

Integrating the Healthcare Enterprise



5

IHE IT Infrastructure Technical Framework

10

Volume 4 IHE ITI TF-4 National Extensions

15

20

**Revision 14.0 – Final Text
July 21, 2017**

25

Please verify you have the most recent version of this document, which is published [here](#).

Contents

1	Introduction	5
30	1.1 Introduction to IHE	5
	1.2 Intended Audience	5
	1.3 Overview of Volume 4.....	5
	1.4 Comment Process.....	6
	1.5 Copyright Licenses	6
35	1.5.1 Copyright of Base Standards	6
	1.6 Trademark	6
	1.7 Disclaimer Regarding Patent Rights	6
	1.8 History of Document Changes	7
2	2 Overview of National Extensions to the Technical Framework	8
40	2.1 Scope of National Extensions	8
	2.2 Process for Developing National Extensions.....	8
	2.3 Process for Proposing Revisions to the Technical Framework	9
3	3 National Extensions for IHE USA	10
	3.1 Data Segmentation for Privacy (DS4P)	10
45	3.1.1 DS4P Document Content	12
	3.1.2 DS4P DocumentEntry	12
	3.1.2.1 DS4P DocumentEntry.confidentialityCode	12
	3.1.2.1.1 DS4P Confidentiality Security Classification Label	12
	3.1.2.1.2 DS4P Sensitivity Security Classification Label	12
50	3.1.2.1.3 DS4P Handling Caveats Security Category	13
	3.1.2.2 DS4P DocumentEntry.healthcareFacilityTypeCode	13
	3.1.2.3 DS4P DocumentEntry.practiceSettingCode.....	13
	3.1.2.4 DS4P DocumentEntry.typeCode	14
	3.1.3 DS4P SubmissionSet.....	14
55	3.1.3.1 DS4P SubmissionSet.intendedRecipient	14
	3.1.3.2 DS4P SubmissionSet.author	14
4	4 National Extensions for France	15
	4.1 French requirements related to Patient and Patient Administration	15
	4.1.1 Requirements on all HL7 V2.x transactions	15
60	4.1.1.1 HL7 character set.....	15
	4.1.1.2 Forbidden fields in France	16
	4.1.1.3 EVN Segment.....	16
	4.1.1.4 MSH Segment rules.....	16
	4.1.1.5 PID Segment.....	16
65	4.1.2 Segments that apply only to ITI-30 and ITI-31.....	20
	4.1.2.1 PD1 Segment	20
	4.1.2.2 ROL Segment	21
	4.1.2.3 NK1 Segment	23
	4.1.2.4 PV1 Segment	26
70	4.1.2.5 PV2 Segment	33

	4.1.2.6 ACC segment.....	39
	4.1.2.7 ZBE Segment: Action on a movement.....	40
	4.1.2.8 ZFA segment	43
	4.1.2.9 ZFV Segment: Additional information regarding the encounter	45
75	4.1.2.10 ZFM segment: DRG movement	48
	4.1.2.11 IN1; IN2; IN3: Medical coverage.....	51
	4.1.2.11.1 Compulsory Health Insurance (CHI) coverage related to the patient's account	51
80	4.1.2.11.2 Complementary private health insurance (CPHI) or Complementary Medical Assistance (CMA), or Universal Complementary Health (UCH) coverage related to the patient's account	54
	4.1.2.11.3 Other payer	56
	4.1.2.12 OBX segment	58
85	4.1.3 Requirements on PAM Profile	61
	4.1.3.1 Minimal common data model.....	61
	4.1.3.1.1 The Functional Unit (FU) or Ward.....	61
	4.1.3.1.2 The concept of patient account (informative).....	62
	4.1.3.1.3 The concept of visit/encounter.....	62
	4.1.3.1.4 The concept of movement	63
90	4.1.3.2 Actor Requirements for PAM	63
	4.1.3.3 Transaction Specific Requirements	64
	4.1.3.3.1 Movement management rules applicable in France	64
	4.1.3.3.1.1 The concept of movement.....	64
	4.1.3.3.1.2 Granularity of messages that describe a movement.....	65
95	4.1.3.3.1.3 Trigger events associated with movement.....	66
	4.1.3.3.1.4 Requirements	67
	4.1.3.3.2 ITI-30 Extensions	67
	4.1.3.3.3 ITI-31 Extensions	68
100	4.1.3.3.3.1 Trigger Event Extensions.....	68
	4.1.3.3.3.2 ITI-31 French specific segments.....	69
	4.1.3.3.3.3 Historic Movement Management (from intl).....	71
	4.1.3.3.3.4 Details regarding the account/visit/movement identifiers	72
	5 National Extensions for IHE Germany	73
105	5.1 Referenced Standards.....	73
	5.2 HL7 v2 Conventions for Message Profiles	73
	5.2.1 HL7: Support for Character Sets	73
	5.2.2 Naming Conventions for Profiles	73
	5.3 ITI-30 and ITI-31	73
110	5.3.1 Extension Requirements: Notation and Location	74
	5.3.1.1 German Message Profile Architecture	75
	5.3.2 German HL7 Message Profiles for PAM	76
	5.3.3 Additional German HL7 Message Profile Components	77
	5.3.4 Additional German Segment Definitions	78
	5.3.5 Additional German Data Type Definitions.....	79

115	5.3.6 Additional German Table Value Definitions.....	79
	Appendices.....	81
	Glossary	82

1 Introduction

120 This document, Volume 4, of the IHE IT Infrastructure (ITI) Technical Framework describes the country-specific extensions to ITI transactions and content modules.

1.1 Introduction to IHE

125 Integrating the Healthcare Enterprise (IHE) is an international initiative to promote the use of standards to achieve interoperability among health information technology (HIT) systems and effective use of electronic health records (EHRs). IHE provides a forum for care providers, HIT experts and other stakeholders in several clinical and operational domains to reach consensus on standards-based solutions to critical interoperability issues.

130 The primary output of IHE is system implementation guides, called IHE Profiles. IHE publishes each profile through a well-defined process of public review and trial implementation and gathers profiles that have reached final text status into an IHE Technical Framework, of which this volume is a part.

For more general information regarding IHE, refer to www.ihe.net. It is strongly recommended that, prior to reading this volume, readers familiarize themselves with the concepts defined in the *IHE Technical Frameworks General Introduction*.

135 **1.2 Intended Audience**

The intended audience of IHE Technical Frameworks Volume 4 is:

- Those interested in integrating healthcare information systems and workflows on an international or country basis
- IT departments of healthcare institutions
- Technical staff of vendors participating in the IHE initiative
- Experts involved in standards development

1.3 Overview of Volume 4

145 This volume contains information about the scope of national extensions to the transactions and/or content modules defined in the IHE IT Infrastructure (ITI) Technical Framework. Section 2 describes the permitted scope of national extensions and the process by which national IHE initiatives can propose such extensions for approval by the IHE Technical Committee and documentation in the IHE Technical Framework. Section 3 and beyond describe the national extensions, per country, which have been defined. Examples include specific transaction or content changes for IHE Canada, IHE Germany, IHE Japan.

150 **1.4 Comment Process**

IHE International welcomes comments on this document and the IHE initiative. They can be submitted by sending an email to the co-chairs and secretary of the IT Infrastructure domain committees. See http://ihe.net/ITI_Public_Comments.

1.5 Copyright Licenses

155 IHE International hereby grants to each Member Organization, and to any other user of these documents, an irrevocable, worldwide, perpetual, royalty-free, nontransferable, nonexclusive, non-sublicensable license under its copyrights in any IHE Profiles and Technical Framework documents, as well as any additional copyrighted materials that will be owned by IHE International and will be made available for use by Member Organizations, to reproduce and 160 distribute (in any and all print, electronic or other means of reproduction, storage or transmission) such IHE Technical Documents.

The licenses covered by this Copyright License are only to those copyrights owned or controlled by IHE International itself. If parts of the Technical Framework are included in products that also include materials owned or controlled by other parties, licenses to use those products are beyond 165 the scope of this IHE document and would have to be obtained from that other party.

1.5.1 Copyright of Base Standards

IHE Technical Documents refer to and make use of a number of standards developed and published by several standards development organizations. All rights for their respective base standards are reserved by these organizations. This agreement does not supersede any copyright 170 provisions applicable to such base standards.

Health Level Seven, Inc. has granted permission to IHE to reproduce tables from the HL7®¹ standard. The HL7 tables in this document are copyrighted by Health Level Seven, Inc. All rights reserved. Material drawn from these documents is credited where used.

1.6 Trademark

175 IHE® and the IHE logo are trademarks of the Healthcare Information Management Systems Society in the United States and trademarks of IHE Europe in the European Community. They may only be used with the written consent of the IHE International Board Operations Committee, which may be given to a Member Organization in broad terms for any use that is consistent with the IHE mission and operating principles.

180 1.7 Disclaimer Regarding Patent Rights

Attention is called to the possibility that implementation of the specifications in this document may require use of subject matter covered by patent rights. By publication of this document, no

¹ HL7 is the registered trademark of Health Level Seven International.

position is taken with respect to the existence or validity of any patent rights in connection therewith. IHE International is not responsible for identifying Necessary Patent Claims for which 185 a license may be required, for conducting inquiries into the legal validity or scope of Patents Claims or determining whether any licensing terms or conditions provided in connection with submission of a Letter of Assurance, if any, or in any licensing agreements are reasonable or non-discriminatory. Users of the specifications in this document are expressly advised that determination of the validity of any patent rights, and the risk of infringement of such rights, is 190 entirely their own responsibility. Further information about the IHE International patent disclosure process including links to forms for making disclosures is available at http://ihe.net/Patent_Disclosure_Process. Please address questions about the patent disclosure process to the secretary of the IHE International Board: secretary@ihe.net.

1.8 History of Document Changes

195

Date	Document Revision	Change Summary
2014-09-23	11.0	Newly created Volume 4 - Create and add US Data Segmentation for Privacy (DS4P)
2015-09-18	12.0	Add German and French Extensions
2016-09-09	13.0	Updated revision and date and removed copyright footer on each page and replaced with footnotes when applicable.
2017-07-21	14.0	Updated revision and date to coincide with updates to other volumes.

2 Overview of National Extensions to the Technical Framework

200 The goal of IHE is to promote implementation of standards-based solutions to improve workflow and access to information in support of optimal patient care. To that end, IHE encourages the development of IHE National Deployment Committees to address issues specific to local health systems, policies and traditions of care. The role of these organizations and information about how they are formed is available at http://ihe.net/Governance/#National_Deployment.

2.1 Scope of National Extensions

205 National extensions to the IHE Technical Framework are allowed in order to address specific local healthcare needs and promote the implementation of the IHE Technical Frameworks. They may add (though not relax) requirements that apply to the Technical Framework generally or to specific transactions, actors and integration profiles. Some examples of appropriate national extensions are:

- 210
- Require support of character sets and national languages
 - Provide translation of IHE concepts or data fields from English into other national languages
 - Extensions of patient or provider information to reflect policies regarding privacy and confidentiality
- 215
- Changes to institutional information and financial transactions to conform to national health system payment structures and support specific local care practices

220 All national extensions shall include concise descriptions of the local need they are intended to address. They shall identify the precise transactions, actors, integration profiles and sections of the Technical Framework to which they apply. And they must provide technical detail equivalent to that contained in the Technical Framework in describing the nature of the extension.

2.2 Process for Developing National Extensions

225 National extension documents are to be developed, approved and incorporated in the Technical Framework in coordination with the IHE Technical Committee and its annual cycle of activities in publishing and maintaining the Technical Framework. The first prerequisite for developing a national extension document is to establish a national IHE initiative and make information regarding its composition and activities available to other IHE initiatives.

230 Established IHE national initiatives may draft a document describing potential national extensions containing the general information outlined above. This draft document is submitted to the IHE Technical Committee for review and comment. Based on discussion with the Technical Committee, they prepare and submit finalized version of the document in appropriate format for incorporation into the Technical Framework. The publication of National Extensions is to be coordinated with the annual publication cycle of other Technical Framework documents in the relevant domain.

2.3 Process for Proposing Revisions to the Technical Framework

- 235 In addition to developing national extension documents to be incorporated in the Technical Framework, national IHE initiatives may also propose revisions to the global Technical Framework. These may take the form of changes to existing transactions, actors or integration profiles or the addition of new ones. Such general changes would be subject to approval by the IHE Technical and Planning Committees.
- 240 National extensions that are minor in scope, such as suggestions for clarifications or corrections to documentation, may be submitted throughout the year via the ongoing errata tracking process, called the [Change Proposal Process](#).
- More substantial revision proposals, such as proposals to add new integration profiles or major country-based extensions, should be submitted directly to the IHE Technical and Planning
245 Committees via the process for submitting new proposals called the [Profile Proposal Process](#).

3 National Extensions for IHE USA

250 The national extensions documented in this section shall be used in conjunction with the definitions of integration profiles, actors and transactions provided in Volumes 1 through 3 of the IHE ITI Technical Framework. This section includes extensions and restrictions to effectively support the regional practice of healthcare in the United States.

This ITI national extension document was authored under the sponsorship and supervision of IHE USA and the IT Infrastructure Technical Committee. Comments should be directed to:

http://www.ihe.net/ITI_Public_Comments

255 3.1 Data Segmentation for Privacy (DS4P)

This National Extension shows how to use and interpret the Document Sharing Metadata Profiles (XDS.b, XCA, XDR, XDM, and MHD) in compliance with the requirements identified for Data Segmentation for Privacy (DS4P). Data Segmentation is the privacy and security concept for differentiating between data that are to be handled differently for privacy or security reasons.

260 Data Segmentation for Privacy support in this context is the interoperability constraints to enable documents of various and different privacy and sensitivity to be communicated within a trust framework in a way that the sender can communicate necessary and specific privacy and security attributes and obligations in a way that the recipient can clearly understand them and act properly.

265 This national extension is intended to be used within a trust framework between communicating parties. This trust framework includes policy agreements to use this national extension to communicate segmented sensitive information. For each document that is communicated within this trust framework (PUSH or PULL) the following metadata constraints shall be used to communicate the highest sensitivity of the content as evaluated by the sender. The identified sensitivity level is then enforced by the recipient. Trust enforcement is expected to be defined and managed within that trust framework.

275 This USA National Extension addresses methods for sharing of segmented documents containing personally identifiable information (PII) as may be permitted by privacy policies or regulations. The privacy policies on which this National Extension is based do not explicitly address the clinical implications of giving patients control over the disclosure of their sensitive records. Standards development organizations are focused on the development of technical infrastructure specifications and remain agnostic on the appropriateness of a privacy policy.

280 Privacy policies are defined as limits on disclosure and use. Disclosure and use restrictions may originate from a patient, a service provider, or from jurisdictions where healthcare is delivered. Implementations should be prepared to extend functionality based on state, region, and local policies.

285 This USA National Extension is the result of a proposal from the US Department of Health and Human Services, Office of the National Coordinator for Health IT (ONC) to develop guidance for implementation of Data Segmentation Techniques, including RESTful patterns as defined in the MHD Profile, using the standards, building blocks and principles documented in the Use

290 Cases developed by the S&I DS4P stakeholder community, and the [NwHIN SOAP/Exchange version of the S&I DS4P Implementation Guide](#). Furthermore, this specification draws upon and cites specific instances of U.S. law such as 42 CFR Part 2, 38 CFR Part 1, etc. These specific references are intended to profile a specific set of users operating under realm specific law and goals. Nothing in this supplement is intended to prevent adoption or customization to meet the needs of other realms.

295 This USA National Extension is based on artifacts and the findings of [pilot implementations of the Data Segmentation for Privacy \(DS4P\) S&I Framework Initiative](#), specifically on the Use Cases developed by the stakeholder community, and the [NwHIN SOAP/Exchange version of the S&I DS4P Implementation Guide](#). Additionally, content from the HL7 DS4P Profiles (HL7_IG_DS4P_R1_CH1_CONTENT_N2_2014JAN, HL7_IG_DS4P_R1_CH2_DIRECT_N2_2014JAN, and HL7_IG_DS4P_R1_CH3_EXCHANGE_N2_2014JAN) which in turn reference IHE XDS are noted as important companion documents. For a detailed description of the project, refer to the S&I Initiative DS4P Project Executive Summary found at <http://wiki.siframework.org/Data+Segmentation+for+Privacy+Homepage>.

300 305 This USA National Extension defines constraints according to the requirements captured in the [Use Cases developed](#) by the Data Segmentation for Privacy (DS4P) S&I Framework Initiative stakeholder community and additional requirements that were identified by [pilot projects engaged](#) in validating the implementation guidance developed by the DS4P S&I Framework Initiative.

310 Conformance to the Document Sharing Profiles (XDS.b, XDR, XDM, XCA, and MHD) is expected with the following additional constraints based on privacy policies related to the type of document and the context of the exchange (requesting user, patient, consent, document, facility, purpose, communications mechanism, etc.).

- Document Entry constraints are given in Section 3.1.2 below. The constraints include:
 - Security tags (confidentialityCode) constraints
 - indicate the Confidentiality Level specified by using the designated HL7 Confidentiality vocabulary
 - indicate the Handling Caveats for Obligation Policy using a designated Obligation Policy vocabulary
 - indicate the Handling Caveats for Purpose of Use using a designated Purpose of Use vocabulary
 - indicate Handling Caveats for Refrain Policy using a designated Refrain Policy vocabulary
 - indicate the Authoring healthcare facility type using a designated restricted healthcare facility type vocabulary
 - indicate the Document practice setting type using a designated restricted practice setting vocabulary

- 325
 - indicate the Low-level classification of the document (typeCode) using a designated restricted type code vocabulary
 - SubmissionSet constraints are given in the Section 3.1.3 below. The constraints include:
 - Indicated as necessary the Targeted intended recipient (intendedRecipient)
 - Indicate the SubmissionSet creator

330 **3.1.1 DS4P Document Content**

Any CDA®² document SHOULD comply with the CDA constraints defined in the HL7 CDA Privacy Segmented Document template (templateId: 2.16.840.1.113883.3.3251.1.1)

Other content types MAY be carried.

