

**Community Support Services Common Assessment Project**

**interRAI Community Health Assessment (CHA)**

**Software Requirements Specifications**

RFP For Assessment Entry Module

Document Release 1.2

June 28<sup>th</sup>, 2012

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# 1. Documentation Overview

The following documents represent the software requirements specifications for the automation of the interRAI Common Health Assessment (CHA):

- Software Requirements Specification (PDF, this document)
- interRAI Specification (to be obtained from interRAI)
- interRAI CHA Technical Specifications (provided by interRAI and revised as of September 23, 2010)
- Data Submission Requirements from the Integrated Assessment Record (IAR) project.
- Data Submission and Technical Specifications
- IAR Submission Schema
- IAR PHI Submission Schema

The approach taken in documenting the software requirements for the automation of the interRAI CHA tool details core automation requirements, business processes and business rules for the Community Support Services (CSS) sector without imposing a specific implementation approach.

If there are any further questions/concerns regarding the requirements for the implementation of the automated tool, please contact the Community Support Services Common Assessment Project (CSS CAP) team at:

**CSS CAP**

**Tel: 1.866.909.5600, Option 9**

**Fax: 416.314.1585**

**Email: [csscap@ccim.on.ca](mailto:csscap@ccim.on.ca)**

## To obtain specifications to develop the solution:

- Go to the interRAI website - <http://www.interrai.org> to Organization/Licensing:  
 Brant E. Fries, Ph.D.  
 Institute of Gerontology  
 University of Michigan  
 300 North Ingalls  
 Ann Arbor, Michigan USA 48109  
 Email: bfries@umich.edu
- Ensure that interRAI is aware that you require the Canadian license
- interRAI will provide you with a log-in to the interRAI website and you will be directed to where you can download the materials as well as which materials you need to develop the Canadian interRAI CHA

## Revision History

Version	Date	Change	Change by
1.1	2012-01-27	<i>Draft RFP original version</i>	CCIM
1.2	2012-06-26	<p><i>Clarification section 4.4 around Discharge Assessment use case</i></p> <p><i>Reinforcement of error corrections requirements within section 5</i></p> <p><i>Edits to Privacy security and Consent Management component section 6.0</i></p> <p><i>Correction: took out rule around Administrative factsheet elements being mandatory for discharge assessments (Appendix A: Cross validation rules)</i></p> <p><i>Took out reference to HC (Home Care) assessment – Appendix A</i></p> <p><i>Added sixteen further Cross validation rules to Appendix A</i></p> <ul style="list-style-type: none"> <li><i>Specifically Cross validation rule around no Health card number entered.</i></li> </ul>	CCIM

		<i>Addition to Requirement ACBR.17</i>  <i>MA.BR6 out of scope</i>	
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## 2. Introduction

As one of its strategic priorities, Community Care Information Management established the development of common assessment capability across the Community Care sector. Common assessment is widely recognized as a key enabler of quality care through the standardized collection of assessment information.

The CSS sector provides a wide range of services to the community, supporting individuals with a variety of needs. Seniors are among the many individuals benefiting from community support services, with support ranging from meal delivery through Meals on Wheels to comprehensive support, and activities of daily living through Assisted Living.

### 2.1 Purpose

The purpose of this document is to provide the minimum set of requirements for the automation (implementation of software) of the interRAI CHA tool. The implemented software must support all features, specifications and business rules as outlined in this document and all supporting requirements documents outlined above.

### 2.2 *interRAI Community Health Assessment*

The interRAI Community Health Assessment (CHA) was developed by interRAI, a collaborative network of researchers in over 30 countries. The interRAI CHA is an instrument intended for use in the assessment of adults living in the community and a variety of residential care settings. The Community Supports Services sector is currently implementing version 9.1 of the tool. The tool is a modular instrument that contains a basic core assessment and the following four supplements: functional, assisted living, mental health and deafblind. Each supplement is required to be completed only if it has been triggered within the core assessment. The tool assesses client needs in the following domains:

- Cognition
- Communication and vision
- Mood
- Psychosocial Well-Being
- Functional Status
- Continence
- Disease Diagnosis
- Health Conditions
- Oral and Nutritional Status
- Medications
- Treatment and Procedures
- Social Relationships
- Environment

## **2.3 General Guiding Principles**

Vendor software must support compliance with all privacy and security requirements in regard of the Personal Health Information Protection Act, 2004 (PHIPA) and associated Regulations, including those described in Ont.Reg 329/04 under PHIPA for a Health Information Network Provider (HINP).

## **2.4 Intended Audience**

This document is intended for Vendors responding to the RFP for Assessment Entry Module.

Vendors will use this document as a supporting document to the RFP and other documentation noted in the RFP to make up the automation requirements.

The project team is available throughout the implementation phase for clarifications and questions about the requirements as needed. Any additional questions can be sent to the project team through the Support Centre.

