Health Financing Workflows

- Beneficiary Enrollment
 - Query Beneficiary
 - Check enrollment status
 - Enrol beneficiary
- Claim Submission
 - Check beneficiary validity
 - Check beneficiary balance/treatment options
 - Preauthorization of claim
 - o Track status of claim
 - Submit claim
- Indicator Reporting
 - o openIMIS Indicator Reporting
- openIMIS Patient Level Indicator Reporting
- Other HF Workflows
- Other HIE Workflows



The initial set of draft workflows are FHIR-based workflows leveraging Health Financing and FHIR workflows and ongoing work on Integrating health financing into the OpenHIE Landscape. The workflows are being documented by the OpenHIE community and will be included in the OpenHIE Specification.

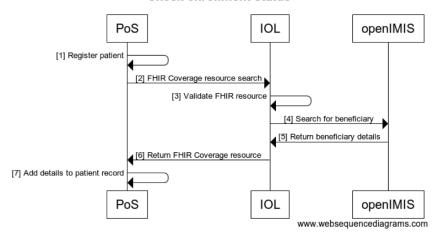
Beneficiary Enrollment

Query Beneficiary

//query for beneficiary - should come close to mirror CR workflow.

Check enrollment status

Check enrollment status



```
title Check enrollment status

PoS->PoS: [1] Register patient

PoS->IOL: [2] FHIR Coverage resource search

IOL->IOL: [3] Validate FHIR resource

IOL->openIMIS: [4] Search for beneficiary

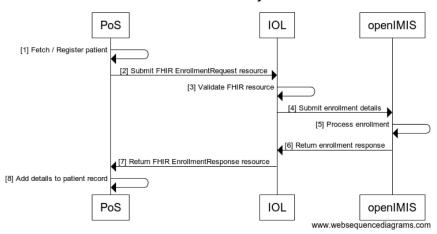
openIMIS->IOL: [5] Return beneficiary details

IOL->PoS: [6] Return FHIR Coverage resource

PoS->PoS: [7] Add details to patient record
```

Enrol beneficiary

Enrol beneficiary



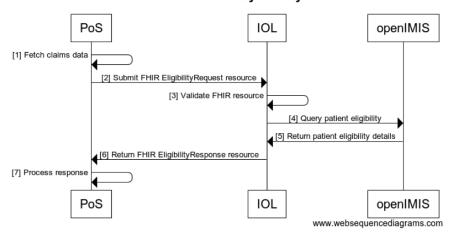
title Enrol beneficiary

PoS->PoS: [1] Fetch / Register patient
PoS->IOL: [2] Submit FHIR EnrollmentRequest resource
IOL->IOL: [3] Validate FHIR resource
IOL->openIMIS: [4] Submit enrollment details
openIMIS->openIMIS: [5] Process enrollment
openIMIS->IOL: [6] Return enrollment response
IOL->PoS: [7] Return FHIR EnrollmentResponse resource
PoS->PoS: [8] Add details to patient record

Claim Submission

Check beneficiary validity

Check beneficiary validity



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title Check beneficiary validity

PoS->PoS: [1] Fetch claims data

PoS->IOL: [2] Submit FHIR EligibilityRequest resource

IOL->IOL: [3] Validate FHIR resource

IOL->openIMIS: [4] Query patient eligibility

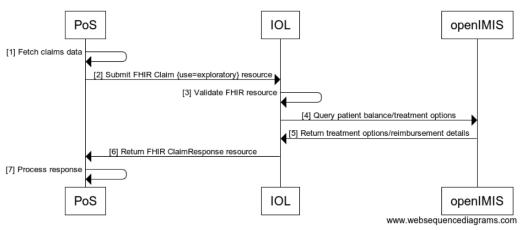
openIMIS->IOL: [5] Return patient eligibility details

IOL->PoS: [6] Return FHIR EligibilityResponse resource

PoS->PoS: [7] Process response
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Check beneficiary balance/treatment options

Check beneficiary balance/treatment options



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title Check beneficiary balance/treatment options

PoS->PoS: [1] Fetch claims data

PoS->IOL: [2] Submit FHIR Claim {use=exploratory} resource

IOL->IOL: [3] Validate FHIR resource

IOL->openIMIS: [4] Query patient balance/treatment options

openIMIS->IOL: [5] Return treatment options/reimbursement details

IOL->PoS: [6] Return FHIR ClaimResponse resource

PoS->PoS: [7] Process response
```

Preauthorization of claim

Preauthorization of claim PoS IOL openIMIS [1] Fetch claims data [2] Submit FHIR Claim {use=proposed} resource [3] Validate FHIR resource [4] Submit claim to reserve funds [Acknowledgement of preauthorizati [5] Return acknowledgement of preauthorization [6] Return FHIR ClaimResponse resource [7] Process response [Additional information requested] [5] Request for additional information [6] Return FHIR CommunicationRequest resource [7] Process response and fetch claims data [8] Submit FHIR Communication resource [9] Validate FHIR resource [10] Submit supporting information [11] Return adjudicated response [12] Return FHIR ClaimResponse resource [13] Process response

PoS

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title Preauthorization of claim
PoS->PoS: [1] Fetch claims data
PoS->IOL: [2] Submit FHIR Claim {use=proposed} resource
IOL->IOL: [3] Validate FHIR resource
IOL->openIMIS: [4] Submit claim to reserve funds
alt Acknowledgement of preauthorization
   openIMIS->IOL: [5] Return acknowledgement of preauthorization
    IOL->PoS: [6] Return FHIR ClaimResponse resource
   PoS->PoS: [7] Process response
else Additional information requested
   openIMIS->IOL: [5] Request for additional information
   IOL->PoS: [6] Return FHIR CommunicationRequest resource
   PoS->PoS: [7] Process response and fetch claims data
   PoS->IOL: [8] Submit FHIR Communication resource
   IOL->IOL: [9] Validate FHIR resource
   IOL->openIMIS: [10] Submit supporting information
   openIMIS->IOL: [11] Return adjudicated response
   IOL->PoS: [12] Return FHIR ClaimResponse resource
    PoS->PoS: [13] Process response
end
```