3.1.2 DS4P DocumentEntry

- 335 The following constraints apply to all documents in the SubmissionSet.

All the designated vocabulary and value sets are defined by HL7.

3.1.2.1 DS4P DocumentEntry.confidentialityCode

The confidentialityCode metadata SHALL use the “HL7 Healthcare Privacy and Security Classification System (HCS)” as defined in ITI TF-3:4.2.3.2.5

340 **3.1.2.1.1 DS4P Confidentiality Security Classification Label**

The confidentialityCode element SHALL contain exactly one value from the codesystem 2.16.840.1.113883.5.25 (i.e., U, L, M, N, R, or V) (aka, <http://hl7.org/implement/standards/fhir/v3/Confidentiality/index.html>), to indicate the Confidentiality coding of the content.

- 345 The confidentialityCode may also contain other values from other codesystems for which Sections 3.1.2.1.2 and 3.1.2.1.3 below are two examples.

The value represents the most restrictive content in the identified document (aka, High water mark).

3.1.2.1.2 DS4P Sensitivity Security Classification Label

- 350 The confidentialityCode SHOULD NOT contain a sensitivity indicator unless the trust framework policies indicate otherwise.

² CDA is the registered trademark of Health Level Seven International.

3.1.2.1.3 DS4P Handling Caveats Security Category

The confidentialityCode element SHALL contain any Obligation Handling Caveats deemed necessary.

- 355 If present, the Obligation values SHALL be selected from the ValueSet

 HL7 ObligationPolicyCode 2.16.840.1.113883.1.11.20445

 Also found at <http://hl7.org/implement/standards/fhir/v3/vs/ObligationPolicy/index.html>

If present, the Purpose Of Use values SHALL be selected from the ValueSet

 HL7 PurposeOfUse 2.16.840.1.113883.1.11.20448

- 360 Also found at <http://hl7.org/implement/standards/fhir/v3/vs/PurposeOfUse/index.html>

If present, the Refrain Policy values SHALL be selected from the ValueSet

 HL7 RefrainPolicy 2.16.840.1.113883.1.11.20446

 Also found at <http://hl7.org/implement/standards/fhir/v3/vs/RefrainPolicy/index.html>

3.1.2.2 DS4P DocumentEntry.healthcareFacilityTypeCode

- 365 The healthcareFacilityTypeCode element contains an indicator of the type of facility that authored the document. The ValueSet designated is restricted to the subset of practice setting codes that will not disclose details about the healthcare facility that may be protected in a specific affinity domain, directed exchange, Health Information Exchange, etc. The HL7 RestrictedHealthcareFacilityTypeCode ValueSet meets this definition and is designated for this purpose.

370 The healthcareFacilityTypeCode element's value SHALL be selected from the ValueSet

 HL7 RestrictedHealthcareFacilityTypeCode 2.16.840.1.113883.3.3251.3.2.1

This HL7 ValueSet is a dynamic ValueSet. An HL7 ‘dynamic’ ValueSet is one that can change over time to adjust to changing policy landscapes, but is a managed ValueSet.

- 375 **3.1.2.3 DS4P DocumentEntry.practiceSettingCode**

- 380 The practiceSettingCode element contains an indicator of the type of practice setting. The ValueSet designated is restricted to the subset of practice setting codes that will not disclose details about the practice that may be protected in a specific affinity domain, directed exchange, Health Information Exchange, etc. The HL7 RestrictedPracticeSettingCode ValueSet meets this definition and is designated for this purpose. The ValueSet is derived from SNOMED-CT codes in a way consistent with prevailing privacy policies.

The practiceSettingCode element's value SHALL be selected from the ValueSet

 RestrictedPracticeSettingCode 2.16.840.1.113883.3.3251.3.2.2

- 385 This HL7 ValueSet is a dynamic ValueSet. An HL7 ‘dynamic’ ValueSet is one that can change over time to adjust to changing policy landscapes, but is a managed ValueSet.

3.1.2.4 DS4P DocumentEntry.typeCode

The typeCode element identifies the type of document. The ValueSet designated avoids disclosing protected information. The HL7 RestrictedTypeCode ValueSet meets this definition and is designated for this purpose.

- 390 The typeCode element's value SHALL be selected from the ValueSet

 RestrictedTypeCode 2.16.840.1.113883.3.3251.3.2.3

This HL7 ValueSet is a dynamic ValueSet. An HL7 ‘dynamic’ ValueSet is one that can change over time to adjust to changing policy landscapes, but is a managed ValueSet.

3.1.3 DS4P SubmissionSet

- 395 The following constraints apply to the submissionSet containing the document entries

3.1.3.1 DS4P SubmissionSet.intendedRecipient

The intended recipient element's value MAY contain the intended recipient. When the exchange requires an intended recipient constraint, this element SHALL be populated. This element SHALL contain the e-mail address of that intended recipient unless the trust framework identifies an alternative encoding that is acceptable.

- 400

3.1.3.2 DS4P SubmissionSet.author

The SubmissionSet Author element's value SHALL contain at least the author of the submission set.

- 405 This element SHALL contain the e-mail address of the author of the submission set unless the trust framework identifies an alternative encoding that is acceptable.

The recipient utilizes the SubmissionSet author as the indicator of the sender for PUSH transactions, and as the provenance identifier of the submission. This information may be used by the recipient in policy decisions and enforcement.

4 National Extensions for France

4.1 French requirements related to Patient and Patient Administration

HL7 v2.5 events and segments used by the PAM Profile are detailed in the IHE ITI Technical Framework which will be referred to as ITI TF-2 in the remainder of this section.

This section describes constraints on HL7 v2.5 events and segments used in the French environment. Some of these constraints apply to all HL7 transactions. Others only affect the ITI-415 30 and ITI-31 transactions.

The document narrows or specifies the use of events and segments mentioned in ITI TF-2. It also specifies the use of HL7 v2.5 events and segments that are still not detailed in ITI TF-2.

Each segment is displayed as a table which rows are the items and which “Usage” and “Card.” Columns respectively specify the use of the item and its cardinalities in the French environment.

420 The “Usage” column follows the common codification to HL7 and IHE:

- R Required. The item must be provided in the French environment
- RE Must be provided if the sending application owns the information. The sending application must be able to supply that item.
- O Optional: IHE France doesn’t impose any restriction on that item which may or may not be managed by sending and receiving applications.
- C Conditional. The condition for using in the French environment is specified below the table.
- X Forbidden in France.

The “Card.” column includes the bracketed highest and lowest cardinalities.

430 An “IHE Fr” column was added to the tables. Such a column is marked with an asterisk when the constraint on the use established by IHE France is different from the one set up by IHE International or by HL7 v2.5 standard for the particular item. In other words, no asterisk means that the French use is exactly the same than the international one.

435 Some of the items are detailed below the data type table. Especially, IHE France can provide values lists for some of those items. These lists (restricted, extended or even edited as compared with the original ones established by HL7) include values that are strictly permitted in France. None of these lists can be edited without having to update the present document.

4.1.1 Requirements on all HL7 V2.x transactions

4.1.1.1 HL7 character set

440 The ISO 8859/1 and ISO 8859/15 character sets shall be supported.

4.1.1.2 Forbidden fields in France

The following fields are forbidden in all HL7 messages.

- Patient race: PID-10; NK1-35
- Patient religion: PID-17; NK1-25
- Patient ethnic group: PID-22; NK1-28

445

4.1.1.3 EVN Segment

- Pending events shall use EVN with empty EVN-3 and EVN-6,
- Planned events shall use EVN with planned date time in EVN-3 and empty EVN-6,
- Past events shall use EVN with date time in EVN-6 and EVN-3 empty.

450

4.1.1.4 MSH Segment rules

The MSH-12 field shall be fully populated. When part of ITI-30 and ITI-31 transactions, it shall be populated as follows:

- MSH-12.1: HL7 version number
- MSH-12.2: Internationalization code (Table #399) shall be FRA
- MSH-12.3: HL7 Profile version number shall be 2.5

455

4.1.1.5 PID Segment

All transactions that contain a PID segment shall support the changes made to PID-3, PID-5, PID-6, PID-8, PID-10, PID-16, PID-17, PID-32.

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR	
PID-1	4	SI	O	[0..1]		Set ID - PID		
PID-2	20	CX	X	[0..0]		Patient ID		
PID-3	250	CX	R	[1..*]		Patient Identifier List	*	National identifier
PID-4	20	CX	X	[0..0]		Alternate Patient ID - PID		
PID-5	250	XPN	R	[1..*]		Patient Name	*	French legal policy
PID-6	250	XPN	O	[0..*]		Mother's Maiden Name	*	
PID-7	26	TS	O	[0..1]		Date/Time of Birth		
PID-8	1	IS	O	[0..1]	1	Administrative Sex	*	Restricted User table
PID-9	250	XPN	X	[0..0]		Patient Alias		
PID-10	250	CE	X	[0..0]	5	Race	*	forbidden
PID-11	250	XAD	C	[0..*]		Patient Address		
PID-12	4	IS	X	[0..0]	289	County Code		
PID-13	250	XTN	O	[0..*]		Phone Number - Home		

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR	
PID-14	250	XTN	O	[0..*]		Phone Number - Business		
PID-15	250	CE	O	[0..1]	296	Primary Language		
PID-16	250	CE	O	[0..1]	2	Marital Status	*	User table
PID-17	250	CE	X	[0..0]	6	Religion	*	forbidden
PID-18	250	CX	C	[0..1]		Patient Account Number		
PID-19	16	ST	X	[0..0]		SSN Number - Patient		
PID-20	25	DLN	X	[0..0]		Driver's License Number - Patient		
PID-21	250	CX	O	[0..*]		Mother's Identifier		
PID-22	250	CE	X	[0..0]	189	Ethnic Group		
PID-23	250	ST	O	[0..1]		Birth Place		
PID-24	1	ID	O	[0..1]	136	Multiple Birth Indicator		
PID-25	2	NM	C	[0..1]		Birth Order		
PID-26	250	CE	O	[0..*]	171	Citizenship		
PID-27	250	CE	O	[0..1]	172	Veterans Military Status		
PID-28	250	CE	X		212	Nationality		
PID-29	26	TS	O	[0..1]		Patient Death Date and Time		
PID-30	1	ID	O	[0..1]	136	Patient Death Indicator		
PID-31	1	ID	CE		136	Identity Unknown Indicator		
PID-32	20	IS	RE	[0..*]	445	Identity Reliability Code	*	French user table
PID-33	26	TS	C	[0..1]		Last Update Date/Time		
PID-34	241	HD	O	[0..1]		Last Update Facility		
PID-35	250	CE	C	[0..1]	446	Species Code		
PID-36	250	CE	C	[0..1]	447	Breed Code		
PID-37	80	ST	O	[0..1]		Strain		
PID-38	250	CE	O	2	429	Production Class Code		
PID-39	250	CWE	O	[0..*]	171	Tribal Citizenship		

460

PID-3: Patient Identifier List

This field is used to carry the patient's identifiers, IPP (Permanent Patient identifier), INS-A, INS-C (Patient's National Health Identifiers) among others.

Each identifier is carried with its type (CX-5) and its assigning authority (CX-4).

465 The INS-C number is calculated. If any INS-C changes; this list shall contain all the known INS-C with their calculation dates in CX-7. The most recently calculated INS-C shall be used as the current INS-C.

470 For each patient's identifier, the CX type allows specifying the legal entity, the establishment, the ward or the department that produced or had it. This list shall include all of the patient's known INS.

PID-5: Patient Name

Three types of name can be conveyed in the PID-5 field, which is repeatable. They comply with the HL-7 name structure, and differ in their use of family name.

- 475 • The family name which is the legal name according to the Art.311-21 of the Code Civil is also defined as the “name of birth” in the DGOS N°DGOS/MSIOS/2013/281 instruction from 7 June 2013. Last name and name of birth are then regarded as similar. The patronymic name is obsolete. The legal name should be present if known. This shall be a name type “L”.
- 480 • The use name, defined by the circular of 26 June 1986: this name is variable through a person’s life. It also may have been defined and may not be defined any longer a moment later (a married person who had a marital name may get divorced without conserving it.) A use name is optional. This shall have a name type “D”.
- 485 • A nickname: this name is an assumed name a patient is entitled to ask for if he fulfills certain conditions, related to his notoriety. Such a name has no legal standing. A nickname is optional. This shall have a name type “S”.

Reference on the name definition is available on the French administration website:
<http://vosdroits.service-public.fr/N151.xhtml>

In France, allowed HL7 types (L, D, S and U).

490 The last name (L type) is automatically conveyed in HL7 messages. The use name (D type) will only be transmitted if it was defined (spouse’s marital name).

The surname prefix shall be in XPN-1 and not separated out as a sub-component. Other prefixes, e.g., “Dr.” shall be in XPN-5

Examples (the ~ character separates two occurrences):

495 NOZIERE^Violette^^^^^L
 Violette NOZIERE (last name, frequently known as birth name)
 DE GUERMANTES^Oriane^^^^^D~DES LAUMES^Oriane^^^^^L
 Oriane DE GUERMANTES (use name), born DES LAUMES (last name)
500 Caesar^Julius^^^^^S
 VIP registered under the pseudonym Julius Caesar

PID-6: Mother’s Maiden Name

“Mother’s Maiden Name” PID-6 is used to convey the mother’s birth name not the patient’s birth name.

505

PID-8: Patient Sex

The following values shall be used:

HL7 table 0001 – Administrative Sex

Value IHE FR	Description	Display France	IHE fr Comments
F	Female	Féminin	
M	Male	Masculin	
O	Other	Autre	
U	Unknown	Inconnu	

510 *PID-16: Marital Status*

The following values shall be used:

PID-16: Marital Status

Value IHE FR	Description	Display France	IHE fr Comments
A	Separated	Séparé	
D	Divorced	Divorcé	
G	Living together	Concubin	
M	Married	Marié	
P	Domestic partner	PACS	
S	Single	Célibataire	
U	Unknown	Inconnu	
W	Widowed	Veuf/Veuve	

*PID-18 Patient Account Number*515 *See below in ITI-31 for extra requirements.*

Patient account number shall be present if PV1 segment is present.

The “Patient Account Number” PID-18 field is required in the context of the “Patient Encounter Management” ITI-31 Transaction in France. This field is the account number that will be used by the facility to issue invoices matching the services performed for the patient.

520 Its duration may exceed the limits of the patient’s visit to the hospital, either the beginning or the end of the stay.

Each visit in the establishment shall be associated to a patient account number.

PID-32: Identity Reliability Code

525 This field is used to encode the different identity status values set out by the GMSIH³.

In France, the following 0445 table shall be used:

Value IHE FR	Description	Recommended display	Translation	IHE France comments
VIDE		Identité non encore qualifiée	Identity not qualified	
PROV		Provisoire	Provisional identity	
VALI		Validé	Validated Identity	
DOUB		Doublon ou esclave	Duplicated identity	
DESA		Désactivé	Disabled identity	
DPOT		Doublon potentiel	Potential duplicated identity	
DOUA		Doublon avéré	Real duplicated identity	
COLP		Collision potentielle	Potential collision	
COLV		Collision validée	Validated collision	
FILI		Filiation	filiation	
CACH		Cachée	Hidden identity	
ANOM		Anonyme	Anonym	
IDVER		Identité vérifiée par le patient	Identity checked by the patient	
RECD		Reçue d'un autre domaine	Identity received from another identification domain	
IDRA		Identité rapprochée dans un autre domaine	Identity cross-referenced in another domain	
USUR		Usurpation	Identity theft	
HOMD		Homonyme détecté	Detected homonym	
HOMA		Homonyme avéré	Real homonym	

4.1.2 Segments that apply only to ITI-30 and ITI-31

4.1.2.1 PD1 Segment

PD1-2: Living Arrangement

Value IHE FR	Description	Recommended display	IHE France comments
A	Alone	Seul	

³ GMSIH : Groupement de Modernisation des Systèmes d'Information Hospitaliers

Value IHE FR	Description	Recommended display	IHE France comments
F	Family		
I	Institution		
R	Relative		
S	Spouse Only		
U	Unknown		
H	Homeless	Sans domicile fixe	Added by IHE France for homeless people

530

4.1.2.2 ROL Segment

The role that a physician takes when interacting with the patient is represented by a ROL segment. This segment shall not be used to identify next of kin or responsible persons. The NK1 segment is used for that.

535

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR	
1	60	EI	C	[0..1]		Role Instance ID		
2	2	ID	R	[1..1]	287	Action Code	*	User table defined
3	250	CE	R	[1..1]	443	Role-ROL	*	User table completed with French values
4	250	XCN	R	[1..*]		Role Person		
5	26	TS	O	[0..1]		Role Begin Date/Time		
6	26	TS	O	[0..1]		Role End Date/Time		
7	250	CE	O	[0..1]		Role Duration		
8	250	CE	O	[0..1]		Role Action Reason		
9	250	CE	O	[0..1]		Provider Type		
10	250	CE	O	[0..1]	406	Organization Unit Type		
11	250	XAD	O	[0..1]		Office/Home Address/Birthplace		
12	250	XTN	O	[0..1]		Phone		

ROL-2: Action Code

HL7 Table 0287 - Problem/goal action code

Value IHE FR	Description	Display France	IHE fr Comments
AD	ADD		New physician role
DE	DELETE		Cancellation of the physician role

Value IHE FR	Description	Display France	IHE fr Comments
UC	UNCHANGED		Notification of the physician to be taken into account for the defined role in the current context
UP	UPDATE		Updating of the physician's role

ROL-3 Role Nature (CE)

540 This element defines the role played by the physician.

Here follow values that are allowed by this national extension:

HL7 Table 0443 – Provider role

Value IHE FR	Description	Display France	IHE fr Comments
AD	Admitting		PV1-17 Admitting doctor Physician from the institution that decides to admit
AT	Attending		PV1-7 Attending doctor Physician responsible for the patient during the visit
CP (note3)	Consulting Provider		Consulted physician for a second opinion, in the scope of the visit
FHCP	Family Health Care Professional		Family physician. Used in the few cases he is different from the officially declared referring doctor
RP	Referring Provider		PV1-8 Referring doctor
RT	Referred to Provider		Correspondence physician (National Health Insurance definition)
ODRP (note1)	Officially Declared Referring Physician	Value added by IHE-France	Declared Referring Physician (National Health Insurance definition)
SUBS (note2)	Substitute	Value added by IHE-France	Declared Referring physician replacement

545 1st note: ODRP: « Declared Referring Physician ». Value added to the HL7 0443 table. Indeed, none of the existing values in the table was likely to represent the Declared referring Physician. “FHCP” is a family physician that might go into a ROL segment but that is not necessarily the declared referring physician. “RP” is the patient’s referring physician and may be different from the declared referring physician (for instance a medical specialist).

