

Programs synchronization

Note

On the OpenMRS Design Forum 2018-10-03 (meeting notes: <https://notes.openmrs.org/2018-10-03-Design-Forum>) we decided (together with OpenMRS community) synchronize this object via REST because mapping via FHIR is too complex.

Introduction

Note that information about OpenMRS programs is placed [here](#).

FHIR Mapping

On this page are placed suggestion on how to map OpenMRS classes:

OpenMRS class	FHIR class
PatientState	EpisodeOfCare
PatientProgram	ReferralRequest
Program	PlanDefinition
ProgramWorkflow	CarePlan
ProgramWorkflowState	ReferralRequest

Keyword **extension** means that FHIR [Extension](#) has to be used to synchronize this field.

OpenMRS class PatientState. FHIR class [EpisodeOfCare](#).

OpenMRS class	OpenMRS field	DB column	FHIR field	Details
PatientState	patientStateId : Integer	patient_state_id : INT	-	Instead of database id is used the UUID.
PatientState	patientProgram : PatientProgram	patient_program_id : INT	referralRequest : Reference (ReferralRequest)	
PatientState	state : ProgramWorkflowState	state : INT	referralRequest : Reference (ReferralRequest)	
PatientState	startDate : Date	start_date : DATE	period : Period	Used start date from the Period object.
PatientState	endDate : Date	end_date : DATE	period : Period	Used end date from the Period object.
BaseOpenmrsData	creator : User	creator : INT	extension	
BaseOpenmrsData	dateCreated : Date	date_created : DATETIME	extension	
BaseOpenmrsData	changedBy : User	changed_by : INT	extension	
BaseOpenmrsData	dateChanged : Date	date_changed : DATETIME	extension	
BaseOpenmrsData	voided : Boolean	voided : TINYINT	extension	
BaseOpenmrsData	dateVoided : Date	date_voided : DATETIME	extension	
BaseOpenmrsData	voidedBy : User	voided_by : INT	extension	
BaseOpenmrsData	voidedReason : String	void_reason : VARCHAR (255)	extension	
BaseOpenmrsObject	uuid : String	uuid : CHAR(38)	identifier : Identifier	

OpenMRS class PatientProgram. FHIR class [ReferralRequest](#).

OpenMRS class	OpenMRS field	DB column	FHIR field	Details
PatientProgram	patientProgramId : Integer	patient_program_id : INT	-	Instead of database id is used the UUID.
PatientProgram	patient : Patient	patient_id : INT	subject : Reference(Patient)	
PatientProgram	program : Program	program_id : INT	definition : Reference (PlanDefinition)	
PatientProgram	location : Location	location_id : INT	supportingInfo : Reference(Any)	
PatientProgram	dateEnrolled : Date	date_enrolled : DATETIME	occurrencePeriod : Period	Used start date from the Period object.
PatientProgram	dateCompleted : Date	date_completed : DATETIME	occurrencePeriod : Period	Used end date from the Period object.
PatientProgram	outcome : Concept	outcome_concept_id : INT	reasonCode : CodeableConcept	
PatientProgram	states : Set<PatientState>	Many to one relation	-	In the PatientState is the reference to PatientProgram.
BaseOpenmrsData	creator : User	creator : INT	extension	
BaseOpenmrsData	dateCreated : Date	date_created : DATETIME	authoredOn : dateTime	
BaseOpenmrsData	changedBy : User	changed_by : INT	extension	
BaseOpenmrsData	dateChanged : Date	date_changed : DATETIME	extension	
BaseOpenmrsData	voided : Boolean	voided : TINYINT	extension	
BaseOpenmrsData	dateVoided : Date	date_voided : DATETIME	extension	
BaseOpenmrsData	voidedBy : User	voided_by : INT	extension	
BaseOpenmrsData	voidedReason : String	void_reason : VARCHAR (255)	extension	
BaseOpenmrsObject	uuid : String	uuid : CHAR(38)	identifier : Identifier	

OpenMRS class Program. FHIR class [PlanDefinition](#).

OpenMRS class	OpenMRS field	DB column	FHIR field	Details
Program	programId : Integer	program_id : INT	-	Instead of database id is used the UUID.
Program	concept : Concept	concept_id : INT	goal.description : CodeableConcept	
Program	outcomesConcept : Concept	Outcomes_concept_id : INT	goal.target.detailCodeableConcept : CodeableConcept	
Program	allWorkflows : Set<ProgramWorkflow>	Many to one relation	-	In the PatientProgram is the reference to Program.
BaseOpenmrsMetadata	name : String	name : VARCHAR(50)	name : string	
BaseOpenmrsMetadata	description : String	description : TEXT	description : markdown	
BaseOpenmrsMetadata	creator : User	creator : INT	extension	
BaseOpenmrsMetadata	dateCreated : Date	date_created : DATETIME	extension	
BaseOpenmrsMetadata	changedBy : User	changed_by : INT	extension	
BaseOpenmrsMetadata	dateChanged : Date	date_changed : DATETIME	date : dateTime	
BaseOpenmrsMetadata	retired : Boolean	retired : TINYINT	extension	
BaseOpenmrsObject	uuid : String	uuid : CHAR(38)	identifier : Identifier	

OpenMRS class ProgramWorkflow. FHIR class [CarePlan](#).

OpenMRS class	OpenMRS field	DB column	FHIR field	Details
ProgramWorkflow	programWorkflowId : Integer	program_workflow_id : INT	-	Instead of database id is used the UUID.
ProgramWorkflow	program : Program	program_id : INT	definition : Reference (PlanDefinition)	
ProgramWorkflow	concept : Concept	concept_id : INT	category : CodeableConcept	
ProgramWorkflow	states : Set<ProgramWorkflowState>	Many to one relation	-	In the ProgramWorkflowState is the reference to ProgramWorkflow.
BaseOpenmrsMeta data	creator : User	creator : INT	extension	
BaseOpenmrsMeta data	dateCreated : Date	date_created : DATETIME	extension	
BaseOpenmrsMeta data	changedBy : User	changed_by : INT	extension	
BaseOpenmrsMeta data	dateChanged : Date	date_changed : DATETIME	extension	
BaseOpenmrsMeta data	retired : Boolean	retired : TINYINT	extension	
BaseOpenmrsObject	uuid : String	uuid : CHAR(38)	identifier : Identifier	

OpenMRS class ProgramWorkflowState. FHIR class [ReferralRequest](#).

OpenMRS class	OpenMRS field	DB column	FHIR field	Details
ProgramWorkflowState	programWorkflowStateId : Integer	program_workflow_state_id : INT	-	Instead of database id is used the UUID.
ProgramWorkflowState	programWorkflow : ProgramWorkflow	program_workflow_id : INT	basedOn : Reference (CarePlan)	
ProgramWorkflowState	concept : Concept	concept_id : INT	reasonCode : CodeableConcept	
ProgramWorkflowState	initial : Boolean	initial : TINYINT	extension	Other solutions: 1. using the status field 2. using the note field
ProgramWorkflowState	terminal : Boolean	terminal : TINYINT	extension	Other solutions: 1. using the status field 2. using the note field
BaseOpenmrsMetadata	creator : User	creator : INT	extension	
BaseOpenmrsMetadata	dateCreated : Date	date_created : DATETIME	extension	
BaseOpenmrsMetadata	changedBy : User	changed_by : INT	extension	
BaseOpenmrsMetadata	dateChanged : Date	date_changed : DATETIME	extension	
BaseOpenmrsMetadata	retired : Boolean	retired : TINYINT	extension	
BaseOpenmrsObject	uuid : String	uuid : CHAR(38)	identifier : Identifier	