



Canadian Institute for Health Information (CIHI) An Overview



Canadian Institute
for Health Information

Institut canadien
d'information sur la santé



Our Vision

Better data. Better decisions. Healthier Canadians.

Our Mandate

To lead the development and maintenance of comprehensive and integrated health information that enables sound policy and effective health system management that improve health and health care.

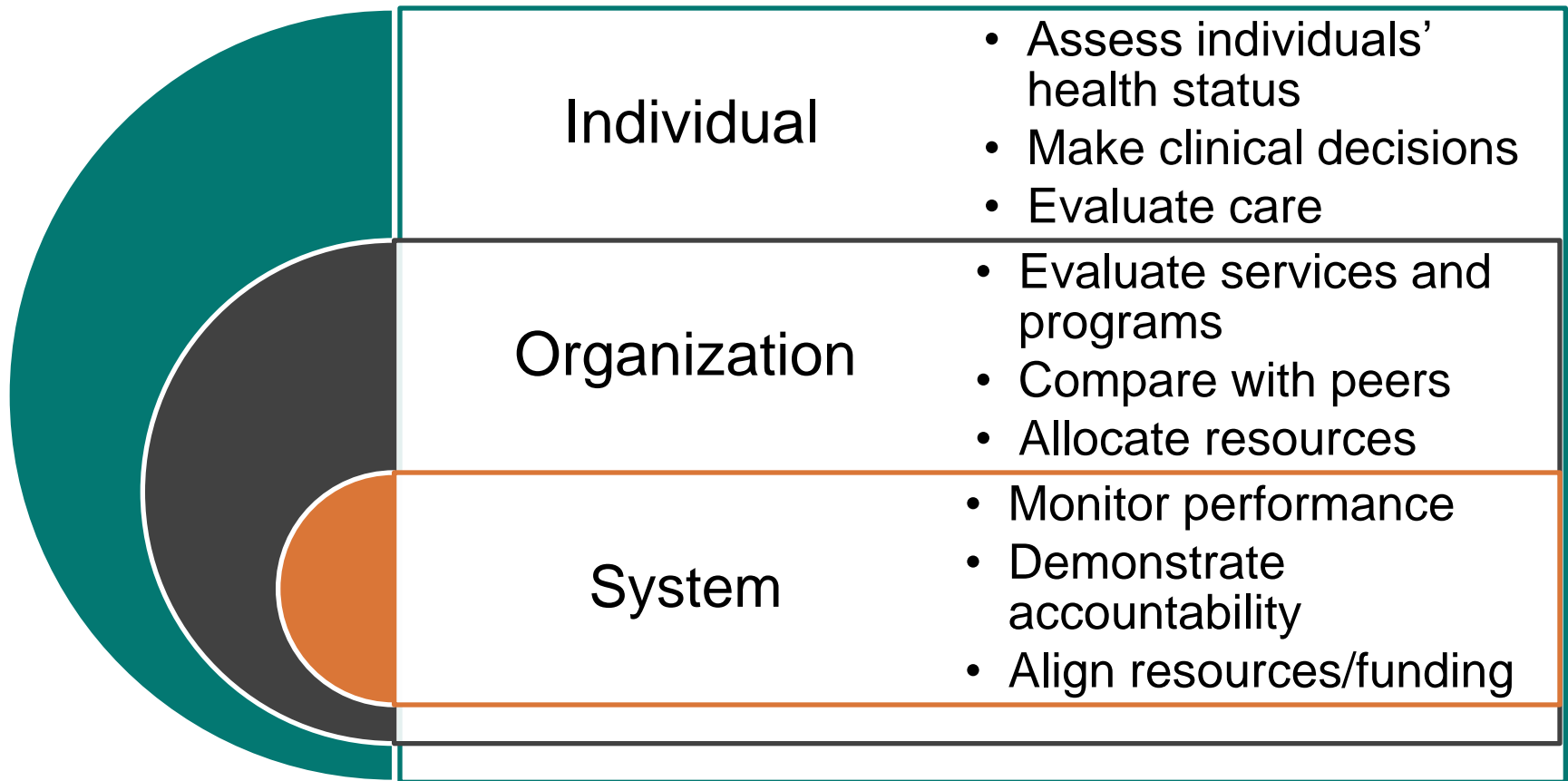
Our Values

Respect, Integrity, Collaboration, Excellence, Innovation

CIHI's Data Holdings

- 28 databases of **comparable** health information
 - Health spending
 - Health workforce
 - Types of care: acute hospital, specialized services, community care and pharmaceuticals
- Some of our largest databases receive over 3 million records per month

