HL7® FHIR® DevDays

JUNE | 2021

Claims on FHIR

Dharmesh Patel, Google Cloud Healthcare and Mike Arce, Moxe Health

HL7 FHIR DevDays 2021, Virtual Edition, June 7–10, 2021 | @HL7 | @FirelyTeam | #fhirdevdays | www.devdays.com

ORGANIZED BY

PARTNER

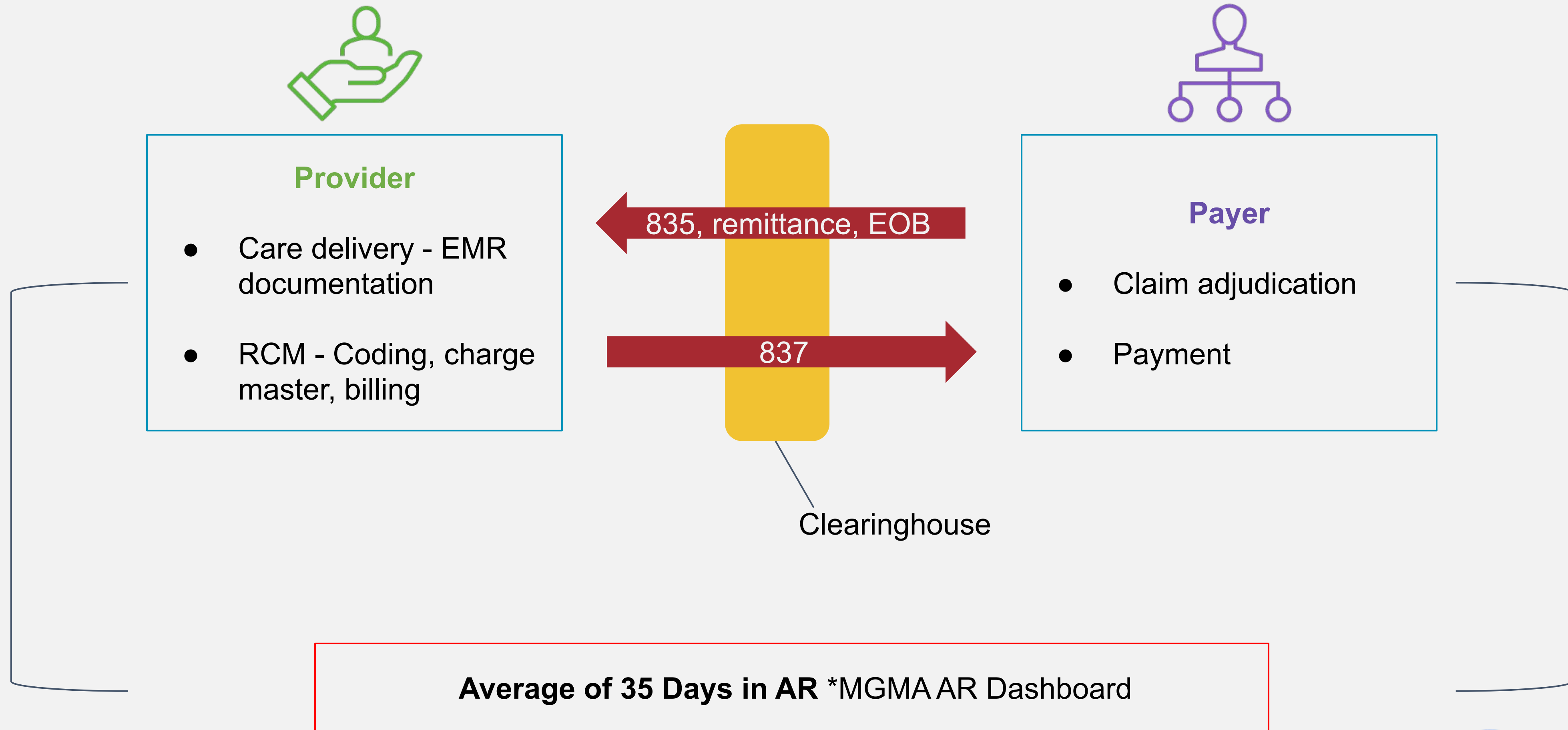
HL7®, FHIR® and the flame Design mark are the registered trademarks of Health Level Seven International and are used with permission.

