# **Integrating the Healthcare Enterprise**



# IHE IT Infrastructure Technical Framework Supplement

# PAM –National Extension France

# **Draft for Public Comment**

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**Please verify you have the most recent version of this document.** See <a href="here">here</a> for Trial Implementation and Final Text versions and <a href="here">here</a> for Public Comment versions.

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#### **Foreword**

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This is a supplement to the IHE IT Infrastructure Technical Framework V11.0. Each supplement undergoes a process of public comment and trial implementation before being incorporated into the volumes of the Technical Frameworks.

This supplement is published on June 8, 2015 for public comment. Comments are invited and can be submitted at <a href="http://www.ihe.net/ITI\_Public\_Comments">http://www.ihe.net/ITI\_Public\_Comments</a>. In order to be considered in development of the final text version of the supplement, comments must be received by July 8, 2015.

This supplement describes changes to the existing technical framework documents.

"Boxed" instructions like the sample below indicate to the Volume Editor how to integrate the relevant section(s) into the relevant Technical Framework volume.

*Amend Section X.X by the following:* 

- Where the amendment adds text, make the added text **bold underline**. Where the amendment removes text, make the removed text **bold strikethrough**. When entire new sections are added, introduce with editor's instructions to "add new text" or similar, which for readability are not bolded or underlined.
- 45 General information about IHE can be found at: <a href="http://ihe.net">http://ihe.net</a>.

Information about the IHE IT Infrastructure domain can be found at: <a href="http://ihe.net/IHE\_Domains">http://ihe.net/IHE\_Domains</a>.

Information about the organization of IHE Technical Frameworks and Supplements and the process used to create them can be found at: <a href="http://ihe.net/IHE\_Process">http://ihe.net/IHE\_Process</a> and

50 http://ihe.net/Profiles.

The current version of the IHE IT Infrastructure Technical Framework can be found at: http://ihe.net/Resources/Technical\_Frameworks.

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# 110 1 Open Issues

FrenchPAM001: IHE International recommends that restrictions on the PID segment apply to all HL7 v2 transactions. Should the restrictions on the PID segment in this PAM extension apply to all v2 transactions in France? Or just ITI-30 and ITI-31?

FrenchPAM002: IHE International did not change the scope of the restrictions on other HL7 segments to go beyond ITI-30 and ITI-31. Should those restrictions in this PAM extension apply to all v2 transactions in France? Or just ITI-30 and ITI-31?

# **Volume 4 – National Extensions**

Add appropriate Country section

## 120 4 National Extensions

#### 4.I National Extensions for France

#### 4.I.1 Comment Submission

This national extension document was authored under the sponsorship and supervision of InteropSanté, who welcome comments on this document and the IHE France initiative.

125 Comments should be directed to:

Karima Bourquard, co-chair (users) IHE-FRANCE, <u>karima.bourquard@in-system.eu</u> Isabelle Gibaud, co-chair (vendors) IHE-FRANCE, <u>isabelle.gibaud@sib.fr</u>

## 4.I.2 French requirements

HL7 v2.5 events and segments used by the PAM Profile are detailed in the technical framework referenced ITI-TF-2 hereafter.

This current document is the PAM Profile's French extension. It describes applicable constraints on HL7 v2.5 events and segments to this integration profile from ITI technical framework used in the French environment.

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.

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.

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#### X Forbidden in France.

The "Card." column includes the bracketed highest and lowest cardinalities.

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.

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.I.2.1 Requirements on all HL7 V2.x transactions

#### 4.I.2.1.1 HL7 character set

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

#### 160 4.I.2.1.2 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

• Identity unknown indicator: PID-31 (use the PID-32 field to manage the identity status)

# 4.I.2.1.3 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.

# 170 **4.I.2.1.4 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

# 4.I.2.1.5 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	О	[01]		Set ID - PID		
PID-2	20	CX	X	[00]		Patient ID		
PID-3	250	CX	R	[1*]		Patient Identifier List	*	National identifier
PID-4	20	CX	X	[00]		Alternate Patient ID - PID		
PID-5	250	XPN	R	[1*]		Patient Name	*	French legal policy
PID-6	250	XPN	О	[0*]		Mother's Maiden Name	*	
PID-7	26	TS	О	[01]		Date/Time of Birth		
PID-8	1	IS	0	[01]	1	Administrative Sex	*	Restricted User table
PID-9	250	XPN	X	[00]		Patient Alias		
PID-10	250	CE	X	[00]	5	Race	*	forbidden
PID-11	250	XAD	С	[0*]		Patient Address		
PID-12	4	IS	X	[00]	289	County Code		
PID-13	250	XTN	0	[0*]		Phone Number - Home		
PID-14	250	XTN	О	[0*]		Phone Number - Business		
PID-15	250	CE	0	[01]	296	Primary Language		
PID-16	250	CE	О	[01]	2	Marital Status	*	User table
PID-17	250	CE	X	[00]	6	Religion	*	forbidden
PID-18	250	CX	С	[01]		Patient Account Number		
PID-19	16	ST	X	[00]		SSN Number - Patient		
PID-20	25	DLN	X	[00]		Driver's License Number - Patient		
PID-21	250	CX	0	[0*]		Mother's Identifier		
PID-22	250	CE	X	[00]	189	Ethnic Group		
PID-23	250	ST	0	[01]		Birth Place		
PID-24	1	ID	0	[01]	136	Multiple Birth Indicator		
PID-25	2	NM	С	[01]		Birth Order		
PID-26	250	CE	0	[0*]	171	Citizenship		
PID-27	250	CE	0	[01]	172	Veterans Military Status		
PID-28	250	CE	X		212	Nationality		
PID-29	26	TS	О	[01]		Patient Death Date and Time		
PID-30	1	ID	О	[01]	136	Patient Death Indicator		
PID-31	1	ID	X		136	Identity Unknown Indicator		

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME		IHE FR
PID-32	20	IS	RE	[0*]	445	Identity Reliability Code	*	French user table
PID-33	26	TS	С	[01]		Last Update Date/Time		
PID-34	241	HD	0	[01]		Last Update Facility		
PID-35	250	CE	С	[01]	446	Species Code		
PID-36	250	CE	С	[01]	447	Breed Code		
PID-37	80	ST	О	[01]		Strain		
PID-38	250	CE	0	2	429	Production Class Code		
PID-39	250	CWE	О	[0*]	171	Tribal Citizenship		

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#### PID-3: Patient Identifier List

See the CX data type description that appears in the "<u>IHE France constraints on common HL7</u> data types for ITI Profiles" document.

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).

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.

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. See data type description in the

"IHE France constraints on common HL7 data types for ITI Profiles" document.

This list shall include all the patient's known INS.

#### 195 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.

- Legal name according to the 311-21 of the Code Civil. This name is also defined by "name of birth", especially 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".
- 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

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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". When an identity change removes a use name, the "D" shall be in quotes, see HL7 chapter 2 par 2.5.3.

