Health New Zealand
Te Whatu Ora

hiso Health Information Standards Organisation
PAEREWA PĀRONGO HAUORA

HISO 10114 Technical Guide for HL7 2.x Messaging of Gender and Sex Details

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This document should be read in conjunction with the document: 'Interim guidance – collection and transmission of gender and sex related information in the health system in New Zealand.'

PID-8 – Administrative Sex is 'gender'

The NHI system is the source of truth for health identity and NHI number assignment in New Zealand. The NHI only includes an attribute for self-identified gender and not sex. Administrative demographic information in PAS/PMS systems is commonly synced with the NHI to ensure accurate identification of patients and matching to NHI records. However, there are inconsistencies in the fields (sex/gender) that PAS systems synch with the NHI gender field.

Systems have used the PID-8 Administrative Sex HL7 v2.x message field in the PID Patient Identification segment to exchange both sex and gender values in systems downstream from the PAS/PMS. The interpretation has varied around the country and between different configurations of systems. Therefore, there is not a common standard across systems for what is being sent in this field to downstream systems.

To move towards consistency and to allow for gender and sex as distinct attributes, we are now setting the standard that **PID-8 should be treated as 'gender' by default by the PAS/PMS and all downstream systems**. This will mean change for some systems, and their owners will need to assess the impact and make careful plans accordingly. PID-8 can continue to be used in existing implementations and subject to existing interpretations until local implementation of the change. No change to the message format for interaction with the NHI is proposed.

Variation to HL7® version 2.4 to add 'sex parameter for clinical use' and other gender and sex related elements to improve data quality

This document details a variation to the HL7® version 2.4 messaging standard to support electronic transfer of gender and sex details within the New Zealand health sector.

Our variation follows closely the direction of the HL7 Gender Harmony Project and ISO technical report on sex and gender in electronic health records.

New segments have been created in HL7® version 2.9.1 to support the Gender Harmony artifacts (as an outcome of the HL7 Gender Harmony Project).

In order to use these new segments in earlier versions of HL7 (before V2.9.1) this variation has been developed to support the pre-adoption of data elements and segments from HL7® version 2.9.1.

The data segments from HL7® version 2.9.1 that are relevant to this variation are:

- GSP – Person Gender and Sex Segment
- GSR – Recorded Gender and Sex Segment
- GSC – Sex Parameter for Clinical Use Segment

These data segments are placed inside the message structure in a way that provides context to the information being transferred. These data elements can be included in such segments as the Patient Identification segment (PID), Patient Additional Demographic Segment (PD1), Next of Kin (NK1) or Insurance segment (IN1). Sex Parameter for Clinical Use can be used in context-specific ways following the guidelines provided in the first page of this interim guidance document.

When exchanging these concepts, refer to the guidance in the Gender Harmony Implementation Guide: https://build.fhir.org/ig/HL7/fhir-gender-harmony/branches/main/hl7v2genderharmony.html

A short implementation guide will be made available on the Health New Zealand | Te Whatu Ora website to support this variation.

Note: The NHI will continue receiving gender information for new patients and when updating a person's gender using the currently defined Z segments.

This guidance has been developed following international recommendations for standards regarding gender and sex-related data collection. These include:

- Design Considerations - HL7 Cross Paradigm Implementation Guide: Gender Harmony - Sex and Gender Representation, Edition 1 v1.0.0 (fhir.org)
- https://www.iso.or g/obp/ui/en/#iso:std:iso:tr:9143:ed-1:v1:en ISO/TR 9143:2023 Health informatics — Sex and gender in electronic health records
- HL7 v2 standards https://www.hl7.org/implement/standards/product_brief.cfm?product_id=185
- Australian Core Data for Interoperability R1: AUCDI Release 1 – Sparked (csiro.au)
- United States Core Data for Interoperability (USCDI) | Interoperability Standards Platform (ISP) (healthit.gov)