Google Cloud

Dharmesh Patel
Healthcare Solutions
Google Cloud

Mike Arce
Chief Product Officer
Moxe Health

Claims transaction - Status Quo



Google Cloud

Example Challenges with current Claims processing

Challenge	Reason
Patient Experience	● Long timeline to receive bill ● Confusion on what was billed/why ● EOB leads to more questions than answers ● Potential for overpayments
Administrative Costs	● Staff passively work denials and claim edits ● Manual coding ● Handoffs to multiple parties ● Data requirements not met by standard claim and administrative transactions (ex: medical record review)
Tools and workflow inconsistencies	● Different implementations of X12 ● Manual coding ● Lack of data resulting in multiple queries ● Incorrect information resulting in denials

Challenging Use Cases and Processes

Use Case or Process	Challenges
Prior Authorization	Manual activities and reviews which results into delays in getting authorization for the healthcare services and in turn causes delays in rendering care
Claim Submission	Requires human based medical coding and manual review which makes it slow and error prone
Claim Adjudication	Manual review which causes payment integrity issues and delays in remittance
Overall Revenue Cycle	Burdensome to both providers and payers and due to the administrative overhead, the claims processing is expensive, and slow

Key Claims Transactions

Transactions	Description	EDI X12 Transactions
1. Eligibility Verification	• Transaction to inquire about patient's health plan eligibility and coverage	• EDI 270/271
2. Utilization management (Prior-authorization)	• Transaction to get pre-approval of healthcare services	• EDI 278/275
3. Claims processing	• Submit claims for processing and reimbursement • Inquire about previously submitted pended claims	• EDI 837/835 • EDI 276/277

1. Eligibility Verification

Transaction to inquire patient's healthcare insurance benefits, and coverage including information like copays and deductibles.

As a **Healthcare service provider**, I want to

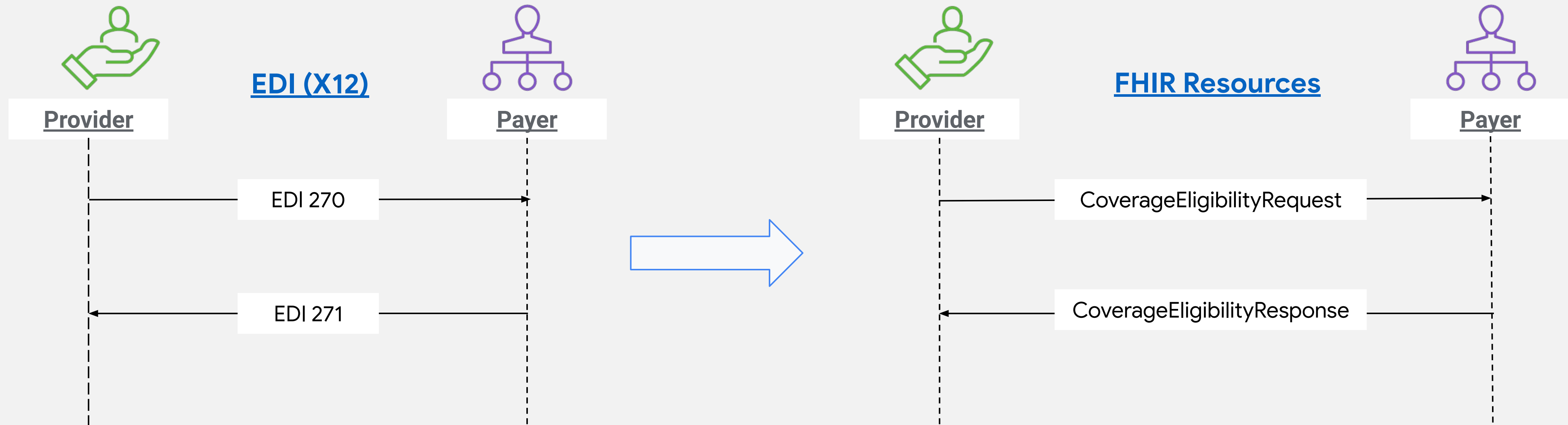
- Request information about Member's health insurance benefits, and coverage from the payer

As a **Member**, I want to

- Access my health benefits, and coverage information from anywhere using device of my choice

Current State	Future state vision	Value Drivers
Check online using Provider portal operated by thrid party software vendors or clearing houses **Check via telephone** using Interactive Voice Response (IVR) automated phone systems	**Standards (FHIR) complaint APIs** for Eligibility and Benefits check which can be used from both Provider and Member facing Apps Enhanced IVR capabilities with **realtime access to the Benefits and Coverage information**	• Cost reduction • Improve Provider and Patient experience • Reduce call volume to the call centers

Eligibility Verification - EDI to FHIR



FHIR R4 - Financial Module

Google Cloud

2. Utilization Management - Prior Authorization

A healthcare provider, such as a hospital sends pre-treatment authorization and referral certification requests to payers for prior authorization.