• 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) are detailed at chapter "XPN-7: Type of name (ID)" of French N Appendix.

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).

A word of caution, if a patient's identity change leads to not defining any use name, while it previously was, the D type shall be sent with two quotes: "" (HL7 norm, chapter 2 par2.5.3). This case may arise after a divorce, when the divorced spouse does not keep their 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):

NOZIERE^Violette^^^^L

Violette NOZIERE (last name, frequently known as birth name)

DE GUERMANTES^Orianne^^^^D~DES LAUMES^Orianne^^^^L

Orianne DE GUERMANTES (use name), born DES LAUMES (last name)

""^Orianne^^^^D~DES LAUMES^Orianne^^^^L

Orianne DES LAUMES (last name) gets divorced and does not carry her former use name anymore.

Caesar^Julius^^^^S

VIP registered under the pseudonym Julius Caesar

235 PID-6: Mother's Maiden Name

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"Mother's Maiden Name" PID-6 is used to convey the mother's birth name not the patient's birth name. (PID-5: see N Appendix).

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#### PID-8: Patient Sex

The following values shall be used:

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HL7 table 0001 - Administrative Sex

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

#### PID-16: Marital Status

The following values shall be used:

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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

See below in ITI-31 for extra requirements.

250 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.

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

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

PID-32: Identity Reliability Code

This field is used to encode the different identity status values set out by the GMSIH<sup>1</sup>.

260 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	

<sup>&</sup>lt;sup>1</sup> GMSIH : Groupement de Modernisation des Systèmes d'Information Hospitaliers

# 4.I.2.2 Segments that apply only to ITI-30 and ITI-31

# 4.I.2.2.1 PD1 Segment

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PD1-2: Living Arrangement

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

# 4.I.2.2.2 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.

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME		IHE FR
1	60	EI	С	[01]		Role Instance ID		
2	2	ID	R	[11]	287	Action Code	*	User table defined
3	250	CE	R	[11]	443	Role-ROL	*	User table completed with French values
4	250	XCN	R	[1*]		Role Person		
5	26	TS	0	[01]		Role Begin Date/Time		
6	26	TS	0	[01]		Role End Date/Time		
7	250	CE	0	[01]		Role Duration		
8	250	CE	0	[01]		Role Action Reason		
9	250	CE	0	[01]		Provider Type		
10	250	CE	0	[01]	406	Organization Unit Type		
11	250	XAD	0	[01]		Office/Home Address/Birthplace		
12	250	XTN	О	[01]		Phone		

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### ROL-2: Action Code

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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
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)

This element defines the role played by the physician.

Here follow values that are allowed by this national extension:

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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)

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Value IHE FR	Description	Display France	IHE fr Comments
SUBS (note2)	Substitute	Value added by IHE-France	Declared Referring physician replacement

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.

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.

# 4.I.2.2.3 NK1 Segment

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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	ОРТ	R P/#	TBL#	ITEM#	ELEMENT NAME		IHE FR
1	4	SI	R			00190	Set ID - NK1		
2	250	XPN	О	Y		00191	Name		
3	250	CE	0		0063	00192	Relationship	*	User table translated and completed
4	250	XAD	О	Y		00193	Address		
5	250	XTN	О	Y		00194	Phone Number		
6	250	XTN	О	Y		00195	Business Phone Number		
7	250	CE	0		0131	00196	Contact Role	*	User table translated and completed

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SEQ	LEN	DT	ОРТ	R P/#	TBL#	ITEM#	ELEMENT NAME	IHE FR
8	8	DT	О			00197	Start Date	
9	8	DT	O			00198	End Date	
10	60	ST	О			00199	Next of Kin / Associated Parties Job Title	
11	20	JCC	О		0327/03 28	00200	Next of Kin / Associated Parties Job Code/Class	
12	250	CX	О			00201	Next of Kin / Associated Parties Employee Number	
13	250	XON	О	Y		00202	Organization Name - NK1	
14	250	CE	О		<u>0002</u>	00119	Marital Status	
15	1	IS	O		<u>0001</u>	00111	Administrative Sex	
16	26	TS	О			00110	Date/Time of Birth	
17	2	IS	О	Y	0223	00755	Living Dependency	
18	2	IS	О	Y	<u>0009</u>	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	
22	250	CE	О		0215	00743	Publicity Code	
23	1	ID	О		0136	00744	Protection Indicator	
24	2	IS	О		0231	00745	Student Indicator	
25	2508 0	CE	X		0006	00120	Religion	Forbidden

SEQ	LEN	DT	ОРТ	R P/#	TBL#	ITEM#	ELEMENT NAME		IHE FR
26	250	XPN	О	Y		00109	Mother's Maiden Name		
27	250	CE	О		0212	00739	Nationality		
28	250	CE	X	Y	<u>0189</u>	00125	Ethnic Group		Forbidden
29	250	CE	О	Y	0222	00747	Contact Reason		
30	250	XPN	О	Y		00748	Contact Person's Name		
31	250	XTN	О	Y		00749	Contact Person's Telephone Number		
32	250	XAD	О	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	О		0311	00752	Job Status		
35	250	CE	X	Y	<u>0005</u>	00113	Race	*	Forbidden
36	2	IS	О		0295	00753	Handicap		
37	16	ST	0			00754	Contact Person Social Security Number		
38	250	ST	О			01905	Next of Kin Birth Place		
39	2	IS	О		0099	00146	VIP Indicator		

# 300 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.

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	Professionel de santé
CHD	Child	Enfant
DEP	Handicapped dependent	Dépendant handicapé
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
МТН	Mother	Mère
NCH	Natural child	Enfant naturel
NON	None	Aucun
OAD	Other adult	Autre adulte

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Value	Description	Display France
ОТН	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	Entraineur
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.

### NK1-7: Contact Role

310 IHE France identified the values list, enclosed below.

HL7 User Defined Table 0131 - Contact Role

Values	Description	Display France	
Е	Employer	Employeur	
С	Emergency Contact	Personne à contacter en cas d'urgence	
F	Federal Agency	Agence fédérale	
I	Insurance Company	Compagnie d'assurances	

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

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

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.