2nd note: SUBS: “Substitute”. Value added to the HL7 0443 table (user defined). Corresponds to the physician who substitutes the declared referring physician, currently absent.

550 3rd note: CP: “Consulting Provider”. The consulting physician is entirely detailed in a ROL segment, under the PV1/PV2 combination. The PV1-9 (Consulting doctor) field, which usage is X in the PAM Profile and downgraded by HL7 v2.5, must not be used.

555

4.1.2.3 NK1 Segment

ITI-30 (A28 and A31 messages) and ITI-31 (A05, A01, A04 and Z99 messages) transactions convey the NK1 segment except if the NK1 segment corresponds to the trustworthy person (NK1-3=K). The latter shall be transmitted only using the ITI-31 transaction.

Each next of kin is described by a NK1 segment.

An NK1 segment transmits identities of next of kin or trustworthy persons.

SEQ	LEN	DT	OPT	R P/#	TBL#	ITEM#	ELEMENT NAME	IHE FR	
1	4	SI	R			00190	Set ID - NK1		
2	250	XPN	O	Y		00191	Name		
3	250	CE	O		0063	00192	Relationship	*	User translated and completed
4	250	XAD	O	Y		00193	Address		
5	250	XTN	O	Y		00194	Phone Number		
6	250	XTN	O	Y		00195	Business Phone Number		
7	250	CE	O		0131	00196	Contact Role	*	User translated and completed
8	8	DT	O			00197	Start Date		
9	8	DT	O			00198	End Date		
10	60	ST	O			00199	Next of Kin / Associated Parties Job Title		
11	20	JCC	O		0327/0328	00200	Next of Kin / Associated Parties Job Code/Class		
12	250	CX	O			00201	Next of Kin / Associated Parties Employee Number		
13	250	XON	O	Y		00202	Organization Name - NK1		
14	250	CE	O		0002	00119	Marital Status		
15	1	IS	O		0001	00111	Administrative Sex		
16	26	TS	O			00110	Date/Time of Birth		
17	2	IS	O	Y	0223	00755	Living Dependency		
18	2	IS	O	Y	0009	00145	Ambulatory Status		
19	250	CE	O	Y	0171	00129	Citizenship		
20	250	CE	O		0296	00118	Primary Language		
21	2	IS	O		0220	00742	Living Arrangement		

SEQ	LEN	DT	OPT	R P/#	TBL#	ITEM#	ELEMENT NAME	IHE FR	
22	250	CE	O		0215	00743	Publicity Code		
23	1	ID	O		0136	00744	Protection Indicator		
24	2	IS	O		0231	00745	Student Indicator		
25	25080	CE	X		0006	00120	Religion		Forbidden
26	250	XPN	O	Y		00109	Mother's Maiden Name		
27	250	CE	O		0212	00739	Nationality		
28	250	CE	X	Y	0189	00125	Ethnic Group		Forbidden
29	250	CE	O	Y	0222	00747	Contact Reason		
30	250	XPN	O	Y		00748	Contact Person's Name		
31	250	XTN	O	Y		00749	Contact Person's Telephone Number		
32	250	XAD	O	Y		00750	Contact Person's Address		
33	250	CX	R	Y		00751	Next of Kin/Associated Party's Identifiers	*	Required Identifiers in France
34	2	IS	O		0311	00752	Job Status		
35	250	CE	X	Y	0005	00113	Race	*	Forbidden
36	2	IS	O		0295	00753	Handicap		
37	16	ST	O			00754	Contact Person Social Security Number		
38	250	ST	O			01905	Next of Kin Birth Place		
39	2	IS	O		0099	00146	VIP Indicator		

560

NK1-3: Relationship

This field indicates the nature of the relationship of the person to the patient. This may be a familial, professional or friendly relationship.

565

Note: According to the French regulatory requirements, the trustworthy person is bonded to the patient's visit (article L.1111-6 of the Public Health code).

HL7 User Defined Table 0063 - Relationship

Value	Description	Display France
ASC	Associate	Collègue
BRO	Brother	Frère
CGV	Care giver	Professionnel de santé
CHD	Child	Enfant
DEP	Handicapped dependent	Dépendant handicapé

Value	Description	Display France
DOM	Life partner	Compagnon
EMC	Emergency contact	Contact d'urgence
EME	Employee	Employé
EMR	Employer	Employeur
EXF	Extended family	Proche
FCH	Foster child	Enfant adoptif
FND	Friend	Ami
FTH	Father	Père
GCH	Grandchild	Petits-enfants
GRD	Guardian	Tuteur
GRP	Grandparent	Grand-parent
MGR	Manager	Directeur
MTH	Mother	Mère
NCH	Natural child	Enfant naturel
NON	None	Aucun
OAD	Other adult	Autre adulte
OTH	Other	Autre
OWN	Owner	Propriétaire
PAR	Parent	Parent proche
SCH	Stepchild	Beau-fils
SEL	Self	Elle-même
SIB	Sibling	Frère et soeur
SIS	Sister	Soeur
SPO	Spouse	Epoux
TRA	Trainer	Entraîneur
UNK	Unknown	Inconnu
WRD	Ward of court	Tutelle judiciaire

Note: To transmit a relationship not in the table, set the NK1-3-1 field with the value “OTH” and the NK1-3-2 field with text describing the relationship.

570 NK1-7: Contact Role

IHE France identified the values list, enclosed below.

HL7 User Defined Table 0131 - Contact Role

Values	Description	Display France
E	Employer	Employeur
C	Emergency Contact	Personne à contacter en cas d'urgence
F	Federal Agency	Agence fédérale

Values	Description	Display France
I	Insurance Company	Compagnie d'assurances
N	Next-of-Kin	Parent proche
S	State Agency	Agence d'État
O	Other	Autre
U	Unknown	Inconnu
K	Confidence contact	Personne de confiance

NK1-33: Next of Kin/Associated Party's Identifiers

575 This field is used to transmit the next of kin or trustworthy person's identifiers.

All identifiers shall have both type (CX-5) and assignment authority (CX-4).

To identify next of kin or trustworthy persons, using the identifier type PN (Person Number) is recommended.

This field NK1-33 is required.

580 **4.1.2.4 PV1 Segment**

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR	
PV1-1	4	SI	O	[0..1]		Set ID - PV1		
PV1-2	1	IS	R	[1..1]	4	Patient Class	*	restricted user table
PV1-3	80	PL	C	[0..1]		Assigned Patient Location	*	explanation
PV1-4	2	IS	O	[0..1]	7	Admission Type	*	User table completed
PV1-5	250	CX	C	[0..1]		Preadmit Number	*	explanation
PV1-6	80	PL	C	[0..1]		Prior Patient Location		
PV1-7	250	XC N	O	[0..*]	10	Attending Doctor		
PV1-8	250	XC N	O	[0..*]	10	Referring Doctor		
PV1-9	250	XC N	X	[0..0]		Consulting Doctor		
PV1-10	3	IS	O	[0..1]	69	Hospital Service	*	French user table
PV1-11	80	PL	C	[0..1]		Temporary Location		
PV1-12	2	IS	O	[0..1]	87	Preadmit Test Indicator		
PV1-13	2	IS	O	[0..1]	92	Re-admission Indicator		
PV1-14	6	IS	O	[0..1]	23	Admit Source	*	French user table
PV1-15	2	IS	O	[0..*]	9	Ambulatory Status		
PV1-16	2	IS	O	[0..1]	99	VIP Indicator	*	User table defined
PV1-17	250	XC N	O	[0..*]	10	Admitting Doctor	*	
PV1-18	2	IS	O	[0..1]	18	Patient Type		

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR	
PV1-19	250	CX	C	[0..1]		Visit Number	*	Conditional value
PV1-20	50	FC	O	[0..*]	64	Financial Class		
PV1-21	2	IS	O	[0..1]	32	Charge Price Indicator	*	User table completed
PV1-22	2	IS	O	[0..1]	45	Courtesy Code	*	
PV1-23	2	IS	O	[0..1]	46	Credit Rating		
PV1-24	2	IS	O	[0..*]	44	Contract Code		
PV1-25	8	DT	O	[0..*]		Contract Effective Date		
PV1-26	12	NM	O	[0..*]		Contract Amount		
PV1-27	3	NM	O	[0..*]		Contract Period		
PV1-28	2	IS	O	[0..1]	73	Interest Code		
PV1-29	4	IS	O	[0..1]	110	Transfer to Bad Debt Code		
PV1-30	8	DT	O	[0..1]		Transfer to Bad Debt Date		
PV1-31	10	IS	O	[0..1]	21	Bad Debt Agency Code		
PV1-32	12	NM	O	[0..1]		Bad Debt Transfer Amount		
PV1-33	12	NM	O	[0..1]		Bad Debt Recovery Amount		
PV1-34	1	IS	O	[0..1]	111	Delete Account Indicator		
PV1-35	8	DT	O	[0..1]		Delete Account Date		
PV1-36	3	IS	O	[0..1]	112	Discharge Disposition	*	User table completed
PV1-37	47	DL D	O	[0..1]	113	Discharged to Location	*	
PV1-38	250	CE	O	[0..1]	114	Diet Type		
PV1-39	2	IS	O	[0..1]	115	Servicing Facility		
PV1-40	1	IS	X	[0..0]		Bed Status		
PV1-41	2	IS	O	[0..1]	117	Account Status	*	User table defined
PV1-42	80	PL	C	[0..1]		Pending Location		
PV1-43	80	PL	O	[0..1]		Prior Temporary Location		
PV1-44	26	TS	O	[0..1]		Admit Date/Time		
PV1-45	26	TS	O	[0..1]		Discharge Date/Time		
PV1-46	12	NM	O	[0..1]		Current Patient Balance		
PV1-47	12	NM	O	[0..1]		Total Charges		
PV1-48	12	NM	O	[0..1]		Total Adjustments		
PV1-49	12	NM	O	[0..1]		Total Payments		
PV1-50	250	CX	O	[0..1]	203	Alternate Visit ID		
PV1-51	1	IS	O	[0..1]	326	Visit Indicator		
PV1-52	250	XC N	X	[0..0]		Other Healthcare Provider		

PV1-2: Patient Class

PV1-2 Shall have a value from the following table:

Value IHE FR	Description	Recommended display	IHE France comments
E	Emergency	Visit to the emergency department	Arrival to the emergency department
I	Inpatient	Inpatient admit	Full or partial inpatient admit, all types combined, including long-term and home care retirement facilities, post-acute care and rehabilitation...
N	Not Applicable	Not applicable	Not applicable: Value used in the « Patient Identity Feed » ITI-30 transaction
O	Outpatient	Outpatient admit	Outpatient admit, including delivering medicines.
R	Recurring patient	Recurring admit	Recurring admit

585

PV1-3: Assigned Patient Location (PL)

This field contains the geographical location of the patient and the housing ward that takes responsibility for their housing. The following elements shall be provided when known:

590

- PV1-3.1: Housing ward code (housing FU)
- PV1-3.2: room
- PV1-3.3: bed
- PV1-3.4: healthcare facility (HD)
- PV1-3.5: bed status (unoccupied/occupied).

HL7 Table 0116 – Bed Status

Value IHE FR	Description	Libellé conseillé	Commentaires d'IHE France
O	Occupied	occupé	
U	Unoccupied	libre	

595

*PV1-4: Admission Type (IS)***HL7 Table 0007 – Admission Type**

Value IHE FR	Description	Recommended display	IHE France comments
C	Elective	Comfort (plastic surgery)	
L	Labor and Delivery	Childbirth	
N	Newborn (Birth in healthcare facility)	Newborn	

Value IHE FR	Description	Recommended display	IHE France comments
R	Routine	Routine	Default value
U	Urgent	Acute emergency problem whatever is the admission ward	Example: Admission to ophthalmology department, a glass shard in the eye
RM	Delivery	Delivery of medicines	Value added by IHE France to define visits with delivery of medicines purposes
IE		Inter-facility services	Value added by IHE France to define visits with services billed to another facility purposes.

PV1-5: Preadmit Number (CX)

600 IHE recommends using the exact same pre-admission and admission numbers.

If the account number is different between the pre-admit message and the admission message, the pre-admit account number shall be recorded in the admission message PV1-5 field. Therefore, this field becomes conditional.

605 *PV1-10: Medical price discipline/Hospital Service (IS)*

Values recorded in the 0069 table correspond to the B nomenclature (services disciplines) excerpt from the 2005 healthcare facilities annual statistic published by the French Ministry of Health available at:

610 [http://www.parhage.sante.fr/re7/doc.nsf/VDoc/E7A685B20FF9E7A4C12576A3005BD49F/\\$FILE/NOM2009.pdf](http://www.parhage.sante.fr/re7/doc.nsf/VDoc/E7A685B20FF9E7A4C12576A3005BD49F/$FILE/NOM2009.pdf)

PV1-14: Personalized admit mode (IS)

Values shall be taken from table 0023 below when applicable. Additional items can be added when this list lacks an item that meets the facility's needs.

615 **HL7 User Defined Table 0023 – Admit Source**

Value IHE FR	Description	Recommended display	IHE France comments
1	Physician referral	Referred by an external physician	
3	HMO referral	Convening to the hospital	
4	Transfer from a hospital	Transfer from another healthcare facility	
6	Transfer from another health care facility	Admit by internal transfer	

Value IHE FR	Description	Recommended display	IHE France comments
7	Emergency room	Emergency admit	The visit seems to be an emergency, which is not deductible from the fact that the patient comes from an emergency ward. This value can be used when the patient is admitted in emergency after an accident. Example: Admission to ophthalmology department, a glass shard in the eye
8	Court/law enforcement	Admit under forces of law	
90	Planned stay	Planned stay	
91	Personal decision	Personal decision	

PV1-16: VIP Indicator

The PV1-16 field allows identifying a patient as a Very Important Person (VIP).

Values from user defined table 0099 shall be used in PV1-16.

620

User-defined table 0099 – VIP Indicator

Value IHE FR	Description	Recommended display	IHE France comments
Y	Yes		
N	No		

PV1-17: Admitting Doctor

The physician working at the facility who decided to admit the patient. A ROL segment can provide further details regarding this physician, following the segment group {PV1, PV2, ... } (See above).

625

PV1-19: Visit Number

This number corresponds to the patient's physical stay in the healthcare facility: the visit. The account number (PID-18) applies to one or more visits (PV1-19).

630

The PV1-19 field shall be present in ITI-31 Transactions and may be present in other uses of the PV1 segment. The PV1-2 field (patient class) determines how the PV1-19 field (visit identifier) shall be filled out and interpreted.

635

- If PV1-2 equals I, then PV1-19 is required and identifies the visit for hospital or home care.
- If PV1-2 equals O, then PV1-19 is required and identifies the visit for medical acts and outpatient registration, including visits for medicine delivery.

- 640
- If PV1-2 equals R, then PV1-19 is required and identifies a recurring visit (a visit identifier for each recurring visit is necessary).
 - If PV1-2 equals E, then PV1-19 is required and identifies the number of the visit to the emergency department.
 - If PV1-2 equals N (ITI-30 Transaction), then there are no visits and the rest of the PV1 segment shall be empty.

PV1-20: Financial Class

645 This is the rate code of the visit within the medical ward. The terminology will generally correspond to the facility's general terminology that unequivocally defines the rate of the stay within the medical ward.

PV1-21: Charge Price Indicator

650 The national nomenclature, recorded in table 0032 below, corresponds to an excerpt of the nomenclature (Activity type) from the 2005 healthcare facilities annual statistics published by the French Ministry of Health. Values sent in PV1-21 shall come from this table:

HL7 User defined Table 0032 – Charge Price Indicator

Value IHE FR	Recommended display	IHE France comments
03	Inpatient care (excluding week hospitalisation)	
04	Hospital day care	
05	Hospital night care	
06	Home care	
07	Consultations, outpatient care	
08	Operating unit (including obstetrical and gynaecological)	
09	Other medico-technical wards (anaesthesiology, functional explorations, physiotherapy and rehabilitation, pharmaceuticals)	
10	Emergency department reception	
11	Complete housing/residency (excluding during the week))	
12	Night housing in partnered structures	
13	Semi-residency	
14	Day services	
15	Host family care placement (strictly social)	
16	Services in the living area (excluding host family care)	
17	Week residency	
18	Night housing in fragmented structure	
19	Ambulatory treatments	
20	Week hospitalisation	
21	Day-care reception	
23	Ambulatory anaesthesia or surgeries	

Value IHE FR	Recommended display	IHE France comments
24	Reception and management in therapeutical/psychiatric host family care departments	
25	Temporary holidays or week-ends housing	
26	Biological medical tests	
28	Dental consultations and care	
32	Radiology (radio diagnostic and radiotherapy), medical imaging	
33	Research	
37	Reception and management in psychiatric therapeutic apartment	
38	Reception and management in a psychiatric facility	
39	Reception and management in a psychiatric crisis facility	
97	Non-stated activity	

PVI-22: Request for a private room

This field indicates to what extent the patient requested a private room.

