

Gravidanza

High-level information model

Mapping and Implementation: Parinaz Tabari (ptabari@unisa.it)

- **Core Patient Information** (profile: **GravPatient**, base resource: Patient)

Description of demographic and personal details of the pregnant woman

Data element	FHIR path	Data type	Comments
Name (first)	Patient.name.given	humanName	Patient.name
Surname	Patient.name.family		
Age	Patient.birthDate	integer	Calculated from birthDate
Gender	Patient.gender	code	Only Female
Date of birth	Patient.birthDate	Date	
Educational level	Patient.extension[educationalLevel]	String	
Occupation	Patient.extension[occupation]	String	
Marital Status	Patient.extension[maritalStatus]	String	
Italian Language	Patient.extension[italianLangauge]	Boolean	Yes/No
Substance Addiction	Patient.extension[substanceAddiction]	Boolean	Yes/No
Psychological treatment	Patient.extension[psychologicalTreatment]	Boolean	Yes/No

- **Pregnancy details (medical history)**

Description of pregnancy-related information and medical history

(profiles: **GravObservation** and **GravProcedure**, base resources: Observation, Procedure)

Data element	FHIR path	Data Type	Comments
Pregnancy	observation.valueCodeableConcept	CodeableConcept	Pregnancy status (boolean) LOINC: 82810-3 Result: pregnant, not pregnant, unknown
Expected delivery date	Observation.component[ExpectedDeliverydate].code	CodeableConcept	LOINC: 11778-8, delivery date estimated

	Observation.component[ExpectedDeliveryDate].valueDateTime	dateTime	Estimated delivery date (EDD)
Number of Pregnancies	Observation.component[NumberofPregnancies].code	codeableConcept	LOINC: 11996-6 Number of pregnancies
	Observation.component[NumberofPregnancies].valueInteger	Integer	Total number of pregnancies
Undergoing medically assisted procreation	Procedure[MedicallyAssistedProcreation].code	codeableConcept	

- Psychological Function/User Experience/Quality of General Health/follow-up:**
Although the items are patient-reported outcomes, it is best not to use the QuestionnaireResponse resource. Because we do not record the items of the questionnaires, only the outcomes (final result/score) are important to us. Therefore, using the Observation resource and treating the outcomes like a clinical observation is better.

Data element	FHIR path	Data type	Comments	Domain
Profile: PsychologicalFunctionObservation , base resource: Observation				
K10 score	Observation.extension[k10Score]	Integer	No loinc code	Psychological function
PSS score	Observation.extension[PSSScore]	Integer	Loinc: LL6386-8	
MPFI score	Observation.extension[MPFIScore]	Integer	No loinc code	
GSE score	Observation.extension[GSEScore]	Integer	Loinc: 66775-8	
ERQ score	Observation.extension[ERQScore]	Integer	No loinc code	
COPE-NVI-25 score	Observation.extension[COPEScore]	Integer	No loinc code	
BDI-II item 9	Observation.extension[BDIScore]	Integer	Loinc code: 89210-9	
WHOQOL BREF	Observation.extension[WHOQOL BREFScore]	String? [should be integer?!]	Total score (loinc code): 98944-2	
Profile: UserExperienceObservation , base resource: Observation				
UES-SF score	Observation.extension[UES-SF Score]	Integer	No loinc code	User experience
SUS score	Observation.extension[SUSScore]	Integer	No loinc code	
ITA BUS B score	Observation.extension[ITAScore]	Integer	No loinc code	
uMARS score	Observation.extension[uMARSScore]	Integer	No loinc code	
Profile: QualityOfHealthObservation , base resource: Observation				
GHQ score	Observation.extension[GHQScore]	Integer	No loinc code	Quality of General Health
SF-36 score	Observation.extension[SFScore]	Integer	Loinc code: 72001-1 or 62975-8 (https://loinc.org/72001-1 or	

			https://loinc.org/62975-8) to check?	
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- Follow-up: Periodic evaluations and monitoring (Patient Self-Report + Interview)

Profile: **FollowUpEncounter**, base resource: Encounter

Data element	FHIR path	Data type	Comments
Follow-up date	Encounter.period.start	dateTime	
PSS score (follow-up)	Encounter.extension[pssScoreFollow]	Integer	Loinc code: LL6386-8
Participant feedback	Encounter.extension[participantFeedback]	String	