# 320 **4.I.2.2.4 PV1 Segment**

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME		IHE FR
PV1-1	4	SI	0	[01]		Set ID - PV1		
PV1-2	1	IS	R	[11]	4	Patient Class	*	restricted user table
PV1-3	80	PL	С	[01]		Assigned Patient Location	*	explanation
PV1-4	2	IS	0	[01]	7	Admission Type	*	User table completed
PV1-5	250	CX	С	[01]		Preadmit Number	*	explanation
PV1-6	80	PL	С	[01]		Prior Patient Location		
PV1-7	250	XCN	О	[0*]	10	Attending Doctor		
PV1-8	250	XCN	0	[0*]	10	Referring Doctor		
PV1-9	250	XCN	X	[00]		Consulting Doctor		
PV1-10	3	IS	0	[01]	69	Hospital Service	*	French user table
PV1-11	80	PL	С	[01]		Temporary Location		
PV1-12	2	IS	0	[01]	87	Preadmit Test Indicator		
PV1-13	2	IS	0	[01]	92	Re-admission Indicator		
PV1-14	6	IS	0	[01]	23	Admit Source	*	French user table
PV1-15	2	IS	0	[0*]	9	Ambulatory Status		
PV1-16	2	IS	0	[01]	99	VIP Indicator	*	User table defined

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME		IHE FR
PV1-17	250	XCN	0	[0*]	10	Admitting Doctor	*	
PV1-18	2	IS	0	[01]	18	Patient Type		
PV1-19	250	CX	С	[01]		Visit Number	*	Conditional value
PV1-20	50	FC	0	[0*]	64	Financial Class		
PV1-21	2	IS	0	[01]	32	Charge Price Indicator	*	User table completed
PV1-22	2	IS	0	[01]	45	Courtesy Code	*	
PV1-23	2	IS	0	[01]	46	Credit Rating		
PV1-24	2	IS	0	[0*]	44	Contract Code		
PV1-25	8	DT	0	[0*]		Contract Effective Date		
PV1-26	12	NM	0	[0*]		Contract Amount		
PV1-27	3	NM	0	[0*]		Contract Period		
PV1-28	2	IS	0	[01]	73	Interest Code		
PV1-29	4	IS	0	[01]	110	Transfer to Bad Debt Code		
PV1-30	8	DT	0	[01]		Transfer to Bad Debt Date		
PV1-31	10	IS	0	[01]	21	Bad Debt Agency Code		
PV1-32	12	NM	0	[01]		Bad Debt Transfer Amount		
PV1-33	12	NM	0	[01]		Bad Debt Recovery Amount		
PV1-34	1	IS	0	[01]	111	Delete Account Indicator		
PV1-35	8	DT	0	[01]		Delete Account Date		
PV1-36	3	IS	0	[01]	112	Discharge Disposition	*	User table completed
PV1-37	47	DLD	0	[01]	113	Discharged to Location	*	
PV1-38	250	CE	0	[01]	114	Diet Type		
PV1-39	2	IS	0	[01]	115	Servicing Facility		
PV1-40	1	IS	X	[00]		Bed Status	*	User table defined
PV1-41	2	IS	0	[01]	117	Account Status	*	User table defined
PV1-42	80	PL	С	[01]		Pending Location		
PV1-43	80	PL	0	[01]		Prior Temporary Location		
PV1-44	26	TS	0	[01]		Admit Date/Time		
PV1-45	26	TS	0	[01]		Discharge Date/Time		
PV1-46	12	NM	0	[01]		Current Patient Balance		
PV1-47	12	NM	О	[01]		Total Charges		
PV1-48	12	NM	О	[01]		Total Adjustments		
PV1-49	12	NM	О	[01]		Total Payments		
PV1-50	250	CX	О	[01]	203	Alternate Visit ID		
PV1-51	1	IS	0	[01]	326	Visit Indicator		
PV1-52	250	XCN	X	[00]		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
Е	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
О	Outpatient	Outpatient admit	Outpatient admit, including delivering medicines.
R	Recurring patient	Recurring admit	Recurring admit

### 325 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:

- PV1-3.1: Housing ward code (housing FU)
- PV1-3.2: room
- 330 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
О	Occupied	occupé	
U	Unoccupied	libre	

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### PV1-4: Admission Type (IS)

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HL7 Table 0007 – Admission Type

Value IHE	Description	Recommended display	IHE France comments
FR	Description	Neconinienaea aispiay	IIIL I Tance comments
С	Elective	Comfort (plastic surgery)	
L	Labor and Delivery	Childbirth	
N	Newborn (Birth in healthcare facility)	Newborn	
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)

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.

### 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:

 $\underline{http://www.parhtage.sante.fr/re7/doc.nsf/VDoc/E7A685B20FF9E7A4C12576A3005BD49F/\$FILE/NOM2009.pdf}$ 

# 355 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.

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	
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	

### 360 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.

User-defined table 0099 – VIP Indicator

Value IHE FR	Description	Recommended display	IHE France comments
P	Public		
I	Incognito		

365

### 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, ... ZFD} (See above).

#### 370 PV1-19: Visit Number

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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).

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.

- 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.
- 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

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

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 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	
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 therapeutical apartment	
38	Reception and management in a psychiatric facility	
39	Reception and management in a psychiatric crisis facility	
97	Non-stated activity	

# 400 PV1-22: Request for a private room

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

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	

# 405 PV1-36: Discharge Disposition

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

HL7 Table 0112 – Discharge Disposition

Value IHE FR	Descripti on	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)	
Е		Escape	
F		Fugue	
A		Absence (<12h)	
P		Permission (<72h)	
S		Discharge with care program	
В		Transfer to a MCO (Medical, Surgery, Obstetric) facility	

# 410 PV1-37: Discharged to location

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

415

This field must not be used. You shall use 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.

The values in table 0117 shall be used in this field.

HL7 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	

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# 4.I.2.2.5 **PV2 Segment**

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME		IHE FR
PV2-1	80	PL	С	[01]		Prior Pending Location		
PV2-2	250	CE	0	[01]	129	Accommodation Code		
PV2-3	250	СЕ	О	[01]		Admit Reason	*	User table created for psychiatry assignment
PV2-4	250	CE	0	[01]		Transfer Reason		
PV2-5	25	ST	0	[0*]		Patient Valuables		
PV2-6	25	ST	0	[01]		Patient Valuables Location		
PV2-7	2	IS	0	[0*]	130	Visit User Code	*	User table completed
PV2-8	26	TS	0	[01]		Expected Admit Date/Time		
PV2-9	26	TS	0	[01]		Expected Discharge Date/Time		
PV2-10	3	NM	О	[01]		Estimated Length of Inpatient Stay		
PV2-11	3	NM	О	[01]		Actual Length of Inpatient Stay		
PV2-12	50	ST	0	[01]		Visit Description		
PV2-13	250	XCN	0	[0*]		Referral Source Code		
PV2-14	8	DT	0	[01]		Previous Service Date		
PV2-15	1	ID	О	[01]	136	Employment Illness Related Indicator		
PV2-16	1	IS	0	[01]	213	Purge Status Code		
PV2-17	8	DT	0	[01]		Purge Status Date		

