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Patient Identification Management Interoperability Specification

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EHEALTH DIGITAL SERVICES INFRASTRUCTURE
OPEN NATIONAL CONTACT POINT
IMPLEMENTATION AND TEST PLATFORM
SERVICES

Patient Identification Management Interoperability Specification

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Approval

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Reference documents

This section gathers the documents which are referenced in this document. In the body of this document, any reference to an external document is formatted using [KEYWORD] from the first column.

Keyword	Name and reference
[ISEC]	Security and Privacy Interoperability Specification HSE9100-LOT2-CORE-IS-SECURITY_PRIVACY
[ITERM]	General Terminology Interoperability Specification HSE9100-LOT2-IS-TERMINOLOGY
[PATIENT_ID_MGT_UC]	Patient Identification Management Use Case HSE9100-LOT2-UC-PATIENT_ID_MGT
[HIQA_GUIDANCE]	National standard demographic dataset and guidance for use in health and social care settings in Ireland https://www.hiqa.ie/sites/default/files/201701/Demographic-Dataset-and-Guidance.pdf

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1 Preface

Ireland as a European country is becoming involved in the eHDSI (eHealth Digital Services Infrastructure) project led by the European Commission under the CEF (Connecting European Facilities) program and will participate to the deployment in the wave 3 (2020). To prepare the deployment of the NCPeH (National Contact Point for eHealth) in Ireland, the HSE (Health Service Executive) procured in 2018 the support services that will facilitate the implementation of the NCPeH and its connection to central Irish services. The first step of the project is to define the needed use cases to support and to design the architecture for connecting the Irish NCPeH. These tasks will be followed by the design of the architecture within Ireland, the corresponding Interoperability Specifications, the testing strategy including test plans and the implementation of Gazelle test platform that includes test cases, test tools and test data.

1.1 Context

Directive 2011/24/EU provides rules for facilitating access to safe and high-quality cross border healthcare and promotes cooperation on healthcare between member states. The aims of implementing the Irish NCPeH exchange of Patient Summaries and ePrescription are in line with the principles of cross-border care. The NCPeH and cross border exchange implementations are all key building blocks that will interact with the national data dictionary (single source of trust for clinical data definitions across the enterprise) and the Patient Summary and ePrescribing documents and associated metadata will be stored there as minimum data sets.

The main goals are to design the platform based on the needs that will be developed in the first steps of the project that includes

- Use Cases for ePrescription and Patient Summary
- Corresponding Interoperability specifications and architecture orchestration
- Validated version of IHE Gazelle. The test harness will provide to the authority the ability to test prospective vendors and products against the above interoperability specifications.

1.2 Glossary

ePrescription: means a medicinal prescription issued and transmitted electronically, as elaborated in point 3 (f) of Commission Recommendation 2008/594/EC on cross-border interoperability of electronic health records. [PS/eP guidelines]

eDispensation: is defined as the act of electronically retrieving a prescription and giving the medicine to the patient. Once the medicine has been dispensed, a report on the items dispensed is sent to the prescribing Member State in a structured format. [PS/eP guidelines]

IHE profile: provides a common language for purchasers and vendors to discuss the integration needs of healthcare sites and the integration capabilities of healthcare IT products. A Profile is a guideline for implementation of a specific process, by providing precise definitions of how standards can be implemented to meet specific clinical needs. [eHealth Interoperability

Conformity Assessment Scheme for Europe (EURO-CAS)] Patient Summary is an identifiable "dataset of essential and understandable health information" that is made available "at the point of care to deliver safe patient care during unscheduled care [and planned care] with its maximal impact in the unscheduled care" [PS/eP guidelines]

Interoperability use case: description of a specific use of HIT (Health Information Technology) that includes depiction of both humans (business actors) and systems (technical actors), scope, workflows of tasks performed by healthcare professionals and associated data flows. Should be written in natural language. May include several scenarios. One or more use cases are derived from one business case [IHE taskforce]

Realisation scenario: description of human activities (business actors), systems (technical actors) roles (i.e., IHE actors) and transactions related to a set of technical use cases that support the interoperability infrastructure for use cases (implementable infrastructure). [IHE taskforce]

Interoperability Specifications: specify the interfacing of the various IT systems and devices to an eHealth infrastructure with all necessary technical details specific to allow the support of an Interoperability Use Case in an eHealth deployment project. It covers not only the specification of the information that may flow back and forth across the interface, but also the policies that control the behaviour of the systems and users to ensure end-to-end interoperability (e.g. semantics, security, privacy, service level agreements). An Interoperability Specification references profile specifications (e.g. IHE Profiles) and standards, when profiles are not available. Interoperability Specifications (IS) are targeted to be the sole entry point for the technology developers, the compliance assessment testing, and the purchaser of IT systems in term of technical requirements that will ensure interoperability. [ISO/TR 23380-3 – IHE Global Standards Adoption Process – Deployment].

1.3 Document purpose

The purpose of this document is to address the Irish Core Interoperability Specifications for the Patient Identification Management Use Case. It is a critical common component of the two clinical Use cases on Patient Summaries and ePrescription and forms a set of requirements that complements the set of Integrating the Healthcare Enterprise (IHE) Profiles, Health Level 7 (HL7) Vocabulary Standards required by this specification with Irish eHealth specific constraints.

The Interoperability Specification specified in this document is enabled by the Individual Health Identifier (IHI) system that is under deployment. This Interoperability Specification supports the current services intended to be offered in the short-term and that will have to be used by the Irish National Contact Point (NCPeH) to enable cross-border eHealth services.

This interoperability Specification may also be used to support the access of any point of care consumer system to the services of the IHI Register.

1.4 How to read this document

This document contains three normative sections (4, 5, and 6), as well as informative appendices for the reader convenience. The document is structured as follows:

- Section 3: Provides a reference to the Patient Identification Management Use Case supported by this Interoperability Specification
- Section 4: Establishes the Conformance Requirements for the Interoperability Specification.
- Sections 5: Establishes the Constraints on the IHE Patient Demographics Query (PDQ) Profile.
- Section 6: Establishes the Constraints on the IHE Patient Identifier Cross-Reference (PIX) Profile.
- Section 7: Appendices that provides sample HL7 V2 messages for a patient demographic query request and a query response.

1.5 References

A (Core) Interoperability Specification (IS) is targeted to be the sole entry point for the technology developers, the compliance assessment testing, and the purchaser of IT systems in terms of the technical requirements that will ensure interoperability.

From this (Core) Interoperability Specification a number of supporting Interoperability Specifications are referenced:

- Security and Privacy Interoperability Specification [ISEC]
- General Terminology Interoperability Specification [ITERM]

The above Interoperability Specifications include precise references to internationally adopted profiles and standards as well as Irish specific constraints.

Implementations are required to conform to the requirements within this (Core) Interoperability Specification; all referenced Interoperability Specifications, and the standards and profiles they specify.