As a **Healthcare service provider**, I want to

- Obtain authorization for both service and referral quickly to avoid delays in providing care

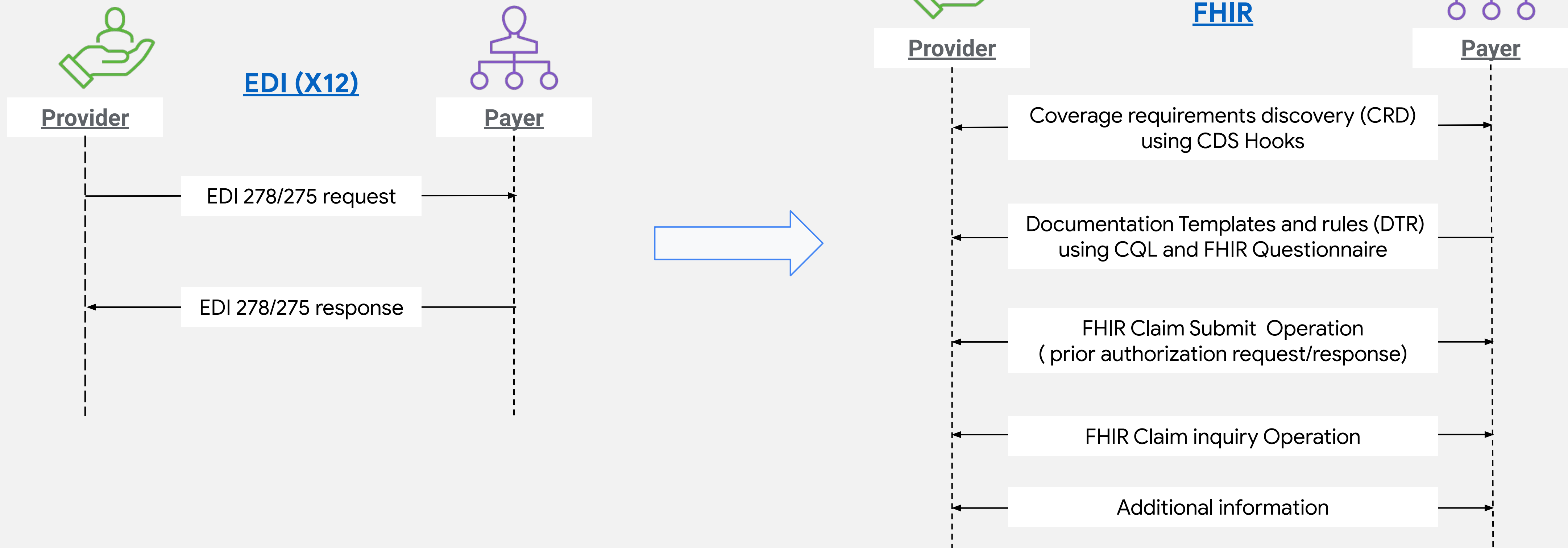
As a **Member**, I want

- Quick and timely decision on my treatment and care

Current State	Future state vision	Value Drivers
Obtain it online using Provider portal operated by third party software vendors or clearing houses **Obtain pre-authorization by contacting** the health plan call centers	Standards **(FHIR) complaint APIs** for Pre-authorization, and Pre-determination	• Timely care decisioning improves patient outcome • Improves Provider and Patient experience • Reduce waste, and abuse of resources

Google Cloud

Prior Authorization - EDI to FHIR



- Da Vinci Prior Authorization Support FHIR IG
- Da Vinci Coverage Requirements Discovery FHIR IG
- Da Vinci Documentation Templates and Rules IG

Google Cloud

3. Claims processing

Set of transactions for **submission**, **inquiry**, **adjudication**, and **remittance** of a the medical claim

As a **Healthcare service provider**, I want to

- Expedite and enhance claims submission, adjudication, and remittance by minimizing manual review,
- Inquire about my pended claims from anywhere using device of my choice