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME		IHE FR
PV2-18	2	IS	0	[01]	214	Special Program Code		
PV2-19	1	ID	0	[01]	136	Retention Indicator		
PV2-20	1	NM	0	[01]		Expected Number of Insurance Plans		
PV2-21	1	IS	0	[01]	215	Visit Publicity Code		
PV2-22	1	ID	0	[01]	136	Visit Protection Indicator		
PV2-23	250	XON	О	[0*]		Clinic Organization Name		
PV2-24	2	IS	О	[01]	216	Patient Status Code		
PV2-25	1	IS	О	[01]	217	Visit Priority Code		
PV2-26	8	DT	О	[01]		Previous Treatment Date		
PV2-27	2	IS	0	[01]	112	Expected Discharge Disposition		
PV2-28	8	DT	0	[01]		Signature on File Date		
PV2-29	8	DT	0	[01]		First Similar Illness Date		
PV2-30	250	CE	0	[01]	218	Patient Charge Adjustment Code	*	User table defined
PV2-31	2	IS	0	[01]	219	Recurring Service Code		
PV2-32	1	ID	0	[01]	136	Billing Media Code		
PV2-33	26	TS	0	[01]		Expected Surgery Date and Time		
PV2-34	1	ID	0	[01]	136	Military Partnership Code		
PV2-35	1	ID	0	[01]	136	Military Non-Availability Code		
PV2-36	1	ID	0	[01]	136	Newborn Baby Indicator		
PV2-37	1	ID	0	[01]	136	Baby Detained Indicator		
PV2-38	250	CE	0	[01]	430	Mode of Arrival Code	*	French user table
PV2-39	250	CE	0	[0*]	431	Recreational Drug Use Code		
PV2-40	250	CE	0	[01]	432	Admission Level of Care Code		
PV2-41	250	CE	0	[0*]	433	Precaution Code		
PV2-42	250	CE	0	[01]	434	Patient Condition Code		
PV2-43	2	IS	0	[01]	315	Living Will Code		
PV2-44	2	IS	0	[01]	316	Organ Donor Code		
PV2-45	250	CE	0	[0*]	435	Advance Directive Code		
PV2-46	8	DT	0	[01]		Patient Status Effective Date		
PV2-47	26	TS	С	[01]		Expected LOA Return Date/Time		
PV2-48	26	TS	0	[01]		Expected Pre-admission Testing Date/Time		

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR
PV2-49	20	IS	О	[0*]	534	Notify Clergy Code	

#### PV2-3: Admit Reason

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

- 430 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
- Values allowed by this national extension are based on the "Legal care type" nomenclature, available at: <a href="http://www.atih.sante.fr/index.php?id=0002F0006EFF">http://www.atih.sante.fr/index.php?id=0002F0006EFF</a>. This is a non-exhaustive list that may be updated according to the facility's needs.

IHE Table PV2-3 – Admit Reason (Psychiatry)

Value IHE FR	Description	Recommended display	IHE France comments
HL		Free Hospitalisation	Obsolete since 1 January 2012
НО		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)	

Value IHE FR	Description	Recommended display	IHE France comments
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)	

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### 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.

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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	
ТО		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	

Value IHE FR	Recommended display	Description	IHE France comments
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	
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	

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.

- 450 A Z99 event may update the indicator, updating all the events above, if needed.
  - The officially declared physician: ROL segment ("ODRP") following the PID/PDI combination
  - The corresponding doctor: ROL segment ("RT") following the {PV1, V2, ZBE, ... ZFD} segments combination
- The officially declared physician's substitute: ROL segment ("SUBS") following the {PV1, V2, ZBE, ... ZFD} segments combination

PV2-30: Patient Charge Adjustment Code

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

460

HL7 Table 0218 – Charge adjustment

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

## PV2-38: Mode of Arrival Code

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

465

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

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HL7 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	

# 4.I.2.2.6 ACC segment

475

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	[01]		Accident Date/Time		
ACC-2	250	CE	R	[11]	50	Accident Code	*	User table defined
ACC-3	25	ST	0	[01]		Accident Location		
ACC-4	250	CE	X	[00]		Auto Accident State		
ACC-5	1	ID	0	[01]	136	Accident Job Related Indicator		
ACC-6	12	ID	0	[01]	136	Accident Death Indicator		
ACC-7	250	XCN	О	[01]		Entered By		
ACC-8	25	ST	О	[01]		Accident Description		
ACC-9	80	ST	0	[01]		Brought In By		
ACC- 10	1	ID	О	[01]	136	Police Notified Indicator		
ACC- 11	250	XAD	О	[01]		Accident Address		

### 480 ACC-2: Accident Code

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 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	
С		Assault and battery	
L		School accident	
В		Plan Blanc	
U		Unknown accident nature	

485

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

ACC 200512250120 P^Accident on public road

4.I.2.2.7 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	[11]		Start of Movement Date/Time		
3	26	TS	X	[01]		End of Movement Date/Time	*	Forbidden in France
4	6	ID	R	[11]		Action on the Movement		
5	1	ID	R	[11]		Indicator "Historical movement"		
6	3	ID	С	[01]		Original trigger event code		
7	6	XON	С	[01]		Ward of medical responsibility in the period starting with this movement	*	explanation
8	6	XON	С	[01]		Ward of care responsibility in the period starting with this movement	*	French field

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SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME		IHE FR
9	3	CWE	R	[11]	IHE ZBE-9	Nature of this movement	*	French field

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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 the beginning of this document). 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.

The following paragraphs reuse the ZBE-1 to ZBE-6 definitions, excerpt from the IHE ITI Technical Framework Vol.2.

This national extension puts limits to the ZBE-7 field's definition, and adds two new fields: ZBE-8 and ZBE-9.

As specified in the ITI Technical Framework Vol.2, the ZBE segment is required for the following 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.

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.

ZBE-7: Medical Responsible Ward

520 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
- 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.

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
- 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.

*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	
Н		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	
С		Updating or change of patient's administrative status without generating any movement	

# 545 **4.1.2.2.8 ZFA segment**

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR
1	20	ID	RE	[01]		Patient's PHR status	*
2	26	TS	RE	[01]		Patient's PHR status collection date	*
3	26	TS	RE	[01]		Patient's PHR closing date	*
4	1	ID	RE	[01]		Valid access authorization to the patient's PHR, granted to the facility	*
5	26	TS	RE	[01]		Collection date of the status of the facility's access authorization to the patient's PHR	*
6	1	ID	RE	[01]		Opposition of the patient to the "bris de glace" mode access (see 1 <sup>st</sup> note)	*
7	1	ID	RE	[01]		Opposition of the patient to the "centre 15" mode access (see 2 <sup>nd</sup> note)	*
8	26	TS	RE	[01]		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.

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.

550 2nd note: The value "centre\_15" is uniquely reserved for emergency services call and dispatch centers.

#### ZFA-1 Patient PHR's status (ID)

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.

The information is not historically recorded; the PES Actor conveys the last known status for the patient.

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

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

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)

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

570

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).

575 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:

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.

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

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).