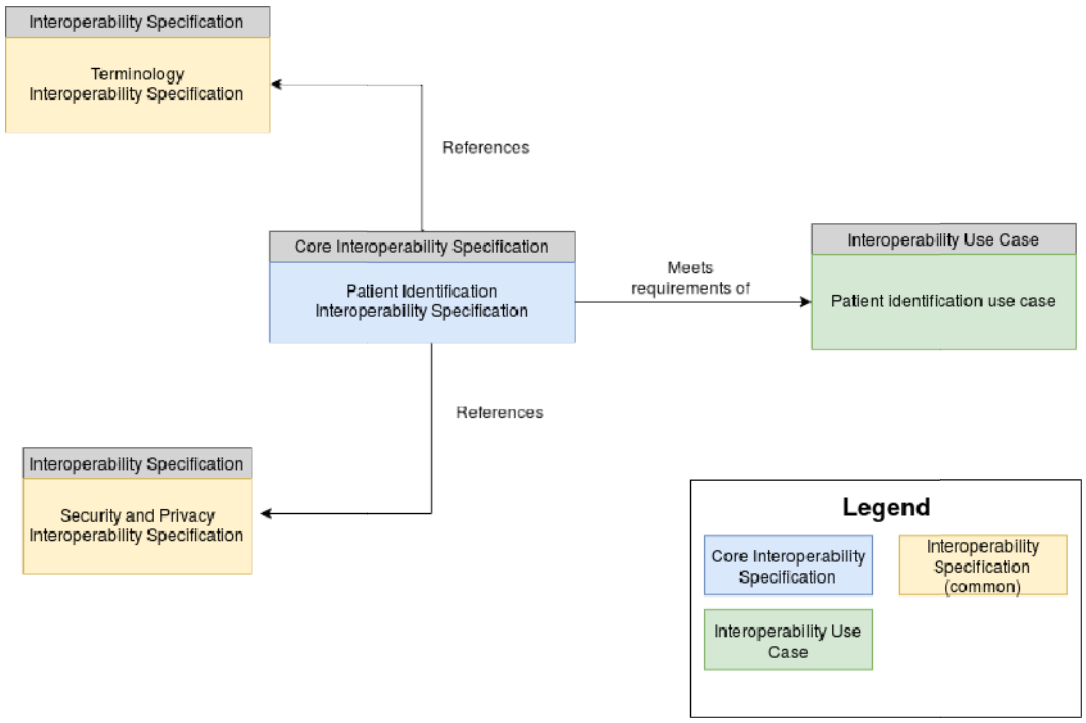

FIGURE 1-1 PATIENT IDENTIFICATION MANAGEMENT DOCUMENT ORGANISATION

1.6 Description

This Interoperability Specification describes the technical interface requirements to manage the patient identity and identifier. It covers both the query on demographics and the cross-referencing of patient identifiers.

1.7 Document convention

1.7.1 Requirements numbering conventions

Interoperability Specifications contain numbered requirements that follow this format:

[ABCD-###] where ABCD is a three or four letter acronym unique to that Interoperability Specification for convenient purposes, and ### is the unique number for that requirement within the Interoperability Specification.

These numbered requirements are the elements of the Interoperability Specification that the system conforms to. In other words, in order to implement a system that fully supports the Use Case and Interoperability Specification, the system shall be able to demonstrate that it conforms to every numbered requirement for the system actors to which it is claiming conformance.

Please note that all numbered requirements are numbered uniquely, however numbered requirements are not always sequential.

1.7.2 Requirements language

Throughout this document the following conventions[1] are used to specify requirement levels:

- **SHALL:** The definition is an absolute requirement of the specification.
- **SHALL NOT:** The definition is an absolute prohibition of the specification.
- **SHOULD:** There may exist valid reasons in particular circumstances to ignore a particular item, but the full implications must be understood and carefully weighed before choosing a different course.
- **SHOULD NOT:** There may exist valid reasons in particular circumstances when the particular behaviour is acceptable or even useful, but the full implications should be understood, and the case carefully weighed before implementing any behaviour described with this label.
- **MAY or OPTIONAL:** Means that an item is truly optional. One vendor may choose to include the item because a particular marketplace requires it or because the vendor feels that it enhances the product while another vendor may omit the same item.

1.8 Methodology

This Interoperability Specification has been developed with input from various Irish stakeholders collected during several months through workshops and teleconferences. Stakeholders included Physicians from many different disciplines and Irish IT specialists.

The development of a Core Interoperability Specification relies on the high-level requirements set by the associated Use Case. These high-level requirements are not restated in this specification and readers may consider reviewing the related Use Case document.

1.8.1 Introduction of the use case driven approach

This methodology[2] has the objective to

- Define Use cases and their prioritisation to answer the eHealth strategy objectives of nation/region.
- From use cases to design the interoperability specifications and infrastructure based on IHE profiles.
- To define the testing strategy and identify test plan and test methods (test cases, test tools and test data).

[1] Definitions based upon IETF RFC 2119

[2] Bourquard Karima and Berler, Alexander. Use case driven approach for a pragmatic implementation of interoperability in eHealth. IGI Global Journal. (Telemedicine, national/regional EHR, replacement of product in hospitals) The methodology is based on experiences and good practices in other countries or regions. It is further described in: Patient Identification Management Interoperability Specification

- To support Project teams to procure products or solutions for their eHealth Project.
- The publication: Understanding User Needs for Interoperability: Standards for Business Cases in eHealth. July 2017 Journal of AHIMA.
- The report “ePrescription and Patient Summary use case analysis”, HSE9100-LOT-21A.
- The report “Design of general interoperability architecture to support use cases”, HSE9100-LOT-2-1B.

2 Use case overview

2.1 Scope

The scope of this document is the specification of how various Heath IT systems within Ireland obtain a patient’s unique Individual Health Identifier (IHI) number and key identifying patient demographic data via a health information standards-based query. This IHI number is used for unique identification of a patient and its health records when sharing information nation-wide and abroad.

It also supports a cross-referencing service between multiple locally generated local patient Ids and associated demographics and the IHI number and its associated demographics.

The following topics are in scope for this Interoperability Specification:

- Use of the IHE Patient Demographics Query (PDQ) and IHE Patient Identifiers Cross-reference (PIX) Profile to perform the standards-based query.
- Five types of patients are identified for the purpose of obtaining their Individual Health Identifier (IHI) number and key identifying demographic data. They are:
    - Citizens and Permanent Residents that have or are entitled to a Personal Public Service Number (PPSN) in Ireland.
    - And in the future, New born (before a PPSN is assigned to them) and Foreign Visitors (not entitled to a PPSN).

2.2 Out of Scope

The following is a list of content and specifications that are specifically out of scope for this Interoperability Specification:

- The Department of Social protection (DSP) registry of individuals is used as the registry of record for the demographic information and national identifiers (e.g.

