# NZHTS release note for February 2023

22 February 2023

This is the release note for the first monthly issue of new content to the NZ Health Terminology Service (NZHTS).

Launched in December 2022, NZHTS is the sector's one-stop source of standard terminologies and code sets for high quality digital health records and interoperability. It's a free service, available to all New Zealand health entities and their industry partners, that will help create a simpler and more unified health system in Aotearoa.

Learn more about NZHTS and how to use it on the <u>Te Whatu Ora website</u> and the <u>Hira marketplace</u>.

The content at launch included the SNOMED CT NZ Edition and code sets supporting the National Health Index (NHI), Health Provider Index (HPI) and HL7® FHIR® NZ Base Implementation Guide.

The February 2023 release adds important new content:

- NZ Pathology Observation Code Sets (NZPOCS)
- NZ International Patient Summary (NZIPS) code sets for problems and conditions and for allergies and adverse reactions
- MedDRA pharmacovigilance codes.

Here we describe each new FHIR value set and concept map in the release.

#### **NZPOCS**

NZPOCS is built on the LOINC international standard and covers all commonly performed pathology tests in biochemistry, haematology, immunology, microbiology, virology/serology and toxicology. NZPOCS extends LOINC to include codes for several local New Zealand test types.

This release is based on LOINC version 2.73, published 8 August 2022.

The new value set is https://nzhts.digital.health.nz/fhir/ValueSet/nzpocs (this is the value set's canonical URI).

#### **NZIPS**

NZIPS is our adaptation of the International Patient Summary (IPS) standard for Aotearoa. NZIPS defines a core personal health data set that is structured and coded for interoperability, is accessible by patients and whānau, and can be shared between points of care.

This first tranche of code sets for NZIPS covers:

- problems and conditions
- allergies and adverse reactions

See the NZIPS consultation document for background.

The FHIR representation of NZIPS is based on FHIR IPS STU 1.1.0.

### **Problems and conditions**

Our code set choices in this area come from the <u>Condition (IPS) resource profile</u>.

Absent or unknown is coded as no-problem-info or no-known-problems using the value set http://hl7.org/fhir/uv/ips/ValueSet/absent-or-unknown-problems-uv-ips.

#### **Problem code**

The codes used to label problems are set out here <u>Problems (SNOMED CT) – IPS</u> and combine SNOMED concepts from three hierarchies:

- Clinical finding
- Situation with explicit context
- Event

The value set is http://hl7.org/fhir/uv/ips/ValueSet/problems-snomed-uv-ips.

### **Body site**

Body site is recorded using the SNOMED concepts under <u>Anatomical or acquired</u> <u>body site</u>. The value set is **http://hl7.org/fhir/ValueSet/body-site**.

## **Severity**

Severity is coded as mild, moderate or severe using SNOMED Severities concepts. The value set is http://hl7.org/fhir/ValueSet/condition-severity.

#### **Clinical status**

Clinical status is coded as active, recurrence, relapse, inactive, remission or resolved using the value set http://hl7.org/fhir/ValueSet/condition-clinical.

## Certainty

Certainty is coded as unconfirmed, provisional, differential, confirmed or refuted using the value set http://hl7.org/fhir/ValueSet/condition-ver-status.

# Allergies and adverse reactions

Our code set choices in this area come from the <u>Allergy Intolerance (IPS) resource</u> <u>profile</u>.

Absent or unknown is coded as no-allergy-info, no-known-allergies, no-known-medication-allergies, no-known-environmental-allergies, no-known-food-allergies using the value set http://hl7.org/fhir/uv/ips/ValueSet/absent-or-unknown-allergies-uv-ips.

### Allergy or intolerance flag

Entries are differentiated as either allergy or intolerance using the value set <a href="http://hl7.org/fhir/allergy-intolerance-type">http://hl7.org/fhir/allergy-intolerance-type</a>.

### Category

Category is coded as food, medication, environment or biologic using the value set http://hl7.org/fhir/ValueSet/allergy-intolerance-category.

