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PAEREWA PĀRONGO HAUORA

COVID-19

Assessment and Testing Data Standard

HISO 10082:2020

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New Zealand Government

MINISTRY OF HEALTH
MANATŪ HAUORA

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MANATŪ HAUORA

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Contents

1 Introduction

This is a standard for patient assessment or testing data sets that facilities should collect and be able to be used to support monitoring and reporting during the COVID-19 pandemic.

This document is published as a draft standard that will be updated to reflect new requirements as they emerge.

1.1 Purpose

This standard has been produced in direct response to the COVID-19 pandemic. It has been designed to ensure that all COVID-19 assessments and tests are consistently and completely recorded to enable properly informed health service response, surveillance and analytics.

1.2 Scope

The standard sets out the minimum data set needed to accurately record administrative, demographic and clinical information for patients assessed or tested for COVID-19.

This covers all assessments and tests wherever they are performed. This includes: fixed and pop-up community testing centres, laboratory collection centres (also known as patient service centres), mobile services, hospital departments, general practice, ambulance, workplaces, managed isolation and quarantine facilities, vessels and other community settings. The standard can also be used for assessments on those in self-isolation. For the purposes of this standard, these are called assessment and testing facilities.

The standard is consistent with WHO pandemic reporting guidelines and forms part of the pandemic minimum data set for COVID-19 in New Zealand.

The requirements are for structured and coded data wherever possible to ensure maximum utility for data analysis.

The standard provides technical requirements for software solutions supporting COVID-19 assessments and tests.

The standard is limited to clinical assessments and tests. It does not extend to a complete set of data requirements for contact tracing, laboratory reporting or patient management.

This standard does not cover contact tracing or travel history. However, note that at a minimum it will be necessary to record town/city/country/airport, flight number, seat number and date information for all international and local travel.

1.3 Background documents

Ministry of Health COVID-19 Case Definitions
COVID-19 Health and Disability System Response Plan
Initial COVID-19 Māori Response Action Plan
HISO 10005 HPI Data Set Standard

1.4 Revision history

27 March 2020	First published as draft standard to support CBAC implementation
15 April 2020	Minor revision to draft standard to: • Remove vehicle identifier data element • Extend the set of symptom codes to match the 8 April 2020 case definition • Add a code for a negative assessment outcome • Add type of swab • Clarify the settings in scope
21 May 2020	Minor revision to draft standard to: • Add SNOMED concepts for nasopharyngeal swab and probable COVID-19 • Align clinical criteria with latest COVID-19 case definitions • Correct the phone number format • Add indicator data element for asymptomatic
1 December 2020	Revision of draft standard to: • Reflect broader use for COVID-19 assessments and tests • Add assessment and testing facility types • Add isolation observation type • Update the list of symptoms to align with the COVID-19 case definitions published on 7 August 2020 and included asymptomatic. • Remove the data element for the asymptomatic indicator • Update the clinical signs for: o 'Temperature' to 'Body temperature', including the link to the relevant SNOMED CT identifier. o Pharyngeal exudate. Changed the link to relevant SNOMED CT identifier. • Update the list of medical conditions: o separated Immunodeficiency and HIV o removed 'Current cancer', as this is covered under the term Cancer (history of < 5 years). • change the link to the relevant SNOMED CT identifier for 'Throat swab taken'
15 March 2021	Minor revision of draft standard to • add the data element to indicate if a patient meets the High Index of Suspicion (HIS) criteria. • rename the data element 'Exposure to confirmed case' to 'Exposure to confirmed or probable case' and updated the definition.

2 Data set specification

This section presents the required data elements to be recorded for each patient that has an assessment or test by a facility.

Some data elements are defined in other HISO standards, in which case a simple reference to the source is provided. All other data elements are defined in this document using the following form based on *ISO/IEC 11179 Information Technology – Metadata Registries (MDR)*.[1]

Name	Data element name
Definition	A statement that expresses the essential nature of the data element and its differentiation from other elements in the data set.
Source standards	Established data definitions or guidelines pertaining to the data element.
Data domain	The valid values or codes that are acceptable for the data element. Each coded data element has a specified code set. Code sets use the SNOMED CT clinical terminology standard where possible. Enumerated SNOMED concepts are denoted by preferred term and linked to descriptions in the **SNOMED International browser**.
Obligation	Indicates if the data element is mandatory or optional in the context, or whether its appearance is conditional.
Guide for use	Additional guidance to inform the use of the data element, including verification rules.