PSPN, or Personal Public Services Number) of all citizens and residents in Ireland. How the identifiers and demographic information is populated is outside the scope of this specification.

- How the Patient Demographics Supplier Use Case Actor (e.g. IHI Register) populates its database and how it maintains information consistency with the DSP system is outside the scope of this specification.
- For exceptions, such as patient not found (i.e., new born babies), an exception process to be specified in a future version of this specification may be specified.
- Whether Health IT systems use the IHI number to manage their local records or a local Id is outside the scope of this specification. Specifics of "fuzzy" matching algorithms are not standardized by this Interoperability Specification and determined by the Patient Demographics Supplier (Health Identifiers Index and IHI Register) implementation.

3 Nation-wide Patient Identification Management Use Case

This use case includes the requirements met by this interoperability specification.

See [PATIENT_ID_MGT_UC]

4 Interoperability Specification Conformance Requirements

A system conforming to this Core Interoperability Specification shall claim conformance at the level of a Use Case Actor (first columns of Table 4-1 Interoperability Conformance Requirements). A system may claim conformance to one or more Use Case Actors.

Such a conforming system shall declare that it conforms to one or more of the following:

- "National Patient Identification Management as a Patient Identity Source and Identifier Cross-Reference Consumer Use Case Actor"
- "National Patient Identification Management as a Patient Demographics Consumer Use Case Actor"
- "National Patient Identification Management as a Patient Identifiers and Demographics Manager Use Case Actor"

Note: An example of Patient Identity Source and Identifier Cross-Reference Consumer Use Case Actor could be a hospital. An example of a Patient Demographics Consumer Use Case Actor could be the Cross-Border National Contact Point or a National Patient Portal. An example of a Patient Identifiers and Demographics Manager Use Case Actor is the IHI Index and Registry.

The Use Case Actors and the Services they support are described at a functional level in the National Patient Identification Management Use Case document. Services may be required, conditional or optional. The Use Case Actor, Service(s) and Optionality are conveyed in the first three columns of Table 4-1 Interoperability Conformance Requirements.

The second part of the table (columns 4-7) provides the mapping for the Use Case Actor to the detailed specifications (such as IHE Profiles, Profile Actors, Optionality) that systems shall implement to exchange healthcare information in the context of this Use Case.

For a selected Use Case Actor (a single row in the table), the system shall implement all the requirements (some optionality when allowed) listed in the second part of the table (columns 4-7). This includes the referenced healthcare profiles, the standards specified and terminology standards. For each Profile Actor (whether required or optional), the last column references the detailed specification that constrain and extend the implementation of this profile for Irish specific requirements. These specifications may be found in Appendices to this (core) specification or in other referenced Interoperability Specifications.

Readers that wish to understand the mapping of Use Case Actors to real world products are recommended to read the Nation-Wide Patient Identification Management Use Case document.

TABLE 4-1 INTEROPERABILITY CONFORMANCE REQUIREMENTS

Nation-Wide Patient Identification Management			Mapping to sections from this and referenced Interoperability Specifications			
Use Case Actor	Service Supported	Opt	Technical Actor	OPT	Profile/ Standard	Referenced Specification and Comments
Patient Identity Source and Identifier Cross Reference Consumer	Patient Identity Cross References	R	Patient Identifier Cross Reference Consumer	R	IHE - Patient Identifier Cross Referencing (PIX)	Nation-Wide Patient Identification Management (Core) Interoperability Specification - Section 6.1 and 6.2 General Terminology Interoperability Specification – Gender and Patient Type Value Sets
	Patient Identity Feed for add/update /merge of local demographics for a local patient Id	R	Patient Demographics Supplier	R	IHE - Patient Administration management (PAM)	Nation-Wide Patient Identification Management (Core) Interoperability Specification - Section 6.5 General Terminology Interoperability Specification – Gender and Patient Type Value Sets
			Secure Node	R	IHE Audit Trail and Node Authentication (ATNA)	Security and Privacy Interoperability Specification –

						Sections 3.2 and 3.3
			Time Client	R	IHE Consistent Time (CT)	Security and Privacy Interoperability Specification- Section 3.1
Patient Demographics Consumer	Query for an IHI Number based on demographics data	R	Patient Demographics Consumer	R	IHE - Patient Demographics Query (PDQ)	Nation-Wide Patient Identification Management (Core) Interoperability Specification - Section 5.1 and 5.2. General Terminology Interoperability Specification – Gender and Patient Type Value Sets
			Secure Node	R	IHE Audit Trail and Node Authentication (ATNA)	Security and Privacy Interoperability Specification – Sections 3.2 and 3.3.
			Time Client	R	IHE Consistent Time (CT)	Security and Privacy Interoperability Specification- Section 3.1
	Query for national demographics based on an IHI Number.	O	Patient Demographics Consumer	O	IHE - Patient Demographics Query (PDQ)	Nation-Wide Patient Identification Management (Core) Interoperability Specification - Section 5.1 and 5.2. General Terminology Interoperability

						Specification – Gender and Patient Type Value Sets
Patient Identifiers and Demographics Manager	Patient Identity Cross-references	R	Patient Identifier Cross-reference Manager	R	IHE - Patient Identifier Cross-referencing (PIX)	Nation-Wide Patient Identification Management (Core) Interoperability Specification - Section 6.3 and 6.4. General Terminology Interoperability Specification – Gender and Patient Type Value Sets
	Patient Identity Feed	R	Patient Demographics Consumer	R	IHE - Patient Administration Management (PAM)	Nation-Wide Patient Identification Management (Core) Interoperability Specification - Section 6.3 and 6.4. General Terminology Interoperability Specification – Gender and Patient Type Value Sets
	Query for an IHI Number based on demographics data	R	Patient Demographics Supplier	R	IHE - Patient Demographics Query (PDQ)	Nation-Wide Patient Identification Management (Core) Interoperability Specification – Section 5.3 and 5.4 General

						Terminology Interoperability Specification – Gender and Patient Type Value Sets
	Query for national demographics based on an IHI Number.	R	Patient Demographics Supplier	R	IHE - Patient Demographics Query (PDQ)	Nation-Wide Patient Identification Management (Core) Interoperability Specification – Section 5.3 and 5.4. General Terminology Interoperability Specification – Gender and Patient Type Value Sets
			Secure Node	R	IHE Audit Trail and Node Authentication (ATNA)	Security and Privacy Interoperability Specification – Sections 3.2 and 3.3.
			Time Client	R	IHE Consistent Time (CT)	Security and Privacy Interoperability Specification - Section 3.1

R=Required, O = Optional, C= Conditional

5 Constraints on the IHE Patient Demographics Query (PDQ) PROFILE

This Section specifies Irish extensions and constraints to the IHE Patient Demographics Query (PDQ) Profile. The reader not familiar with the IHE PDQ integration profile and transactions should review IHE ITI TF-1: Section 24.