## **2.5 Benefits and Goals**

### **Clients and Assessors**

- Reduce duplication of assessments within the circle of care by sharing information
- Holistic view of a client
- Assist clients in accessing the most appropriate available services based on their needs
- Further develop the practice of assessment and care/service planning

### **Organization and System**

- Standardized, aggregate data can inform decision-making and planning based on client profiles, trends and service provision
- Further facilitates inter-agency communication through a common language based on recognized data standards



## 3. Scope

### 3.1 In Scope Items

1. Ability to capture Face Sheet information
2. Ability to capture InterRAI CHA information including the core assessments and its four supplements (mandatory fields, valid values, cross validation)
3. Assessment Management
  - New, in-progress, completed and cancelled assessments
  - Manage Assessment (e.g., search, view, error correction, print)
  - Reassessment
  - Discharge
4. CAPs, Outcome Measures and Triggers (including data quality testing)
  - Supplement Triggers and Algorithms
  - CAPs (Variables and Algorithms)
  - Outcome Measures and Scales
5. Mobility
6. Privacy, Security and Consent Management
7. Data Submission to Central Data Repository
8. Reports

### 3.2 Out of Scope Items

1. Electronic Management of the Referral Process
2. Data Transfer to and/or from other Health Service Provider (HSP) system
3. Development of the form entry module for Assisted Living and Deaf Blind Supplements

### **3.3 Assumptions/Constraints/Considerations**

- The interRAI CHA is the standard comprehensive assessment tool for the CSS sector
- There are variances in existing business processes within the HSPs based on the type and number of services provided
- LHINs/HSPs will comply with standard guidelines around assessment completion to ensure data consistency and accuracy across the sector
- LHINs/HSPs will be required to regularly submit completed assessment data to a central data repository
- Only a licensed interRAI CHA vendor will be authorized to implement the interRAI CHA tool

## **4. Business Process Overview**

The interRAI CHA will serve as the assessment tool for various LHINs/HSPs within the CSS sector.

### **4.1 Assessment Process**

There are different circumstances in which the Assessors will complete the assessment based on the reason for assessment (refer to interRAI CHA, section A).

#### **Reason for Assessment**

1. First Assessment
2. Routine Reassessment
3. Return Assessment
4. Significant change in status reassessment
5. Discharge assessment, covers last 3 days of service
6. Discharge tracking only
7. Other e.g. research

### **4.2 First Assessment**

The first assessment identifies the initial assessment for the episode of care. The Assessor determines if a client is eligible for services and then creates an assessment in the software, thereby collecting such information as personal information and personal health information and asking a series of questions based on the assessment tool to complete the assessment in their organization's software.

### **4.3 Reassessment**

Reassessments are conducted regularly (typically annually) on all clients or as informed by the assessment outcomes.

A reassessment can also be done any time there is a significant change in the health status of the client.

### **4.4 Discharge**

Within the CSS sector a client may no longer require services from an HSP and may be discharged. (Refer to Appendix A for CHA discharge rules)

A client can be discharged as a result of an assessment (discharge) or a client may be discharged (discharge tracking only) where no assessment is completed.

## 4.5 Supplement Assessments Triggers

The core assessment may trigger one or more supplement assessments to be completed:

1. Functional Supplement to CHA (mandatory for completion if triggered)
2. Mental Health Supplement to CHA (**optional** for completion if triggered)
3. Assisted Living Supplement to CHA (form entry component excluded; only the requirement to trigger is in scope)
4. Deaf Blind Supplement to CHA (form entry component excluded; only the requirement to trigger is in scope)

