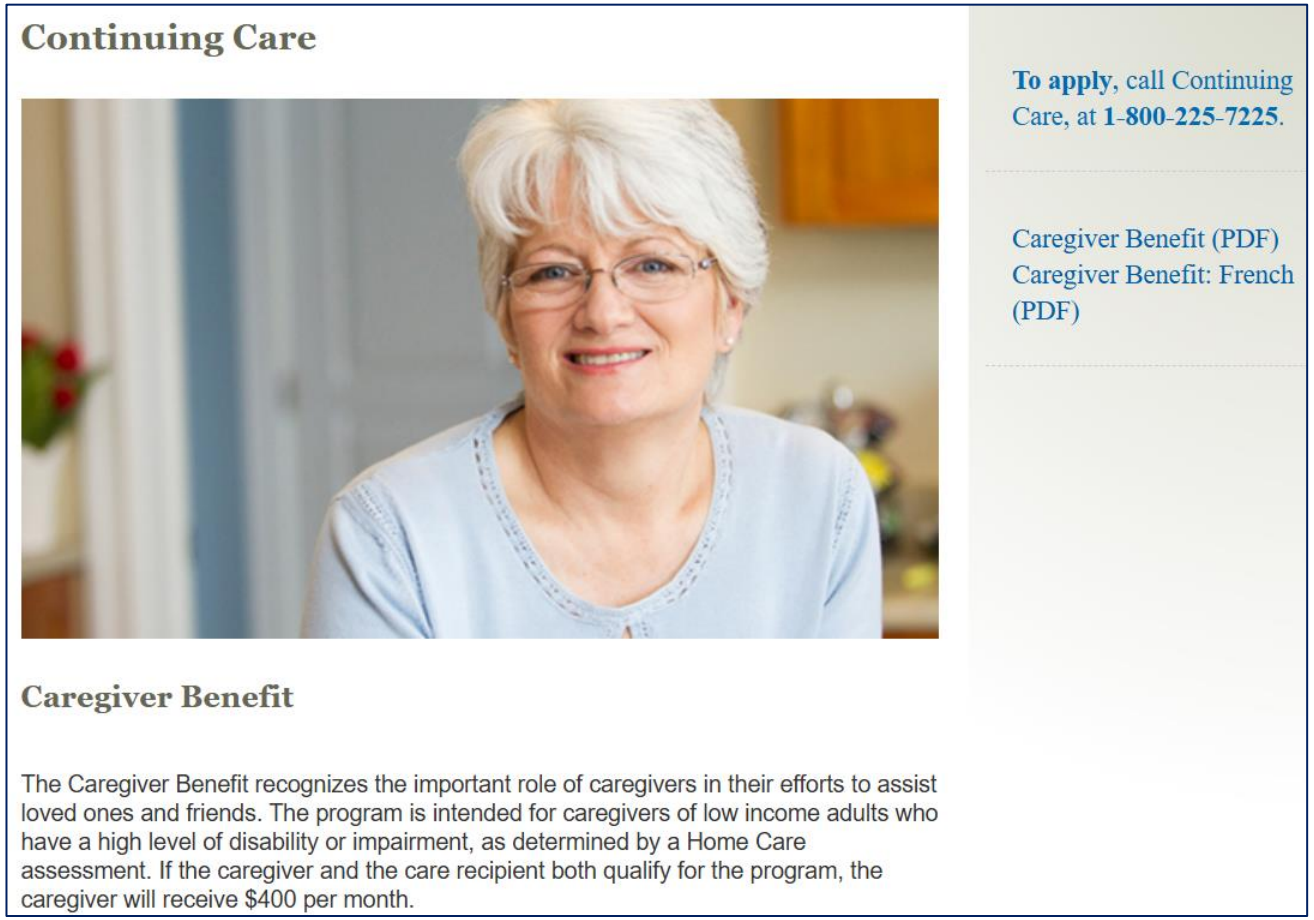
Using more than one output to help with decision making

Use of HC Outputs

Example

Nova Scotia's Caregiver Benefit is using MAPLe, CPS, ADL and IADL scores from the RAI HC to determine if caregivers of low-income adults qualify to receive a monthly allowance.