Standardized point-of-care data collection uses strategy to collect once, use many



Researchers and clinicians in 30+ countries

- Non-profit organization
- International evidence
- Science behind assessments
- A common language
- Decision support tools
- Electronic Health Record ready



The screenshot shows the interRAI website with a navigation bar and three main content columns. The navigation bar includes links for Welcome, Organization, Instruments, Applications, Bibliography, Publications, Members Only, and Contact Us. The first column, 'Mission and Vision', describes the organization's collaborative network and goals. The second column, 'Common Language', explains the shared terminology across instruments. The third column, 'Rigorous Research', details the high standards for data quality. A news section on the right highlights recent publications.

interRAI

Welcome | Organization | Instruments | Applications | Bibliography | Publications | Members Only | Contact Us

Mission and Vision

interRAI is a collaborative network of researchers in over 30 countries committed to improving health care for persons who are elderly, frail, or disabled. Our 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.



Common Language

Although each instrument in the interRAI family of tools and applications has been developed for a particular population, they are designed to work together to form an integrated health information system. interRAI instruments all share a common language, that is, they refer to the same clinical concept in the same way across instruments. Using common measures enables clinicians and providers in different care settings

Rigorous Research

As an organization, interRAI maintains high standards for the quality of measures used in our instruments. Each version of a tool represents the results of rigorous research and testing to establish the reliability and validity of items, outcome measures, assessment protocols, case-mix algorithms and quality indicators. We also encourage and financially support ongoing research efforts by members of the corporation, called Fellows, to

News »

New interRAI Publications Portal Launched
Tuesday Jul 7th, 2009
[\[more \]](#)

Comprehensive descriptions of the new interRAI Suite published online
Friday Jun 19th, 2009

Canadian Approved Standards



Long-Term Care

Minimum Data Set (MDS) 2.0 © Canadian Version

MDS 2.0 Form © InterRAI Corporation 1997, 1999
Canadianized Items © CIHI, 2002

FULL ASSESSMENT

* Status in last 7 days, unless other time frame indicated

Addressograph

SECTION AA and A IDENTIFICATION INFORMATION

AA1 UNIQUE REGISTRATION IDENTIFIER

AA2 RESIDENT NAME

AA3 ROOM NUMBER

AA4 SEX: M, Male; F, Female; O, Other

AA5 ASSESSMENT REFERENCE DATE

AA6B BIRTH DATE: Year, Month, Day

AA6A ESTIMATED BIRTH DATE: Yes/No, Month, Day

AA4A TREATY BAND: Band, Treaty, File

AA5 MARITAL STATUS: 1. Never married, 2. Married, 3. Widowed, 4. Divorced, 5. Unknown

AA6 FACILITY NUMBER

AA6G HEALTH CARE NUMBER

AA6H PROVINCE/TERRITORY OF ISSUE

AA6I HEALTH RECORD NUMBER

AA6J HEALTH RESIDENT NUMBER

AA6K HEALTH RESIDENT NUMBER

Minimum Data Set "Home Care (MDS-HC) Canadian Version

Addressograph

SECTION AA NAME AND IDENTIFICATION INFORMATION

1. NAME OF CLIENT: a. Last/Family name, b. First name, c. Middle name(s)

2. CASE RECORD NO.

3. HEALTH CARD NO.

36. PROVINCE/TERRITORY (INCLUDING HEALTH CARE NO.)

37. SOCIAL CODE OF RESIDENCE

SECTION AB PERSONAL ITEMS

1. SEX: M, Male; F, Female; O, Other

28. BIRTH DATE: Year, Month, Day

29. ESTIMATED BIRTH DATE: Yes/No, Year, Month, Day

30. ABORIGINAL COUNTRY: Client identifies self as First Nations, Métis, Inuit, or other

31. MARITAL STATUS: 1. Never married, 2. Married, 3. Widowed, 4. Divorced, 5. Other

32. LANGUAGE: Primary language (See IADPC manual for additional codes), ENG, English; FRE, French

33. EDUCATION: Highest Level (Completed): 1. No schooling, 2. 50 grade-level, 3. High school, 4. Technical or trade school, 5. Some college/university, 6. Bachelor's degree, 7. Graduate degree, 8. Unknown