Clinical terminology standard

The data domain for coded clinical data elements, defaults to SNOMED CT. The concepts making up each data domain are denoted by preferred term and linked to entries in the **SNOMED CT browser**. The SNOMED CT concept identifier can be viewed by hovering over the link.

Some data elements are restricted to a definite set of SNOMED CT concepts. Others are more open-ended and allow the user to select from a wider set of concepts, usually within a certain SNOMED CT hierarchy or sub-hierarchy – eg, the set of all disease concepts. See the **SNOMED CT Search and Data Entry Guide** for a guide to building a user-friendly search across the terminology.

The **SNOMED NZ Edition** is to be used when implementing this standard. The **SNOMED NZ Edition**, incorporating the SNOMED CT International Edition and SNOMED NZ Extension, is released in April and October every year. SNOMED CT is free to use in New Zealand.

[1] See https://standards.iso.org/ittf/PubliclyAvailableStandards/index.html

Character sets

Text data elements must accommodate macrons for Te reo Māori and diacritic characters for other commonly used languages. By default, this means using the Unicode Basic Latin, Latin-1 Supplement and Latin Extended A character sets.

Alphabetic and alphanumeric codes and identifiers are at least restricted to printable Basic Latin characters and will normally be restricted further.

ISO/IEC 10646:2017 Information technology – Universal Coded Character Set (UCS) is the recognised standard. UTF-8 is recommended for character encoding.

2.1 Provider and facility details

The identity of the assessment or testing facility is to be recorded as part of each patient encounter.

2.1.1 Provider identifier

HPI organisation identifier for the provider operating the facility where an assessment or test is actioned.

Every health provider organisation must be registered in the HPI and issued one of these identifiers – eg, G00011-K for Auckland DHB.

See **HISO 10005 HPI Data Set Standard** for details.

This data element is mandatory for organisations that have an HPI organisation identifier.

2.1.2 Provider name

The name of the provider organisation operating the assessment or testing facility.

See **HISO 10005 HPI Data Set Standard** for details.

This data element is mandatory for a health provider organisation.

2.1.3 Facility identifier

HPI facility code unique to the assessment or testing facility.

Every assessment or testing facility recorded as a facility in the HPI system are to be recorded using its HPI identifier in the assessment or test data set. All other assessment or testing facilities will need to be identified by a name or location description alone, using the 'facility name' data element.

HPI facility identifier – eg, FB9964-G

See **HISO 10005 HPI Data Set Standard** for details.

This data element is optional.

2.1.4 Facility name

For every HPI-registered facility, use the assessment or testing facility 's name as recorded in the HPI system. Every other assessment or testing facility must have an agreed name (eg, the name of a vessel where the assessment or testing was actioned) or free text location description. The facility name is recorded in the format described in the following standard.

See **HISO 10005 HPI Data Set Standard** for details.

This data element is mandatory.

2.1.5 Facility type

Facility type is mandatory for each assessment or test collected.

The new SNOMED concepts and terms identified in the following table will be included in the **SNOMED CT NZ Edition April 2021 release**. The concept identifiers are valid for the purposes of this standard. They have been provided to support system implementation prior to the release of these SNOMED concepts and terms.

Name	Facility type
Definition	The type of facility that actioned the health service.
Source standards	
Data domain	SNOMED CT: • Laboratory collection centre (SCTID **56691000210105)** • Community testing centre (SCTID **56701000210105)** • **Mobile service** • Pop-up community testing centre (SCTID **56711000210107**) • Pop-up border workforce testing centre (SCTID **56721000210102)** • **General practice** • **Hospital emergency department** • **Hospital intensive care unit** • **Hospital outpatients** • Managed isolation facility (SCTID **56741000210108**) • Managed quarantine facility (SCTID **56731000210100)** • Watercraft (SCTID **56751000210106)**
Obligation	Mandatory
Guide for use	

2.2 Patient details

Patients being assessed or being tested at a facility may already be recorded in the **National Health Index (NHI)** or should have a record created.

This record should be populated from the patient record in the NHI system, and any updated information copied back into the NHI system.

2.2.1 Patient identifier

Use the NHI number to identify the patient being assessed or tested.