- 655 The values in user-defined table 0045 shall be used in this field.

User-defined table 0045 – Courtesy Code

Value IHE FR	Description	Recommended display	IHE France comments
Y	Yes	Request for a private room	
N	No	No request for a private room	

PVI-36: Discharge Disposition

The values in table 0112 shall be used in this field.

- 660

HL7 Table User-defined 0112 – Discharge Disposition

Value IHE FR	Description	Recommended display	IHE France comments
2		Disciplinary measures	
3		Medical decision (default value)	
4		Against medical advice	
5		Awaiting medical tests	
6		Personal reasons	
R		Trial (Psychiatric context)	
E		Escape	
F		Fugue	

Value IHE FR	Description	Recommended display	IHE France comments
A		Absence (<12h)	
P		Permission (<72h)	
S		Discharge with care program	
B		Transfer to a MCO (Medical, Surgery, Obstetric) facility	

PV1-37: Discharged to location

- 665 This shall be the destination establishment's FINESS code. This field is used with the A03 (discharge), A16 (pending discharge), A21 (in the scope of a transfer movement to another department for a medical act (<48h)) events as well as with the Z99 event, which corresponds to the update for each one of those events.

PV1-40: Bed Status

- 670 This field shall not be used. The value shall be sent in the "Patient Housing" PV1-3 field's 5th component. (See above).

PV1-41: Account Status

- This field shall only be filled with the A03 (discharge) and Z99 (if the last discharge is updated) trigger events. The field allows detailing whether the ending visit closes the account or not.
- 675 The values in table 0117 shall be used in this field.

HL7 User-defined Table 0117 – Account Status

Value IHE FR	Description	Recommended display	IHE France comments
D		It was the last visit for this account	
N		It was not the last visit for the account	

4.1.2.5 PV2 Segment

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR	
PV2-1	80	PL	C	[0..1]		Prior Pending Location		
PV2-2	250	CE	O	[0..1]	129	Accommodation Code		
PV2-3	250	CE	O	[0..1]		Admit Reason	*	User table created for psychiatry assignment

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR	
PV2-4	250	CE	O	[0..1]		Transfer Reason		
PV2-5	25	ST	O	[0..*]		Patient Valuables		
PV2-6	25	ST	O	[0..1]		Patient Valuables Location		
PV2-7	2	IS	O	[0..*]	130	Visit User Code	*	User table completed
PV2-8	26	TS	O	[0..1]		Expected Admit Date/Time		
PV2-9	26	TS	O	[0..1]		Expected Discharge Date/Time		
PV2-10	3	NM	O	[0..1]		Estimated Length of Inpatient Stay		
PV2-11	3	NM	O	[0..1]		Actual Length of Inpatient Stay		
PV2-12	50	ST	O	[0..1]		Visit Description		
PV2-13	250	XCN	O	[0..*]		Referral Source Code		
PV2-14	8	DT	O	[0..1]		Previous Service Date		
PV2-15	1	ID	O	[0..1]	136	Employment Illness Related Indicator		
PV2-16	1	IS	O	[0..1]	213	Purge Status Code		
PV2-17	8	DT	O	[0..1]		Purge Status Date		
PV2-18	2	IS	O	[0..1]	214	Special Program Code		
PV2-19	1	ID	O	[0..1]	136	Retention Indicator		
PV2-20	1	NM	O	[0..1]		Expected Number of Insurance Plans		
PV2-21	1	IS	O	[0..1]	215	Visit Publicity Code		
PV2-22	1	ID	O	[0..1]	136	Visit Protection Indicator		
PV2-23	250	XON	O	[0..*]		Clinic Organization Name		
PV2-24	2	IS	O	[0..1]	216	Patient Status Code		
PV2-25	1	IS	O	[0..1]	217	Visit Priority Code		
PV2-26	8	DT	O	[0..1]		Previous Treatment Date		
PV2-27	2	IS	O	[0..1]	112	Expected Discharge Disposition		
PV2-28	8	DT	O	[0..1]		Signature on File Date		
PV2-29	8	DT	O	[0..1]		First Similar Illness Date		
PV2-30	250	CE	O	[0..1]	218	Patient Charge Adjustment Code	*	User table defined
PV2-31	2	IS	O	[0..1]	219	Recurring Service Code		
PV2-32	1	ID	O	[0..1]	136	Billing Media Code		
PV2-33	26	TS	O	[0..1]		Expected Surgery Date and Time		
PV2-34	1	ID	O	[0..1]	136	Military Partnership Code		
PV2-35	1	ID	O	[0..1]	136	Military Non-Availability Code		

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR	
PV2-36	1	ID	O	[0..1]	136	Newborn Baby Indicator		
PV2-37	1	ID	O	[0..1]	136	Baby Detained Indicator		
PV2-38	250	CE	O	[0..1]	430	Mode of Arrival Code	*	French user table
PV2-39	250	CE	O	[0..*]	431	Recreational Drug Use Code		
PV2-40	250	CE	O	[0..1]	432	Admission Level of Care Code		
PV2-41	250	CE	O	[0..*]	433	Precaution Code		
PV2-42	250	CE	O	[0..1]	434	Patient Condition Code		
PV2-43	2	IS	O	[0..1]	315	Living Will Code		
PV2-44	2	IS	O	[0..1]	316	Organ Donor Code		
PV2-45	250	CE	O	[0..*]	435	Advance Directive Code		
PV2-46	8	DT	O	[0..1]		Patient Status Effective Date		
PV2-47	26	TS	C	[0..1]		Expected LOA Return Date/Time		
PV2-48	26	TS	O	[0..1]		Expected Pre-admission Testing Date/Time		
PV2-49	20	IS	O	[0..*]	534	Notify Clergy Code		

680 *PV2-3: Admit Reason*

This field indicates the type of assignment to psychiatry for the following events:

- A01 (Admit)
- A05 (Pre-admit)
- A06 (Change of status, outpatient or emergency to inpatient)
- A14 (Pending admit)
- Z99, if it updates one of the events above

685

Values allowed by this national extension are based on the “Legal care type” nomenclature, available at: <http://www.atih.sante.fr/index.php?id=0002F0006EFF>. This is a non-exhaustive list that may be updated according to the facility’s needs.

690

IHE Table PV2-3 – Admit Reason (Psychiatry)

Value IHE FR	Description	Recommended display	IHE France comments
HL		Free Hospitalisation	Obsolete since 1 January 2012
HO		Involuntary Placement	Obsolete since 1 January 2012
HDT		Hospitalisation requested by a third party	Obsolete since 1 January 2012
JPI		Placement of a person regarded as criminally irresponsible (Penal Code 122.1 article and Public Health Code L3213-7 article)	Obsolete since 1 January 2012
OPP		Temporary placement order	
DET		Prisoner (Code of Criminal Procedure D398 article)	Obsolete since 1 January 2012
SPP		Psychiatric care for imminent danger	
SPL		Free Psychiatric care	
SPAP		Psychiatric care with parental permission	
SDREP		Psychiatric care following a request by the representative of the State, by order of the prefect (L3213-1 article)	
SDREM		Psychiatric care following the request by the representative of the State, by order of the mayor (L.3213-2 article)	
SDREIP		Psychiatric care following the request by the representative of the State after having regarded the person as criminally irresponsible (L.3213-7 article)	
SPD		Psychiatric care of prisoners (Code of Criminal Procedure D.398 article)	
SDT		Psychiatric care requested by a third party (2 certificates) (L.3212-1-II-1 article)	
SDTU		Psychiatric care requested as an emergency by a third party (1 certificate) (L3213-3 article)	
SPI		Psychiatric care for imminent danger (1 certificate) (L.3212-1-II-2 article)	

695 PV2-7: Visit User Code

The PV2-7 field contains the care pathway indicator. The values in table 0130 shall be used in this field.

HL7 Table 0130 – Visit User Code

Value IHE FR	Recommended display	Description	IHE France comments
TN		New officially declared referring physician (the patient changed his doctor or declared this doctor for the 1st time)	
TD		Specific direct admit	
TU		Emergency: (The patient gets to the emergency, with no recommendation from the officially declared referring doctor)	
TH		Outside usual home	
TR		The patient is referred by the officially declared referring doctor's substitute	
MR		Consulted doctor = officially declared referring doctor's substitute	
TO		patient referred by the officially declared referring doctor (The patient sees another physician on the advice of their officially declared referring doctor: (care sequence))	
ME		consultation of the officially declared referring doctor = consulted doctor	
1C		1ère officially declared referring doctor consultation for opinion	
IT		Recurring care in accordance with the officially declared referring doctor (D162-1-6 par. 1 or 2)	
AG		The patient is less than 16 at the time of the consultation	No B2 code
MT		The patient is referred by the hospital company works doctor	No B2 code
CS		Out coordination admit (admit on the patient's own initiative, without consulting the officially declared referring doctor)	
SM		The patient has not declared any officially declared referring doctor	
ML		A military person, under army medical prescription (D162-1-6 SS Article) (patient not referred by the officially declared referring doctor)	
EM		Medical exclusion (smoking, alcoholism, ...) (D162-1-6 SS Article) (patient not referred by the officially declared referring doctor)	
NT		The patient is referred by a physician who is not their officially declared physician	
PI		The performer is a general practitioner who has recently been installed.	
ZD		The performer is a general practitioner who has recently moved in a medical deficit area	

Value IHE FR	Recommended display	Description	IHE France comments
AL		Acts & consultations planned in the scope of ALD D162-1-6, 3rd paragraph care protocol	
PS		Acts & consultations in the scope of ALD D162-1-6, 5th paragraph care protocol	
AM		State Medical Support (SMS)	No B2 code
CI		Foreigner taken care of in the scope of international conventions.	No B2 code
ET		Foreigner taken care of – other circumstances (regular status)	
MI		Passage migrant (L254-1)	
DT		Non active care pathway (Care pathway that began before the implementation date of the regulation)	
MA		Special case of Mayotte's fund	
AS		Any other circumstances	

700

The current legal context requires the coordinated care pathway indicator for the A04 (outpatient) and A07 (change of status; inpatient to outpatient) events. In other words, the indicator is required for outpatient registrations.

A Z99 event may update the indicator, updating all the events above, if needed.

705

- The officially declared physician: ROL segment (“ODRP”) following the PID/PDI combination
- The corresponding doctor: ROL segment (“RT”) following the {PV1, V2, ZBE, ... } segments combination
- The officially declared physician’s substitute: ROL segment (“SUBS”) following the {PV1, V2, ZBE, ... } segments combination

710

PV2-30: Patient Charge Adjustment Code

This field specifies whether a movement is billable or not. If present, values shall come from table 0218:

HL7 Table 0218 – Charge adjustment

Value IHE FR	Description	Recommended display	IHE France comments
F		Billable	
N		Not billable	Default value

715

PV2-38: Mode of Arrival Code

This field is required, if known, for the following events:

- A01 (Admit)

- 720
- A05 (Pre-admit)
 - A06 (Change of status, outpatient or emergency to inpatient)
 - A14 (Pending admit)
 - Z99, if it updates one of the events above

The values in table 0430 shall be used in this field.

HL7 User-defined Table 0430 – Mode of Arrival Code

Value IHE FR	Description	Recommended display	IHE France comments
0		Police	
1		Emergency medical assistance service, land-based	
2		Public Ambulance service	
3		Private Ambulance service	
4		Taxi	
5		Personal means	
6		Emergency medical assistance service by helicopter	
7		Firefighters	
8		Lightweight health vehicle	
9		Others	

725 4.1.2.6 ACC segment

The ACC segment shall be present when a patient is admitted to a facility following an accident.

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR	
ACC-1	26	TS	RE	[0..1]		Accident Date/Time		
ACC-2	250	CE	R	[1..1]	50	Accident Code	*	User table defined
ACC-3	25	ST	O	[0..1]		Accident Location		
ACC-4	250	CE	X	[0..0]		Auto Accident State		
ACC-5	1	ID	O	[0..1]	136	Accident Job Related Indicator		
ACC-6	12	ID	O	[0..1]	136	Accident Death Indicator		
ACC-7	250	XCN	O	[0..1]		Entered By		

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR	
ACC-8	25	ST	O	[0..1]		Accident Description		
ACC-9	80	ST	O	[0..1]		Brought In By		
ACC-10	1	ID	O	[0..1]	136	Police Notified Indicator		
ACC-11	250	XAD	O	[0..1]		Accident Address		

ACC-2: Accident Code

- 730 This field details the nature of the accident according to the standard nomenclature. The values in table 0050 shall be used in this field.

HL7 Table User-defined 0050 – Accident Code

Value IHE FR	Description	Recommended display	IHE France comments
P		Accident on public road	
T		Occupational accident	
D		Accident in the home	
S		Sport accident	
J		Commuting accident	
C		Assault and battery	
L		School accident	
B		Plan Blanc	
U		Unknown accident nature	

Example: Accident on public road, 25 December, 1:20 A.M.

735

ACC|200512250120|P^Accident on public road

4.1.2.7 ZBE Segment: Action on a movement

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR	
1	427	EI	R	[0..*]		Movement ID		
2	26	TS	R	[1..1]		Start of Movement Date/Time		
3	26	TS	X	[0..0]		End of Movement Date/Time	*	Forbidden in France
4	6	ID	R	[1..1]		Action on the Movement		
5	1	ID	R	[1..1]		Indicator “Historical movement”		
6	3	ID	C	[0..1]		Original trigger event code		

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR	
7	6	XON	O	[0..1]		Ward of medical responsibility in the period starting with this movement	*	explanation
8	6	XON	O	[0..1]		Ward of care responsibility in the period starting with this movement	*	French field
9	3	CWE	R	[1..1]	IHE ZBE-9	Nature of this movement	*	French field

740 This segment identifies a movement excerpt from the sequence of the movements corresponding to a patient's visit (see the definition of these terms at ITI TF-2b: 3.31.4. The segment details the action that will be implemented on this movement: Insert, Cancel, Update.

Insertion can add a new movement only at the end of a sequence. Cancellation shall only be carried out on the current movement, the last known in the sequence. Updating can be done on every movement of the sequence.

745 The following paragraphs reuse the ZBE-1 to ZBE-6 definitions, excerpt from IHE ITI TF-2b: 3.31.6.1.

As specified in ITI TF-2b: 3.31.5.6 (Historic Movement Management), the ZBE segment is required for the following events:

750 A01, A02, A03, A04, A05, A06, A07, A11, A12, A13, A14, A15, A16, A21, A22, A25, A26, A27, A38, A52, A53, A54, A55, Z99.

The ZBE segment is also required for the following French extension events:

- Z80: Change of medical ward
- Z81: Cancellation of a change of medical ward
- Z82: Change of pending medical ward
- Z83: Cancellation of a change of pending medical ward
- Z84: Change of nursing ward
- Z85: Cancellation of a change of nursing ward
- Z86: Change of pending nursing ward
- Z87: Cancellation of change of pending nursing ward
- Z88: Change of the conditions of the medico-administrative management
- Z89: Cancellation of change of the conditions of the medico-administrative management

ZBE-3: End Movement Date/Time

Forbidden.

765

ZBE-7: Medical Responsible Ward

This field provides the code of the ward that is medically responsible for the patient.

The required elements (when known) are:

- ZBE-7.1: The ward's display name
- 770 • ZBE-7.6: Identifier of the assignment authority that granted the responsible ward an identifier.
- ZBE-7.7: The value of this field shall be "Ward"
- ZBE-7.10: Identifier of the medically responsible ward.

775 *ZBE-8: Nursing care Responsible Ward*

This IHE France-added field provides the code of the ward that is responsible for the nursing care.

The required elements (when known) are:

- ZBE-8.1: Display name of the ward
- 780 • ZBE-8.6: Identifier of the assignment authority that granted the responsible ward an identifier.
- ZBE-8.7: The value of this field shall be "Ward"
- ZBE-8.10: Identifier of the nursing care responsible ward.

785 *ZBE-9: Nature of the movement (CWE)*

This field details the nature of the element(s) that was (were) submitted to a change of situation since the ZBE-2 movement date.

Allowed values are:

IHE Table ZBE-9 – Nature of movement

Value IHE FR	Description	Recommended display	IHE France comments
S		Change of nursing care responsibility only	
H		Change of housing responsibility only	
M		Change of medical responsibility only	
L		Change of bed only	

Value IHE FR	Description	Recommended display	IHE France comments
D		Change of medico-administrative management leaving responsibilities and location for the patient unchanged.	(ex : change of the ward's visit fee)
SM		Change both of nursing and medical responsibilities	
SH		Change both of nursing and housing responsibilities	
MH		Change both of housing and medical responsibilities	
LD		Change of bed and medico-administrative management, leaving responsibilities unchanged	
HMS		Simultaneous change of the three responsibilities	
C		Updating or change of patient's administrative status without generating any movement	

790

4.1.2.8 ZFA segment

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR
1	20	ID	RE	[0..1]		Patient's PHR status	*
2	26	TS	RE	[0..1]		Patient's PHR status collection date	*
3	26	TS	RE	[0..1]		Patient's PHR closing date	*
4	1	ID	RE	[0..1]		Valid access authorization to the patient's PHR, granted to the facility	*
5	26	TS	RE	[0..1]		Collection date of the status of the facility's access authorization to the patient's PHR	*
6	1	ID	RE	[0..1]		Opposition of the patient to the "bris de glace" mode access (see 1 st note)	*
7	1	ID	RE	[0..1]		Opposition of the patient to the "centre 15" mode access (see 2 nd note)	*
8	26	TS	RE	[0..1]		Collection date of the status of oppositions issued by the patient	*

This segment is required for the following events: A01, A04, A05 and Z99. It gives some information regarding the existence of the patient's PHR.

795

1st note: The "bris_de_glace" value allows access to information without the patient's consent, under certain conditions defined by the target system. This value must not be used except for exceptional emergency situations.