# 4.I.2.2.9 ZFP segment: Professional situation

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR
ZFP-1	1	ID	RE	[01]	IHE ZFP-1	Socio-Professional occupation (INSEE nomenclature)	*
ZFP-2	2	ID	RE	[01]	IHE ZFP-2	Socio-Professional group (INSEE nomenclature)	*

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

595 • A01 (Admit)

- A04 (Outpatient)
- A05 (Pre-admit)
- A14 (Pending admit)
- Z99, if it updates one of the events above
- Values for this segment's two fields are excerpts from the Socio-professional categories and occupations INSEE nomenclature, available at:

http://www.insee.fr/fr/nom\_def\_met/nomenclatures/prof\_cat\_soc/pages/pcs.htm

ZFP-1: Socio Professional occupation (ID)

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

•

IHE Table ZFP-1 – Socio-Professional Occupations

Value IHE FR	Description	Recommended display	IHE France comments		
1		Individual farmers			
2		Craftsmen, merchants and heads of business			
3		Managerial and highly qualified occupations			
4		Technicians and associate professionals			
5		Employees			
6		Workers			
7		Retired			
8		No professional occupation			

ZFP-2: Socio Professional group (ID)

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

IHE Table ZFP-2 – Socio professional group

Value IHE FR	Description	Recommended Display	IHE France comments
11		Small farm operation farmer	
12		Medium-size farm operation farmer	
13		Large farm operation farmer	
21		Craftsmen	
22		Merchants	
23		Heads of 10-or-more-employee business	
31		Self-employment and liberal professions	
33		Public service executive	
34		Teachers, scientific professions	
35		Information, art, entertainment-related professions	
37		Corporate administrative and commercial executives	
38		Engineers and technical corporate executives	
42		School teachers	
43		Health care and social work intermediary occupations	
44		Clergy	
45		Public service administrative intermediary occupations	

Value IHE FR	Description	Recommended Display	IHE France comments
46		Middle management (Business and firms)	
47		Technicians	
48		Supervisors, first line managers	
52		Civilian employees and public service representative	
53		Police and military forces	
54		Administrative employees	
55		Commercial clerk	
56		Service and support to individuals staff	
62		Industrial skilled workers	
63		Craft skilled workers	
64		Drivers	
65		Handling, storage skilled workers	
67		Industrial non skilled workers	
68		Craft non skilled workers	
69		Farm workers	
71		Former farm owners	
72		Former Craftsmen, merchants and heads of business	
74		Former executives	
75		Former Technicians and associate professionals	
77		Former clerk	
78		Former workers	
81		Unemployed who has never worked	
83		Military, serviceman	
84		Students	
85		Less-than-60 unemployed people (except retired)	
86		60-and-more unemployed people (except retired)	

# 4.I.2.2.10 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)
- A03 (Discharge)
- A04 (Outpatient)
  - A05 (Pre-admit)
  - A14 (Pending admit)
  - A21 (Temporary discharge, absence, transfer movement to another department
  - Z99, when the updated movement corresponds to one of the events above

625

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR
1	47	DLD	0	[01]		Establishment of origin and date of the last visit to this facility	*
2	250	CE	0	[01]		Discharge transport mode (nomenclature displayed in the 0430 table, see above, under the PV2-28 field description)	*
3	2	IS	X	[00]		Pre-admit type	*
4	26	TS	0	[01]		Placement starting date (psy)	*
5	26	TS	0	[01]		Placement ending date (psy)	*
6	250	XAD	О	[02]		Establishment of origin or destination establishment address	*
7	250	CX	0	[01]		Establishment of origin account number	*
8	250	CX	О	[0N]		Archive number	*
9	6	IS	0	[01]		Personalized discharge mode	*
10	2	IS	С	[01]		legal care mode RIM-P code transmitted in the PV2-3	*

ZFV-1: Establishment of origin (DLD)

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

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

*ZFV-2: Discharge transport mode (CE)* 

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).

635

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")

640 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)

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

645

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

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)

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

ZFV-9: Personalized discharge mode

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.

660

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

This conditional field shall be filled when the legal care mode is transmitted (PV2-3 field).

The values in the following table shall be used, according to the official RIM-P codes documentation:

665

Recommended Display					
Free psychiatric care					
Psychiatric care following a request by the representative of the State					
Code of Criminal Procedure 706-135 article and Code of Public Health L. 3213-7 article for persons regarded as criminally irresponsible					
Temporary Placement Order					
Prisoners: Code of Criminal Procedure D.398 article					
Psychiatric care following a request by a third party (2 certificates)  Or					
Psychiatric care following an emergency request by a third party (1 certificate)  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.

#### Example:

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

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

or

675

 $PV2 \mid \mid \mid SDREM^*$  Psychiatric care following the request by the representative of the State, by order of the mayor  $\mid$  ,

# ZFV-10 field would take the following value:

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

## 680 4.I.2.2.11 ZFM segment : DRG movement

The ZFM segment shall be present.

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.

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SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR
1	1	IS	О	[01]	IHE ZFM-1	PMSI admission mode	*
2	1	IS	0	[01]	IHE ZFM-2	PMSI discharge mode	*
3	1	IS	О	[01]	IHE ZFM-3-	PMSI establishment of origin mode	*
4	1	IS	О	[01]	IHE ZFM-3-	PMSI destination mode	*

685

The French ZFM segment is required for the following events:

- 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
  - 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
  - Z99 (when the updated movement corresponds to one of the events above)

# 705 ZFM-1: DRG admit mode (IS)

Values allowed by this national extension are:

IHE Table ZFM-1 – 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.

# 710 ZFM-2: DRG discharge mode (IS)

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

IHE Table ZFM-2 – 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

(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)

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

720

IHE Table ZFM-3-4 – 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	
		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: <a href="http://www.atih.sante.fr">http://www.atih.sante.fr</a>

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

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.I.2.2.12 Segment ZFD : Additional demographic information

735 The French ZFD segment required if known for the following events:

- A01 (Admit)
- A04 (Outpatient)
- A05 (Pre-admit)
- A14 (Pending admit)
- A28 (Creation of a new patient)
  - A31 (Patient's Information update)
  - Z99, when the updated movement corresponds to one of the events above

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR
1	8	NA	O	[01]		Lunar Date	*
2	16	NM	O	[01]		Number of weeks of gestation	*
3	1	ID	0	[01]		SMS Consent	*

## 745 ZFD-1: Lunar date (NA)

This field shall be used for those who set an arbitrary date for their birth date. The NA data type is a 3-interger vector:

ZFD-1.1: a double-digit integer that represents the day.

Example: Patients who are aware of the month and year of their birth, but who don't know the exact day:

- If the birth took place on the 1st week, day = 31
- If the birth took place on the 1st week, day = 32
- If the birth took place on the 1st week, day = 33
- If the birth took place on the 1st week, day = 34
- If the birth took place on the 1st week, day = 35

ZFD-1.2: a double-digit integer that represents the month, which may be higher than 12.