All IHE ITI TF-2a transaction requirements are applicable to the Actors below.

Note: This includes common IHE requirements (see IHE ITI TF-2x Appendix C) such as: “Implementations supporting sequence number protocol (and using the field MSH-13-Sequence Number) shall be configurable to allow them to perform transactions without such protocol.” In addition, the following requirement applies to all PDQ Actors:

[IPIM-019] In messages conforming to an IHE Transaction using HL7 v2.5 and later, field MSH-21-Message Profile Identifier SHOULD contains one field repetition with a value representing the IHE transaction identifier, in the form “ITI21^IHE”.

[IPIM-020] For the PDQ related transactions, the value conveyed in the MSH Segment fields: Sending Application, Sending Facility, in the message sender and Receiving Application, Receiving Facility in the message receivers, SHALL be configurable in both sending and receiving implementations.

[IPIM-024] For the PDQ related transactions, the value conveyed in the MSH Segment fields:

- Sending Facility shall be configurable in the message sender. It may be ignored by receivers.
- Receiving Facility shall be configurable in the message sender. It may be ignored by receivers.

5.1 Requirements for PDQ query request Attributes – Patient Demographics Consumer Actor

5.1.1 Patient identifiers used in the Query for an IHI Number based on demographics data.

Patient Id - Specifies an identifier associated with the patient whose information is being queried. Multiple instances of the attribute are required to be supported as specified below. The Patient Demographics Consumer Actor is required to support the capture of this attribute, and if captured, sending it in the query transaction.

The following types of identifiers and attributes shall be supported.

[IPIM-013] The Patient Demographics Consumer Actor SHALL support all combinations of the required and optional (if supported by the Patient Demographics Consumer Actor) query attributes listed in this Section 5.1.

Note: Given that the Irish policy requiring the inclusion in any patient identification query of the core attributes (family name, surname, date of birth and sex) plus one of 4 others (PPSN, Address Line 1, Eircode or Mothers Birth Family Name), may require some exceptions such as for new born babies or foreign visitors, this requirement is not placed in this interoperability specification.

When necessary, it should be enforced by the implementation of the Patient Demographics Supplier Actor as a query responder. In addition, Patient demographics Consumer implementations may provide guidance on their user interface but should not enforce this “core plus one” requirement in their implementations.

Note: In HL7v2.5, the patient Identifier is conveyed using the CX data type. The required components for this data type are:

- CX-1: ID number (String) – represents the patient identifier
- CX-4: Assigning Authority (HD) – identifies the issuer of the patient identifier. The HD data type is made of Namespace ID, universal ID and universal ID type elements.

The PPSN identifier is generated by the Department of Social protection (DSP) for Irish citizens and permanent residents.

Patient identifiers may be issued in a PDQ request. That is to say that the Patient Demographics Consumer shall support the sending of the various types of patient identifiers defined in the section. In particular, it shall use the CX data type and use the appropriate assigning authority.

[IPIM-002] PSPN: The PPSN SHALL be supported. It MAY be issued in a PDQ query request. When issued, it SHALL be conveyed with a <Assigning Authority ID> to identify the DSP as its assigning authority and an <ID number> to identify the IHI number. The <Assigning Authority ID> (placed in the HL7V2.5 universal ID) shall be set to “1.2.372.980010.1.1”.

[IPIM-017] IHI: The Individual Health Identifier is generated by the Department of Health. It SHALL be supported. It MAY be issued in a PDQ query request.

[IPIM-003] IHI: The heath identifier used for sharing of patient records. The <Assigning Authority ID> identifies the IHI assigning authority and the <ID number> identifies the IHI Number. The <Assigning Authority ID> (placed in the HL7 V2.5 universal ID) SHALL be set to ”1.2.372.980010.1.2”.

[IPIM-014] Local Patient ID: The heath identifier used internally by a care delivery organization or a central system for identifying patients. PDQ Queries based on the Local Patient ID PDQ MAY be supported. If supported, It MAY be issued in a PDQ query request.

[IPIM-015] Local Patient ID: The <System OID> shall be used to identify the Local Patient ID assigning authority and the <ID number> SHALL convey the

Local Patient Id value. The <System OID> (placed in the HL7V2.5 universal ID) SHALL be set to ”1.2.372.980010.1.6.<GS1 GLN code digits>.w”. The GLN code is registered with GS1 and issued by the Irish Health Directory. w is a required non-null numeric value uniquely assigned by the organization identified by the GLN.

[IPIM-004] National European ID Card (EHIC number): This identifier is issued by national health insurance providers in Europe. The <Assigning Authority ID> identifies the national health insurance provider who is the issuing authority of the National ID Card and the <ID number> identifies the National ID specific to a patient. The <Assigning Authority ID> (placed in the HL7V2.5 universal ID) shall be set to “1.2.372.980010.1.3.<ISO 3166-1 Numeric Code for Country>”.

Note: The EHIC number gives the patient access to medically necessary, state-provided healthcare during a temporary stay in any of the 28 EU countries, Iceland, Liechtenstein, Norway and Switzerland, under the same conditions and at the same cost (free in some countries) as people insured in that country. That is to say that each country needs to be represented as a different assigning authority.

For foreign visitors that have registered in a point of care in Ireland, this EHIC National ID could facilitate for them the access to their identifying information in Ireland if they need to receive care in another point of care. For Irish patients that have recorded their EHIC National ID at a point of care, this could allow the use of this number when receiving care abroad.

[IPIM-005] Passport Number: These identifiers are generated by the various national passport issuing authorities for their citizen issued passports that come to Ireland as visitors. The < Assigning Authority ID> identifies the Nation who is the issuing authority of the passport number and the <ID number> identifies the issued Passport Number. The < Assigning Authority ID> (placed in the HL7V2.5 universal ID) SHALL be set to “1.2.372.980010.1.4.<ISO 3166-1 Numeric Code for Country>”.

Note: The Passport number is useful in care delivery encounters for repeat visits of foreigners.

[IPIM-006] Patient Name: Specifies the name of the person whose information is being queried. The Patient Demographics Consumer Actor SHALL support the capture of this attribute, and if captured, sending it in the query transaction. Both “Family Name (XPN-1)” and “Given Name” (XPN-2) component elements SHALL be sent. The middle name, if available, SHALL be sent using the

"Second And Further Given Names Or Initials Thereof (XPN-3)" component element.

[IPIM-016] The implementation SHALL capture and convey the family and given elements of the Patient Name in a UTF-8 Character Set (MSH-18 SHALL contain "UNICODE UTF-8").