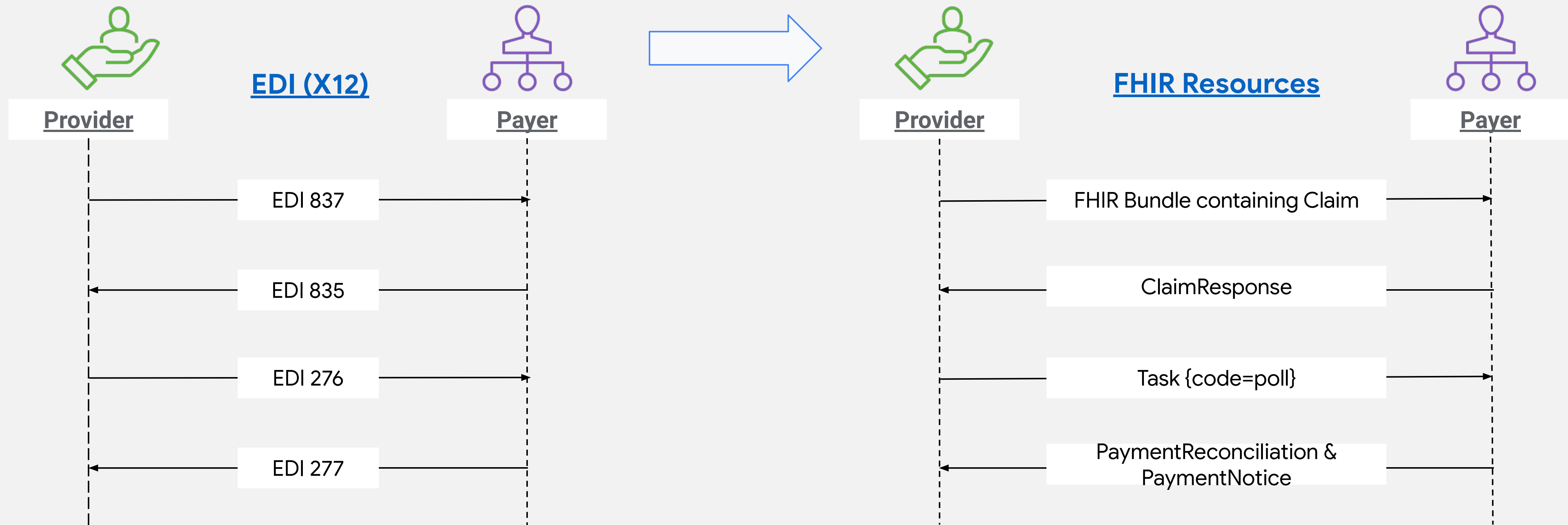
As a **Payer**, I want to

- Reduce my administrative burden by streamlining adjudication, and remittance of claims
- Improve payment integrity by reducing fraud, waste and abuse of resources

Current State	Future state vision	Value Drivers
Current claims submission, inquiry, and adjudication processes **entails manual activities and reviews**, which are **slow, and error prone**	Prepare and submit claims using **NLP and FHIR based APIs for realtime coding** and **automated review** of clinical encounter data. Communicate the outcome of the claims processing immediately followed by a quick **FHIR compliant Electronic Remittance Advice.**	• Improves efficiency, reduces errors caused due to manual review process • Reduces rejection rates • Improves Provider and Patient experience • Reduce fraud and waste of resources