ZFD-1.3: 4-digit integer that represents the year of birth.

ZFD-2: Number of weeks of gestation (NM)

760 This element points to the number of weeks of gestation.

#### ZFD-3: SMS Consent

This optional field indicates whether the patient accepts to receive a text message on their mobile device, for any reason: appointment confirmation, appointment update...

It takes the "Y" value should the patient consent to receive text messages, and the "N" value otherwise. The default value is "N".

# 4.I.2.2.13 IN1; IN2; IN3; GT1 segments: Medical coverage

HL7 v2.5 chapters 3 and 6 specify the order and structure of IN1, IN2, IN3, and GT1 segments within a message. The field definitions within France are as follows.

# 770 4.I.2.2.13.1 Compulsory Health Insurance (CHI) coverage related to the patient's account

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.

# 775 The displayed data are:

Coveraç	ge information	Type[lg] HL7	Field	Usage	Card.	Comments	Source/values
CHI Organisation	Type of payer	CE[250]	IN1-2	R	[11]	A CHI organization or the State Medical Assistance (SMA) or the Universal Health Cover (UHC)	« CHI», « SMA », « UHC » See 0072 table redefined by IHE F, section 4.20
	Insurance scheme + fund + paying center	CX[250]	IN1-3	R	[11]	Scheme succession (2), management fund (3), management center (4)	Vitale smart card or legal attestation. List is available at www.sesamvitale.fr (Beneficiary organisations codification table)
Insured	IRN (Insurance Register Number)	CX[250]	IN1-49	RE	[01]	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	[01]	2 alphanumerical characters	Vitale card List available at www.sesam- vitale.fr (CDC 1.40- Workstation data

Covera	ge information	Type[lg] HL7	Field	Usage	Card.	Comments	Source/values
							dictionary)
	Identity	XPN[250]	IN1-16	RE	[01]	Last name, first name	
	Address	XAD[250]	IN1-19	RE	[01]		
	Telephones	XTN[250]	IN2-63	RE	[01]		
Beneficiary							
	Birth order	NM	PID-25	RE	[01]	« 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	[11]	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	[01]	As many [IN1, IN2, IN3] sequences as there are CHI coverage periods	
	End	DT[8]	IN1-13	RE	[01]		
	Exemption from co- payment	IS[3]	IN1-15	RE	[01]	1 alphanumerical character	B2 standard, Appendix 9
Visit coverage	CHI supporting documentation's nature	ST[2]	IN1-45	RE	[01]	1 alphanumerical character	B2 standard, Appendix 8
	Patient Management request	AUI[239]	IN1-14	0	[01]	Authorisation date of delivery (YYYYMMDD)	
	Insurance's nature	IS[2]	IN1-31	RE	[01]	10 (disease), 13 (Alsace-Moselle disease), 30 (Maternity), 41 (Work accident), 90 (prevention)	B2 standard (type 2-position 77-78)

Coverag	e 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	С	[01]	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	[01]	See PV2 segment in PAM French extension	B2 standard, Appendix 25 These values are similar for each segment recurrence
	Third-party payer (Y/N)	IS[2]	IN1-20	RE	[01]	Y / N (= refund the insured)	B2 standard, Appendix 25 These values are similar for each segment recurrence
	Patient Medical Management rate	MOP[23]	IN3-5	RE	[01]		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 0148 table in the

Coverage information		Type[lg] HL7	Field	Usage	Card.	Comments	Source/values
							4.21 section). IN3-5.2 contains the percentage (example 60)

# 4.I.2.2.13.2 Complementary private health insurance (CPHI) or Complementary Medical Assistance (CMA), or Universal Complementary Health (UCH) coverage related to the patient's account

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 organisations 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 organisation is represented by only one [IN1, IN2, IN3] sequence.

Coverage information		Type[lg] HL7	Field	Usage	Card.	Comments	Source/values
CPHI Organisation	Type of payer	CE[250]	IN1-2	R	[11]	CPHI or UCHC complementary organisation or CMA coverage	« CPHI », « UCHC », « CMA » See 0072 table defined by IHE France, in sSction 4.20.
	Complementar y organisation number	CX[250]	IN1-3	R	[11]	« CPHI », « UCHC » or « CMA » number	Entitlement support (card or entitlement attestation)
Insured	Member identifier	CX[250]	IN1-49	RE	[01]	CPHI member	Entitlement support (card or entitlement attestation)
	Identity	XPN[250]	IN1-16	RE	[01]	Last name, first name	
	Address	XAD[250]	IN1-19	RE	[01]		
	Telephones	XTN[250]	IN2-63	RE	[01]		

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Coverage	information	Type[lg] HL7	Field	Usage	Card.	Comments	Source/values
Beneficiary	Beneficiary's status	CE[250]	IN1-17	R	[11]	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	[01]		
	End	DT[8]	IN1-13	RE	[01]		
Visit coverage	Nature of the CPHI supporting documentation	ST[2]	IN1-45	RE	[01]	1 numerical character	B2 standard, Appendix 8
	Type of contract	IS[2]	IN1-31	RE	[01]	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	[01]		This information can be disaggregated into three subfields. Here, IN3-5.1 displays the nature of the rate, using a value allowed by the 0148 table (see 0148 Table in section 4.21). IN3-5.2 contains the percentage (example 100)
Managed services	RMC[82]	IN2-28	0	[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	[01]	Y / N (= refund the insured)	

# 4.I.2.2.13.3 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 [GT1, IN1, IN2] sequence represents such a payer

GT1 sequence

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR
1	4	SI	R	[11]		Set ID - GT1	
2	250	CX	О	[0*]		Guarantor Number	
3	250	XPN	R	[1*]		Guarantor Name	
4	250	XPN	X	[00]		Guarantor Spouse Name	*
5	250	XAD	0	[0*]		Guarantor Address	
6	250	XTN	О	[0*]		Guarantor Ph Num - Home	

