Assuta-Datos
AllergyIntolerance FHIR API

FHIR-4.01 API
Version: 2.0
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Contents

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0 Track Changes

Version 1:
- Initial mapping

Version 2:
- Solved most of the open issues
- Filled the Operations section
- Defined an identifier for the resource
- Added open issues about the patient's UUID

1 Operations

Assuta will POST new AllergyIntolerance resources to Datos's server.
When an update occurs Assuta will perform a GET operation searching for the resource according to a business identifier and then perform a PUT operation with the recieved logical ID.

1.1 Create a new AllergyIntolerance
POST [BaseURL]/AllergyIntolerance

1.2 Get an AllergyIntolerance
GET [BaseURL]/AllergyIntolerance/?identifier= http://fhir.assuta.co.il/identifier/allergy-intolerance *|[identifier]*

1.3 Update an AllergyIntolerance
PUT [BaseURL]/AllergyIntolerance/[logical ID]

2 URI's

Code System	URI	Owner	Comments
Tafnit MRN	http://fhir.assuta.co.il/identifier/tafnit-mrn	Assuta	Used to reference the home care Encounter during which the Observation was created
Chemeleon Medication Code	http://fhir.assuta.co.il/cs/chameleon-medication-code	Assuta	
Chemeleon Allergy Code	http://fhir.assuta.co.il/cs/chameleon-allergy-code	Assuta	
AllergyIntolerance	http://terminology.hl7.org/CodeSystem/allergyintolerance-clinical	HL7	

Clinical Status				
Chameleon User ID	http://fhir.assuta.co.il/identifier/chameleon-user-id	Assuta		
Chameleon AllergyIntolerance ID	http://fhir.assuta.co.il/identifier/allergy-intolerance	Assuta		
Chemeleon Allergy reaction code	http://fhir.assuta.co.il/cs/chameleon-allergy-reaction-code	Assuta		

3   Headers

In any HTTP request the client should pass a Content-Type header parameter with the following value: "application/fhir+json; fhirVersion=4.0".
In addition, an authorization parameter shall be included. Example:
Authorization: Basic TW92ZW90ZXN0VXNlcjpBYjEyMzQ=

4   Body

Element name	Cardinality	Type	Value	Notes
resourceType	1..1	string	"AllergyIntolerance"	fixed value
identifier	0..*	Object		
identifier.system	1..1	string	http://fhir.assuta.co.il/identifier/allergy-intolerance	fixed value
identifier.value	1..1	string	[patient].[Drug] | [patient].[Allergy_ID]	
clinicalStatus	1..1	Object		
clinicalStatus.coding	1..*	Object		
clinicalStatus.coding.system	1..1	string	http://terminology.hl7.org/CodeSystem/allergyintolerance-clinical	

clinicalStatus.coding.code	1..1	string	active | inactive | resolved	
type	0..1	string	allergy | intolerance	
category	0..*	string	food | medication | environment | biologic	
criticality	0..1	string	low | high | unable-to-assess	
code	1..1	Object		
code.coding	1..*	Object		
code.coding.system	1..1	string	http://fhir.assuta.co.il/cs/chameleon-medication-code OR: http://fhir.assuta.co.il/cs/chameleon-allergy-code	Depends on the source of the record (Medication/Allergy)
code.coding.code	1..1	string	[Drug] | [Allergy_ID]	Allergy/Medication code
code.text	0..1	string	[Drug_Name] | [Allergy_IDText]	Hebrew description of the substance
patient	1..1	Object		
patient.reference	1..1	string	Patient/[logical id]	A relative URL pointing at the patient resource
recordedDate	0..1	string	[Entry_Date]	Format: YYYY-MM-DDTHH:mm:ss.msZ
recorder	0..1	Object		
recorder.type	1..1	string	"Practitioner"	fixed value
recorder.identifier	1..1	Object		
recorder.identifier.system	1..1	string	http://fhir.assuta.co.il/identifier/chameleon-user-id	fixed value
recorder.identifier.value	1..1	string	[Entry_User]	

recorder.display	0..1	string	[WritingBy]	Name of the recording user
reaction	0..*	Object		
reaction.manifestation	1..*	Object		
reaction.manifestation.coding	0..*	Object		One of: manifestation.coding, manifestation.text MUST be present
reaction.manifestation.coding.system	1..1	string	http://fhir.assuta.co.il/cs/chameleon-allergy-reaction-code	
reaction.manifestation.coding.code	1..1	string	[Reaction]	
reaction.manifestation.text	0..1	string	[Reaction_Text]	One of: manifestation.coding, manifestation.text MUST be present

Example:

```json
{
  "resourceType": "AllergyIntolerance",
  "id": "126765",
  "identifier": [
    {
      "system": "http://fhir.assuta.co.il/identifier/allergy-intolerance",
      "value": "abc123.1078"
    }
  ],
  "clinicalStatus": {
    "coding": [
      {
        "system": "http://terminology.hl7.org/CodeSystem/allergyintolerance-clinical",
        "code": "active"
      }
    ]
  },
```

```
    "type": "allergy",
    "category": [
      "medication"
    ],
    "criticality": "high",
    "code": {
      "coding": [
        {
          "system": "http://fhir.assuta.co.il/cs/chameleon-medication-code",
          "code": "10"
        }
      ],
      "text": "AMPICILLIN"
    },
    "patient": {
      "reference": "Patient/45c72d13-f4f8-4292-81d4-b644d41f583f"
    },
    "recordedDate": "2021-11-21T11:08:11.111Z",
    "recorder": {
      "type": "Practitioner",
      "display": "דר משה אופניק",
      "identifier": {
        "system": "http://fhir.assuta.co.il/identifier/chameleon-user-id",
        "value": "12345"
      }
    },
    "reaction": [
      {
        "manifestation": [
          {
            "coding": [
              {
                "system": "http://fhir.assuta.co.il/cs/chameleon-allergy-reaction-code",
                "code": "117"
              }
            ],
            "text": "קשיי נשימה"
          }
        ]
      }
    ]
}
```

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5 Issues & Decisions

Resource	Element	Issue	Decision	IL-Core Action Required?
AllergyIntolerance		Need to define a mechanism for the interface. Will Datos ask for the Allergies when they fetch patients? Is it a separate transaction? Are UPDATES / DELETES supported?	Assuta will POST/PUT the resources to Datos' server	
AllergyIntolerance	code	One medication code URI for all Assuta sites or separate ones?	Same one	
AllergyIntolerance	identifier / id	What fields should comprise the resource identifier (PK)? Row_ID? Medical_Record? Both?	[patient].[Drug] | [patient].[Allergy_ID]	
AllergyIntolerance	type	Need to define logic to differentiate between allergy and intolerance, if possible		
AllergyIntolerance	category	Need to define logic to differentiate between food | medication | environment | biologic, if possible		
AllergyIntolerance	criticality	values must be: low | high | unable-to-assess Should the source field 'degree' be used to map to these?		
AllergyIntolerance	recorder.identifier	Is WritingBy also a User ID like Entry_User	The actual table (not the view) has Entry_User also, so	

		or is it some other type of identifier?	it's the same mapping for both sources	
AllergyIntolerance	patient.reference	The patient's logical id (UUID) should already be assigned before the AllergyIntolerance resource can be generated		
AllergyIntolerance	reaction.manifestation	Do both allergy sources have coded reaction codes? And if so, is it the same code system for both medication allergies and other allergies?		

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