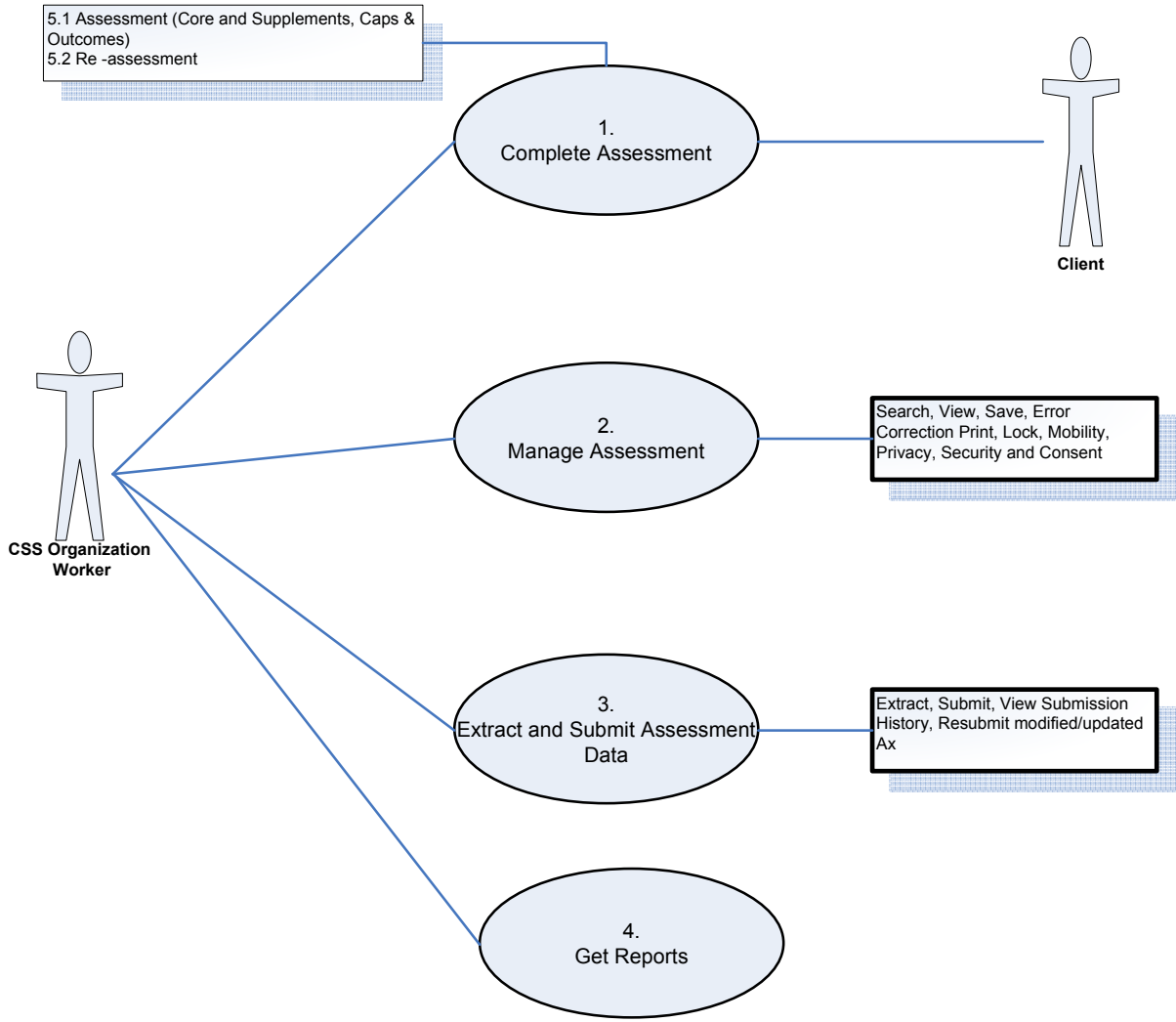
### System Model

#### *Actors*

**CSS Worker/Assessor:** The primary actor that uses the system to capture Client Assessment information in the organizational system. The following roles may exist within an organization

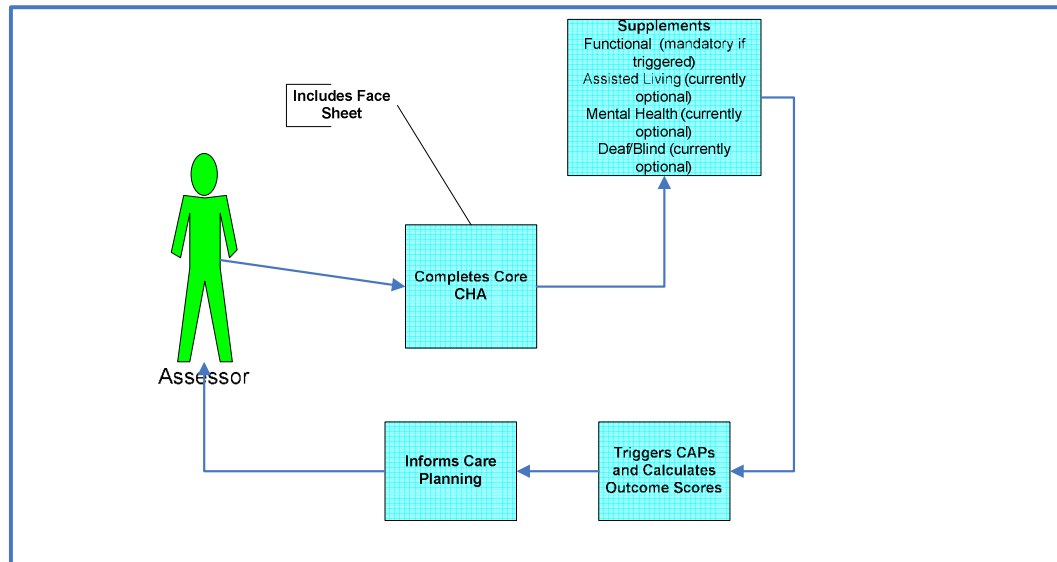
- Case Manager/Case Worker/Coordinator (also called Assessor)
- Supervisor, Manager
- Administrator (System Administrator)

**Client:** The recipient of community support services



## 5. Functional Requirements

### Assessment Completion Process



Recommendation is to complete the assessment and all supplements within three days; however, detailed specifications will be provided in regards to the duration for completion and conditions for enforcing assessment completion. The system must have an ability to configure the duration for assessment completion.

### 5.1 Overall Assessment Requirements

5.1.1 The automated solution must provide the ability to complete and associate the following for a specific client each time a CHA is completed:

1. Core CHA and its four supplements
  - i. Functional Supplement (mandatory for completion if triggered)
  - ii. Mental Health Supplement (optional for completion if triggered)
  - iii. Assisted Living Supplement (form entry component excluded; only the requirement to trigger is in scope)
  - iv. Deaf/Blind Supplement (form entry component excluded; only the requirement to trigger is in scope)
2. Administrative Face Sheet has additional data elements required to be captured as part of the assessment data (refer to data element spreadsheet)
3. Calculate complex algorithms for CAPs and Outcome scores

- 5.1.2 The system must alert the user in real time as soon as a supplement is triggered based on interRAI CHA trigger algorithm.
- 5.1.3 If a functional or any of the optional supplement is not triggered it can still be completed at the discretion of the assessor (if built in as part of the software).
- 5.1.4 Only demographic information (Section A) can be pre-populated from the Core CHA to related supplements.
  - 5.1.4.1 Demographic information can also be pre-populated to subsequent assessments on the same client
- 5.1.5 The system should display the Administrative Face Sheet between section A and Section B of the interRAI CHA
  - 5.1.5.1 The “Reason for no Health Care Number” Administrative Face Sheet field is displayed below the field A5a Health Care Number. This field should be made visually distinct and include a note that this is not an interRAI field (See Appendix A for details).
- 5.1.6 A note entry field must be appended to each section/domain of the core and supplement assessments for additional information entry.
- 5.1.7 An assessor must be able to view triggered CAPs, scales and outcome scores for complete assessment once all mandatory fields and cross validation fields have been filled in. It must also provide the ability to store the triggered CAPs and Outcome scores results as values once the assessment record has a completed status.
- 5.1.8 Assessment outcomes scores and CAPs must be calculated and stored as values within the assessment record.
- 5.1.9 The system must have the ability to alert the user if the Assisted Living and Deafblind supplements are triggered.
- 5.1.10 The system must automatically assign “In Progress”, “Completed” and “Cancelled” status for assessments based on business rules.