[IPIM-018] If patients are known by multiple names (including aliases) or have had a name change, anyone of the alternative names MAY be captured in repeating instances of Patient Name. Patient names SHALL be typed using one of the values from the Irish Patient Name Type value set identified by the OID value: 1.2.372.980010.3.1 specified in the General Terminology IS.

[IPIM-007] Gender: specifies the administrative gender of the person whose information is being queried. The Patient Demographics Consumer Actor SHALL support the capture of this attribute, and if captured, sending it in the query transaction.

[IPIM-008] Gender: The supported code values SHALL be one of the codes defined in the Administrative Gender Value Set with an OID="2.16.840.1.113883.5.1" specified in the General Terminology Interoperability Specification.

[IPIM-009] Birth Date- Specifies the birth date of the person in the Gregorian calendar whose information is being queried. The Patient Demographics Consumer Actor SHALL support the capture of this attribute, and if captured, sending it in the query transaction. The contents SHALL NOT contain time but contain the greatest degree of detail among year, month, and day as is available.

[IPIM-010] Mothers Maiden Name - Specifies the name of the mother (birth name of the mother) of the person (placed in Patient Name) whose information is being queried. The Patient Demographics Consumer Actor SHALL support the capture of the Mothers Maiden Name attribute, and if captured, sending it in the query transaction. The implementation SHALL capture and convey the family and given elements of the Patient Name in a UTF-8 Character Set (MSH-18 SHALL contain "UNICODE UTF-8").

[IPIM-011] Patient Address: Only the first line of the address shall be conveyed in the PID.11.1 component, if captured by the Patient Demographics Consumer, as a query field.

[IPIM-012] Patient Telephone Number: The Patient Telephone number(s) shall be conveyed in the PID.13.7 component (Local Number), if captured by the Patient Demographics Consumer, as a query field.

[IPIM-038] Patient e-mail Address: The Patient e-mail addresses shall be conveyed in the PID.13.4 component, if captured by the Patient Demographics Consumer, as a query field.

5.2 Behaviour Rules for the Patient Demographics Consumer Actor

5.2.1 Identification domain support

[IPIM-039] The IHI patient Identifier with the IHI Index as the source SHALL be supported. For a specific PDQ Query and Response, the scope of a specific Patient Identity Source SHALL be selected in the QPD-8 field (See IHE ITI-TF 2a:3.21.4.1.2.2)

Note: This means that in a PDQ response a matching patient, if any, is from the selected single Patient Identity Source of a Patient Identifier Domain. Note: The IHI number is a computed identity by the Patient Demographics Supplier Actor.

Note: The IHE PDQ Profile defines QPD-8 What Domains Returned as a repeating field. This is allowed by HL7 2.5 QPD definition: “The client data is presented as a sequence of HL7 fields. Beginning at QPD-3-User parameters, the remaining fields of the QPD segment carry user parameter data. Each QPD user parameter field corresponds to one parameter defined in the Conformance Statement, where each name, type, optionality, and repetition of each parameter has been specified.”

5.2.2 Continuation Option

[IPIM-021] The Patient Demographics Consumer MAY NOT support the Continuation Option defined in the IHE PDQ Profile.

5.2.3 For Information Flags

[IPIM-022] A Patient Demographics Consumer Actor SHALL support the case when it performs PDQ Query based on the IHI Number (for the IHI patient Identity Domain) and the query response returns a matching patient with its IHI number along with a flag that indicates that the IHI number returned is different from the IHI number used in the query (which is no longer valid), as it has been updated. This flag is materialized in the response with:

- Message accepted (AA)
- Includes an error segment (ERR) with an Application Error Code in ERR-5 with a code indicating that the IHI Number returned has been updated. This error code has the value: “IHI-UPDATED”

- The Error Severity is set to: I (information)

If the IHI number was the only query parameter in the query, the Patient Demographics Consumer Actor SHALL no longer use this IHI number.

[IPIM-023] A Patient Demographics Consumer Actor SHALL support the case when it performs PDQ Query and the query response returns that there is no matching patient along with a flag that indicates that there are actually multiple potential matches. The Patient Demographics Consumer Actor is invited to reissue the PDQ query with additional attributes to disambiguate among the multiple potential patients.
This flag is materialized in the response with:

- Message accepted (AA)
- Includes an error segment (ERR) with an Application Error Code in ERR-5 with a code indicating that the IHI Number returned has been updated. This error code has the value: “MULTI-MATCH”
- The Error Severity is set to: I (information)

5.3 Requirements for the PDQ query response – Patient Demographics Supplier Actor

[IPIM-025] Patient Id containing the IHI number SHALL be returned, if assigned, in response to a PDQ query with the IHI patient ID Source Domain selected (See IPIM041). The <Assigning Authority ID> identifies the IHI number assigning authority and the <ID number> identifies the IHI number. The <Assigning Authority ID> SHALL be set to “1.2.372.980010.1.2”.

[IPIM-026] Other IDs such as PPSN, National ID from the EHIC Health Card, if applicable, SHALL be returned using the Patient Id attribute. See section 5.1.1 for the associated assigning authority OIDs for each ID attribute.

[IPIM-027] Both “Family Name” (At least of Legal Name Type) and “Given Name” subcomponents SHALL be returned. The first name is specified in the first “given name” element. The middle name, if available, SHALL be sent using the “Second And Further Given Names Or Initials Thereof” subcomponent.
If patients are known by multiple names (including aliases) or have had a name change, anyone of the alternative names MAY be returned in repeating instances of Patient Name. Patient names shall be typed using one of the values from the Patient Name Type value set specified in the General Terminology IS [ITERM]. The implementation SHALL convey the family and given elements of the Patient Name in a UTF-8 Character Set (MSH-18 SHALL contain “UNICODE UTF-8”).

Note: PID-9 Patient Alias shall not be used.

Note: The order of given names in the given name list reflects the sequence in which they are known – first, second, third, fourth. The first name is specified in the first "given" element in the list. Any middle name(s) are specified in the second, third and fourth "given" element in the list.

[IPIM-028] The Patient Demographics Supplier Actor SHALL support not only an exact match but also "fuzzy" matching.

Note: The specifics of these "fuzzy" matching algorithms are not standardized by this Core Interoperability Specification and determined by the Patient Demographics Supplier implementation.

[IPIM-029] Gender SHALL be returned. The returned value SHALL be one of the codes defined in the Administrative Gender Value Set. See section 5.1 [IPIM-018] for the associated assigning authority of the Administrative Gender Value Set.

[IPIM-030] Birthdate SHALL be returned. The contents SHALL NOT contain time but SHALL contain the greatest degree of detail among year, month, and day as is available.

[IPIM-031] Mothers Maiden Name contains the family name at birth of the mother of the person whose information was queried SHALL be returned if known.