Google Cloud

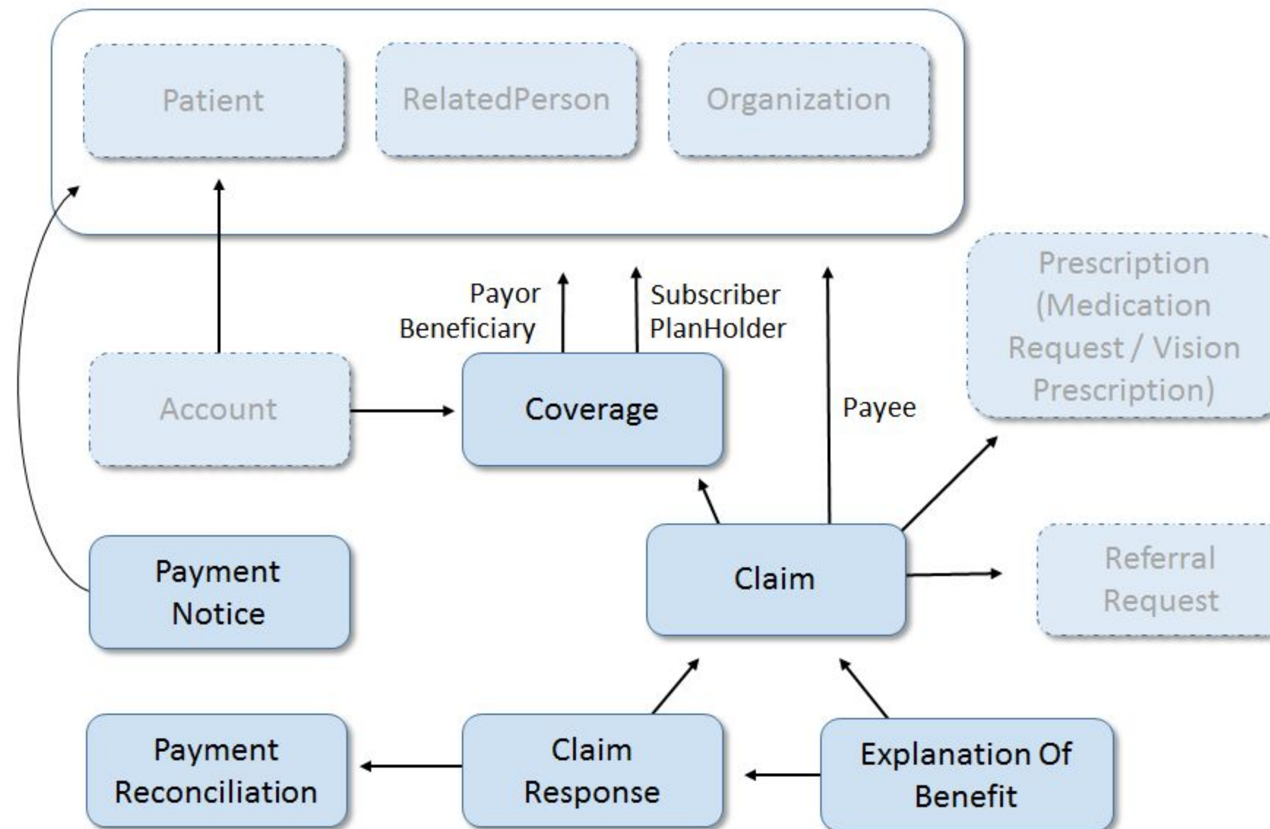
Claims processing - EDI to FHIR



FHIR R4 - Financial Module

Google Cloud

FHIR R4 Financial Module



Google Cloud

Claims Transactions in FHIR R4

Business Activity	Request Resource	Response Resource
Eligibility Check	CoverageEligibilityRequest	CoverageEligibilityResponse
Claim	Claim (type={discipline}, use=claim)	ClaimResponse
Claim with attachments	Bundle containing Claim and the attachments	ClaimResponse
Predetermination	Claim (type={discipline}, use=predetermination)	ClaimResponse
Preauthorization	Claim (type={discipline}, use=preauthorization)	ClaimResponse
ReversalCancel	Task (code=cancel)	Task (optional output=ClaimResponse)
NullifyNullify	Task (code=nullify)	Task (output=error codes)
ReleaseRelease	Task (code=release)	Task (output=error codes)
Re-adjudicationReprocess	Task (code=reprocess)	Task (output=ClaimResponse)
Status CheckStatus	Task (code=status)	Task (output=status code)
Pended Check (Polling)Poll	Task (code=poll)	Task (output={Resource})
Payment Notice	Task (code=deliver, input=PaymentNotice)	Task (output=error codes)
Payment Reconciliation	Task (code=poll, input=PaymentReconciliation)	Task (output=PaymentReconciliation)
Send Attachments	Task (code=deliver, input=Communication)	Task (output=error codes)
Request Attachments	Task (code=poll, input=CommunicationRequest)	Task (output=CommunicationRequest)
Request an Explanation of Benefits	Task (code=poll, input=ExplanationOfBenefit)	Task (output=ExplanationOfBenefit)

Google Cloud

Contact

- During DevDays, you can find / reach us here:
  - Via Whova App – Speaker's Gallery
  - Zulip Chat
  - Email: dharmeshpatel@google.com
  - Email: marce@moxehealth.com

Google Cloud

Q&A