## **5.2 Reassessment Requirements**

- 5.2.1 There is no difference between a first assessment and a reassessment process with the exception of Section B (Intake and Initial History Information). The information in Section B must be carried over to all subsequent assessments and cannot be editable.

Note: Section B (Intake and Initial History Information) should be taken from the most recent First Assessment (i.e. the first assessment within the current episode of care).

5.2.2 Only demographic information (Section A) can be pre-populated from previous core CHA when starting the reassessment process and the system should allow a user to edit the demographic section for the assessment until marked complete.

5.2.3 The system must allow HSPs to customize the reassessment cycle. The requirements will be specified in the detailed specification to follow.

- Reassessments are conducted regularly (typically annually) on all clients or as informed by the assessment outcomes.
- A reassessment can also be done at any time there is a significant change within the health status of the client.

Assessment Completion Business Rule	
Business Rule #	Description
AC BR1.	All clients must have a unique client ID per organization.
AC BR2.	All assessments must have a unique Assessment ID.
AC BR3.	The software must include all data fields and valid values, CAPs and Outcomes Algorithms, Supplement Triggers and Cross Validation as defined in the interRAI CHA tool. (Refer to Requirement Specification Toolkit).
AC BR4.	The system must present the core CHA first before any of the supplements: <ul style="list-style-type: none"> <li>• interRAI Functional Supplement to CHA</li> <li>• interRAI Mental Health Supplement to CHA</li> </ul>
AC BR5.	For consistency, assessments must have the following short form: <ul style="list-style-type: none"> <li>• Core assessment: CHA</li> <li>• Functional supplement: FS</li> <li>• Mental health supplement: MHS</li> </ul>
AC BR6.	The Face Sheet needs to be completed along with the core CHA.
AC BR7.	System must associate the core assessment to all completed relating supplements, Face Sheet, triggered CAPs and Outcome scores as one assessment record.
AC BR8.	Responses in Section A can be carried over from core CHA to its supplements.



	<p>Responses in Section B of the most recent First Assessment (i.e. the first assessment within the current episode of care) will be carried over to subsequent assessments and cannot be changed.</p> <p>Detailed pre-population rules will be defined in the detailed specifications to follow.</p>																				
AC BR9.	System must allow assessment questions to be completed in any order within the core and between supplements.																				
AC BR10.	<p>The Core CHA must remain in progress while supplements are being completed.</p> <p>Rationale: This will allow flexibility for the assessor to review responses provided earlier by the client and allow for changes if the client has provided more information that could potentially change the coding of the responses provided earlier.</p>																				
AC BR11.	<p>System must track supplement assessments based on the conditions outlined below:</p> <table border="1" data-bbox="625 884 1318 1255"> <thead> <tr> <th></th> <th>Supplements (FS,AL,MHS,DB)</th> <th>Triggered</th> <th>Completed</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Triggered and Completed</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>2</td> <td>Triggered and Not Completed</td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>3</td> <td>Not Triggered and Not Completed</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>4</td> <td>Not Triggered and Completed</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> </tbody> </table> <p>The combinations of the triggered and completed stated above must be stored and displayed (when viewing an assessment online or in printed form) for each of the four CHA supplements (i.e. FS, MH, DB and AL) in the assessment.</p> <p>Note: A blank supplement form should not be displayed or printed for an assessment where the supplement has not been filled out by the assessor/user.</p>		Supplements (FS,AL,MHS,DB)	Triggered	Completed	1	Triggered and Completed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2	Triggered and Not Completed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3	Not Triggered and Not Completed	<input type="checkbox"/>	<input type="checkbox"/>	4	Not Triggered and Completed	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Supplements (FS,AL,MHS,DB)	Triggered	Completed																		
1	Triggered and Completed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																		
2	Triggered and Not Completed	<input checked="" type="checkbox"/>	<input type="checkbox"/>																		
3	Not Triggered and Not Completed	<input type="checkbox"/>	<input type="checkbox"/>																		
4	Not Triggered and Completed	<input type="checkbox"/>	<input checked="" type="checkbox"/>																		
AC BR12.	CAPs results and outcome scores may only be displayed once all of the mandatory fields in Core CHA plus any triggered /optional Supplements have been completed.																				

AC BR13.	<p><b>In Progress status:</b>  Assessment is "In Progress" if:</p> <ul style="list-style-type: none"> <li>All mandatory fields are not completed while information being captured and the assessment record can be saved intermittently while in this status</li> </ul> <p>HSPs might further define business rules relating to this status especially around enforcing assessment completion timeframe.</p>
AC BR14.	<p><b>Complete Assessment Status:</b>  Assessment is complete only when the following conditions are met:</p> <ol style="list-style-type: none"> <li>All mandatory fields for the Administrative Face Sheet has been completed</li> <li>All mandatory fields have been completed for core and supplement assessments (partially completed supplements cannot be part of a completed assessment record).</li> <li>Conditions for cross validation checks have been met</li> <li>Outcome scores and CAPs results have been generated and saved</li> </ol> <p>Note: Once an assessment is marked as complete it is locked and no further changes can be made.</p>