[IPIM-032] Patient Address Patient Address SHALL be sent structured in one of two alternative ways:

- Structured address:
  - First Line: conveyed in XAD.1.
  - City: conveyed in XAS.3
  - County: conveyed in XAD.4
  - Postcode (Eircode): conveyed in XAD .5
  - Country: conveyed in XAD.6
  - Geo Code: conveyed in XAD.8
  - Other address elements that do not fit in one of the above shall be conveyed in XAD-2.
- Unstructured address:
  - Address Line 1: Conveyed in the Street address component of the XAD data type.
  - Second and additional lines: Conveyed in XAD-2 to be populated when Address lines 2 to lines 5 cannot be mapped individually to

city, county and country, i.e. all remaining Address details after Address Line 1 can be concatenated into this field. A comma should be introduced between address lines.

[IPIM-033] Patient Telephone Number: The Patient Telephone number(s) can be provided in query response and SHALL be placed according to their types:

- For the primary residence phone number, place it in its entirety in the PID.13.3 field. The PID.13.7 Telecom Use Type field shall contain ““PRN”.
- For the mobile phone number, place it in its entirety in the PID.13.3 field. The PID.13.7 Telecom Use Type field shall contain ““CP”.
- For the work phone number, place it in its entirety in the PID.13.3 field. The PID.13.7 Telecom Use Type field shall contain ““WPN”.

Note: PID.14 is not expected to be used.

[IPIM-038] Patient e-mail Address: The Patient e-mail address can be provided in query response and SHALL be placed in the PID.13.3 field. The PID.13.7 Telecom Use Type field shall contain ““NET”.

[IPIM-034] The multiple Birth Order Number specifies the order in which a person was born if part of multiple birth and SHALL be returned IF KNOWN and if the person was part of a multiple birth.

5.4 Behaviour Rules for the PDQ Patient Demographics Supplier Actor

5.4.1 Maximum number of matching patient returned

[IPIM-040] The Patient Demographics Supplier SHALL NOT provide in one query response more than one matching patient.

5.4.2 Patient Identification Domains selection

[IPIM-041] The IHI Patient Identifier Domain SHALL be supported for PDQ queries by the Patient Demographics Supplier Actor. The IHI patient Identifier is a computed identity.

Note: Computation rules of demographics attributes related to the IHI number are internal to the Patient Demographics Supplier Actor (The Irish IHI Registry computed “best record”).

[IPIM-042] Per the IHE PDQ Profile, for a specific PDQ Query and Response, the scope of a specific Patient Identity Source SHALL be selected in the QPD-8 field (See IHE ITI-TF 2a:3.21.4.1.2.2)

Note: This means that in a PDQ response a matching patient, if any, is from the selected single Patient Identity Source of a Patient Identifier Domain.

Note: The IHE PDQ Profile defines QPD-8 What Domains Returned as a repeating field. This is allowed by HL7 2.5 QPD definition: "The client data is presented as a sequence of HL7 fields. Beginning at QPD-3-User parameters, the remaining fields of the QPD segment carry user parameter data. Each QPD user parameter field corresponds to one parameter defined in the Conformance Statement, where each name, type, optionality, and repetition of each parameter has been specified."

5.4.3 IHI Number Format and Management Rules

The format and management of the IHI Number is not constrained by this Interoperability Specification beyond the format of the IHI Number defined in [IPIM-1], see Section 5.1.1 However, the following assumption are expected:

- The value placed in the <extension> of the IHI number is expected to be unique (i.e., no two distinct patients have the same, at the present or in the future-never reassigned for other patients, and the probability of the same person to have two distinct IHI numbers is extremely low).
- This Core Interoperability Specification does not constrain the relationship of this IHI Number <extension> with the patient's corresponding PSPN(s). It is the implementation of the Patient Demographics Supplier Actor responsibility to ensure persons that may undergo change in their PSPN does not change their IHI.

5.4.4 Patient Not Found Expected Actions

The section defines additional expected actions for the case when the Patient Demographics Supplier Actor finds no patients matching the criteria sent in the query parameters.

[IPIM-043] The Patient Demographics Supplier SHALL respond to the query request when no patient is found as described by the following case:

a. AA (application accept) is returned in MSA-1
b. NF (data found, no errors) is returned in QAK-2

The Patient Demographics Consumer SHOULD assume the Patient Demographics Supplier was unable to find any matches for this query request.

Note: This does not mean that an IHI Number has never been assigned to this patient.

5.4.5 Continuation Option

The Patient Demographics Supplier MAY NOT support the Continuation Option defined in the IHE PDQ Profile. There are no requirements for the Patient Demographics Supplier to provide in one query response with more than one matching patient (See 5.4.1).

6 Constraints on the IHE Patient Identifier Cross-referencing (PIX) PROFILE

This Section specifies Irish extensions and constraints to the IHE Patient Identifier Cross-referencing (PIX) Profile combined with the Patient Administration Management (PAM) Profile. The reader not familiar with the IHE PIX and PAM integration profiles and transactions should review IHE ITI TF-1: Sections 5 and 14.

All IHE ITI TF-2a transaction requirements are applicable to the Actors below.

Note: This includes common IHE requirements (see IHE ITI TF-2x Appendix C) such as: “Implementations supporting sequence number protocol (and using the field MSH-13-Sequence Number) shall be configurable to allow them to perform transactions without such protocol.”

In addition, the following requirement applies to PIX Actors:

[IPIM-050] In messages conforming to an IHE Transaction using HL7 v2.5 and later, it is recommended that field MSH-21-Message Profile Identifier contains one field repetition with a value representing the IHE transaction identifier, in the form of either:

- “ITI9^IHE” for the Patient Identifier Cross-reference Query transaction
- “ITI30^IHE” for the Patient Identity Management transaction

[IPIM-035] For the PIX related transactions, the value conveyed in the fields: Sending Application, Sending Facility, in the message sender and Receiving Application, Receiving Facility in the message receivers, SHALL be configurable in both sending and receiving implementations.

[IPIM-059] For the PIX related transactions, the values:

- Sending Facility, shall be configurable in the message sender. It may be ignored by receivers.
- Receiving Facility shall be configurable in the message sender. It may be ignored by receivers.

Note: MSH.10 Message Control ID uniquely identifies the message. Any algorithm that meets the maximum length of 20 characters may be used.

6.1 Requirements for PIX Identifier Cross-Reference query request Attributes – Patient Identifier Cross-reference Consumer Actor

Patient Id - Specifies an identifier associated with the patient whose other identifiers are being queried. A single instance of a patient identifier attribute is required to be supported as specified below. The Patient Demographics Consumer Actor is required to support the capture of this attribute, and if captured, sending it in the query transaction.

[IPIM-054] Local Patient ID: The heath identifier used internally by a care delivery organization or a central system for identifying patients. PIX Queries based on the Local Patient ID SHALL be supported.