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR
7	250	XTN	0	[0*]		Guarantor Ph Num - Business	
8	26	TS	X	[00]]		Guarantor Date/Time Of Birth	*
9	1	IS	X	[00]	0001	Guarantor Administrative Sex	*
10	2	IS	0	[01]	0068	Guarantor Type	
11	250	CE	0	[01]	0063	Guarantor Relationship	
12	11	ST	0	[01]		Guarantor SSN	
13	8	DT	0	[01]		Guarantor Date - Begin	
14	8	DT	0	[01]		Guarantor Date - End	
15	2	NM	0	[01]		Guarantor Priority	
16	250	XPN	0	[0*]		Guarantor Employer Name	
17	250	XAD	0	[0*]		Guarantor Employer Address	
18	250	XTN	О	[0*]		Guarantor Employer Phone Number	
19	250	CX	О	[0*]		Guarantor Employee ID Number	
20	2	IS	0	[01]	0066	Guarantor Employment Status	
21	250	XON	0	[0*]		Guarantor Organization Name	
22	1	ID	0	[01]	0136	Guarantor Billing Hold Flag	
23	250	CE	0	[01]	0341	Guarantor Credit Rating Code	
24	26	TS	О	[01]		Guarantor Death Date And Time	
25	1	ID	0	[01]	0136	Guarantor Death Flag	
26	250	CE	О	[01]	0218	Guarantor Charge Adjustment Code	
27	10	СР	О	[01]		Guarantor Household Annual Income	
28	3	NM	0	[01]		Guarantor Household Size	
29	250	CX	О	[01]		Guarantor Employer ID Number	*
30	250	CE	0	[01]	0002	Guarantor Marital Status Code	
31	8	DT	О	[01]		Guarantor Hire Effective Date	
32	8	DT	О	[01]		Employment Stop Date	
33	2	IS	X	[00]	0223	Living Dependency	*
34	2	IS	X	[00]	0009	Ambulatory Status	*
35	250	CE	X	[00]	0171	Citizenship	*
36	250	CE	О	[01]	0296	Primary Language	
37	2	IS	О	[01]	0220	, , ,	
38	250	CE	X	[00]	0215	Publicity Code	*
39	1	ID	X	[00]	0136	Protection Indicator	*

SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	IHE FR
40	2	IS	X	[00]	0231	Student Indicator	*
41	250	CE	X	[00]	0006	Religion	*
42	250	XPN	X	[00]		Mother's Maiden Name	*
43	250	CE	0	[01]	<u>0212</u>	Nationality	
44	250	CE	X	[00]	0189	Ethnic Group	*
45	250	XPN	0	[0*]		Contact Person's Name	
46	250	XTN	О	[0*]		Contact Person's Telephone Number	
47	250	CE	0	[01]	0222	Contact Reason	
48	3	IS	0	[01]	0063	Contact Relationship	
49	20	ST	0	[01]		Job Title	
50	20	JCC	0	[01]		Job Code/Class	
51	250	XON	О	[01]		Guarantor Employer's Organization Name	*
52	2	IS	X	[00]	0295	Handicap	*
53	2	IS	0	[01]	0311	Job Status	
54	50	FC	О	[01]		Guarantor Financial Class	
55	250	CE	X	[00]	0005	Guarantor Race	*
56	250	ST	0	[01]		Guarantor Birth Place	
57	2	IS	0	[01]	0099	VIP Indicator	

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Coverage information		Type[lg] HL7	Field	Usage	Card.	Comments	Source/values
payer/drawee	Type of payer	CE[250]	IN1-2	R	[11]	Patient Insured External Facility Employer County	PAT, INS, EMP, EXTF, COU: 0072 table defined by IHE France, see Section 4.20
	Name or corporate name	XPN[250]	IN1-16	RE	[01]		
	First name	XPN[250]	IN1-16	RE	[01]		
	Addresses	XAD[250]	IN1-19	RE	[01]		
	Telephone s	XTN[250]	IN2-63	RE	[01]		
Entitlement period	Beginning	DT[8]	IN1-12	RE	[01]		

Coverage information		Type[lg] HL7	Field	Usage	Card.	Comments	Source/values
	End	DT[8]	IN1-13	RE	[01]		
Visit coverage	Nature of the supporting document	ST[2]	IN1-45	RE	[01]	1 numerical character	

Values that shall be used for the IN1-2 field are displayed in the 0072 "user defined" table (HL7®) and fed by IHE France:

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Table 0072: Type of payer

IHE FR value	English value	French display	Comments
AMO	СНІ	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	СРНІ	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 [GT1, 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 [GT1, IN1, IN2] sequence providing details about the insured as a payer
EMP	EMP	Employer	In a [GT1, IN1, IN2] sequence providing details about the employer as a payer
ETB	EXTF	External facility	In a [GT1, IN1, IN2] sequence providing details about external facility as a payer
DEP	COU	County	In a [GT1, IN1, IN2] sequence providing details about the county as a payer

Values that shall be used for the IN3-5.1 component are displayed in HL7 standard's 0148 table, which content was redefined by IHE France as follows:

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Table 0148: Types of refund rules

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
РВ	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.I.2.2.14 **OBX** segment

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.

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SEQ	LEN	DT	Usage	Card.	HL7 TBL#	ELEMENT NAME	II	HE FR
OBX-	4	SI	R	[11]		Set ID - OBX		
OBX-	2	ID	R	[11]	00125	Observation type		
OBX-	250	CE	R	[11]		Observation identifier	*	
OBX- 5	unlimited	varies	С	[11]		Observation value		
OBX-	250	CE	С	[01]		Unit		
OBX- 11	1	ID	R	[11]	00085	Observation status	*	User table completed
OBX- 14	26	TS	RE	[01]		Observation date/time		
OBX- 16	250	XCN	R	[11]		Data enterer		

# 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:

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	
m	Meter	Mètre	UnitsOfMeasureCaseSensitive	
cm	Centimeter	Centimètre	UnitsOfMeasureCaseSensitive	

#### OBX-11: Observation status

This field shall contain the observation status. The table below lists values that are usable in the scope of PAM Profile 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 PDS & PES actors is wrong and must be deleted. This observation shall never be displayed or used by the receiving systems.		

#### OBX-11: Observation date/time

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.

# 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.

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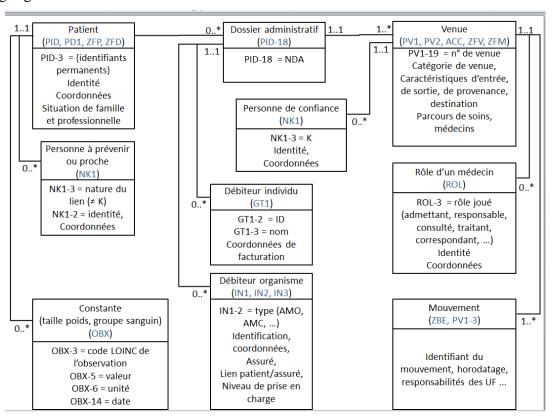
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# 4.I.2.3 Requirements on PAM Profile

#### 4.I.2.3.1 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.



<sup>1</sup>st 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-

# 4.I.2.3.1.1 The Functional Unit (FU) or Ward

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).

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<sup>2&</sup>lt;sup>nd</sup> 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 below, section 5.1.4).

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:

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- 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.I.2.3.1.2 The concept of patient account (informative)

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.I.2.3.1.3 The concept of visit/encounter

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".

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.

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.

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

# 4.I.2.3.1.4 The concept of movement

This extension uses the IHE international definition of the "movement" as it appears in the ITI Technical Framework, 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".