AC BR15.	Partially completed Core and/or supplements may be cancelled,  An assessment with partially completed supplements (FS and MH) cannot be marked as complete. All required data field must be filled in.
AC BR16.	<p><b>Cancelled Assessment Status:</b> If an assessor chooses to discontinue an assessment (“In Progress” status) a “cancellation” status is assigned.</p> <ol style="list-style-type: none"> <li>1. Additional field to capture cancellation reason may be required for the core assessment. Data fields completed thus far should be captured and stored alongside the cancellation reason</li> <li>2. Requesting a cancellation should override enforcing the mandatory field rule</li> </ol>
AC BR17.	<p><b>Discharge:</b> There are two options to discharge a client (A7)</p> <ol style="list-style-type: none"> <li>1. Option 5 of section A: final assessment is completed as part of discharge, with no changes to system functionality</li> <li>2. Option 6 of section A: if selected only section P of CHA “Discharge” is required to be completed along with section Q (Assessment information)</li> </ol> <p>Note: There may be a system feature to grey out remaining fields when option 6 of section A (discharge tracking) is selected to avoid entering inadvertent data.</p>
AC BR18.	<p>The electronic representation of the interRAI CHA tool should have the same look and feel as the paper version of the interRAI CHA tool.</p> <p>However, it is critical that the implementation does not change the order and flow of sections, fields per the official PDF version of the interRAI CHA and its four supplements as provided by interRAI.</p>

## 5.3 Manage Assessment

- 5.3.1 Provide the ability to conduct searches to view client assessments based on defined criteria e.g. client name, client status, assessment status, assessment date, case record number, OHIP# etc,. The requirements will be specified in the detailed specification to follow.
- 5.3.2 System must provide the ability for an assessor to continue a previously saved assessment with “In Progress” status until the assessment is marked as “Completed” or “Cancelled”.
- 5.3.3 System must allow the user to specify a reassessment date based on established business rules. .
- 5.3.4 A business or system process must allow for changes or major error corrections for completed assessment and a field to capture reason for change.
- 5.3.5 Error corrections made to a completed assessment must be tracked with the same Assessment ID and update flag identifier and must maintain an audit trail of changes to the assessment record.
  - 5.3.5.1 Both the original “Completed” and the actual “Corrected” assessment (and its supplements) should be saved within the system, with the “Corrected” assessment being the current version of the assessment (i.e. displayed in client search).
- 5.3.6 Provide administrative privileges to assign or reassign case managers, case workers to clients and add or remove users at an organization level.
- 5.3.7 Provide administrative privileges to delete duplicate client records/assessment based on HSPs business processes.
- 5.3.8 System must maintain “Client Status” information based on client assessment type (reason for assessment).
- 5.3.9 Provide retention and archiving capabilities based on provincial and sector policies and standards.
- 5.3.10 Provide an online and offline help feature for the assessment tool.
- 5.3.11 Provide the ability to print blank assessments with the same look and feel as a paper version of the interRAI CHA tool.
- 5.3.12 Provide the ability to print “In progress” or “Completed” assessments and /or CAPs and Outcomes results.
- 5.3.13 Printed assessments should display the following header/footer information on every page of the printed document
  - Assessment ID

- Client ID and Name
- Assessor Name
- HSP Name
- Print Date
- Page Numbers
- Assessment Status
- Assessment Type
- Printed By User ID
- Privacy and Security warning/cautionary/disclaimer note preventing unauthorized usage or archival of patient information. Final wording to follow in the detailed specifications.

5.3.14 Provide options to print assessments with or without notes.

5.3.15 Provide the ability to export one or more assessment data to CSV, Excel formats.

5.3.16 Provide the capability to extract and transfer assessment data to IAR.

5.3.17 Provide the capability to allow user view submission history of completed assessment sent to IAR.

5.3.18 Provide the capability to allow users to resubmit modified/updated assessment records previously submitted to IAR with the same Assessment ID and an update flag identifier.

5.3.19 Provide the capability to for users to add additional lines as necessary to capture more assessment information as indicated on the interRAI form for disease diagnoses and medication section of the core CHA.

<b>Manage Assessment Business Rule</b>	
<b>Business Rule</b>	<b>Description</b>
MA.BR 1.	The system must maintain a complete history of assessment records for a client.
MA.BR 2.	<p>A client's search result must display "Completed" and "In progress" assessments in a logical order: for example the "In Progress" assessment record should be displayed before any completed assessment.</p> <ol style="list-style-type: none"> <li>1. All completed assessments should be displayed chronologically, by reference date with the most recent at the top</li> </ol>

MA.BR 3.	<p>The system must have the ability to print partial or completed assessments in a standard format for example:</p> <ol style="list-style-type: none"> <li>1. The online view of the assessment and the printed version should have the same “look and feel”</li> <li>2. Font and size should be consistent on printed documents</li> <li>3. All assessments destined for printing must be precluded by a cover sheet containing Privacy messaging.</li> </ol>
MA.BR 4.	<ol style="list-style-type: none"> <li>1. Client ID, Assessment ID, Assessment Type and HSP name and Assessor name should always be printed at top of the page to aid manual business process and information sharing</li> <li>2. Headings and sections should be prominent</li> <li>3. interRAI CHA Header and Footer information of the paper version must be included in the printed version.</li> </ol>
MA.BR 5.	<p>Assessment Error Correction:</p> <p>Once assessment has a “Completed” status, no further changes can be made to the assessment record.</p> <p>If a user identifies an error to a completed assessment, an error correction function within the system should allow the user to make corrections to a full copy of the original completed assessment (i.e. same Assessment ID). The user should be allowed to make the necessary corrections, resign and submit.</p> <p>The actual correction event including what fields were corrected (reason), the assessment ID, time of correction and the individual who made the correction, should all be logged within the system and accessible for audit purposes.</p> <p>Note: Both the original completed and the actual corrected assessment should be saved and accessible through the system.</p>
MA.BR 6.	<p>Client Status (Not in Scope)</p> <ol style="list-style-type: none"> <li>1. Active</li> <li>2. Inactive</li> </ol>

## 5.4 Mobility Requirements

- 5.4.1 Provide an online and offline mobile solution supporting the assessment completion process.
- 5.4.2 Vendors must ensure that offline version of the assessment tool is consistent and matches the online version of the interRAI CHA and its algorithms.
- 5.4.3 Ensure ease of use for back-in-office synchronization process.
- 5.4.4 . Provide the ability for organizations to view synchronization history to ensure assessments are updated or synchronized on a frequent basis, based on defined timeline as specified by the organizations.