SECTION AC REFERRAL ITEMS (Complete if applicable)

1. CATEGORIES ORDERED/RECORDED: 1. None, 2. Yes

2. REASON FOR REFERRAL: 1. Right hospital care, 2. Community or home care, 3. Home placement system, 4. Eligibility for home care, 5. Day care, 6. Other

3. UNDESIRABLE STRONG OP GOALS OF CARE: 1. Client/family education, 2. Client nursing treatment, 3. Monitoring to avoid crisis, 4. Rehabilitation, 5. Client/family education, 6. Family therapy, 7. Palliative care

7. RESPONSES TO ADVANCED DIRECTIVES: 1. Confirms a legal guardian decision-order, 2. Confirms advanced care, for example, a do not resuscitate order, 3. Other government authority, 4. Federal government - private, 5. Federal government - public, 6. Provincial government - private, 7. Provincial government - public, 8. Other country resident, 9. Responsibility for partner

Home Care

Minimum Data Set For Mental Health (MDS-MH) ©

© Government of Ontario; Ontario Hospital Association; InterRAI

Addressograph

SECTION AA NAME AND IDENTIFICATION NUMBERS

1. NAME

1X1 COUNTRY OF RESIDENCE: 1. Canada, 2. U.S.A., 3. Other, 4. Unknown

2X1 PROVINCE/TERRITORY OF RESIDENCE: 1. Canadian resident - private, 2. Canadian resident - public, 3. Other country resident, 4. Responsibility for partner

2X2 HEALTH CARE NUMBER: 1. Known, 2. Unknown, 3. Not applicable

2X3 CHART NUMBER

3. CASE RECORD NUMBER

4. FACILITY NUMBER: Prov./Terr., Facility Number (See manual for provincial/territorial codes)

5. LANGUAGE IDENTIFIER: 1. None, 2. English, 3. French, 4. Other

SECTION AB PERSONAL ITEMS (Complete if intake only)

1. SEX: M, Male; F, Female; O, Other

2. BIRTH DATE: Year, Month, Day

3. ESTIMATED BIRTH DATE: Yes/No, Year, Month, Day

4. MARITAL STATUS: 1. Never married, 2. Married, 3. Widowed, 4. Divorced, 5. Other

5. LANGUAGE: Primary language (See manual for additional codes), Eng = English, Fre = French

6. EDUCATION: Highest Level (Completed): 1. No schooling, 2. 50 grade-level, 3. High school, 4. Technical or trade school, 5. Some college/university, 6. Bachelor's degree, 7. Graduate degree, 8. Unknown

SECTION AC REFERRAL ITEMS (Complete if intake only)

1. CATEGORIES ORDERED/RECORDED: 1. None, 2. Yes

2. REASON FOR REFERRAL: 1. Threat or danger to self, 2. Threat or danger to others, 3. Inpatient to care for serious mental illness, 4. Problem with addiction/substance use, 5. Specific psychiatric symptoms (e.g. depression, mania, psychosis, delirium, etc.), 6. Inpatient with criminal justice system, forensic diagnosis, 7. Forensic assessment