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[IPIM-055] Local Patient ID: The <System OID> shall be used to identify the Local Patient ID <Assigning Authority> and the <ID number> SHALL convey the Local Patient Id value. The <System OID> (placed in the HL7V2.5 universal ID) SHALL be set to <1.2.372.980010.1.6.< GS1 GLN code digits>.w". The GLN code is registered with GS1 and issued by the Irish Health Directory. "w" is a required non-null numeric value uniquely assigned by the organization identified by the GLN.

[IPIM-051] PPSN: The PPSN identifier is generated by the Department of Social protection (DSP) for Irish citizens and permanent residents. The PPSN MAY be supported. It MAY be issued in a PIX query request.

[IPIM-052] PPSN: This identifier SHALL be conveyed with an <Assigning Authority ID> to identify the DSP as its assigning authority and an <ID number> to identify the IHI number. The <Assigning Authority ID> (placed in the HL7 V2.5 universal ID) shall be set to "1.2.372.980010.1.1".

[IPIM-058] IHI: The Health Identifier is generated by the Department of Health. It MAY be supported. It MAY be issued in a PIX query request.

[IPIM-053] IHI: The heath identifier used for sharing of patient records. The <Assigning Authority ID> identifies the IHI assigning authority and the <ID number> identifies the IHI Number. The <Assigning Authority ID> (placed in the HL7 V2.5 universal ID) SHALL be set to "1.2.372.980010.1.2">.

[IPIM-056] National European ID (EHIC Card): This identifier is issued by national health insurance providers in Europe. It MAY be supported in PIX Queries. The <Assigning Authority ID> identifies the national health insurance provider who is the issuing authority of the National ID Card and the <ID number> identifies the National ID specific to a patient. The <Assigning Authority ID> (placed in the HL7V2.5 universal ID) SHALL be set to "1.2.372.980010.1.3.<ISO 3166-1 Numeric Code for Country>".

Note: The EHIC number gives the patient access to medically necessary, state-provided healthcare during a temporary stay in any of the 28 EU countries, Iceland, Liechtenstein, Norway and Switzerland, under the same conditions and at the same cost (free in some countries) as people insured in that country. That

is to say that each country needs to be represented as a different assigning authority.

For foreign visitors that have registered in a point of care in Ireland, this EHIC National ID could facilitate for them the access to their identifying information in Ireland if they need to receive care in another point of care.

Note: for Irish patients that have recorded their EHIC National ID at a point of care, this could allow the use of this number when receiving care abroad.

[IPIM-057] Passport Number: These identifiers are generated by the various national passport issuing authorities for their citizen issued passports that come to Ireland as visitors. The <Assigning Authority ID> identifies the Nation who is the issuing authority of the passport number and the <ID number> identifies the issued Passport Number. The <Assigning Authority ID> (placed in the HL7V2.5 universal ID) SHALL be set to "1.2.372.980010.1.4.<ISO 3166-1 Numeric Code for Country>">. Note: The Passport number is useful in care delivery encounters for repeat visits of foreigners.

6.2 Behaviour Rules for the PIX Patient Identifier Cross-reference Consumer Actor

[IPIM-060] To select the identifiers of interest (called patient ID domains by IHE-PIX) to receive Patient IDs, the Patient Identifier Cross-reference Consumer Actor SHALL either:

- Populate "QPD-4-What Domains Returned" with repetitions for each one of the domains for which it wants to receive Patient IDs. Domains are identified by their Assigning Authority (The OID value is specified in IPIM-0052 for getting a PPSN (if authorized) and IPIM-0053 for getting the IHI number).
- If QPD-4 is empty, the Patient Identifier Cross-reference Manager shall return Patient IDs for all domains (IHI, PPSN, all relevant Local patient IDs) for which it possesses a corresponding Patient ID (subject to local publication restrictions).

Note: The IHE-PIX Patient Update Notification Option SHOULD NOT be supported. It is out of scope at the present for this Interoperability Specifications.

6.3 Requirements for the PIX Identifier Cross-Reference response – Patient Identifier Cross-reference Manager Actor

The Patient Identifier Cross-reference Manager processes PIX query requests and returns a response in the form of a list of corresponding patient identifiers from the requested Patient Identification Domain(s). The following types of identifiers shall be returned:

[IPIM-070] The cross-referenced Patient Identifiers are made available only when the national policies have been enforced by the cross-reference function internal to the Cross-reference Manager Actor (e.g. some Patient Demographics Consumers are not provided access to the PPSN patient Identifiers).

[IPIM-071] PPSN: Returning the PPSN SHALL be supported. It MAY be issued in a PIX query response. When returned it shall meet the requirements of IPIM-052.

[IPIM-072] IHI: Returning the IHI SHALL be supported. It MAY be issued in a PIX query response. When returned it SHALL meet the requirements of IPIM-052.

[IPIM-073] No optional segments shall be returned in PIX query responses. Note: A PDQ query is intended to be used to query of demographic traits against a patient identifier.

6.4 Behaviour Rules for the Patient Identifier Cross-reference Manager Actor

[IPIM-066] When receiving a selection of the identifiers of interest (called patient ID domains by IHE-PIX) using "QPD-4-What Domains Returned" the Patient Identifier Cross-reference Manager Actor SHALL return the Patient ID value(s) for each requested domain if a value is known. If QPD-4 is empty, the Patient Identifier Cross reference Manager Actor SHALL return Patient IDs for all domains (IHI, PPSN and Local Patient IDs) for which it possesses a corresponding Patient ID.

Note: The IHE-PIX Patient Update Notification Option SHOULD NOT be supported. It is out of scope at the present for this Interoperability Specifications.

6.5 Requirements for the PAM Patient Demographics Supplier Actor

[IPIM-080] The Patient Demographics Source Actor SHALL support all combinations of the required and optional attributes for the PAM Patient Identity Management transaction listed in this Section 6.5.

Note: The IHE-PAM Patient Identity Management is used instead of the IHE-PIX Patient Identity Feed to convey new identities and updates to the PIX Cross-Reference Manager Actor that needs to be grouped with a patient Demographics Consumer Actor. The reason is that it was preferred to have all transactions aligned to HL7 V2.5 or 2.5.1. This transaction uses the same trigger events.

[IPIM-081] PPSN: The PPSN identifier is generated by the Department of Social protection (DSP) for Irish citizens and permanent residents. The PPSN SHALL

be supported. It MAY be issued in a PAM Patient Identity Management Transaction.

[IPIM-082] PSPN: This identifier SHALL be conveyed with an <Assigning Authority ID> (Universal ID with Universal ID Type=ISO) to identify the DSP as its assigning authority and an <ID number> identifies the IHI number. The < Assigning Authority ID> (Universal ID) shall be set to "1.2.372.980010.1.1".

IHI: The Health Identifier is generated by the Department of Health. It is used for sharing patient records.

[IPIM-084] IHI: The Health Identifier SHALL be supported. It MAY be issued in a PAM Patient Identity Management Transaction.