## 5.5 Organization Software Reports

Reports will allow organizations to use and conduct analysis on captured assessment data. The sector has defined a minimum set of end-user and operational reports (refer to Report Specification document and Report Mock samples).

The operational reports will be required to be developed based on needs as outlined in the detailed specification to follow.

Reports Business Rule	
Business Rule	Description
RE-BR 1	Organization and end-user reports as defined in the report specifications are mandatory.
RE-BR 2	The reports defined in the specification document should be available in the following formats: <ul style="list-style-type: none"><li>• Online report</li><li>• Printable paper format</li><li>• Ability to export reports to various format e.g. Excel, CSV.</li></ul>

## 6. Privacy Security and Consent Management

### 6.1 Security Requirements

As the healthcare industry moves towards the electronic storage, sharing and transferring of sensitive information, Privacy and Security issues must be identified and addressed in order to ensure the confidentiality, integrity and availability of information.

While the requirements mentioned do not completely list all Privacy and Security controls it should be provided in its entirety and included in the proposed solution, each vendor must be fully cognizant of the typical controls recommended by industry best practices and standards (e.g. ISO27799) and expected by provincial legislation (e.g. robust access controls, logging and auditing capabilities, etc). Such controls must be provided as fully integrated components of their product offering.

It is highly recommended that the vendors include a description of their understanding, experience and practice in such subject areas as Personal Health Information Protection Act (PHIPA), ISO27799, and the CSA Model Code, and map the Privacy and Security controls included with their product to a standard such as ISO27799 in order to facilitate the evaluation of their product by the user organization.

It is the responsibility of the vendor to provide a product that will enable user HSPs to comply with their obligations under PHIPA.

It is the responsibility of each user organization to be aware of their role as defined within PHIPA and to fulfill the requirements of that role by completing their own due diligence when selecting and implementing a product. That due diligence may include conducting a Privacy Impact Assessment and a Security Threat Risk Assessment on the proposed solution.

Ensure appropriate security is in place for collection and storage of personal and health information data in accordance with PHIPA and PIPEDA regulations. Establish unique user login identification and passwords to promote individual accountability to protect against unauthorized system and information access.

### 6.2 Consent Management

Currently HSPs have specific processes in place to manage client consent. As part of the IAR implementation in Ontario, those current processes are being leveraged to arrive at a common consent framework.

In these initial stages, it is being considered to manage consent at various levels, such as client (all or nothing) assessment types (i.e. interRAI CHA or RAI-HC), individual assessments and specific



information within an assessment. At a minimum, the software will be required to capture consent at the assessment level.

It is the project's intent to align with the consent framework formulated to eventually capture consent directives within the data feeds to IAR. Please refer to the following documents for details of consent specification for IAR:

[https://www.ccim.on.ca/Vendor/IAR/Documents/IAR\\_Release\\_3.0\\_Submission\\_Requirements/IAR\\_Consent\\_Management\\_for\\_Vendors\\_v02\\_20111019.pdf](https://www.ccim.on.ca/Vendor/IAR/Documents/IAR_Release_3.0_Submission_Requirements/IAR_Consent_Management_for_Vendors_v02_20111019.pdf)

[https://www.ccim.on.ca/Vendor/IAR/Documents/IAR\\_Release\\_3.0\\_Submission\\_Requirements/IAR\\_R3.0\\_Suppliment\\_SubmissionAndConsentSpecifications\\_20111001.v1.pdf](https://www.ccim.on.ca/Vendor/IAR/Documents/IAR_Release_3.0_Submission_Requirements/IAR_R3.0_Suppliment_SubmissionAndConsentSpecifications_20111001.v1.pdf)

## 7. Other Requirements

### 7.1 Audit Requirements

- 7.1.1 Audit requirements are not mentioned in detail in this document; however, the responsibilities lie with the organizations and vendors to establish standard industry best practices and standards to ensure the software is robust and is able to provide a minimum set of audit capabilities as part of its software implementation.
- 7.1.2 Alerts should be displayed to manage errors, missing data etc. with the ability to navigate user to specific error and/or missing fields.

### 7.2 Usability Requirements

There are no specific requirements mentioned around usability. This empowers software vendors' flexibility to design and best satisfy the needs of the users of the application. Usability should include a user-friendly and intuitive interface that aligns with industry best practices.

## 8. Data Submission to Integrated Assessment Record (IAR)

The Integrated Assessment Record (IAR) is an initiative within Community Care Information Management (CCIM) to allow assessment information to be viewed by authorized health service providers across care settings. The Integrated Assessment Record application is currently being implemented in LHINs across Ontario.

As part of the IAR initiative, a central repository for assessments will be maintained. Client assessment information collected by standardized assessments, such as CSS, is uploaded regularly to the repository.