https://novascotia.ca/dhw/ccs/policies/Caregiver_Benefit_Program_Policy.pdf



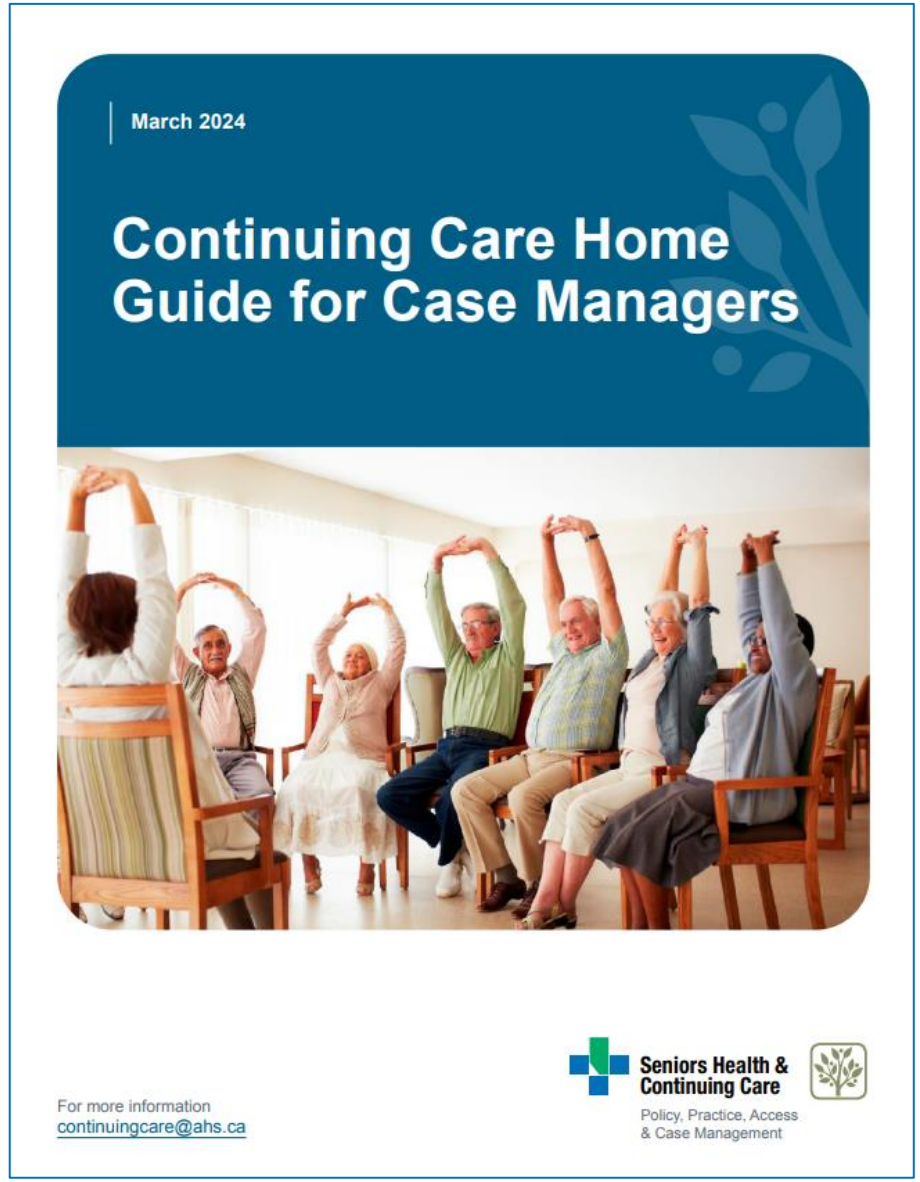
Use of HC Outputs

Example

AHS Continuing Care Home Guide for Case Managers

This Guide is part of the framework for Home Care's coordinated access and provides information needed to determine the most appropriate type of accommodation to meet needs of Albertans

https://www.albertahealthservices.ca/assets/info/seniors/if-sen-living-option-guidelines.pdf



Use of HC Outputs

Example

For admissions into Type A facilities

- Medical Conditions – CHESS, MAPLe
- Cognitive Status – CPS, ABS
- Functional Status - ADL self-performance hierarchy and IADL Capacity Scales

CCH Type A - Scheduled and unscheduled professional and personal care support provided by RNs and HCAs

This environment provides onsite registered nurse (RN) and/or registered psychiatric nurse (RPN) care, assessment and/or treatment 24-hours a day. Licensed practical nurse(s) (LPNs) may also be onsite in addition to the onsite personal care and support provided by HCAs. CCH Type A may also have a secure space.

Some sites may have specialized programs and services available for residents with complex clinical or complex functional care requirements (e.g., rehabilitation). See exclusion considerations in Appendix A.

Medical Conditions	Cognitive Status	Functional Status
Medically complex and unpredictable care needs that can be safely supported with onsite RN/RPN. Requires chronic disease management. Scheduled and unscheduled professional assessments (e.g., physical therapist, pharmacist, etc.) may be required to adjust the care plan. Scheduled and unscheduled nurse practitioner (NP) and/ or physician support for complex health assessments requiring onsite services.	Any severity of cognitive changes. May display unpredictable behaviours with effective interventions to minimize risk of self-harm or harm to others. May lack awareness of personal space of others and may require frequent re- direction and support.	ADL and IADL needs may be able to be scheduled but are flexible based on the day-to- day/moment to moment needs of the resident. Unscheduled needs. Independent, partial, or complete meal assistance. Diet or texture modifications with complex nutritional needs requiring frequent and unscheduled interventions and assessments. May be unable to alert staff using a call bell system.

In summary, linking it all together

interRAI assessments help clinicians, managers and policy-makers by:

Assessing status and needs using common criteria and language

Better planning and measuring of care outcomes

Optimizing resource allocation

Improving the quality of care across the health care system

In summary, linking it all together

Interdisciplinary team all using the same language to describe an individual

Delivers consistent recording of information across care settings

Comparison of immediate or long-term change in status and across settings

Provides evidence that is highly relevant to key questions facing decision makers

Next Session: CIHI Reporting

Public and Private (Integrated interRAI Reporting System - IRRS)

Wednesday, March 2 at 1000


Questions?

Contact us

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cihi.ca

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Better data. Better decisions. Healthier Canadians.

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Thank you

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