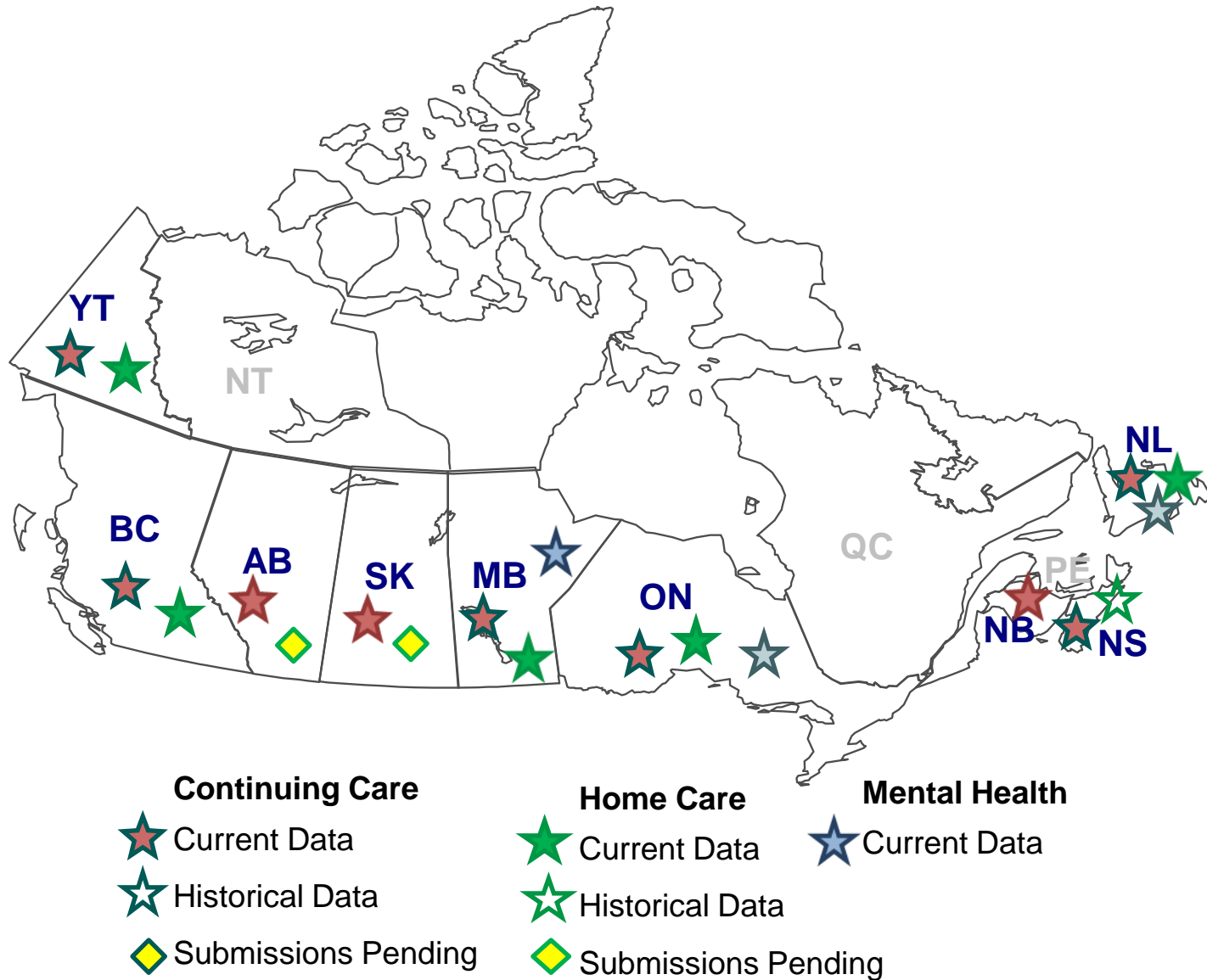
3. UNDESIRABLE STRONG OP GOALS OF CARE: 1. Client/family education, 2. Client nursing treatment, 3. Monitoring to avoid crisis, 4. Rehabilitation, 5. Client/family education, 6. Family therapy, 7. Palliative care

7. RESPONSES TO ADVANCED DIRECTIVES: 1. Confirms a legal guardian decision-order, 2. Confirms advanced care, for example, a do not resuscitate order, 3. Other government authority, 4. Federal government - private, 5. Federal government - public, 6. Provincial government - private, 7. Provincial government - public, 8. Other country resident, 9. Responsibility for partner

Mental Health

CIHI-RAI Reporting Systems

Status October 2014



interRAI Assessment Outputs



Provides a broad view of an individual at a point in time

Physical Function

ADL, balance, vision, communication

Services and Access

Medications, procedures, therapies, resources, wait times



Cognition and Mental Health

Cognitive function, mood, behaviour

Quality of Life

Activities, relationships, participation

Clinical Management

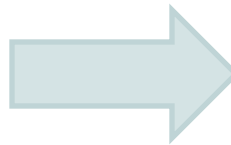
Health conditions, infections, nutrition, skin, falls, pain

Data is used at the point of care for clinical decision-making...