2nd note: The value "centre_15" is uniquely reserved for emergency services call and dispatch centers.

ZFA-1 Patient PHR's status (ID)

800

This field is required if known (RE). It gives details about the existence and the usability of the patient's PHR. If valued, one of these three values shall be used:

- ACTIVE: The patient's PHR exists and is not closed.
- CLOSED: The patient's PHR exists and is closed.
- NONEXISTENT: The patient's PHR doesn't exist.

805 The information is not historically recorded; the Patient Encounter Supplier Actor conveys the last known status for the patient.

ZFA-2 Patient's PHR status collection (TS)

This field is required if known (RE). It provides the patient's PHR status collection date.

810

ZFA-3 Patient's PHR closing date (TS)

This field is required if known (RE). It provides the patient's PHR closing date.

ZFA-4 Valid access authorization to the patient's PHR, granted to the organization (ID)

815 This field is required if known (RE). If valued, one of these two values shall be used:

Y: The organization has a valid access authorization

N: The organization does not have any valid access authorization for this PHR

820 *ZFA-5 Collection date of the status of the organization's access authorization to the patient's PHR (TS)*

This field is required if known (RE).

ZFA-6 Opposition of the patient to the « bris de glace » mode access (ID)

This field is required if known (RE). If valued, one of these two values shall be used:

825 Y: The patient is opposed to the “bris de glace” use of their PHR

N: The patient is not opposed to the ‘bris de glace’ use of their PHR

The “bris_de_glace” mode allows access to information without the patient's consent, under certain conditions defined by the target system. This value must not be used except for exceptional emergency situations.

830

ZFA-7 Opposition of the patient to the « centre 15 » mode access (ID)

This field is required if known (RE). If valued, one of these two values shall be used:

Y: The patient is opposed to the “centre 15” use of their PHR

- N: The patient is not opposed to the “centre 15” use of their PHR
- 835 The “centre_15” mode access is uniquely reserved for emergency services call and dispatch centers.

ZFA-8 Collection date of the status of oppositions issued by the patient (TS)

This field is required if known (RE).

840 **4.1.2.9 ZFV Segment: Additional information regarding the encounter**

The French ZFV segment is required in a hospital or clinical context in the “Patient Encounter Management” ITI-31 Transaction for the following events:

- A01 (Admit)
- A02 (Transfer)
- 845 • A03 (Discharge)
- A04 (Outpatient)
- A05 (Pre-admit)
- A14 (Pending admit)
- A21 (Temporary discharge, absence, transfer movement to another department)
- 850 • Z99, when the updated movement corresponds to one of the events above

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR
1	47	DLD	O	[0..1]		Establishment of origin and date of the last visit to this facility	*
2	250	CE	O	[0..1]		Discharge transport mode (nomenclature displayed in the 0430 table, see above, under the PV2-28 field description)	*
3	2	IS	X	[0..0]		Pre-admit type	*
4	26	TS	O	[0..1]		Placement starting date (psy)	*
5	26	TS	O	[0..1]		Placement ending date (psy)	*
6	250	XAD	O	[0..2]		Establishment of origin or destination establishment address	*
7	250	CX	O	[0..1]		Establishment of origin account number	*

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR
8	250	CX	O	[0..N]		Archive number	*
9	6	IS	O	[0..1]		Personalized discharge mode	*
10	2	IS	C	[0..1]		legal care mode RIM-P code transmitted in the PV2-3	*

ZFV-1: Establishment of origin (DLD)

855 ZFV-1.1: (IS) FINESSE code identifying the establishment of origin before the beginning of the visit: FINESSE codes nomenclature: 0113 table

ZFV-1.2: (TS) Last inpatient admit date (if known)

ZFV-2: Discharge transport mode (CE)

860 Admit (PV2-38) and discharge (ZFV-2) transport modes can be used for both normal (A03) and temporary discharges like “permission”(fr) or transfer to another facility (another legal entity).

ZFV-3: Pre-Admission type (IS)

Forbidden. The pre-admit type is supplied by the PV1-2, PV1-4 and PV1-21 elements when the event's type is “pre-admit” (A05: “Pre-admit a patient”)

865

ZFV-4: Placement starting date/time (psy) (IS)

To be provided for the placement period concerned by the message-referenced visit.

ZFV-5: Placement ending date/time (psy) (IS)

870 To be provided for the placement period concerned by the message-referenced visit.

ZFV-6: Establishment of origin or destination address (XAD)

875 This field of cardinality [0..2] may contain either the facility of origin/destination address or both addresses. Each address is identified by ZFV-6.7 component (Address Type) and shall be either “ORI” for origin or “DST” for destination.

See the complete XAD data type description in the “*IHE France constraints on common HL7 data types for ITI Profiles*” document.

ZFV-7: Establishment of origin's account number (CX)

- 880 This field may contain the establishment of origin's account number. It can be used within the scope of inter facilities services.

ZFV-9: Personalized discharge mode

- 885 This field may contain the code that corresponds to the personalized discharge mode. The “user defined” value table shall be defined according to the facility’s needs.

ZFV-10: Legal care mode code RIMP (CE)

- This conditional field shall be filled when the legal care mode is transmitted (PV2-3 field).
 890 The values in the following table shall be used, according to the official RIM-P codes documentation:

IHE Table 3302 – RIMP Code

RIM-P Code	Recommended Display
1	Free psychiatric care
3	Psychiatric care following a request by the representative of the State
4	Code of Criminal Procedure 706-135 article and Code of Public Health L. 3213-7 article for persons regarded as criminally irresponsible
5	Temporary Placement Order
6	Prisoners: Code of Criminal Procedure D.398 article
7	Psychiatric care following a request by a third party (2 certificates) Or Psychiatric care following an emergency request by a third party (1 certificate)
8	Psychiatric care for Imminent danger (1 certificate, no third party)

Since the PV2-3 field’s type is “user defined”, the editor shall make sure to check the correspondence between the PV2-3 field and the RIM-P code.

- 895 Example:

For the legal SDREP & SDREM care modes, defined as follows in the PV2-3 field:

PV2 SDREP^ Psychiatric care following a request by the representative of the State, by order of the prefect

or

- 900

PV2 SDREM^ Psychiatric care following the request by the representative of the State, by order of the mayor ,

ZFV-10 field would take the following value:

ZFV 3^Psychiatric care following a request by the representative of the State

905

4.1.2.10 ZFM segment: DRG movement

This segment allows conveying the information about the DRG.

DRGs : Diagnosis-related group (DRG) is a system to classify hospital cases into one of originally 467 groups,[1] with the 467th group being "Ungroupable". This system of classification was developed as a collaborative project by Robert B Fetter, PhD, of the Yale School of Management, and John D. Thompson, MPH, of the Yale School of Public Health.[2] The system is also referred to as "the DRGs", and its intent was to identify the "products" that a hospital provides.

The ZFM segment shall be present.

915 Note: The ZFM segment may be replaced by future HL7 developments supporting DRGs, Invoicing, etc. Until that time, the ZFM segment is used. Software should be prepared to manage a future transition from ZFM to HL7 standard segments.

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR
1	1	IS	O	[0..1]	IHE ZFM-1	PMSI admission mode	*
2	1	IS	O	[0..1]	IHE ZFM-2	PMSI discharge mode	*
3	1	IS	O	[0..1]	IHE ZFM-3-4	PMSI establishment of origin mode	*
4	1	IS	O	[0..1]	IHE ZFM-3-4	PMSI destination mode	*

The French ZFM segment is required for the following events:

- 920 • A01 (Admit)
 • A02 (Transfer)
 • A03 (Discharge)
 • A04 (Outpatient)
 • A05 (Pre-admit)
 • A14 (Pending admit)
 • A21 (Temporary discharge, absence, transfer movement to another department)
 • A22 (Return following the transfer to another department for a medical act (<48H))
 • Z80: Change of medical ward
 • Z81: Cancellation of a change of medical ward
 930 • Z82: Change of pending medical ward

- 935
- Z83: Cancellation of a change of pending medical ward
 - Z84: Change of nursing ward
 - Z85: Cancellation of a change of nursing ward
 - Z86: Change of pending nursing ward
 - Z87: Cancellation of change of pending nursing ward
 - Z99 (when the updated movement corresponds to one of the events above)

ZFM-1: DRG admit mode (IS)

Values allowed by this national extension are:

940

IHE Table 3303– DRG admit mode

Value IHE FR	Description	Recommended display	IHE France comments
0		Transfer for medical act	Temporary visit of the patient to the hospital
6		Move (Same facility)	Arrival of the patient in the ward
7		Arrival from another facility	Arrival of the patient to the hospital
8		Any other cases of arrivals	Visit from home, retirement house, public place, with or without reception to the emergency department.

ZFM-2: DRG discharge mode (IS)

The values in the following table shall be used in this field.

IHE Table 3304– DRG discharge mode

Value IHE FR	Description	Recommended display	IHE France comments
0		Transfer for medical act	Temporary discharge
4		Fugue or discharge against medical opinion	
5		Discharge test	Temporary discharge from the psychiatric facility. (1)
6		Transfer (same facility)	The patient leaves the ward
7		Transfer	
8		Leaving to home or similar	Permanent discharge
9		Death	Permanent discharge

- 945 (1) This is an obsolete value since March 2012, date on which the methodological “collecting medical psychiatric information” production guide was released. It is available at:
http://www.sante.gouv.fr/IMG/pdf/sts_20120004_0001_p000.pdf

ZFM-3: DRG origin mode (IS)

- 950 The values the following table shall be used in this field.

IHE Table 3305– DRG origin and destination modes

Value IHE FR	Description	Origin or Destination	IHE France comments
1		Acute care nursing ward (MCO) except resuscitation ward	
2		Long-term care or rehabilitation care ward	
3		Long-term care ward	
4		Psychiatric care ward	
5		Reception to the facility's emergency department	Only used for the origin mode (ZFM-3)
6		Home-based hospitalisation	
7		Medico-social housing structure	
D		Home	Empty value
R		From a resuscitation care ward	This code is used in case of the admission was made by permanent or temporary transfer (Admit mode « 0 » or « 7 » code) from a neonatal, pediatric or adult resuscitation care ward. Used in the scope of the PMSI MCO.

Allowed values are those displayed in the methodological guide “Production of summaries of DRG encounters” available at: <http://www.atih.sante.fr>

- 955 For example, a value of “1” in ZFM-3 would mean that the patient is transferring from an acute care nursing ward.

ZFM-4: DRG destination mode (IS)

See the IHE ZFM-3-4 Table – DRG origin and destination mode

- 960 Allowed values are those displayed in the methodological guide “Production of summaries of DRG encounters” available at: <http://www.atih.sante.fr>

For example, a value of “1” in ZFM-4 would mean that the patient is transferring to an acute care nursing ward.

4.1.2.11 IN1; IN2; IN3: Medical coverage

965 HL7 v2.5 chapters 3 and 6 specify the order and structure of IN1, IN2, and IN3 segments within a message. The field definitions within France are as follows.

4.1.2.11.1 Compulsory Health Insurance (CHI) coverage related to the patient's account

970 A [IN1, IN2, IN3] sequence from the “segment group INSURANCE” represents a Compulsory Healthcare Insurance (CHI) coverage period. Management information (medical management rate, third-party payer...) shall be repeated for each sequence.

The displayed data are:

Coverage information		Type[Ig] HL7	Field	Usage	Card.	Comments	Source/values
CHI Organisation	Type of payer	CE[250]	IN1-2	R	[1..1]	A CHI organization or the State Medical Assistance (SMA) or the Universal Health Cover (UHC)	« CHI », « SMA », « UHC » See 0068 table redefined by IHE France, Section 4.1.2.11.3.
	Insurance scheme + fund + paying center	CX[250]	IN1-3	R	[1..1]	Scheme succession (2), management fund (3), management center (4)	Vitale smart card or legal attestation. List is available at www.sesam-vitale.fr (Beneficiary organisations codification table)
Insured	IRN (Insurance Register Number)	CX[250]	IN1-49	RE	[0..1]	NIR	Vitale smart card or legal attestation.
	Management code read on the legal attestation or provided by Vitale card API.	IS[20]	IN1-35	RE	[0..1]	2 alphanumerical characters	Vitale card List available at www.sesam-vitale.fr (CDC 1.40-Workstation data dictionary)
	Identity	XPN[250]	IN1-16	RE	[0..1]	Last name, first name	
	Address	XAD[250]	IN1-19	RE	[0..1]		
Beneficiary	Telephones	XTN[250]	IN2-63	RE	[0..1]		

Coverage information		Type[lg] HL7	Field	Usage	Card.	Comments	Source/values
	Birth order	NM	PID-25	RE	[0..1]	« Birth order », a positive integer for a multiple birth. Otherwise it remains empty	Vitale card or legal attestation
	Beneficiary's status	CE[250]	IN1-17	R	[1..1]	2 alphanumerical characters	Vitale card or legal attestation. List available at www.sesam-vitale.fr (CDC 1.40-Workstation data dictionary)
Coverage period	Beginning	DT[8]	IN1-12	RE	[0..1]	As many [IN1, IN2, IN3] sequences as there are CHI coverage periods	
	End	DT[8]	IN1-13	RE	[0..1]		
	Exemption from co-payment	IS[3]	IN1-15	RE	[0..1]	1 alphanumerical character	B2 standard, Appendix 9
Visit coverage	CHI supporting documentation's nature	ST[2]	IN1-45	RE	[0..1]	1 alphanumerical character	B2 standard, Appendix 8
	Patient Management request	AUI[239]	IN1-14	O	[0..1]	Authorisation date of delivery (YYYYMMDD)	
	Insurance's nature	IS[2]	IN1-31	RE	[0..1]	10 (disease), 13 (Alsace-Moselle disease), 30 (Maternity), 41 (Work accident), 90 (prevention)	B2 standard (type 2-position 77-78)

Coverage information	Type[lg] HL7	Field	Usage	Card.	Comments	Source/values
Work accident number or common right accident date or pregnancy starting date or childbirth date or adoption date	ST[15]	IN1-36	C	[0..1]	If accident : Work accident (Insurance nature = 41), display the n°AT Common right accident (with insurance nature = 10 or 13), display date (YYYYMMDD) If pregnancy, childbirth or adoption (insurance nature = 30), display corresponding date (YYYYMMDD) Date will be displayed using one character: D: Beginning of the pregnancy R: Last menses date A: Childbirth date O: adoption	
Care pathway situation		PV2-7	RE	[0..1]	See PV2 segment in French extension	B2 standard, Appendix 25 These values are similar for each segment recurrence
Third-party payer (Y/N)	IS[2]	IN1-20	RE	[0..1]	Y / N (= refund the insured)	B2 standard, Appendix 25 These values are similar for each segment recurrence

Coverage information		Type[lg] HL7	Field	Usage	Card.	Comments	Source/values
	Patient Medical Management rate	MOP[23]	IN3-5	RE	[0..1]		B2 standard, Appendix 25 The information can be disaggregated into three subfields. Here, IN3-5.1 must equal 'PB' which means « percentage of the base of reimbursement (see the 0146 table in Section 4.1.2.11.3). IN3-5.2 contains the percentage (example 60).

975 **4.1.2.11.2 Complementary private health insurance (CPHI) or Complementary Medical Assistance (CMA), or Universal Complementary Health (UCH) coverage related to the patient's account**

980 A [IN1, IN2, IN3] sequence following the CHI coverage represents either a Complementary Private Health Insurance (CPHI), or a Universal Complementary Health Coverage (UCHC), or a Complementary Medical Assistance coverage (CMAC). There might be several complementary organizations that share the patient's management. For each one of them, only one Entitlement period is transmitted: the one that is likely to be applied to the visit. Hence, a complementary organization is represented by only one [IN1, IN2, IN3] sequence.

Coverage information		Type[lg] HL7	Field	Usage	Card.	Comments	Source/values
CPHI Organization	Type of payer	CE[250]	IN1-2	R	[1..1]	CPHI or UCHC complementary organization or CMA coverage	« CPHI », « UCHC », « CMA » See 0068 table defined by IHE France, in Section 4.1.2.11.3
	Complementary organization number	CX[250]	IN1-3	R	[1..1]	« CPHI », « UCHC » or « CMA » number	Entitlement support (card or entitlement attestation)
Insured	Member identifier	CX[250]	IN1-49	RE	[0..1]	CPHI member	Entitlement support (card or entitlement attestation)
	Identity	XPN[250]	IN1-16	RE	[0..1]	Last name, first name	
	Address	XAD[250]	IN1-19	RE	[0..1]		

Coverage information		Type[lg] HL7	Field	Usage	Card.	Comments	Source/values
	Telephones	XTN[250]	IN2-63	RE	[0..1]		
Beneficiary	Beneficiary's status	CE[250]	IN1-17	R	[1..1]	2 alphanumerical characters	Vitale card or entitlement attestation. List available at www.sesam-vitale.fr (CDC 1.40-Workstation data dictionary)
CPHI entitlement period						A single period per complementary organization: The one that applies to this visit.	
	Beginning	DT[8]	IN1-12	RE	[0..1]		
	End	DT[8]	IN1-13	RE	[0..1]		
Visit coverage	Nature of the CPHI supporting documentation	ST[2]	IN1-45	RE	[0..1]	1 numerical character	B2 standard, Appendix 8
	Type of contract	IS[2]	IN1-31	RE	[0..1]	85 (UCHC outgoing members managed by CHI) 87(UCHC outgoing members managed by CPHI) 88 (support for mutualizing funds outgoing members), 89 (current UCHC beneficiary) 01 (CMA) 02 (Complementary CMA)	Provided by the fund (entitlement document)

Coverage information		Type[lg] HL7	Field	Usage	Card.	Comments	Source/values
	Patient Medical Management rate	MOP[23]	IN3-5	RE	[0..1]		This information can be disaggregated into three subfields. Here, IN3-5.1 displays the nature of the rate, using a value allowed by the 0146 table (see 0146 Table in Section 4.1.2.11.3). IN3-5.2 contains the percentage (example 100)
	Managed services	RMC[82]	IN2-28	O	[0..*]	IN2-28.1 : « DR » = Daily rate « PRI » = Private room IN2-28.2 : « Y » = Covered « N » = no « L » = limited	
	Third-party payer (Yes/No)	IS[2]	IN1-20	RE	[0..1]	Y / N (= refund the insured)	

985

4.1.2.11.3 Other payer

The ITI-31 Transaction messages can transmit information regarding several other payers: the patient, the insured, the employer, an external facility, a county...