See **HISO 10046:2019 Consumer Health Identity Standard** for details.

This data element is mandatory.

2.2.2 Patient name

The patient's legal first name and surname.

See **Person name data content standard** and **HISO 10046:2019 Consumer Health Identity Standard** for details.

This data element is mandatory.

2.2.3 Birth date

The date of birth provided by the patient on presentation.

See **Date of birth content standard** and **ISO 8601-1:2019 Date and time — representations for information interchange — part 1: basic rules** for more details.

The required format for sharing birth date in extracts is YYYYMMDD.

This data element is mandatory.

2.2.4 Gender

Code used to identify the patient's gender.

See **HISO 10046:2019 Consumer Health Identity Standard** for details.

Gender is recorded using the level 1 classification codes of the **gender identity standard** published by Stats NZ. A review of the statistical standard for gender is currently underway by Stats NZ. Adoption of changes, identified by this review, will be considered and may result in updates being made to the above standard.

The patient may supply their own free text description of their gender if they do not identify as male or female.

This data element is mandatory.

2.2.5 Sex

<table>
<tr><td>Definition</td><td colspan="3">The patient's biological sex.</td></tr>
<tr><td>Source standards</td><td colspan="3"></td></tr>
<tr><td>Data type</td><td>Alphabetic</td><td>Representational class</td><td>Code</td></tr>
<tr><td>Field size</td><td>1</td><td>Representational layout</td><td>A</td></tr>
<tr><td>Data domain</td><td colspan="3"><table><tr><th>Value</th><th>Meaning</th></tr><tr><td>F</td><td>Female</td></tr><tr><td>M</td><td>Male</td></tr></table></td></tr>
<tr><td>Obligation</td><td colspan="3">Mandatory when laboratory tests are required.</td></tr>
<tr><td>Guide for use</td><td colspan="3"></td></tr>
</table>

A review of the statistical standard for sex is currently underway by Stats NZ. Adoption of changes, identified by this review, will be considered and may result in updates being made to the above table.

2.2.6 Ethnicity

This is the patient's self-identified ethnicity as described in **HISO 10046:2019 Consumer Health Identity Standard**

Use the standard **ethnic group code tables** to record ethnicity.

See also **HISO 10001:2017 Ethnicity Data Protocols**

This data element is mandatory.

2.2.7 GP practice

The GP practice where the patient is enrolled, if known.

Use **National Enrolment Service** record where possible to identify the patient's GP practice.

Record HPI facility id for the practice, using the **published facility table**.

This data element is mandatory.

2.2.8 Residential address

This is the full residential address for the patient, either permanently or as an overseas visitor.

See **Street address data content standard** and **HISO 10046:2019 Consumer Health Identity Standard** for details.

This data element is mandatory.

2.2.9 Territorial authority

Name	Territorial authority code
Definition	Identity of the city or district council where the patient usually resides
Source standards	
Data domain	**Territorial Authority 2020 code set** available from **StatsNZ Ariā concept and classification management system**
Obligation	Optional
Guide for use	Eg, Kaipara District is represented by code 003

2.2.10 Domicile

Name	Domicile code
Definition	Identity of the domicile or sub-area within the territorial authority where the patient usually resides
Source standards	**HISO 10046:2019 Consumer Health Identity Standard**
Data domain	**Domicile code table**
Obligation	Optional
Guide for use	Eg, Kaipara Coastal (within the Kaipara District territorial authority) is represented by code 0071 Used to verify residential address

2.2.11 Contact phone number

This number is the direct contact in order to reach the patient.

Name	Phone number		
Definition	The chosen phone number for communication		
Source standards	**ITU-T E.164 The international public telecommunication numbering plan**		
Data type	Numeric	**Representational class**	Identifier
Field size	15	**Representational layout**	N(15)
Data domain	International ITU-T E.164 numbers		

Obligation	Conditional – contact phone number and/or email address is required
Guide for use	International ITU-T E.164 numbers are variable length numeric strings without punctuation, composed of country code, area code or mobile network code and subscriber number Numbers should be entered, validated and displayed as separate components, eg: • 64 4 232*nnnn* • 64 20 412*nnnnn*

2.2.12 Contact email address

The patient's primary email address for communication purposes.

See **HISO 10046:2019 Consumer Health Identity Standard** for details.