A central repository offers the opportunity for assessment information to flow with the client across care settings and to facilitate a common understanding of their needs, thus improving the continuity of care. Assessment information will be available to view by such authorized health service providers as community support service HSP, community mental health HSPs, hospital in-patient services, crisis centers in emergency departments, and community health centers. Having an electronic tool to assist HSPs in linking all of the various assessments together will increase efficiency in directing community support services to clients and patients across the LHINs.

The IAR system will provide a platform to view assessment records and supports collaborative care planning and service delivery. Real time access to standardized clinical data will enable benchmarking, identification of best practices, and informed planning for HSPs across sectors. Integrated assessment data will assist LHINs and the Ministry of Health and Community Support Services in evaluating outcomes for specific clinical assessments, identifying trends, and determining the effects of community care on acute and primary care events. It enables health service provision to transcend care settings.

Completed assessment records will be extracted in XML file format and submitted via web services (HTTPS) an internet based environment.

## Appendix A: Cross Validation Checks

The following Cross validation checks outlined in the table below currently exist within sections of the interRAI assessment suite.

<b>Cross Validation Checks</b> The following Cross validation checks outlined in the table currently exist within sections of the interRAI assessment tool *Represents a field with two possible values			
Section Data Element	Description	Validation Rule	Apply To
A3 Birth Date	Client's date of birth	Cannot be greater than current date  'Client Date of Birth is invalid'	Core CHA
Assessment Reference Date	Date of the assessment	An Assessment Reference Date must be greater than or equal to the Date Case Opened e.g. If the Date Case Opened is June 17 <sup>th</sup> , and the Assessment Reference Date is June 20 <sup>th</sup> , it cannot be entered as June 15 <sup>th</sup> .  If otherwise, the system should display an error message to alert the user:  Assessment Reference Date =>Date Case Opened	Core + All Four Supplements

B1 Date Case Opened	First encounter date with client (e.g. referral date. Date client contacted HSP etc)	<p>Date Case Opened must be the same date as an Assessment Reference Date or it may be before an Assessment Reference Date e.g. If the date case opened is June 17<sup>th</sup> then the Assessment Reference date is either June 17<sup>th</sup> or June 20<sup>th</sup>.</p> <p>If otherwise, the system should display an error message to alert the user:</p> <p>'Date case opened must be greater than Date of Birth'</p>	Core + All Four Supplements
Assessment Information	Date assessment signed as complete	<p>Each assessment i.e. core CHA and triggered supplements may have the same or different signoff dates depending on date of individual completion and it cannot be before an Assessment Reference Date and/or Date Case Opened.</p> <p>If otherwise, the system should display an error message to alert the user:</p> <p>'Date assessment signed as complete must be greater than or equal to the Assessment Reference Date'</p> <p>Or</p> <p>'Date assessment signed as complete must be greater than or equal to the Date Case Opened'</p>	Core + All Four Supplements

Section A	Discharge	If A7 = 5 or A7 = 6 then Section P is Mandatory	Core
Section C	Cognition	If C1 = 5 then skip to Section G  C2,C3, Section D, E and F are not Mandatory	Core
Section O	Discharge Potential and Overall Status	If O2 = 0 or O2 =1 then skip to Section P  03,04,05 = Not Mandatory	Functional
Section G2 (core) Section D (Functional)	CHA section G2 and Functional section D has same algorithm in the description	N/A	Core and Functional
Section G (core) & C (FS)	CHA section G2f ADL: locomotion) and functional section C2 (Mood and behavior: wandering)	If core CHA G2f = 6 or 8 then FS C2a Not = 2 or 3  If otherwise, the system should display an error message within the functional supplement to alert the user:  'The value coded in section C2a is inconsistent with the value coded in the Core CHA section G2f'	Core and Functional

<p>Section J (core) and section F (FS)</p>	<p>CHA section J3b (Health Conditions: unsteady gift) and functional section F1</p>	<p>If FS F1e (quadriplegia) = 1, 2 or 3 then core CHA J3b (unsteady gate)= 0</p> <p>If otherwise, the system should display an error message within the functional supplement to alert the user:</p> <p>'The value coded for section F1e is inconsistent with the value coded in section for J3b Core CHA'</p>	<p>Core and Functional</p>
<p>Section F (FS)</p>	<p>CHA Functional Supplement F1e Quadriplegia F1a Hemiptegia F1c Parapeligia</p>	<p>If F1e =1 2 or 3 then F1a and F1c = 0</p> <p>If otherwise, the system should display an error message within the functional supplement to alert the user:</p> <p>'The value coded for F1e is inconsistent with the value(s) coded for F1a and/or F1c'</p>	<p>CHA Functional Supplement</p>
<p>Section M (FS)</p>	<p>Section M1a: Relationship to person (Helper 1) &amp; (Helper 2)</p>	<p>M1a Helper 1 and M1 a Helper 2 cannot equal 2 at the same time</p> <p>If otherwise, the system should display an error message within the functional supplement to alert the user:</p> <p>'The values coded for M1a</p>	<p>CHA Functional Supplement</p>

		(Helper 1) and (Helper 2) can't be '2' at the same time'.	
Section M2a*	Core CHA section M2a (Hosp use, emerge room , physician visit & FS section A6 (time since last hospital stay)	<p>If M2a = 0 then A6 = 0</p> <p>If otherwise, the system should display an error message within the functional supplement to alert the user:</p> <p>'The value coded for A6 is not consistent with the value coded for M2a Core CHA'</p> <p>(Note '==' represents two fields)</p>	Core and Functional
Section M1a (FS) and M2	CHA FS M1a (Helper 1 & Helper 2) & CHA FS M2 (Informal Helper Status)	<p>If M1a (Helper 1) = 9 then M1b &amp; M1c &amp; M1d = 8</p> <p>If M1a (Helper 2) = 9 then M1b, M1c, &amp; M1d =8</p> <p>If otherwise, the system should display an error message within the functional supplement to alert the user:</p> <p>'The value coded for Section M1b and/or M1c, and/or M1d is not consistent with what was coded for M1a</p> <p>If M1a (Helper 1 &amp; Helper 2) == 9 (no informal helper) then M2a &amp;M2b = 0</p> <p>If otherwise, system should display error message</p>	CHA Functional Supplement