[IPIM-085] IHI: The <Assigning Authority ID> identifies the IHI assigning authority and the <ID number> identifies the IHI Number. The <Assigning Authority ID> SHALL be set to "1.2.372.980010.1.2">.

[IPIM-086] Local Patient ID: The heath identifier used internally by a care delivery organization or a central system for identifying patients. It SHALL be issued in every PAM Patient Identity Management Transaction.

[IPIM-087] Local Patient ID: The <System OID> shall identify the Local Patient ID assigning authority and the <ID number> SHALL convey the Local Patient Id value. The <System OID> (placed in the HL7V2.5 universal ID) SHALL be set to "1.2.372.980010.1.6.< GS1 GLN code digits>.w". The GLN code is registered with GS1 and issued by the Irish Health Directory. "w" is a required non-null numeric value uniquely assigned by the organization identified by the GLN.

[IPIM-088] European Health ID Card (EHIC number): This identifier is issued by national health insurance providers in Europe. The <Assigning Authority ID> identifies the national health insurance provider who is the issuing authority of the National ID
Card and the <ID number> identifies the National ID specific to a patient. The <Assigning Authority ID> (placed in the HL7V2.5 universal ID) shall be set to "1.2.372.980010.1.3.<ISO 3166-1 Numeric Code for Country>". It MAY be issued in a PAM Patient Identity Management Transaction.

[IPIM-089] Passport Number: These identifiers are generated by the various national passport issuing authorities for their citizen issued passport that come to Ireland as visitors. The <Assigning Authority ID> identifies the Nation who is the issuing authority of the passport number and the <ID number> identifies the issued Passport Number. The <Assigning Authority ID> (placed in the HL7V2.5 universal ID) SHALL be set to <value root="1.2.372.980010.1.4.<ISO 3166-1

Numeric Code for Country>". It MAY be issued in a PAM Patient Identity Management Transaction.

[IPIM-090] Patient Name: Specifies the name of the person whose information is conveyed in the PAM Patient Identity Management Transaction. The Patient Demographics Source Actor SHALL support the capture of this attribute, and if captured, it SHALL be issued in a PAM Patient Identity Management Transaction. Both "family" and "given" name elements SHALL be sent. The first name is specified in the "given name" element. The middle name, if available SHALLL be sent using the "Second And Further Given Names Or Initials Thereof" element.

If patients are known by multiple names (including aliases) or have had a name change, anyone of the alternative names MAY be captured in repeating instances of Patient Name. Patient names shall be typed using one of the following value from the Patient Name Type value set identified by the OID value: 1.2.372.980010.3.1 specified in the General Terminology IS.

The implementation SHALL capture and convey the family and given elements of the Patient Name in a UTF-8 Character Set (MSH-18 SHALL contain "UNICODE UTF-8").

Note: PID-9 Patient Alias shall not be used.

[IPIM-091] Gender: specifies the administrative gender of the person whose information is conveyed in a PAM Patient Identity Management Transaction. The Patient Demographics Consumer Source SHALL support the capture of this attribute, and if captured, sending it in a PAM Patient Identity Management Transaction.

[IPIM-092] Gender: The supported code values SHALL be one of the codes defined in the Administrative Gender Value Set OID="2.16.840.1.113883.5.1" specified in the General Terminology Interoperability Specification [ITERM].

[IPIM-093] Birth Date- Specifies the birth date of the person in the Gregorian calendar whose information is being conveyed. The Patient Demographics Source Actor SHALL support the capture of this attribute, and if captured, sending it in a PAM Patient Identity Management Transaction. The contents SHALL NOT contain time but contain the greatest degree of detail among year, month, and day as is available.

[IPIM-094] Mothers Maiden Name - Contains the family name of the mother (birth name of the mother) of the person (placed in Patient Name) whose information is being conveyed. The Patient Demographics Consumer Actor

SHALL support the capture of the Mothers Maiden Name attribute, and if captured, sending it in a PAM Patient Identity Management Transaction. The Patient Name Type SHALL be coded per PIM-090 as “B” for Name at Birth (See Patient Name Type value set from the General Terminology Interoperability Specification). The implementation SHALL capture and convey the family and given elements of the Patient Name in a UTF-8 Character Set (MSH-18 SHALL contain “UNICODE UTF-8”).

[IPIM-095] Patient Address: It shall be structured in one of two alternative ways:

- Structured address:
  - First Line: conveyed in XAD-1. o City: conveyed in XAD-3 o County: conveyed in XAD-4 o Postcode (Eircode): conveyed in XAD-5 o Country: conveyed in XAD-6 o Geo Code:
  - Other address elements that do not fit in one of the above shall be conveyed in XAD-2.
- Unstructured address:
  - Address Line 1: Conveyed in the Street address component of the XDA data type.
  - Second and additional lines: Conveyed in XAD-2 to be populated when Address lines 2 to lines 5 cannot be mapped individually to city, county and country, i.e. all remaining Address details after Address Line 1 can be concatenated into this field. A comma should be introduced between address lines.

[IPIM-096] Patient Telephone Number: The Patient Telephone number(s) MAY be provided in a PAM Patient Identity Management Transaction and SHALL be placed according to their types:

- For the primary residence phone number, place it in its entirety in the PID.13.3 field. The PID.13.7 Telecom Use Type field shall contain ““PRN”.
- For the mobile phone number, place it in its entirety in the PID.13.3 field. The PID.13.7 Telecom Use Type field shall contain ““CP”.
- For the work phone number, place it in its entirety in the PID.13.3 field. The PID.13.7 Telecom Use Type field shall contain ““WPN”.

Note: PID.14 is not expected to be used.

[IPIM-038] Patient e-mail Address: The Patient e-mail address MAY be provided in in a PAM Patient Identity Management Transaction and SHALL be placed in the PID.13.3 field. The PID.13.7 Telecom Use Type field shall contain ““NET”.

[IPIM-097] The multiple Birth Order Number - Specifies the order in which a person was born if part of multiple births. The Patient Demographics Consumer Actor SHALL support the capture of the multiple Birth Order Number attribute, and if captured, sending it in a PAM Patient Identity Management Transaction.

Note: Given that the Irish policy requiring the inclusion in any patient identification query of the core attributes (family name, surname, date of birth and sex) plus one of 4 others (PPSN, Address Line 1, Eircode or Mothers Birth Family Name), may require some exceptions such as for new born babies or foreign visitors, this requirement is not placed in this interoperability specification. It should be enforced by the implementation of the Patient Demographics Supplier Actor as a query responder, so that refinement in this policy can easily be implemented centrally and not impact the PDQ Patient Demographics Consumers (See note on Section 5.1.1).

7 Appendices

7.1 Sample messages

To be provided at a later time, once the IHE Gazelle test platform will be aligned to this Interoperability Specification, to ensure correctness of the sample messages.