Contact phone number and/or email address is required.

2.2.13 Patient's DHB

Name	Patient's DHB
Definition	Agency identifier for the patient's DHB
Source standards	
Data domain	See **HPI organisation identifiers for DHBs table**
Obligation	Optional
Guide for use	HPI organisation identifier for the DHB, eg G00011-K for Auckland DHB

2.2.14 Patient's occupation

Name	Occupation
Definition	The patient's declared occupation
Source standards	**ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, Revision 1**
Data domain	ANZSCO code
Obligation	Optional
Guide for use	

2.2.15 Employer

The name of the company or organisation where the patient is employed.

Use **NZ Business Number (NZBN)** where possible. Search the **NZBN register** to find the entry for the employer.

This data element is optional.

2.2.16 Workplace address

The physical location of the company or organisation that employs/occupies the patient.

See **Street address data content standard** and information about **recording workplace address** on the StatsNZ website.

This data element is optional.

2.2.17 Workplace location

The name of the town or city where the patient works. Record the main location and any other locations as separate instances of this data element.

This data element is optional.

2.2.18 Country of residence

Name	Home country
Definition	Country code for the patient's usual country of residence
Source standards	ISO 3166-1:2006 *Codes for the representation of names of countries and their subdivisions – Part 1: Country codes*
Data domain	2-alpha codes from **http://www.iso.org/iso/country_codes**
Obligation	Mandatory
Guide for use	Record explicitly for everyone, 'NZ' for NZ residents

2.2.19 Overseas province/state name

Name	Overseas province/state name
Definition	Overseas province/state name for non-residents
Source standards	
Data domain	Free text
Obligation	Optional
Guide for use	Record for non-residents and overseas visitors

2.3 Clinical details

2.3.1 Assessment date/time

Name	Assessment date/time
Definition	Date and time the patient received an assessment
Source standards	ISO 8601-1:2019 *Date and time. Representations for information interchange – Part 1: Basic rules*
Data domain	Date/time
Obligation	Mandatory
Guide for use	

2.3.2 Isolation observation type

A person's health and mental wellbeing is monitored while in isolation/quarantine. This data element identifies the type and/or timing of the assessment or test being undertaken during isolation/quarantine.

The new SNOMED concepts and terms identified in the following table will be included in the **SNOMED CT NZ Edition April 2021 release**. The concept identifiers are valid for the purposes of this standard. They have been provided to support system implementation prior to the release of the SNOMED concepts and terms.

Name	Isolation observation type
Definition	The assessment or test status being undertaken on the patient
Source standards	
Data domain	SNOMED CT: • Test on arrival (SCTID 57181000210103) • **Initial test** • Scheduled test (SCTID 57221000210107) • Daily health assessment (SCTID 57191000210101) • **Wellness assessment** • Welfare assessment (SCTID 59061000210101) • Additional test (SCTID 57211000210102) • Final test (SCTID 57201000210104)
Obligation	Mandatory for persons who will be transferred to or are in managed isolation or quarantine facilities
Guide for use	May also be used for monitoring those in self-isolation.

2.3.3 Day in isolation

Name	Isolation day
Definition	The day number that the patient has been in isolation/quarantine when the observation took place
Source standards	
Data domain	2-numeric
Obligation	Mandatory for persons who will be transferred to or are in managed isolation or quarantine facilities
Guide for use	Can also be used for monitoring those in self-isolation.

2.3.4 Clinical assessment outcome

The clinical assessment outcome is recorded in terms of the Ministry of Health **case definitions for COVID-19**. The case definitions set out the criteria for suspect cases, probable cases and confirmed cases.

Name	Clinical assessment outcome
Definition	Clinical assessment outcome in terms of the COVID-19 case definitions
Source standards	**Ministry of Health COVID-19 case definitions**
Data domain	SNOMED CT disorder/situation: • **Suspected COVID-19** • **Probable COVID-19** • **COVID-19** • **Not suspected**
Obligation	Conditional
Guide for use	Probable COVID-19 is a new concept added to the SNOMED CT NZ Extension

2.3.5 Exposure to confirmed or probable case

Flag whether the patient has had exposure to a confirmed or probable case. If so, record the details in narrative text.