MINIMUM DATA SET FOR MENTAL HEALTH (MDS-MH)[®]

SECTION AA. NAME AND IDENTIFICATION NUMBERS		SECTION BB. P	
1	NAME OF PATIENT a. (Last/Family Name) b. (First Name) c. (Middle/Initial)	6	SOURCE INCOME
X10	COUNTRY OF RESIDENCE 1. Canada 3. Other 2. USA 4. Unknown	X30	RESPONSIBLE FOR PAYMENT
X20	PROVIDER ISSUING HEALTH CARD NO	7	ABORIGINAL ORIGIN
2	HEALTH CARD NUMBER		
X30	CHART NUMBER		
3	CASE RECORD NUMBER		
4	FACILITY NUMBER		



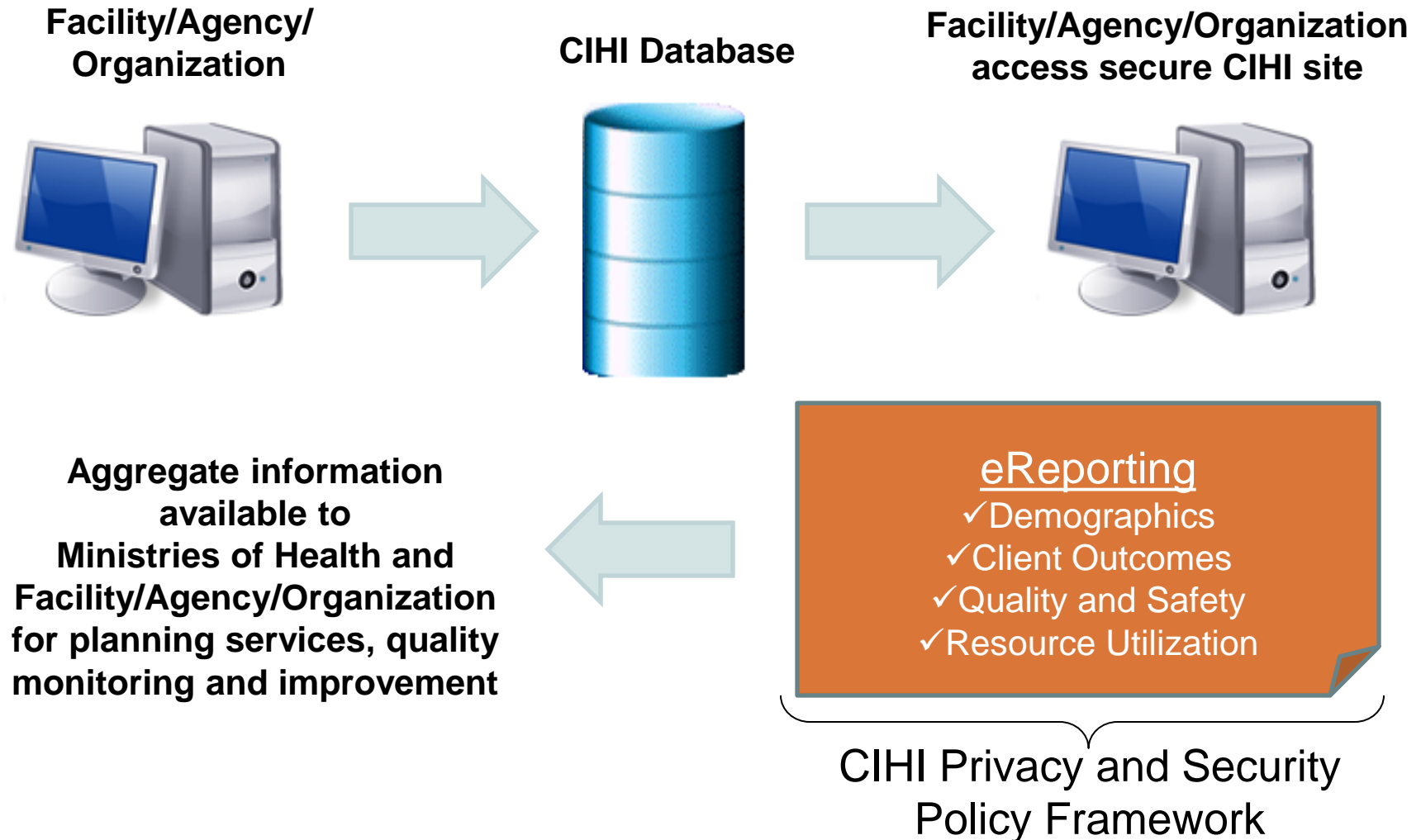
Vendor software/Web application



Clinical Summary
✓ Outcome Scale scores
✓ Clinical Assessment Protocols

Individual Care Plan

...and for health system use with longitudinal aggregate comparative reporting from CIHI



What can be done with RAI Home Care and Continuing Care Assessments?

What the assessments look like

Continuing Care

SECTION B: COGNITIVE PATTERNS		
B1	COMATOSE	<i>(Persistent vegetative state or no discernible consciousness)</i> 0. No 1. Yes (Skip to item G1)
B2	MEMORY	<i>(Recall of what was learned or known)</i> a. Short-term memory OK—seems or appears to recall after 5 minutes 0. Memory OK 1. Memory problem b. Long-term memory OK—seems or appears to recall long past 0. Memory OK 1. Memory problem
B3	MEMORY/ RECALL ABILITY	<i>(Check all that resident was normally able to recall during the LAST 7 DAYS.)</i> a. Current season b. Location of own room c. Staff names/faces d. That he/she is in a facility e. NONE OF ABOVE are recalled
