Vitrea® Intelligence

Vitrea Intelligence 3.3

HL7 Use Form

Revision: A

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Vitrea Intelligence HL7 Use Form

Date:

This form lists the HL7 fields used by Vitrea Intelligence Vitrea Intelligence.

- Items marked as optional are not required but are used if available.
- Other items are necessary for some functionality, of differing levels of importance.

Using this form

This form lists the information that Vitrea Intelligence Vitrea Intelligence extracts from your HL7 messages and the fields where Vitrea Intelligence expects to find that information. (Field references are taken from HL7 2.3.1.)

1. For each piece of information, check where your system stores the information. If this is the same message type and field, you can ignore the message. Vitrea Intelligence handles it correctly.
2. If your system stores the information in a different place in the HL7 messages, write the place in the appropriate spot on this form.
3. If the values you have entered under **In field** and **Vitrea Intelligence looks in** are different, you need a morpher script that copies the information from its current location to the field where Vitrea Intelligence expects it. Some health systems might not even support the section of an HL7 message where Vitrea Intelligence looks, so your morpher script must copy the information to that field.
4. The **Impact** field provides the effect if the information is unavailable. Some information, such as the name and ID of the attending practitioner, is not needed for version 3.3. We plan to use the information in a future release.
5. Using this information, map your fields to the expected fields. Use the mapping to write your morpher script.

Patient and attending practitioner information (ADT, ORM & ORU messages)

Information		Impact if missing	Vitrea Intelligence looks in ...	Message type	In field
Site & Time	Site	Required	MSH-6		
	Message time stamp	Required	MSH-7		
Patient Info	Local PID	Required	PID-3		
	Affinity PID	Required	PID-2		
	Family name (optional)	None	PID-5-1		
	Given name (optional)	None	PID-5-2		
	Sex	Can't filter by gender	PID-8		
	Birth date	Can't filter by patient age	PID-7		
Patient Visit (Encounter)	Visit number	Required	PV1-19-1		
	Visit domain	Required	PV1-19-4		
	Visit start	Required	PV1-44		
	Visit end	No exam duration or turnaround time	PV1-45		
	Patient class	Can't filter by patient type	PV1-2		
Attending Practitioner	ID	None	PV1-7-1		
	System	None	PV1-7-22		
	Family name (optional)	None	PV1-7-2		
	Given name (optional)	None	PV1-7-3		
	Suffix (optional)	None	PV1-7-5		
	Prefix (optional)	None	PV1-7-6		
Diagnosis	ICD code(s) (optional)	None	DG1-3-1		
	Code system (optional)	None	DG1-3-3		

Procedure information (ORM messages)

Information		Impact if missing	Vitrea Intelligence looks in ...	In field
Procedure Request	Master order number	Required	ORC-4	
	Child order number	Required	OBR-2	
	Procedure request code	No procedure information	OBR-4	
	Priority	None	OBR-27-6	
	Scheduled date/time	No schedule-related metrics (late start, patient late)	OBR-36	
	Authored on date/time	No appointment-wait metrics	OBR-27-4	
	Reason (optional)	None	OBR-31	
Requesting Practitioner	ID	No requesting physician	ORC-12-1	
	System	If absent, IDs must be unique across all systems	ORC-12-22	
	Family name (optional)	No name component	ORC-12-2	
	Given name (optional)	No name component	ORC-12-3	
	Suffix (optional)	No name component	ORC-12-5	
	Prefix (optional)	No name component	ORC-12-6	
Procedure	Accession number	Required	ORC-3	
	Procedure codes	No procedure information	OBR-4	
	Government procedure codes	None	OBR-44	
	Procedure start time	No metrics for exam duration, patient wait, patient late or exam late	OBR-7	
	Procedure end time	No exam duration or turnaround time	OBR-8	
	Notes (optional)	None	OBR-13	
Performing Technologist	ID	No performing technologist	OBR-34-1	
	System	If absent, IDs must be unique across all systems	OBR-34-22	
	Family name (optional)	No name component	OBR-34-2	
	Given name (optional)	No name component	OBR-34-3	
	Suffix (optional)	No name component	OBR-34-5	
	Prefix (optional)	No name component	OBR-34-6	
Performing Device	ID	No schedule device data	OBR-19-1	
	System/domain	If absent, IDs must be unique across all systems	OBR-19-22	
	Device name (optional)	No HL7 device name	OBR-19-2	
	Device type (optional)	No HL7 device type	OBR-24	

Information		Impact if missing	Vitrea Intelligence looks in ...	In field
Admitting Practitioner	ID	None	ORC-10-1	
	System	None	ORC-10-22	
	Family name (optional)	None	ORC-10-2	
	Given name (optional)	None	ORC-10-3	
	Suffix (optional)	None	ORC-10-5	
	Prefix (optional)	None	ORC-10-6	
Location	Point of care	None	PV1-3-1	
	Room location ID	None	PV1-3-2	
	Bed location ID	None	PV1-3-3	
	Site/facility location ID	No facility information	PV1-3-4	
	Building location ID	None	PV1-3-7	
	Floor location ID	None	PV1-3-8	