Name	COVID-19 exposure
Definition	Whether the patient has had exposure to a confirmed or probable case of COVID-19
Source standards	
Data domain	Boolean
Obligation	Mandatory
Guide for use	

2.3.6 Recent overseas travel

Record whether patient has recently travelled overseas.

Name	Recent overseas travel
Definition	Flag indicating whether the assessment outcomes are associated with recent overseas travel (within 14 days)
Source standards	
Data domain	Boolean
Obligation	Mandatory
Guide for use	

2.3.7 Consent to medical record access

Name	Medical record access consent
Definition	Patient gives consent to medical record access
Source standards	
Data domain	Boolean
Obligation	Mandatory
Guide for use	

2.3.8 Symptoms

The set of symptoms experienced by the patient.

The following checklist of findings and disorders is used to record the symptoms. If the person has no symptoms, **Asymptomatic** should be recorded.

Asymptomatic	**Diarrhoea**
Acute respiratory infection	**Headache**
Anosmia	**Muscle pain**
Cough	**Nausea**
Fever	**Vomiting**
Head cold (eg, runny nose, sneezing, postnasal drip)	**Confusion**
Sore throat	**Irritability**
Shortness of breath	

Each element of the set of reported symptoms is recorded as follows.

Name	Symptom
Definition	Symptom
Source standards	
Data domain	SNOMED CT finding/disorder (as above)
Obligation	Mandatory
Guide for use	

Any other symptoms may be recorded in the same way using SNOMED CT concepts.

2.3.9 Severity

Name	Severity
Definition	Overall severity of symptoms
Source standards	
Data domain	SNOMED CT Symptom severity: • **Asymptomatic** – No symptoms • **Mild** – Does not interfere with daily activities • **Moderate –** Somewhat restricts daily activities • **Severe –** Prevents daily activities or taking care of oneself
Obligation	Optional
Guide for use	**Critical or life threatening** severity may need to be recorded in other settings

2.3.10 Clinical signs

The set of outcomes from clinical measurements taken during the assessment of the patient.

Measurement	Unit of measure
Body temperature	˚C
Blood pressure (systolic/diastolic)	mmHg/mmHg
Heart rate	beats per minute (BPM)
Respiratory rate	breaths per minute
Oxygen saturation (SpO2)	percentage

The following observed outcomes are positive or negative indications that signs are present.

Pharyngeal exudate	**Coma**	**Abnormal lung auscultation**
Conjunctival injection	**Dyspnea**	**Abnormal lung x-ray**
Seizure	**Tachypnea**	

Each element of the set of positive signs is recorded as follows.

Name	Clinical sign
Definition	Clinical sign
Source standards	
Data domain	SNOMED CT finding/disorder (as above)
Obligation	Mandatory
Guide for use	

Any other signs may be recorded in the same way.

2.3.11 Medical conditions

Record the patient's medical conditions that are known risk factors.

Immunodeficiency	**Stroke (history of)**
HIV	**Cancer (history of)** - *to be used for current or history of cancer <5 year)*
Cardiovascular disease including hypertension	**Chronic lung disease**
Diabetes	**Chronic neurological disease**
Liver disease	**Chronic neuromuscular disease**
Kidney disease	

Each element of the set of medical conditions is recorded as follows.

Name	Medical condition
Definition	Medical condition that is a known risk factor in relation to COVID-19
Source standards	
Data domain	SNOMED CT finding/disorder/situation (as above)
Obligation	Mandatory
Guide for use	

Any other medical conditions of concern may be recorded in the same way. An empty set represents an absence of any medical conditions of concern.

2.3.12 Pregnancy

Record trimester for current pregnancy or whether postpartum less than six weeks.

Name	Pregnancy
Definition	Current pregnancy and trimester, or post-partum less than six weeks
Source standards	
Data domain	SNOMED CT: • **First trimester** • **Second trimester** • **Third trimester** • **Postpartum less than six weeks** • **Not pregnant**
Obligation	Mandatory
Guide for use	If not applicable, record 'Not pregnant'

2.4 Swab details

Record the following details if a swab is taken.

2.4.1 Laboratory sample date/time

Name	Laboratory sample date/time
Definition	Date/time the patient's sample/specimen was taken for laboratory testing
Source standards	ISO 8601-1:2019 *Date and time. Representations for information interchange – Part 1: Basic rules*
Data domain	Date/time
Obligation	Mandatory if a swab is taken
Guide for use	

See the latest update to the **NZ Pathology Observation Code Sets (NZPOCS)** for COVID-19 test codes and descriptions for laboratory use. The **LOINC website** has more information.