### **Agent or clinical finding**

The value set for the causative agent or clinical finding is defined here <u>Allergy</u> <u>Intolerance Substance Condition – IPS</u> and includes all SNOMED concepts under these headings:

- Substance
- Pharmaceutical / biologic product
- Propensity to adverse reactions to substance

The value set is http://hl7.org/fhir/uv/ips/ValueSet/allergy-intolerance-substance-condition-uv-ips.

## Criticality

Criticality is coded as low, high or unable-to-assess using the value set <a href="http://hl7.org/fhir/ValueSet/allergy-intolerance-criticality">http://hl7.org/fhir/ValueSet/allergy-intolerance-criticality</a>.

#### **Clinical status**

Clinical status is coded as active, inactive or resolved using the value set <a href="http://hl7.org/fhir/ValueSet/allergyintolerance-clinical">http://hl7.org/fhir/ValueSet/allergyintolerance-clinical</a>.

## Certainty

Certainty is coded as unconfirmed, confirmed or refuted using the value set <a href="http://hl7.org/fhir/ValueSet/allergyintolerance-verification">http://hl7.org/fhir/ValueSet/allergyintolerance-verification</a>.

#### **Manifestation**

The manifestation of an adverse reaction is coded using a reduced set of SNOMED findings and disorders as defined here <u>Allergy Reaction - SNOMED CT IPS Free Set</u>

#### Examples are:

- Conjunctivitis
- <u>Tight chest</u>
- Cough
- Seizure
- Dyspnoea

The value set is <a href="http://hl7.org/fhir/uv/ips/ValueSet/allergy-reaction-snomed-ct-ips-free-set">http://hl7.org/fhir/uv/ips/ValueSet/allergy-reaction-snomed-ct-ips-free-set</a>.

### **Severity**

The severity of an adverse reaction is coded as mild, moderate or severe using the value set http://hl7.org/fhir/ValueSet/reaction-event-severity.

#### **MedDRA**

MedDRA codes are used in pharmacovigilance reporting of adverse reactions to medicines. To support the process, we make MedDRA lowest level terms (LLT) code set available via NZHTS.

We also publish maps between MedDRA and SNOMED to enable SNOMED codes from digital health records to be translated to MedDRA codes as input to the individual case safety reports (ICSRs) used in the regulatory process.

MedDRA is published by international non-profit ICH, and the maps are jointly published by ICH and SNOMED International.

The current version available in NZHTS is MedDRA version 25.1, published in September 2022.

The MedDRA value set is https://nzhts.digital.health.nz/fhir/ValueSet/meddra-code.

The SNOMED to MedDRA concept map is

https://nzhts.digital.health.nz/fhir/ConceptMap/snomedct-meddra.

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https://nzhts.digital.health.nz/fhir/ConceptMap/meddra-snomedct.

# **Upcoming releases**

New content we'll release in coming months includes:

- In March 2023, the next iteration of NZIPS code sets, as well as UCUM (units of measure), maternity care code sets and ISO country codes
- In April 2023, a collection of over 70 SNOMED reference sets produced by Te
  Aho o Te Kahu for structured pathology reporting of cancer
- In May 2023, the remainder of NZIPS plus oral health code sets, CVX vaccination codes and other Aotearoa Immunisation Register (AIR) code sets.

NZ Medicines Terminology (NZMT) lite content is planned.

### Links

The FHIR API endpoint for NZHTS is <a href="https://nzhts.digital.health.nz/fhir">https://nzhts.digital.health.nz/fhir</a>.

You can find all available NZHTS content listed here:

- <a href="https://nzhts.digital.health.nz/fhir/CodeSystem">https://nzhts.digital.health.nz/fhir/CodeSystem</a>
- https://nzhts.digital.health.nz/fhir/ValueSet
- <a href="https://nzhts.digital.health.nz/fhir/ConceptMap">https://nzhts.digital.health.nz/fhir/ConceptMap</a>

See our Github repository for examples of code set lookups using the API.

### **Contact us**

Please email any enquiries to <u>standards@health.govt.nz</u> or join us at <u>https://forum.hinz.org.nz/c/standards</u>