# 4.I.2.3.2 Actor Requirements for PAM

905 Table 4.I.2.3.2-1: PAM Profile - Actors and Options

Actors	Option	Opt	tionality	Reference
		Intl	French	
Patient	Merge	О	R	ITI TF-2b:3.30.4.1
Demographics Supplier	Link/Unlink	О	0	ITI TF-2b:3.30.4.2
Зиррпег	Acknowledgement Support	О	0	ITI TF-2b: 3.30.4.4
	Ambulatory Patient Data	О	0	ITI TF-2b: 3.30.4.5
Patient	Merge	О	R	ITI TF-2b:3.30.4.1
Demographics Consumer	Link/Unlink	О	0	ITI TF-2b:3.30.4.2
Consumer	Acknowledgement Support	О	0	ITI TF-2b: 3.30.4.4
Patient Encounter Supplier	Inpatient / Outpatient Encounter Management	О	R	ITI TF-2b: 3.31.5.2
	Pending Event Management	0	0	ITI TF-2b:3.31.5.3
	Advanced Encounter Management	О	R	ITI TF-2b:3.31.5.4
	Temporary Patient Transfer Tracking	О	0	ITI TF-2b:3.31.5.5
	Historic Movement	О	R	ITI TF-2b:3.31.5.6 ITI TF-4: something in national extension for ZBE segment
	Acknowledgement Support	О	0	ITI TF-2b: 3.31.5.7
	Maintain Demographics	0	0	ITI TF-1:14.3.9 ITI TF-2b:3.31.5.8
	Ambulatory Patient Dana	О	0	ITI TF-2b: 3.31.5.8
Patient Encounter Consumer	Inpatient / Outpatient Encounter Management	О	R	ITI TF-2b: 3.31.5.2
	Pending Event Management	О	О	ITI TF-2b:3.31.5.3

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Actors	Option	Opti	ionality	Reference
		Intl	French	
	Advanced Encounter Management	О	R	ITI TF-2b:3.31.5.4
	Temporary Patient Transfer Tracking	О	0	ITI TF-2b:3.31.5.5
	Historic Movement	О	R	ITI TF-2b:3.31.5.6 ITI TF-4: something in national extension for ZBE segment
	Acknowledgement Support	О	О	ITI TF-2b: 3.31.5.7
	Maintain Demographics	О	0	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.I.2.3.3 Transaction Specific Requirements

#### 920 4.I.2.3.3.1 Movement management rules applicable in France

#### 4.I.2.3.3.1.1 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):

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• The pre-admission

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- 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,
  - 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,
- 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 the admission time, use the Z99 message to add or update the information.
- The change of the patient management medico-administrative conditions (medical price discipline, involuntary hospitalization, an 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).
- 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.

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.

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# 960 4.I.2.3.3.1.2 Granularity of messages that describe a movement

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.I.2.3.3.1.3 Trigger events associated with movement

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

The following events shall be supported in historical movement events: France

Category	insert	cancel	update
Change of the medical FU (medical ward)	Z80	Z81	Z99

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Category	insert	cancel	update
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:

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

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# 4.I.2.3.3.1.4 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.

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• 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).

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

- 990 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:
  - Its display name,
  - The kind of activity (inpatient, partial, emergency, outpatient or recurring hospitalization),

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- 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.

#### 4.I.2.3.3.2 ITI-30 Extensions

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The French National Extensions modify the ITI-30 transaction.

- The French extension adds the following segment: ZFD Further demographic details
- 1005 It does not modify ITI-30 for identity creation/update/cancellation/merge messages.

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.

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.

• 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.

#### 1025 **4.I.2.3.3.3 ITI-31** Extensions

# 4.I.2.3.3.3.1 Trigger Event Extensions

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

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• 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.

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.

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.I.2.3.3.3.1-1.

Table 4.I.2.3.3.3.1-1: List of French required events in France

Real world Event	notified	cancelled	rectified
Admit inpatient	A01	A11	Z99
Register outpatient	A04	AII	L99
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

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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.

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.I.2.3.3.3.2 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
  - ZFD: further demographic details

The location of the local segments in the message structure is **in bold text** in Table 4.I.2.3.3.3.2-1:

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Table 4.I.2.3.3.3.2-1: French Specific Segments

Segment	Meaning	Usage	Card.	IHE France remarks
MSH	Message Header	R	[11]	
EVN	Event Type	R	[11]	
PID	Patient Identification	R	[11]	
PD1	Additional Demographics	О	[01]	
ROL	Role	0	[0*]	Used to define the officially declared referring physician
NK1	Next of Kin / Associated Parties	О	[0*]	
PV1	Patient Visit	R	[11]	
PV2	Patient Visit – Additional Info	О	[01]	
ZBE	Movement segment	С	[11]	Highlights FU's movement & responsibilities
ZFA	PHR status	RE	[01]	Patient's PHR status
ZFP	Professional occupation	RE	[01]	Occupation & socio-professional category

Segment	Meaning	Usage	Card.	IHE France remarks
ZFV	Additional information about the visit	RE	[01]	Origine Institution, period of admission, transport of discharge
ZFM	DRPG <sup>2</sup> Movement	RE	[01]	DRPG modes: admission, discharge, origin, destination
ZFD	Further demographic details	RE	[01]	
ROL	Role	О	[0*]	Used to define other physicians that interact with the patient, especially the substitute and the referred to provider doctors
DB1	Disability Information	О	[0*]	
OBX	Observation/Result	О	[0*]	
AL1	Allergy Information	О	[0*]	
DG1	Diagnosis Information	О	[0*]	
DRG	Diagnosis Related Group	О	[01]	
	PROCEDURE begin	О	[0*]	
PR1	Procedures	R	[11]	
ROL	Role	О	[0*]	
	PROCEDURE end			
GT1	Guarantor	О	[0*]	
	INSURANCE begin	О	[0*]	
IN1	Insurance	R	[11]	
IN2	Insurance Additional Info.	О	[01]	
IN3	Insurance Additional Info - Cert.	О	[01]	
ROL	Role	О	[0*]	
	INSURANCE end			
ACC	Accident Information	О	[01]	
UB1	Universal Bill Information	О	[01]	
UB2	Universal Bill 92 Information	О	[01]	
PDA	Patient Death and Autopsy	О	[01]	

# 4.I.2.3.3.3.3 Historic Movement Management (from intl)

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

<sup>&</sup>lt;sup>2</sup> 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 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).

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

1075 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:

- 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.

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).

1100 <u>Implementation note:</u> The Patient Encounter Consumer must support transaction log update to maintain integrity of the Movement records.

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# 4.I.2.3.3.3.4 Details regarding the account/visit/movement identifiers

#### 4.I.2.3.3.3.4.1 Re-use of the account/visit/movement identifiers

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

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

# 4.I.2.3.3.2.4.2 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.

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.

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

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

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