2.4.2 Higher Index of Suspicion (HIS)

The following data element identifies if a patient's test should be given the highest priority according to a specific set of symptoms and higher index of suspicion criteria identified by the Ministry of Health.

Name	Higher Index of Suspicion indicator
Definition	Identifies whether the person meets the Higher Index of Suspicion (HIS) criteria.
Source standards	
Data domain	Boolean 1 – Yes 0 - No
Obligation	Mandatory
Guide for use	**YES** would be selected when a patient has at least one of the symptoms listed under the clinical criteria of the **COVID-19 Case definition** and any of the following are met in the 14 days prior to illness onset: • international travel • direct contact with a person who has travelled overseas (eg, Customs and Immigration staff, staff at quarantine/isolation facilities) • worked on an international aircraft or shipping vessel • cleaned at an international airport or maritime port in areas/conveniences visited by international arrivals • exited an MIQ facility (excluding recovered cases), or • any other criteria requested by the local Medical Officer of Health.

2.4.3 Swab procedures

Name	Swab procedure type
Definition	Type of swab procedure performed
Source standards	
Data domain	SNOMED CT: • **Nasopharyngeal swab taken** • **Throat swab taken**
Obligation	Conditional
Guide for use	Mandatory to record this data element if swab performed

2.5 Other case details

2.5.1 Reported date/time

Name	Case reported date/time
Definition	This is the date/time that the patient's case was reported to a community testing centre.
Source standards	ISO 8601-1:2019 *Date and time. Representations for information interchange – Part 1: Basic rules*
Data domain	Date/time
Obligation	Mandatory for those being reported to a community testing centre.
Guide for use	

2.5.2 Reporting person

This is the individual who referred or reported the patient to a community testing centre.

HPI person identifier (HPI-CPN) for referrals from a health practitioner, otherwise the person's Medical Council number or Nursing Council number or name.

See **HISO 10005 HPI Data Set Standard** for details.

Search the **Medical Council register** and **Nursing Council register** for registered practitioners.

This data element is optional.

2.5.3 Reporting organisation

This is the name of the organisation that employs the individual who referred or reported the patient's case to the community testing centre.

Use HPI organisation identifier for reports from health providers and **NZBN** for reports from employers and other organisations.

See **HISO 10005 HPI Data Set Standard** for details.

This data element is optional.

2.5.4 Contact phone number

The contact phone number of the individual who reported the patient's case to the community testing centre.

Refer to the phone number data element specification earlier in this document.

Conditional data element – phone number is required for the contact person if an email address is not available.

2.5.5 Contact email address

The contact email address of the individual who reported the patient's case to the community testing centre.

Conditional data element – email address is required for the contact person if a phone number is not available.

2.5.6 Delivery mode

Name	Delivery mode
Definition	Mode of delivery of assessment
Source standards	
Data domain	Numeric codes as follows: 1. Face to face, one patient to one clinician 2. Face to face, one patient to many clinicians 3. Face to face, one clinician to many patients 4. Remote patient monitoring 5. **Telephone** 6. **Videoconference** 7. **Non-contact (virtual)**
Obligation	Mandatory
Guide for use	

3 Implementation requirements

Following are key implementation requirements for solutions implementing this standard.

3.1 User interface

Use a web form or functionality within the chosen application to capture the required data set. The form needs to be convenient to use for real time data capture by frontline health workers.

3.2 Integration

Integration with NHI, NES, HPI, NZBN and other master data sources referenced in this document will be critical to data quality and workflow efficiency.

In addition, integration with patient management systems and patient portals will be beneficial for access to demographic and clinical data, and for communication with patients.

3.3 Data extracts

Solutions will need to be able to produce on-demand and scheduled bulk extracts of assessment records to populate a national data collection. Each extract will include a time-bracketed set of assessment records conveying specified elements of the assessment data set for multiple patients.

Extract files will be communicated via a secure FTP server. This is consistent with the current methods of data exchange with the Ministry.

Extract processes should be designed for security and performance. Extracts should be runnable on demand and on a schedule as frequently as hourly.

Refer to the **CBAC data collection file specification** on the Ministry of Health website for details.