		<p>within functional supplement to alert the user:</p> <p>'The values for M2a and/or M2b are not consistent with what was coded for M1a'</p> <p>(Note '==' represents two fields)</p>	
Section D & H (FS)	<p>CHA FS section D1d (Functional Status, ADL: eating)</p> <p>CHA FS section H2 (Oral and nutritional Status: mode of nutritional intake)</p>	<p>If D1d = 8 then H2 = 9</p> <p>If otherwise, system should display error message within functional supplement to alert the user:</p> <p>'The value coded for H2 is not consistent with what was coded for D1d'</p>	CHA Functional Supplement
Section G(core) & Section J(core)	<p>CHA section G ADL: (G2f: Locomotion on same floor and G3 (bedbound) and J3b (Health Conditions: unsteady gait)</p>	<p>If G2f = 8 then G3 = 3</p> <p>If otherwise, system should display error message within Core CHA to alert the user:</p> <p>'The value coded for G3 is not consistent with the value coded for G2f'</p> <p>If G2f = 8 then J3b not equal to 2 or 3 or 4</p> <p>If otherwise, system should display error message within Core CHA to alert the user:</p> <p>'The value coded for J3b is not consistent with the value coded for G2f'</p>	Core



<p>Section G (core) &amp; Section D (FS)</p>	<p>CHA section G ADL:(G2f Locomotion on same floor) &amp; CHA FS Section D Functional Status (D2a: times 4 meter walked) (D2b: distance walked) (D2c: distance wheeled self)</p>	<p>If G2f = 6 then D2a = 99</p> <p>If otherwise, system should display error message within functional supplement to alert the user:</p> <p>'The value coded for D2a is not consistent with the value coded for G2f (core CHA)'</p> <p>If G2f = 6 then D2 b &amp; D2c =0</p> <p>If otherwise, system should display error message within Core CHA to alert the user:</p> <p>The values coded for D2b and D2c are not consistent with the value coded for G2f (core CHA)</p>	<p>Core and Functional</p>
<p>Section J (core)</p>	<p>CHA core Section J6, Health Conditions : Pain symptoms</p>	<p>If J6a = 0 then J6b &amp; J6c &amp; J6d = 0</p> <p>If otherwise, system should display error message within Core CHA to alert the user:</p> <p>'The values coded for J6b and/or J6c and/or J6d are not consistent with the value coded for J6a'</p>	<p>Core</p>
<p><u>Section A: Identification Information (CORE CHA)</u></p>	<p><u>Section 4A CHA Health Card Number and</u></p>	<p>One of these two fields has to be filled and neither can be left empty at the same time.</p>	<p><u>Core CHA + Administrative Face Sheet</u></p>

<u>Administrative Face Sheet (AFS)</u>	<u>Section 8 (AFS): Reason for no Health Card Number **</u>	<p>If the health card number is not provided, a “Reason for No Heath Card Number” must be provided.</p> <p><u>Or</u></p> <p>If the health card number is provided, a “Reason for No Heath Card Number” must not be provided.</p> <p><u>If otherwise</u>, system should display error message within Core CHA to alert the user:</p> <p>‘Either specify a Health Card number in section (5a) or select a ‘Reason for no Health Card number’ within the Screener’</p>	
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\*\*Should be displayed under the Health Card Number within section A5a of the interRAI CHA. This field must be identified to the user as a non-interRAI field as seen below

Not from interRAI

Reason for no Health Card Number:

## Appendix B: Sample Outcome Measures and Scale Output Results

Health card number 1234567XX  
Assessment Id 11111111111111  
Assessor John Doe  
Assessment Completed Dec 22 2010

Cognitive Performance Scale 2  
Depression Rating Scale 6  
IADL Involvement Scale 18  
Self-Reliance Index Scale 1  
Pain Scale 3  
MAPLe 4  
ADL Self – Performance Hierarchy Scale 1  
(only available if FS is complete)

## Appendix C: Sample Clinical Assessment Protocols (CAPs) Result

**Health card number** 1234567XX  
**Assessment Id** 11111111111111  
**Assessor** John Doe  
**Assessment Completed** Dec 22 2010

### Functional Performance

**Physical Activities Promotion (Calculated with CHA + FS)** 1 = Triggered With Potential for Improvement  
**Instrumental ADL** 1 = Triggered With Potential to Improve  
**Activities of Daily Living** 2 = Triggered to facilitate improvement  
**Institutional Risk (Risk)** 1 = Triggered

### Cognition and Mental Health

Cognitive Loss	2 = Triggered To prevent Decline
Delirium	1 = Triggered
Mood	2 = Triggered - High Risk

### Social Life

Social Relationship	1 = Triggered
Activities	1 = Triggered

### Clinical Issues

Falls	1 = Triggered Low Risk
Pain	2 = Triggered - High Priority
Cardio – Respiratory Conditions	1 = Triggered
Undernutrition	2 = Triggered - High Risk
Dehydration	2 = Triggered High Level
Prevention	2 = Triggered Because Preventive Strategy Not Pursued and No Recent Physician Visit
Bowel Conditions	1 = Triggered to Prevent Decline