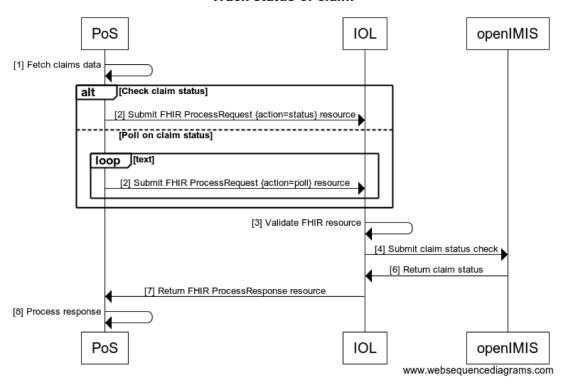
IOL

openIMIS

www.websequencediagrams.com

Track status of claim

Track status of claim

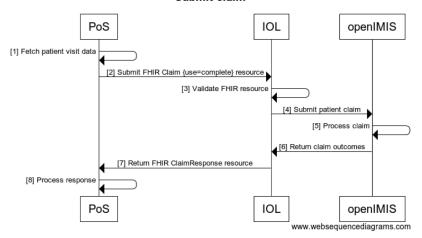


```
title Track status of claim

PoS->PoS: [1] Fetch claims data
alt Check claim status
    PoS->IOL: [2] Submit FHIR ProcessRequest {action=status} resource
else Poll on claim status
    loop text
        PoS->IOL: [2] Submit FHIR ProcessRequest {action=poll} resource
    end
end
IOL->IOL: [3] Validate FHIR resource
IOL->openIMIS: [4] Submit claim status check
openIMIS->IOL: [6] Return claim status
IOL->PoS: [7] Return FHIR ProcessResponse resource
PoS->PoS: [8] Process response
```

Submit claim

Submit claim

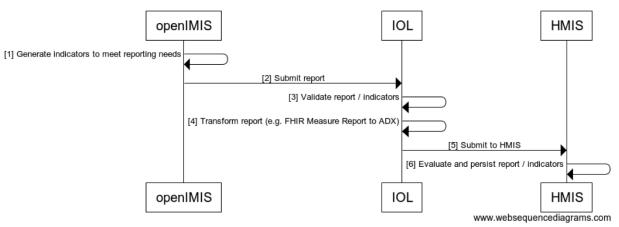


PoS->PoS: [1] Fetch patient visit data
PoS->IOL: [2] Submit FHIR Claim {use=complete} resource
IOL->IOL: [3] Validate FHIR resource
IOL->openIMIS: [4] Submit patient claim
openIMIS->openIMIS: [5] Process claim
openIMIS->IOL: [6] Return claim outcomes
IOL->PoS: [7] Return FHIR ClaimResponse resource
PoS->PoS: [8] Process response

Indicator Reporting

openIMIS Indicator Reporting

openIMIS Indicator Reporting



```
title openIMIS Indicator Reporting

openIMIS->openIMIS: [1] Generate indicators to meet reporting needs
openIMIS->IOL: [2] Submit report

IOL->IOL: [3] Validate report / indicators

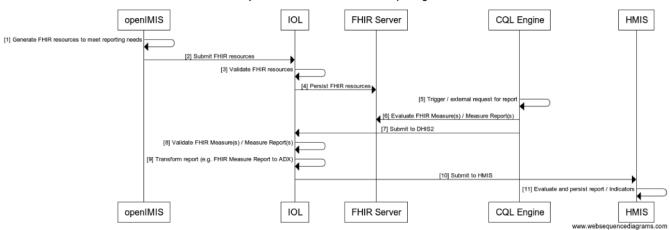
IOL->IOL: [4] Transform report (e.g. FHIR Measure Report to ADX)

IOL->HMIS: [5] Submit to HMIS

HMIS->HMIS: [6] Evaluate and persist report / indicators
```

openIMIS Patient Level Indicator Reporting

openIMIS Patient Level Indicator Reporting



```
title openIMIS Patient Level Indicator Reporting

openIMIS->openIMIS: [1] Generate FHIR resources to meet reporting needs
openIMIS->IOL: [2] Submit FHIR resources
IOL->IOL: [3] Validate FHIR resources
IOL->FHIR Server: [4] Persist FHIR resources
CQL Engine->CQL Engine: [5] Trigger / external request for report
CQL Engine->FHIR Server: [6] Evaluate FHIR Measure(s) / Measure Report(s)
CQL Engine->IOL: [7] Submit to DHIS2
IOL->IOL: [8] Validate FHIR Measure(s) / Measure Report(s)
IOL->IOL: [9] Transform report (e.g. FHIR Measure Report to ADX)
IOL->HMIS: [10] Submit to HMIS
HMIS->HMIS: [11] Evaluate and persist report / indicators
```

Other HF Workflows

 Policy lookup and query – know who is associated to which policy | Stems from a use case in India where 1 family gets a single card / policy number and all members are associated to that policy.

Other HIE Workflows

- 'Patient leaves treatment setting' workflows
 - Explanation of benefit and payment reconciliation
- Client Registry (CR) interactions
 - Beneficiary enrolment
 - Beneficiary verification
- Terminology Services (TS) and Product Registry (PR)
 - Terminology and product code sync
- ...