A [IN1, IN2] sequence represents such a payer

990

Coverage information		Type[lg] HL7	Field	Usage	Card.	Comments	Source/values
	Type of payer	CE[250]	IN1-2	R	[1..1]	Patient Insured External Facility Employer County	PAT, INS, EMP, EXTF, COU: 0068 table defined by IHE France, see below in this section.
	Name or corporate name	XPN[250]	IN1-16	RE	[0..1]		
	First name	XPN[250]	IN1-16	RE	[0..1]		

Coverage information		Type[lg] HL7	Field	Usage	Card.	Comments	Source/values
	Addresses	XAD[250]	IN1-19	RE	[0..1]		
	Telephone s	XTN[250]	IN2-63	RE	[0..1]		
Entitlement period	Beginning	DT[8]	IN1-12	RE	[0..1]		
	End	DT[8]	IN1-13	RE	[0..1]		
Visit coverage	Nature of the supporting document	ST[2]	IN1-45	RE	[0..1]	1 numerical character	

Values that shall be used for the IN1-2 field are displayed in the 0068 “user defined” table (HL7) and defined by IHE France:

Table User-defined 0068: Guarantor Type

IHE FR value	English value	French display	Comments
AMO	CHI	Compulsory Health Insurance	Introduces a [IN1, IN2, IN3] sequence that represents a coverage period by the compulsory health insurance organisation that covers the visit.
CMU	UCHC	CMU caisse	Introduces a [IN1, IN2, IN3] sequence that represents a coverage period of the visit by a Couverture Maladie Universelle caisse
AME	SMA	State Medical Assistance	Introduces a [IN1, IN2, IN3] sequence that represents a coverage period by a State medical assistance
AMC	CPHI	Complementary Private Health Insurance	Introduces a [IN1, IN2, IN3] sequence that represents a complementary private health insurance that covers the visit.
CMUC	UCHC	Universal Complementary Health Cover	Introduces a [IN1, IN2, IN3] sequence that represents a universal complementary health cover that manages the visit
AMEC	CSMA	Complementary State Medical Assistance	Introduces a [IN1, IN2, IN3] sequence that represents a complementary state medical assistance that covers the visit
PAT	PAT	Patient	Introduces a [IN1, IN2] sequence that provides detailed information about the patient as a payer

IHE FR value	English value	French display	Comments
ASS	INS	Insured	In a [IN1, IN2] sequence providing details about the insured as a payer
EMP	EMP	Employer	In a [IN1, IN2] sequence providing details about the employer as a payer
ETB	EXTF	External facility	In a [IN1, IN2] sequence providing details about external facility as a payer
DEP	COU	County	In a [IN1, IN2] sequence providing details about the county as a payer

995

Values that shall be used for the IN3-5.1 component are displayed in HL7 standard's 0146 table:

Table User defined 0146: User amount type

IN3-5.1 IHE FR values	Implicit meaning	Comments
AT	Absolute amount	Amount, in absolute terms. The currency used is notified in the IN3-5.3 subfield (For instance « EUR » for a euro amount). The amount is provided in the IN3-5.2 subfield
PB	Percentage of the base of reimbursement	A usable value for both a compulsory and a complementary coverage. The IN3-5.2 subfield contains a percentage of the base of reimbursement. (ex: 60 means « 60 % of the base of reimbursement »)
PT	Exemption from co-payment percentage	Usable value for a complementary coverage: The IN3-5.2 subfield contains an exemption from co-payment percentage (ex: 100 means « 100% of the ticket modérateur »)
PF	Real costs percentage	Usable value for a complementary coverage: The IN3-5.2 subfield contains a real costs percentage (ex: 90 means « 90% of real costs »)
PC	Non specified percentage	The IN3-5.2 subfield contains a percentage of which the reference amount is not specified.

4.1.2.12 OBX segment

- 1000 The OBX segment is used to transmit medical observations related to the patient. The following requirements apply when used in ITI-30 or ITI-31 transactions.

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR	
OBX-1	4	SI	R	[1..1]		Set ID - OBX		
OBX-2	2	ID	R	[1..1]	00125	Observation type		
OBX-3	250	CE	R	[1..1]		Observation identifier	*	
OBX-5	unlimited	varies	C	[1..1]		Observation value		
OBX-6	250	CE	C	[0..1]		Unit		
OBX-11	1	ID	R	[1..1]	00085	Observation status	*	User table completed
OBX-14	26	TS	RE	[0..1]		Observation date/time		
OBX-16	250	XCN	R	[1..1]		Data enterer		

1005

OBX-3: Observation Identifier, Required

The OBX-3 identifier shall be chosen from ASIP's Interoperability Framework when a suitable identifier is available. When a suitable identifier is not defined it shall be chosen from the LOINC nomenclature. The following table shows a few values:

1010

Value	French display	Unit (UCUM)	Terminology
3142-7	Body weight [Mass] Patient ; Numeric ; Declared	kg or g	LOINC
8335-2	Body weight [Mass] Patient ; Numeric ; Estimated result	kg or g	LOINC
3141-9	Body weight [Mass] Patient ; Numeric ; Measured result	kg or g	LOINC
3137-7	Patient's height [length]; Numeric ; Measured result	cm	LOINC
8301-4	Patient's height [length]; Numeric ; Estimated result	cm	LOINC

OBX-6: Unit, Conditional

This field shall be filled if the observation type is “NM” (Numeric) or “SN” (Structured Numeric) and if the observation is measured. The units' list shall be based on UCUM (The Unified Code for Units of Measure, <http://www.unitsofmeasure.org/>).

Example UCUM units

Value	English display	French display	Terminology
g	Gram	Gramme	UnitsOfMeasureCaseSensitive
kg	Kilogram	Kilogramme	UnitsOfMeasureCaseSensitive

Value	English display	French display	Terminology
m	Meter	Mètre	UnitsOfMeasureCaseSensitive
cm	Centimeter	Centimètre	UnitsOfMeasureCaseSensitive

OBX-11: Observation status

1020 This field shall contain the observation status. The table below lists values that are usable in the scope of French extensions.

Value	Description	Comments
R	Filled but unvalidated observation	This status shall be used as long as the conveyed observation has been unsafe and has not been validated by the medical staff.
F	Filled and validated observation.	This status shall be used as long as the conveyed observation has been validated by the medical staff.
D	Deletes the observation conveyed in the OBX segment.	This status shall be used when the observation conveyed by the Patient Demographics Supplier and Patient Encounter Source Actors is wrong and must be deleted. This observation shall never be displayed or used by the receiving systems.

OBX-11: Observation date/time

1025 This field is required if available among the “Patient Demographics Supplier” and “Patient Encounter Supplier” Actors, which initiate the observation transmission. Observation date & time must be as close as possible to the corresponding measured results. For instance, if the patient’s weight is entered when admitting, the observation date/time will be the one asked the patient, not the entered one.

1030 OBX-16: Observation manager

This field is required. It contains the identity of the person that entered or changed the observation status. For instance, if the patient’s weight is entered at the admission desk, it is conveyed with an “R” status and the observation manager is the enterer. If the patient is weighed within the department, their weight will be conveyed with an “F” status and the observation manager is the medical staff conducting the weighting.

1040

4.1.3 Requirements on PAM Profile

4.1.3.1 Minimal common data model

The figure below shows an assumption of the minimal data model established by the PAM Profile in its French extension. The HL7 v2.5 segments or parts of segments that carry this item are highlighted in blue.

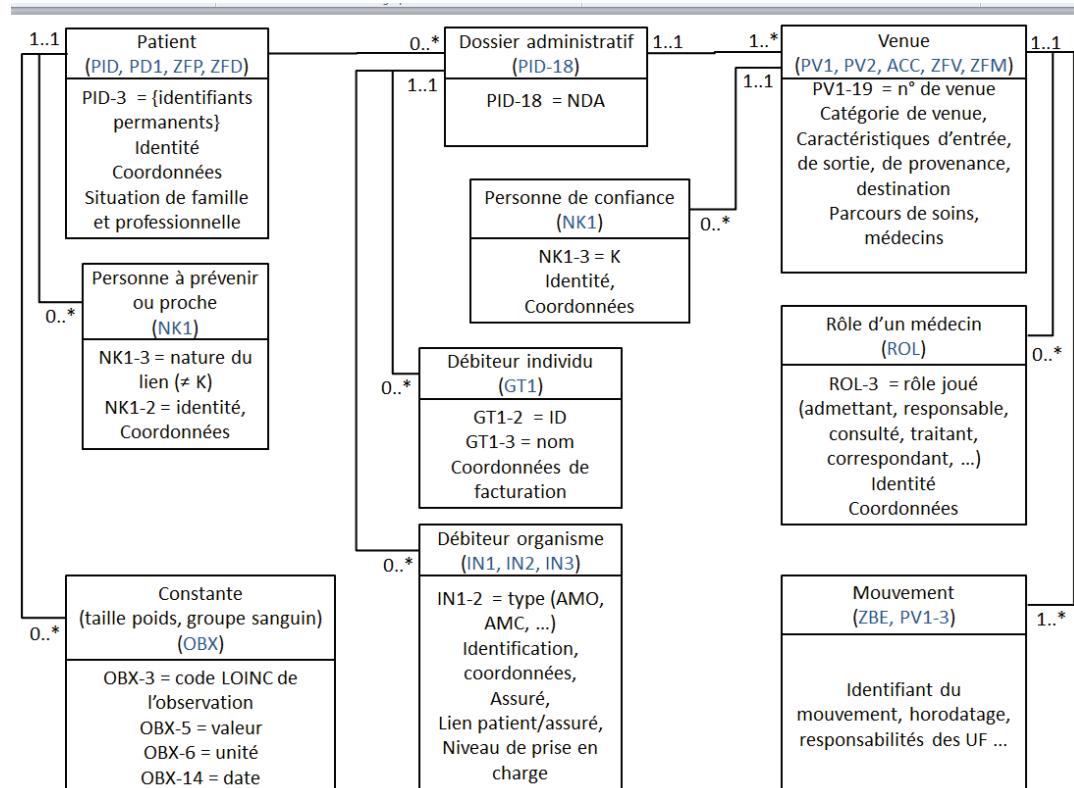


Figure 4.1.3.1-1: PAM French Extension Data Model

1045

1st note: many systems have a 1-by-1 correspondence between visit and patient account. Other systems may need to bring together several visits in a single patient account. That doesn't affect the charging process that can bundle or not visits on a single invoice, or by contrast divides a visit into several intermediary invoices. A system that merely manages an identifier, common to the visit and the patient account, will provide this identifier both in the PV1-19 and in the PID-18.

1050

2nd note – reminder: a movement is a time and date stamped event that sets a change in the patient's situation: a change in the functional unit's responsibility, of bed, of medico-price discipline and so on. The sequence of movements that make up a visit defines a sequence of take-over situations periods (see Section 5.1.4 below).

4.1.3.1.1 The Functional Unit (FU) or Ward

1055

ITI-31 “Encounter Management” transaction’s French extension is based on using features from the functional unit (FU) that is responsible for the patient’s care into the healthcare facility. In the United States however, responsibility for the patient is very often related to the attending doctor, in France responsibility is related to the functional unit (ward).

According to the Technical Agency for Hospital computerization (ATIH), which refers to the issue 83/8 bis of “Le Bulletin Officiel”, the functional unit is the smallest one that fits management constraints, that has a simultaneous homogeneous medical activity on the following axes:

- Geographical,
- Responsibility (medical/care)
- And for a certain kind of activity (ex: inpatient hospitalization/hospitalization day-care).

Thus, the functional unit allows deducing the various natures of patient management as well as the different kinds of hospitalization the patient may require in the healthcare facility.

A patient may be under the responsibility of several functional units (up to three), which are medical ward, nursing ward and housing ward responsibilities: for instance the patient may be located in a housing ward different from the medical ward responsible of his treatment.

Fee conditions for the patient’s hospital stay or visit, which are generally tightly related to the medical ward in charge of the patient, may be subject to a specific scale taking into account particular medical treatments or accommodation policies. These specific features lead us to distinguish between general fee conditions of the care unit medically in charge of the patient from fee conditions that are actually applicable to the patient’s stay within this unit.

4.1.3.1.2 The concept of patient account (informative)

1075 The patient account records each and every medical act, product or attention dispensed to the patient in a specific visit in order to allow charging process.

A patient account can span more than one enterprise visit.

In the ITI-31 Transaction messages, the PID-18 field represents the account number.

4.1.3.1.3 The concept of visit/encounter

1080 The word of “venue” in French transposes, for the French healthcare facilities, the notions of “visit” and “encounter” managed by the HL7 standards.

In the ITI-31 Transaction messages, the PV1-19 field represents the “visit number”.

1085 A visit is defined as an inpatient or outpatient encounter in the healthcare enterprise. The visit number identifies the time period during which the patient is taken care of by the enterprise and physically present in the enterprise (outpatient encounter, inpatient encounter, or its extensions such as home care, placement in a hosting family...). However, short absences of the patient may happen during this time period. These temporary absences, dealt with by trigger events such as “Leave of absence” (A21, A22, A51, A52...), do not terminate the visit.

1090 The visit is related to a patient account assigned to any acts, products and services delivered to the patient in the context of this visit.

For inpatients, a visit can span more than one movement.

4.1.3.1.4 The concept of movement

This extension uses the IHE international definition of the “movement” as it appears in ITI TF-2b:3.31.4.

- 1095 A movement is an event describing a change of the situation of the patient in the context of the encounter. This concept encompasses changes such as transfers of patient location, change of patient class, new attending doctor, new consulting doctor, new encounter starting, encounter closing, etc. The concept of Movement is a superset of the HL7 concept of “Transfer”.

4.1.3.2 Actor Requirements for PAM

1100

Table 4.1.3.2-1: PAM Profile - Actors and Options

Actors	Option	Optionality		Reference
		Intl	French	
Patient Demographics Supplier	Merge	O	R	ITI TF-2b:3.30.4.1
	Link/Unlink	O	O	ITI TF-2b:3.30.4.2
	Acknowledgement Support	O	O	ITI TF-2b: 3.30.4.4
	Ambulatory Patient Data	O	O	ITI TF-2b: 3.30.4.5
Patient Demographics Consumer	Merge	O	R	ITI TF-2b:3.30.4.1
	Link/Unlink	O	O	ITI TF-2b:3.30.4.2
	Acknowledgement Support	O	O	ITI TF-2b: 3.30.4.4
Patient Encounter Supplier	Inpatient / Outpatient Encounter Management	O	R	ITI TF-2b: 3.31.5.2
	Pending Event Management	O	O	ITI TF-2b:3.31.5.3
	Advanced Encounter Management	O	R	ITI TF-2b:3.31.5.4
	Temporary Patient Transfer Tracking	O	O	ITI TF-2b:3.31.5.5
	Historic Movement	O	R	ITI TF-2b:3.31.5.6 ITI TF-4: something in national extension for ZBE segment
	Acknowledgement Support	O	O	ITI TF-2b: 3.31.5.7
	Maintain Demographics	O	O	ITI TF-1:14.3.9 ITI TF-2b:3.31.5.8
	Ambulatory Patient Data	O	O	ITI TF-2b: 3.31.5.8
Patient Encounter Consumer	Inpatient / Outpatient Encounter Management	O	R	ITI TF-2b: 3.31.5.2
	Pending Event Management	O	O	ITI TF-2b:3.31.5.3
	Advanced Encounter Management	O	R	ITI TF-2b:3.31.5.4
	Temporary Patient Transfer Tracking	O	O	ITI TF-2b:3.31.5.5

Actors	Option	Optionality		Reference
		Intl	French	
	Historic Movement	O	R	ITI TF-2b:3.31.5.6 ITI TF-4: something in national extension for ZBE segment
	Acknowledgement Support	O	O	ITI TF-2b: 3.31.5.7
	Maintain Demographics	O	O	ITI TF-1:14.3.9 ITI TF-2b:3.31.5.8

In France, the 3 required options are:

- “Inpatient / Outpatient Encounter Management”: this option extends the management basis function subset adding the concepts of pre-admission, patient transfer, and change of status (outpatient vs. inpatient)
- “Advanced Encounter Management”: this option adds the management of patient’s leave of absence, of the doctor medically in charge of the patient and changes in their account file.
- “Historic Movement”: this option introduces a specific ZBE segment that enables to identify any kind of movement and thereafter to update it using the Z99 event. Such an option allows both the current movement (the last one known regarding the admission) and an historic movement (a previous one) to be updated. However, it doesn’t permit the insertion or the cancellation of an historic movement.

4.1.3.3 Transaction Specific Requirements

4.1.3.3.1 Movement management rules applicable in France

4.1.3.3.1.1 The concept of movement

The international definition of “movement” appears in ITI TF-2b:3.31.4. A movement is an event describing a change of the situation of the patient in the context of the encounter. This concept encompasses changes such as transfers of patient location, change of patient class, new attending doctor, new consulting doctor, new encounter starting, encounter closing, etc. The concept of Movement is a superset of the HL7 concept of “Transfer”.