B4	COGNITIVE SKILLS FOR DAILY DECISION MAKING	<i>(Made decisions regarding tasks of daily life.)</i> 0. INDEPENDENT—decisions consistent and reasonable 1. MODIFIED INDEPENDENCE—some difficulty in new situations only 2. MODERATELY IMPAIRED—decisions poor; cues or supervision required 3. SEVERELY IMPAIRED—never/rarely made decisions

Home Care

SECTION B. COGNITIVE PATTERNS		
1	MEMORY RECALL ABILITY	<i>(Code for recall of what was learned or known)</i> 0. 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 for initiation
2	COGNITIVE SKILLS FOR DAILY DECISION-MAKING	a. How well client made decisions about organizing the day (e.g. when to get up or have meals, which clothes to wear or activities to do) 0. INDEPENDENT —Decisions consistent/reasonable/safe 1. MODIFIED INDEPENDENCE —Some difficulty in new situations only 2. MINIMALLY IMPAIRED —In specific situations, decisions become poor or unsafe and cues/supervision necessary at those times 3. MODERATELY IMPAIRED —Decisions consistently poor or unsafe, cues/supervision required at all times 4. SEVERELY IMPAIRED —Never/rarely made decisions b. Worsening of decision making as compared to status of 90 DAYS AGO (or since last assessment if less than 90 days) 0. No 1. Yes

Clinical Assessment Protocols Useful to the care provider



B. Cognition and Mental Health		
7. Cognitive Loss —identifies persons who have a decline in cognition that threatens personal independence and increases the risk for long-term facility admission.	0 1 2	Not Triggered Triggered to monitor for risk of cognitive decline Triggered to prevent decline
8. Delirium —focuses on issues of delirium (acute cognitive loss) and the related differential diagnosis of chronic cognitive loss and dementia.	0 1	Not Triggered Triggered