Report and radiology information (ORU messages)

Information		Impact if missing	Vitrea Intelligence looks in ...	In field
Diagnostic Report	Accession number	Required	ORC-3	
	Procedure codes	No procedure information	OBR-4	
	Status	Required	OBR-25	
	Issued time (optional)	No turnaround time	OBR-22	
Primary Radiologist	ID	Required	OBR-32-1	
	System	Required	OBR-32-22	
	Family name (optional)	No name component	OBR-32-2	
	Given name (optional)	No name component	OBR-32-3	
	Suffix (optional)	No name component	OBR-32-5	
	Prefix (optional)	No name component	OBR-32-6	
Secondary Radiologist	ID	Required	OBR-33-1	
	System	Required	OBR-33-22	
	Family name (optional)	No name component	OBR-33-2	
	Given name (optional)	No name component	OBR-33-3	
	Suffix (optional)	No name component	OBR-33-5	
	Prefix (optional)	No name component	OBR-33-6	

Information		Impact if missing	Vitrea Intelligence looks in ...	In field
Observation	Placer order number (optional)	No number based on placer	ORC-2	
	Accession number	Required	ORC-3	
	Placer number (optional)	No identifier based on placer	OBR-2	
	Filler number (optional)	Required	OBR-3	
	Issued Time (optional)	None	OBR-22	
	Order Status	Required	OBR-25	
	Value Type	Required	OBX-2	
	Observation Identifier (optional)	Information missing	OBX-3	
	Observation Value	Required	OBX-5	
	Interpretation (optional)	None	OBX-8	
	Result Status (optional because OBR-25 is required)	Uses Diagnostic Report status instead	OBX-11	
	Effective Date and Time (optional)	None	OBX-14	
	Responsible Observer (optional)	None	OBX-16	
	Observation Method (optional)	None	OBX-17	
	Body Site (optional)	None	OBX-20	

Glossary

Because terminology differs between sites and countries, Vitrea Intelligence uses the FHIR definitions at **https://www.hl7.org/fhir/**.

Attending Practitioner
: A practitioner who is responsible for the overall care of a patient in a hospital or clinic setting. An attending physician may also supervise and teach medical students, interns, and residents involved in the patient's care. The attending practitioner might or might not also be the practitioner who admitted the patient, who ordered the procedures, or the practitioner who authorized the procedures.

Authorizing Practitioner
: The practitioner who authorized this procedure. There is no check to see if the practitioner had the authority in the organization.

Child Order Number
: See **Master Order Number**.

Domain
: In FHIR, a domain resource is one with a human-friendly XHTML representation.

HCPCS
: Healthcare Common Procedure Coding System, a standardized coding system for medical procedures. Used in the United States.

ICD
: International Classification of Disease, a standardized diagnosis system.

ID/System
: A machine-friendly identifier separate from a human-friendly name. The ID is restricted in scope to the system. IDs can be presumed to be unique within a system, but not across systems, which is why systems or domains are also used. Two different hospitals might use the same ID value for different things, but because they have different domains or systems, the IDs are not confused. ID 5 can represent Dr. Able at one hospital and Dr. Zulu at another because they have different domains.

Location Resource
: Location resource as defined by the FHIR model. See **https://www.hl7.org/fhir/location.html#example** for more information. Often called a site or a facility. In FHIR, locations can be identified geographically or symbolically: a site might be a building, but it can also be (for example) an ambulance.

Master Order Number
: The order number responsible for causing this set of orders. For example, there might be a single order number for an automobile injury and then subsequent lesser (or child) orders that handle an MRI procedure and a set of X-rays and a sonogram. Some systems call this the Placer Group Number.

PID
: Patient ID

Practitioner
: A medical doctor or qualified hospital employee. A physician may also supervise and teach medical students, interns, and residents involved in the patient's care. Most practitioners are medical doctors, but some categories use the term to include other specialties.

Primary Radiologist
: Radiologist who is responsible for preparing the report.

Procedure Codes and Government Procedure Codes
: The government provides a set of codes for procedures, such as HCPCS in the United States or MBS in Australia. These codes might or might not match with the codes used in the hospital organization for different procedures. A single government code might encompass three different procedures in the organization, while a single code in the organization might represent several government procedures.

Secondary Radiologist
: Radiologist who assisted in preparing the report.

Site
: Often called a facility. In FHIR, a "site" is a geographic location; that site can have multiple buildings (usually buildings), which can in turn have specific floors and rooms.

Visit Domain
: Often called "place of service." This is where the study occurred; it might also contain information about whether this is a scheduled (office) visit, an outpatient visit, or an emergency room visit.