In France, the following real world movements shall be trigger events for ITI-31 transactions. (to be taken into account for every system that implements the “Patient Encounter Supplier” Actor):

- The pre-admission
- The admission to the hospital (the beginning of a visit),
- The change of assigned ward’s responsibility:
 - Change of the functional unit housing responsibility,

- Change of the functional unit medical responsibility,
 - Change of the functional unit nursing responsibility,
- 1130 • The temporary absence (that interrupts certain responsibilities),
- The return from an absence,
 - The permanent discharge from the hospital (end of the visit that, besides, puts an end to all responsibilities),
 - A change of status: from outpatient or emergency to inpatient,
- 1135 • A change of status: from inpatient to emergency or outpatient.

The following events, for their part, may trigger a movement (i.e., it remains the choice of the system that implements the “Patient Encounter Supplier” Actor):

- The change of bed or a bed assignment to a patient (A02). Reminder: the Z99 event carries out the updating. Using an A02 can notify the assignment of a bed to a patient, especially when a delay is observed between the patient’s admission and the first assignment of the bed. However, the Z99 message shall be used in case the end-user
- Wants to add or update this information. In other words, if the assignment of the bed is carried out at admission time, use the Z99 message to add or update the information.
- The change of the patient management healthcare administration conditions (healthcare specialty cost, involuntary hospitalization, and hospitalization requested by a third party...)
- The patient temporarily leaves the facility (>48h) to be transferred to another department (A21) in another facility to carry out a surgical act or a medical examination.
- The return following a transfer to another department (A22).

1150 Each movement is the beginning of a period of time during which the patient’s situation is stable in terms of responsibilities and of patient management. The very next movement marks the end of this period, and starts a new one.

1155 The first movement of a visit is the admission; the last one is the discharge. The sequence of the different movements that have arisen over the visit divides this visit into a sequence of contiguous stable periods to which acts performed on the patient will be reported.

4.1.3.3.1.2 Granularity of messages that describe a movement

1160 The Patient Encounter Supplier Actor generates messages with granularity that fits its application’s transactional logic. When several events occur at the same time (e.g., simultaneous change in the 3 FU responsibilities), they constitute a unique movement, starting point of a new period of responsibilities allocation. The Patient Encounter Supplier Actor can notify of this movement (identified in the ZBE segment) either with a unique message that changes the three responsibilities or with several messages where each one of them states one responsibility change. In any case, the movement identifier remains unique.

4.1.3.3.1.3 Trigger events associated with movement

- 1165 The following events that are optional in IHE Intl shall be supported, because historic movement management is required. The update event shall be supported by using the Z99 defined in ITI TF-2b: 3.31.7.30.

Category	insert	cancel	update
Pre-admit patient (Patient Class = I)	A05	A38	Z99
Admit inpatient (Patient Class = I)	A01	A11	Z99
Pending admission (Patient Class = I)	A14	A27	Z99
Register outpatient (Patient Class = O or E)	A04	A11	Z99
Change patient class (outpatient or emergency) to inpatient (Patient Class : O to I or E to I)	A06	A07	Z99
Change patient class to outpatient (Patient Class : I to O or E to O)	A07	A06	Z99
Change of responsible doctor (Attending Doctor)	A54	A55	Z99
Transfer: Change of housing ward (location FU)	A02	A12	Z99
Pending transfer	A15	A26	Z99
Permanent discharge (end of inpatient encounter, outpatient encounter, emergency encounter, etc.)	A03	A13	Z99
Pending discharge	A16	A25	Z99
Leave of absence (permission) and transfer to another department for a medical act (<48H)	A21	A52	Z99
Return from leave of absence (permission) and return following the transfer to another department for a medical act (<48H)	A22	A53	Z99

- 1170 Z80 to Z89 events are specific to this French extension.

Category	insert	cancel	update
Change of the medical FU (medical ward)	Z80	Z81	Z99
Change of nursing FU (nursing ward)	Z84	Z85	Z99
Change of medico-administrative conditions	Z88	Z89	Z99

When the Pending Event Management Option is supported, the historical movement events in the following table shall be supported:

- 1175

Category	insert	cancel	update
Pending change of the medical FU	Z82	Z83	Z99
Pending change of nursing FU	Z86	Z87	Z99

4.1.3.3.1.4 Requirements

- For IHE France, the unit responsible for the housing of the inpatient (or his/her hosting if he/she is an outpatient) is represented by the first component of the PV1-3 field.
- The ZBE-7 field represents the unit medically in charge of the patient.
- The ZBE-8 field represents the unit responsible for the patient's nursing care (if such a unit is different from the one medically in charge of the patient).

1180

The functional units are required for the following ITI-31 Transaction triggering events:

Trigger events	Required FU
A01, A04, A11, A03, A13, A05, A38, A02, A12, A14, A27, A15, A26, A16, A25, , A21, A22, A06, A07	Housing ward (in PV1-3)
Z80, Z81, Z82, Z83	Medical ward (in ZBE-7)
Z84, Z85, Z86, Z87	Nursing ward (in ZBE-8)
Z99	Housing &/or Medical &/or Nursing, depending on ZBE-9 value

1185

ITI-31 Transaction messages merely carry the functional unit's code. Applications that implement ITI-31 Transaction are assumed to be aware of the main features of the functional unit, which are:

1190

- Its display name,
- The kind of activity (inpatient, partial, emergency, outpatient or recurring hospitalization),
- The kind of functional unit (medical: [dedicated to the outpatient stays/inpatient stays, combined] or not medical),
- A simplified classification into FU categories (obstetric, short stay, follow-up care, long stay, psychiatrics...),
- A further-detailed FU classification into medical price disciplines,
- Dates of effect, as functional units will be opened and closed.

1195

4.1.3.3.2 ITI-30 Extensions

The French National Extensions does not modify ITI-30 for identity creation/update/cancellation/merge messages.

1200

In hospital information systems where several systems can create and assign an identifier for the patient, IHE-FRANCE recommends using separate ranges of identifier values for the patients (PID-3) within the same identification domain (identified by the assigning authority).

This recommendation allows avoiding using temporary identifiers. Indeed, the patient's identifiers must remain unchanged due to their public nature.

1205 Use case: An EHR application directly admits the patient and creates the patient account number, which will be provided to the administrative application (Administrative Management of Patients).

File number and sequences must be established and assigned by the healthcare facility to the various identity producers and consumers systems. The receiver, in that case the administrative application, integrates these identifiers in its system without modification and conveys them to the HIS applications that subscribed to the administrative application.

In any case, IIHE-FRANCE recommends that there should be a one and only identities and movements source that feeds the rest of the hospital information system applications, according to the P1.1 pre-established rules from the French governmental Digital Hospital Program.

1215 • A40 “Merge Patient Identifier List”: the merge of two patients is achieved by the A40 event, but in the scope of the ITI-30 transaction, not in the scope of the ITI-31 transaction. This merge is merely about patient account, and doesn't address the merge of two visits.

4.1.3.3.3 ITI-31 Extensions

1220 **4.1.3.3.3.1 Trigger Event Extensions**

The French extension excludes the following events from the IT-31 transaction:

- 1225
- A08 “Update patient information”: the updating of demographic information is only carried out by A31 event of the ITI-30 transaction. The updating of information related to the patient account, the visit or the movement shall exclusively be implemented thanks to the Z99 event of the ITI-31 transaction.
 - A40 “Merge Patient Identifier List”: the merge of two patients is achieved by the A40 event, but in the scope of the ITI-30 transaction, not in the scope of the ITI-31 transaction. This merge is merely about patient account, and doesn't address the merge of two visits.

1230 The French extension adds Z80 and Z89 specific events (which use ADT_A01 structure) in order to manage functional unit's responsibilities (ward's responsibilities) changes related to a patient.

The ITI-31 transaction is extended in the French National Extensions. A new class of event, “rectified” is defined and two new real world events “Change medical ward” and “Change nursing ward” are added. The rectified column is added because this information is mandatory according to French regulation.

1235 Here follows the exhaustive list of French required events to be fulfilled by the two actors of the ITI-31 transaction:

This is summarized in Table 4.1.3.3.3.1-1.

1240

Table 4.1.3.3.3.1-1: List of French required events in France

Real world Event	notified	cancelled	rectified
Admit inpatient	A01		
Register outpatient	A04	A11	Z99
Discharge patient : sortie	A03	A13	Z99
Pre-admit patient : pré-admission	A05	A38	Z99
Change patient class to inpatient : externe devient hospitalisé	A06	A07	Z99
Change patient class to outpatient : hospitalisé devient externe	A07	A06	Z99
Transfer patient : mutation	A02	A12	Z99
Change attending doctor : changement médecin responsable	A54	A55	Z99
Leave of absence : absence provisoire (permission) et mouvement de transfert vers plateau technique pour acte (<48H)	A21	A52	Z99
Return from leave of absence : retour d'absence provisoire (permission) et mouvement de retour suite à transfert vers plateau technique pour acte (<48H)	A22	A53	Z99
Move account information (réattribution de dossier administratif	A44		
Fr : Change medical ward	Z80	Z81	Z99
Fr : Change nursing ward	Z84	Z85	Z99

1st note: Z82 and Z83 events, which respectively notify and cancel a pending medical functional unit change are required only for an actor that supports the “Pending Event Management” Option. Ditto for the Z86 and Z87 events that respectively notify and cancel a pending functional care unit change. This “Pending Event Management” Option remains optional in France, that's why those 4 events are not displayed in the table above.

1245

2nd note: Z88 and Z89 events, which respectively notify and cancel a change in the conditions for the medico-administrative take-over, remain optional. (cf. Section 5.1.4).

4.1.3.3.2 ITI-31 French specific segments

In addition to the ZBE segment (Movement) defined by the international Patient Administration Management Profile, the French extension adds five other segments:

- ZFA: Patient's PHR status
- ZFP: Professional occupation/Work situation
- ZFV: Additional information about the visit
- ZFM: DRGP (Diagnosis Related Group Program) movement

1255

The location of the local segments in the message structure is **in bold text** in Table 4.1.3.3.3.2-1:

Table 4.1.3.3.3.2-1: French Specific Segments

Segment	Meaning	Usage	Card.	IHE France remarks
MSH	Message Header	R	[1..1]	
EVN	Event Type	R	[1..1]	
PID	Patient Identification	R	[1..1]	
PD1	Additional Demographics	O	[0..1]	

Segment	Meaning	Usage	Card.	IHE France remarks
ROL	Role	O	[0..*]	Used to define the officially declared referring physician
NK1	Next of Kin / Associated Parties	O	[0..*]	
PV1	Patient Visit	R	[1..1]	
PV2	Patient Visit – Additional Info	O	[0..1]	
ZBE	Movement segment	C	[1..1]	Highlights FU's movement & responsibilities
ZFA	PHR status	RE	[0..1]	Patient's PHR status
ZFP	Professional occupation	RE	[0..1]	Occupation & socio-professional category
ZFV	Additional information about the visit	RE	[0..1]	Origine Institution, period of admission, transport of discharge
ZFM	DRPG⁴ Movement	RE	[0..1]	DRPG modes: admission, discharge, origin, destination
ROL	Role	O	[0..*]	Used to define other physicians that interact with the patient, especially the substitute and the referred to provider doctors
DB1	Disability Information	O	[0..*]	
OBX	Observation/Result	O	[0..*]	
AL1	Allergy Information	O	[0..*]	
DG1	Diagnosis Information	O	[0..*]	
DRG	Diagnosis Related Group	O	[0..1]	
---	--- PROCEDURE begin	O	[0..*]	
PR1	Procedures	R	[1..1]	
ROL	Role	O	[0..*]	
---	--- PROCEDURE end			
GT1	Guarantor	O	[0..*]	
---	--- INSURANCE begin	O	[0..*]	
IN1	Insurance	R	[1..1]	
IN2	Insurance Additional Info.	O	[0..1]	
IN3	Insurance Additional Info - Cert.	O	[0..1]	
ROL	Role	O	[0..*]	
---	--- INSURANCE end			
ACC	Accident Information	O	[0..1]	
UB1	Universal Bill Information	O	[0..1]	
UB2	Universal Bill 92 Information	O	[0..1]	
PDA	Patient Death and Autopsy	O	[0..1]	

⁴ DRGs: **Diagnosis-related group (DRG)** is a system to classify hospital cases into one of originally 467 groups,[1] with the 467th group being "Ungroupable". This system of classification was developed as a collaborative project by Robert B Fetter, PhD, of the Yale School of Management, and John D. Thompson, MPH, of the Yale School of Public Health.[2] The system is also referred to as "the DRGs", and its intent was to identify the "products" that a hospital provides.

4.1.3.3.3 Historic Movement Management (from intl)

This option adds the capability to cancel or update safely any Movement.

1260 The Movement updated can be the current Movement (currently active or pending) or a Movement in the past (i.e., historic Movement).

The Movement canceled can only be the current Movement (currently active or pending).

1265 This capability is supported by the addition of segment ZBE below PV1/PV2. With this option, this ZBE segment is required at this position in the messages associated with the following trigger events: A01, A02, A03, A04, A05, A06, A07, A11, A12, A13, A14, A15, A16, A21, A22, A25, A26, A27, A38, A52, A53, A54, A55, Z99. In the following sections the ZBE segment is only shown in the message associated with trigger Z99 which is dedicated to the Historic Movement Management Option. In the other messages, this segment will appear whenever this option is active.

This segment ZBE brings the following features:

- 1270
- It enables unique identification of the Movement (including admission and discharge).
 - It carries an action code that describes the action to be performed on this Movement: The three possible actions are:
 - **INSERT:** The receiver must interpret the content of this message as a new Movement.
 - **CANCEL:** This action code is always associated with a “cancel” trigger event. The receiver shall delete the corresponding Movement (matched with its unique identifier). Only the current Movement can be cancelled.
 - **UPDATE:** This action code is associated with the dedicated trigger event Z99 described in ITI TF-2b: 3.31.7.30. The receiver shall update the corresponding Movement (matched with its unique identifier), which can be the current Movement or a historic Movement.
 - In the case of UPDATE or CANCEL, the ZBE segment carries the code of the original trigger event that was associated with the action INSERT of the related Movement.
 - It carries an indicator “Historic Movement” informing whether the action to perform is about the current Movement or a Historic one.
 - It provides the starting date/time of the “sub-encounter” that this Movement initiates.
 - It carries the ward to which this patient is assigned during this sub-encounter.
- 1275
- 1280
- 1285

This option may apply to any combination of the previous subsets, except Temporary Patient Transfers Tracking (Temporary Patient Transfers do not need to be uniquely identified).

1290 Implementation note: The Patient Encounter Consumer must support transaction log update to maintain integrity of the Movement records.

4.1.3.3.3.4 Details regarding the account/visit/movement identifiers

4.1.3.3.3.4.1 Re-use of the account/visit/movement identifiers

Identifiers (account, visit, movement) are expected to be unique. If an IHE Actor creates an identifier, it shall be unique.
1295

Upon visit cancellation (A01/A11), the visit and account number (respectively PV1-19 and PID-18) shall not be re-used.

4.1.3.3.3.4.2 Account/Visit/Movement id management in a complex environment

An account identifier shall be transmitted in the PID-18 field (CX-type field). The fourth component shall specify the identification domain.
1300

The visit identifier shall be transmitted in the PV1-19 field (CX-type field). The fourth component shall specify the identification domain.

The movement identifier shall be transmitted in the ZBE-1 field with an EI-type field (repeatable field). The identification domain shall be transmitted in components 2, or components 3 and 4, or components 2, 3, and 4.
1305

IHE-FRANCE recommends that there should be one and only one determined identification domain for all the identifiers linked to accounts to feed the whole set of HIS applications, according to the P1.1 prerequisite from the governmental French Digital Hospital Programme.

The identification domain allows defining separate ranges of identifiers that may be used by the different HIS applications that are likely to create the identifiers linked to the account. The whole set of identifiers created under the supervision of the identification domain constitute the unique visit and movement identifiers referential stated in the Digital Hospital Programme.
1310

In a complex environment in which several systems cooperate, there are several ways to manage visit and movement identifiers:

- 1315
- Either using separate identifiers ranges, assigned by the identification domain common to the whole facility. Each system likely to create those identifiers uses an identification range.
 - Or using the combination identification domain/identifier. In this case, each system likely to create those identifiers owns its identification domain.

1320 The composition of the identifiers and the identification domains shall be determined and assigned by the facility to all the producer and consumer systems of visits and movements.

Transmitting the movement and visit identifiers list is not necessary. The visit or movement originator software can assign any identifier in its identification domain. Then the combination identification domain/identifier becomes the visit (PV1-19) or movement (ZBE-1) identification reference. This reference identifier is then sent to every information exchange; it's up to the different systems to manage identifiers correspondence tables.
1325

5 National Extensions for IHE Germany

1330 The national extensions documented in this section shall be used in conjunction with the definitions of integration profiles, actors and transactions provided in Volumes 1-3 of the IHE Technical Framework. This section includes extensions and restrictions to effectively support the regional practice of healthcare in Germany.

This national extension was authored under the sponsorship and supervision of IHE Germany and the IT Infrastructure Technical Committee. Comments should be directed to:

1335 http://www.ihe.net/ITI_Public_Comments and ihe-d-pam-abgleich@googlegroups.com

5.1 Referenced Standards

German HL7 Edition 2.5, German HL7 Chapter (HL7-Benutzergruppe in Deutschland e. V.),
<http://www.hl7.de/>

1340 German National Message Profiles 2003 (Rel.1) to 2004 (Rel.2.1),
http://www.hl7.de/download/documents/Profile_2.1.zip

5.2 HL7 v2 Conventions for Message Profiles

Implementations of ITI-30 and ITI-31 Profiles that also claim support of the German National Extension shall conform to the requirements in this section and the information provided by the links.

1345 **5.2.1 HL7: Support for Character Sets**

All actors with HL7 transactions shall support the value “8859/1” and “8859/15” for the field H/18 in the MSH segment.

5.2.2 Naming Conventions for Profiles

1350 The term “profile” is used as defined by IHE and references “integration profiles” as specified by the different IHE Technical Frameworks.