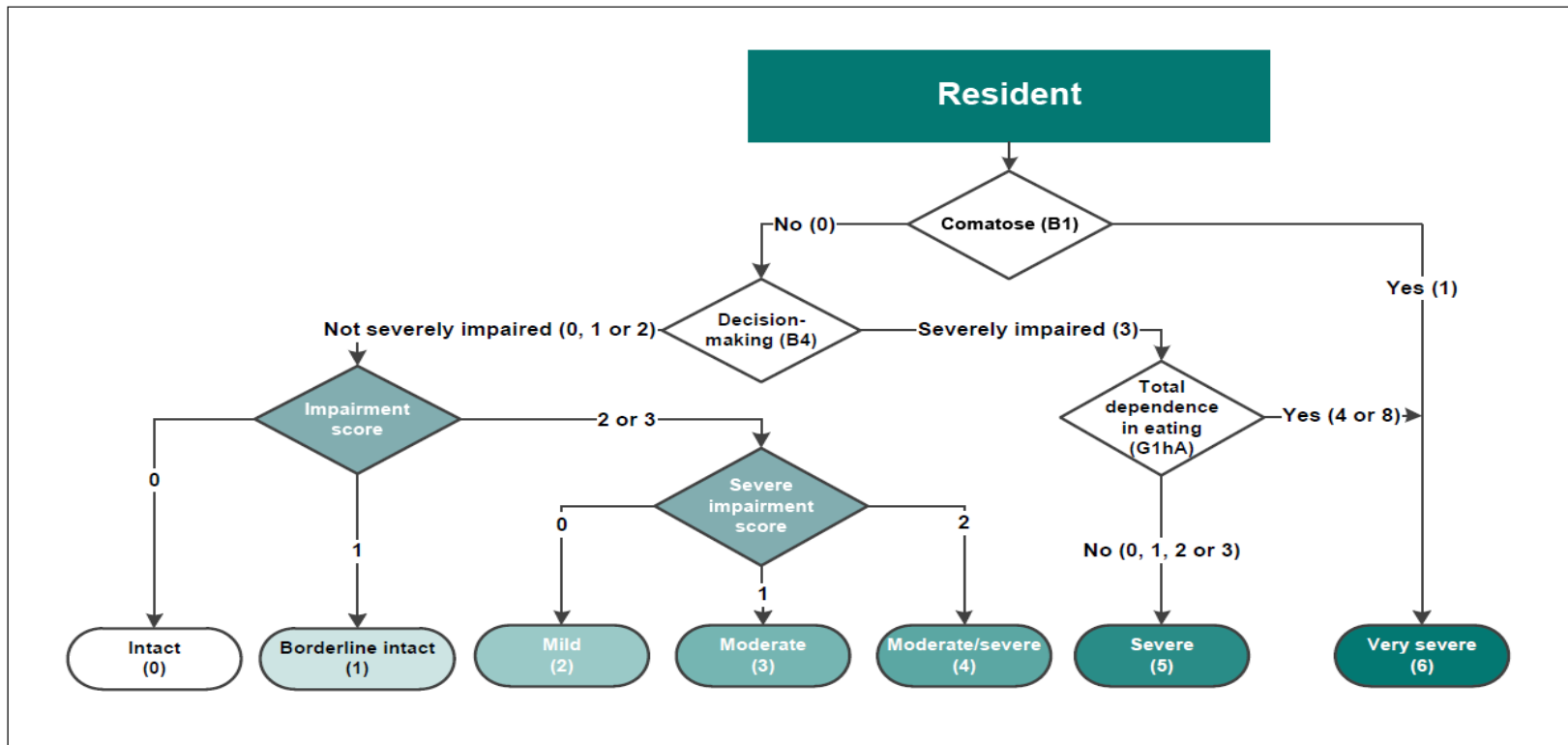
Outcome Scales

Useful to the care provider and for calculating statistics



Example: The Cognitive Performance Scale, which gives a composite score for cognitive performance.

The following decision tree illustrates how the CPS score is determined:



Source

Morris JN, Fries BE, Mehr DR, Hawes C, Philips C, Mor V, Lipsitz L. MDS Cognitive Performance Scale. *J Gerontol: Med Sci.* 1994;49(4):M174-M182.

Quality Indicators

Useful for calculating statistics

Indicate the percent of residents who show a certain clinical issue, after correcting for a series of factors.

Examples of things being measured:

Taken antipsychotics without a diagnosis of psychosis

Has fallen

Has one or more infections

Worsened stage 2 to 4 pressure ulcer

Has a new stage 2 to 4 pressure ulcer

Let's have a look at some tables...



Thank You!