In case where IHE integration profiles leverage HL7 v2 messages, they consist of one or more “HL7 message profiles” that are a specialization of the officially published HL7 v2 standard. When necessary extensions are defined. This is for example the case with the ZBE segment.

1355 The “HL7 Message Profile Component” concept is used to specify fragments of messages, which can be used with different base messages. Such fragments are tables, data types, segments and segment groups. This way, a tedious repetition of specification details is prevented and helps to simplify and reduce development efforts.

5.3 ITI-30 and ITI-31

1360 Implementations of PAM and other profiles that use ITI-30 and ITI-31 that also claim support of the German National Extension shall conform to the requirements in this section.

The names of the HL7 fields shall be as defined in the German HL7 Edition 2.5.

IHE Germany has undertaken a three year project to align the National Message Profiles published in 2003 (Rel.1) to 2004 (Rel.2.1) with the Patient Administration Management Profile.

The overall project details can be found here:

1365 [http://wiki.hl7.de/index.php/PAM-Profil_Abgleich_\(Projekt\)](http://wiki.hl7.de/index.php/PAM-Profil_Abgleich_(Projekt))

The additional constraints can be roughly divided into the following categories:

- data type enhancements (XPN, XAD)
- profile support with MSH-21
- software release verification
- 1370 • provision of specific table values
- diagnosis and procedure related information

Some additional requirements have been crafted in the form of HL7 message profile components which can be combined with the HL7 base message profiles.

- insurance information (payor data with smartcards)
- 1375 • DRG-related data
- contact persons

5.3.1 Extension Requirements: Notation and Location

Most of the requirements are not documented directly in this document, but are instead included by reference in these tables below:

- 1380 • Table 5.3.2-1 Introductory Documents for German Message Profiles
- Table 5.3.2-2 Detailed German Message Profiles for PAM
- Table 5.3.3-1 Additional German Profile Components PAM
- Table 5.3.4-1 Additional German Segment Definitions
- Table 5.3.5-1 Additional German Data Type Definitions
- 1385 • Table 5.3.6-1 Additional German Table Definitions
- Table 5.3.7-1 Additional German Profiles

Implementers are responsible for monitoring any changes to the linked tables hosted on the IHE/HL7 Germany wiki.

1390 In the linked tables, the light blue highlights mark rows containing differences between the requirements in ITI TF-2b for ITI-30 and ITI-31 and German requirements.

The Verwendung (optionality) column shows the German requirements, and the requirements from ITI TF-2b have been preserved in parentheses, the Kard. (cardinality) column shows the German requirements, but the requirements from ITI TF-2b are not preserved.

1395 All changes are SHALL-level implementation constraints for actors that want to comply with the German National Extensions.

For example:

Segmente	Kard.	Verwendung	Beschreibung	Kapitel
MSH	[1..1]	R	Message Header	2.15.9
[{SFT}]	[0..1]	C (O)	Software Segment	2.15.12
EVN	[1..1]	R	Event Type	3.4.1
PID	[1..1]	R	Patient Identification	3.4.2
[PD1]	[0..0]	X (O)	Patient Additional Demographic	3.4.10

5.3.1.1 German Message Profile Architecture

1400 Figure 5.3.1.1.-1 demonstrates the overall structure and relationship of the German Message Profiles as a specialization of ITI PAM:

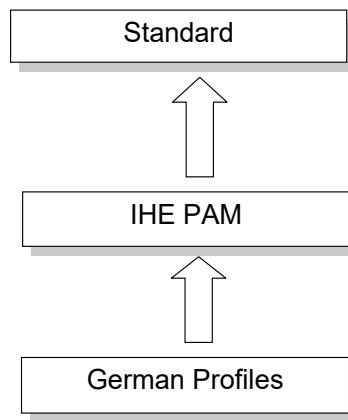
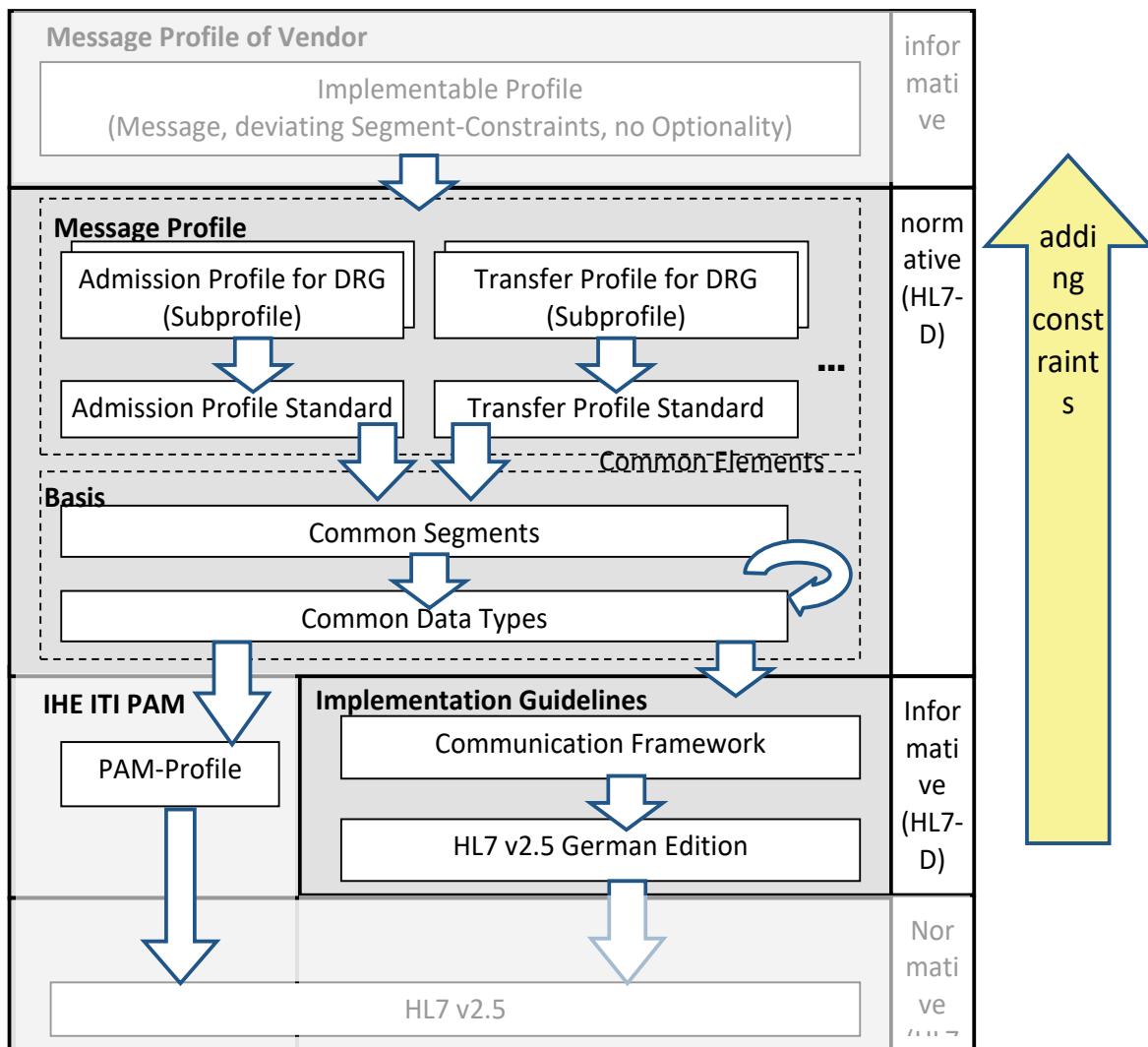


Figure 5.3.1.1-1: German Message Profiles as a National IHE Extension

1405 The detailed architecture is depicted in Figure 5.3.1.1-2:

**Figure 5.3.1.1-2: German Message Profile Architecture**

5.3.2 German HL7 Message Profiles for PAM

1410 The German HL7 Message Profiles were originally created in German but all relevant details have been translated into English and interleaved in the pages linked in this section.

Table 5.3.2-1 provides an overview of the details.

Table 5.3.2-1: Introductory Documents for German HL7 Message Profiles

Description	Link
Document Overview	http://wiki.hl7.de/index.php/HL7v2-Profile_Dokumente
Communication Framework	http://wiki.hl7.de/index.php/HL7v2-Profile_Rahmen
Common Elements	http://wiki.hl7.de/index.php/HL7v2-Profile_gemeinsame_Elemente
Correction of Identifiers	http://wiki.hl7.de/index.php/Korrekturen_von_Identifikatoren

- 1415 To support German National Extensions, the PAM Patient Demographics Supplier, Patient Demographics Consumer, Patient Encounter Supplier, and Patient Encounter Consumer Actors shall support the messages listed in Table 5.3.2-2 and shall support the fields and associated behaviors described in the links in the Message Profile column. Note that some Events in the table are associated with options in the PAM Profile.

Table 5.3.2-2: Detailed German HL7 Message Profiles for PAM

Event	German HL7 Message Profile
A01	Admission: http://wiki.hl7.de/index.php/HL7v2-Profile_Aufnahme
A02	Transfer: http://wiki.hl7.de/index.php/HL7v2-Profile_Verlegung
A03	Discharge: http://wiki.hl7.de/index.php/HL7v2-Profile_Entlassung
A04	Patient registration: http://wiki.hl7.de/index.php/HL7v2-Profile_Besuchsmeldung
A05	Preadmit patient: http://wiki.hl7.de/index.php/HL7v2-Profile_Voraufnahme
A06, A07	Switch in-/outpatient: http://wiki.hl7.de/index.php/HL7v2-Profile_Fallartwechsel
A08	Update: http://wiki.hl7.de/index.php/HL7v2-Profile_Aenderung_Patient
A09, A10	Patient tracking: http://wiki.hl7.de/index.php/HL7v2-Profile_Abwesenheiten_Einrichtung
A11	Cancel Admission: http://wiki.hl7.de/index.php/HL7v2-Profile_Aufnahme_Storno
A12	Cancel Transfer: http://wiki.hl7.de/index.php/HL7v2-Profile_Verlegung_Storno
A13	Cancel Discharge: http://wiki.hl7.de/index.php/HL7v2-Profile_Entlassung_Storno
A21, A22	Leave of absence: http://wiki.hl7.de/index.php/HL7v2-Profile_Abwesenheiten_Urlaub
A31	Update Person: http://wiki.hl7.de/index.php/HL7v2-Profile_Aenderung_Person
A24, A37	Link: http://wiki.hl7.de/index.php/HL7v2-Profile_Verknüpfung
A40, A47	Update Patient ID: http://wiki.hl7.de/index.php/HL7v2-Profile_Aenderung_Patienten-ID
Z99	Historic Movement: http://wiki.hl7.de/index.php/HL7v2-Profile_historische_Bewegung

1420

5.3.3 Additional German HL7 Message Profile Components

Implementations may choose to support any of the message components listed in Table 5.3.3-1 but if supported shall support the fields and associated behaviors described in the links in the HL7 Message Profile Component column.

1425

Table 5.3.3-1: Additional German HL7 Message Profile Components PAM

Description	German HL7 Message Profile Component
Insurance smartcard data	http://wiki.hl7.de/index.php?title=HL7v2-Profilkomponente_Kartendaten
Contact Persons	http://wiki.hl7.de/index.php?title=HL7v2-Profilkomponente_Kontaktpersonen
Insurance	http://wiki.hl7.de/index.php?title=HL7v2-Profilkomponente_Kostenträger

Description	German HL7 Message Profile Component
Transmission of DRG related data	http://wiki.hl7.de/index.php?title=HL7v2-Profilkomponente_DRG-Rohdaten
Patient Photo (informative)	http://wiki.hl7.de/index.php?title=HL7v2-Profilkomponente_Patient_Photo

5.3.4 Additional German Segment Definitions

Implementations shall support all the segments listed in Table 5.3.4-1 and shall support the fields and associated behaviors described in the links in the HL7 Message Profile Component column.

1430

Table 5.3.4-1: Additional German Segment Definitions

Segment	Description	HL7 Message Profile Component
DG1	Diagnosis	http://wiki.hl7.de/index.php/Segment_DG1
ERR	Error	http://wiki.hl7.de/index.php/Segment_ERR
EVN	Event	http://wiki.hl7.de/index.php/Segment_EVN
FT1	Financial Transaction	http://wiki.hl7.de/index.php/Segment_FT1
MRG	Merge	http://wiki.hl7.de/index.php/Segment_MRG
MSA	Message Acknowledgement	http://wiki.hl7.de/index.php/Segment_MSA
MSH	Message Header	http://wiki.hl7.de/index.php/Segment_MSH
IN1	Insurance	http://wiki.hl7.de/index.php/Segment_IN1
IN2	Insurance (Part 2)	http://wiki.hl7.de/index.php/Segment_IN2
IN3	Insurance (Part 3)	http://wiki.hl7.de/index.php/Segment_IN3
NK1	Next of Kin	http://wiki.hl7.de/index.php/Segment_NK1
OBR	Observation Request	http://wiki.hl7.de/index.php/Segment_OBR
OBX	Observations	http://wiki.hl7.de/index.php/Segment_OBX http://wiki.hl7.de/index.php/Segment_OBX_(Codes)
PID	Patient Identification	http://wiki.hl7.de/index.php/Segment_PID
PR1	Procedures	http://wiki.hl7.de/index.php/Segment_PR1
PV1	Patient Visit	http://wiki.hl7.de/index.php/Segment_PV1
PV2	Patient Visit (Addt. Inform.)	http://wiki.hl7.de/index.php/Segment_PV2
ROL	Role	http://wiki.hl7.de/index.php/Segment_ROL
SFT	Software	http://wiki.hl7.de/index.php/Segment_SFT
TXA	Transcription Document Header	http://wiki.hl7.de/index.php/Segment_TXA
ZBE	Movement	http://wiki.hl7.de/index.php/Segment_ZBE
ZGK	Card Data	http://wiki.hl7.de/index.php/Segment_ZGK

5.3.5 Additional German Data Type Definitions

Implementations which send any of the data types listed in Table 5.3.5-1 shall support the fields and associated behaviors described in the links in the HL7 Message Profile Component column.

1435

Table 5.3.5-1: Additional German Data Type Definitions

Data Type	Description	HL7 Message Profile Component
CE	Coded Elements	http://wiki.hl7.de/index.php/V25dt:CE
CNE	Coded No Exceptions	http://wiki.hl7.de/index.php/V25dt:CNE
CWE	Coded With Exceptions	http://wiki.hl7.de/index.php/V25dt:CWE
CX	Extended Composite ID Numbers	http://wiki.hl7.de/index.php/V25dt:CX
DT	Date/Time	http://wiki.hl7.de/index.php/V25dt:DT
ED	Encapsulated Data	http://wiki.hl7.de/index.php/V25dt:ED
EI	Entity Identifier	http://wiki.hl7.de/index.php/V25dt:EI
FN	Family Name (as part of XPN)	http://wiki.hl7.de/index.php/V25dt:XPN
HD	Hierachic Designator	http://wiki.hl7.de/index.php/V25dt:HD
PPN	Performing Person Time Stamp	http://wiki.hl7.de/index.php/V25dt:PPN
SAD	Street or Address (as part of XAD)	http://wiki.hl7.de/index.php/V25dt:XAD
SI	Sequence ID	http://wiki.hl7.de/index.php/V25dt:SI
ST	String	http://wiki.hl7.de/index.php/V25dt:ST
TS	Timestamp	http://wiki.hl7.de/index.php/V25dt:TS
XAD	Extended Address	http://wiki.hl7.de/index.php/V25dt:XAD
XCN	Extended Composite ID Number and Name for Persons	http://wiki.hl7.de/index.php/V25dt:XCN
XON	Extended Composite Name and Identification Number for Organization	http://wiki.hl7.de/index.php/V25dt:XON
XPN	Person Name	http://wiki.hl7.de/index.php/V25dt:XPN
XTN	Contact	http://wiki.hl7.de/index.php/V25dt:XTN

Actors may choose to support any of the messages listed in Table 5.3.2-2 but if supported shall support the fields and associated behaviors described in the links in the HL7 Message Profile Component column.

1440

5.3.6 Additional German Table Value Definitions

Table 5.3.6-1 provides an overview about nationally defined tables. Associated table values will be found at the end of the provided link.

Table 5.3.6-1: Additional German Table Definitions

Table	Description	German Descr.	HL7 Message Profile Component
4902	Card Type	Kartentyp	http://wiki.hl7.de/index.php/Tabelle_4902_(Kartentyp)
4903	WOP Indicator	WOP-Kennzeichen	http://wiki.hl7.de/index.php/Tabelle_4903_(WOP-Kennzeichen)

Table	Description	German Descr.	HL7 Message Profile Component
4904	Sample Identification	Stichprobenzuordnung	http://wiki.hl7.de/index.php/Tabelle_4904_(Stichprobenzuordnung)
4905	Location classification	Rechtskreis	http://wiki.hl7.de/index.php/Tabelle_4905_(Rechtskreis)
4906	Inpatient Services	Stationäre Leistungen	http://wiki.hl7.de/index.php/Tabelle_4906_(stationäre_Leistungen)
4907	Indication for specific person groups	Kennzeichnung besondere Personengruppen	http://wiki.hl7.de/index.php/Tabelle_4907_(Kennzeichnung_besondere_Personengruppen)
4908	Disease management program indicator (eGK)	DMP-Kennzeichen (eGK)	http://wiki.hl7.de/index.php/Tabelle_4908_(DMP-Kennzeichnung_eGK)
4909	Disease management program indicator (KVK)	DMP-Kennzeichen (KVK)	http://wiki.hl7.de/index.php/Tabelle_4909_(DMP-Kennzeichnung_KVK)

1445

Appendices

Intentionally left blank.

1450 **Glossary**

The IHE Glossary can be found as an appendix to the *IHE Technical Frameworks General Introduction* at http://ihe.net/TF_Intro_Appendices.