PHISC
Private Healthcare Information Standards Committee

**Private Healthcare Information Standards Committee
TECHNICAL SUB-COMMITTEE: CONTENT WORKGROUP**

XML: STANDARDISED ELECTRONIC MESSAGING SPECIFICATION

Version 1.02

Table of Contents

Revision History

Version	Release date	Changes	Changed by
0.1	2007/09/25	Initial Version for Proof-of-Concept Testing	PHISC Software Technical Subcommittee
0.2	2007/01/19	Remove SAOA, SEP and CDT from reference price element. Refer to minutes of POC Kick off session, item 6.1. Add "Valid" as item level status. Refer to minutes of POC Kick off session, item 6.1. Rename PrincipleMemberPrimaryContactNumber to PolicyNumber. Remove "and has been accepted for further processing." from description of Received line level status. (According to CR6)	PHISC Software Technical Subcommittee
0.3	2008/0201	Update document with approved financial changes (CR1), new schema (CR3) and failure response message (CR4). Added "BHF" as registration body (Table 1) Add object models to document. Remove Optional, Mandatory from Data dictionary.	PHISC Software Technical Subcommittee
0.4	2008/05/20	Update document with approved financial changes as decided at meeting held on 18-03-2008. Remove data dictionary from document and replace with mapping between content field names and actual names used in XML.	PHISC Software Technical Subcommittee
0.5	2008/06.25	Remove reference to ERA and review document to be shipped with Content document for approval.	PHISC Software Technical Subcommittee
1.00	2008/07/09	First Version	PHISC Software Technical Subcommittee
1.01	2016/07/04	Amend field requirements for tooth numbers	PHISC Message Standards Subcommittee
1.02	2017/05/25	Add and amend field requirements for optometry claims	PHISC Message Standards Subcommittee

Glossary

Item No.	Name	Description
1	PMA	Practice Management Application
2	PHISC	Private Healthcare Industry Standards Committee
3	XML	Extensible Mark-up Language
4	XSD	XML Schema Definition

1. <u>General Information</u>

1.1 Introduction

PHISC established the Standardised Claim Form Committee in 2005 with the objective of defining standards that could address inefficiencies on both paper and electronic claim formats.

To this end, the Committee actively recruited various parties in the industry to ensure the following:-

- Sufficient involvement and representation from Funders, Providers, PMA Vendors, Switching Intermediaries and other 3rd parties.

- Relevance and sufficient coverage when considering the diversity of software systems and business rules in the industry.

- The change impact of the standard in the industry is reasonable and sufficiently motivated by its expected benefits.

- The standard fairly balances the need for simplicity and low cost of implementation with the needs for strategic flexibility.

Workshops were held as open forum sessions with voluntary participation by interested parties. Formal feedback was provided at the broader PHISC committee meetings held quarterly. At these quarterly meetings the following key principles and assumptions have been reiterated and have served to govern the design of the standard:

- The efficiencies which accrue this standard are dependent on broad based adoption and therefore cannot be viewed as a long term sustainable basis for competitive advantage by any single adopter. However, it is critical that all stakeholders should derive benefit from the standard in order for adoption to be meaningful. As a consequence, PHISC holds the position that it's messaging standards must remain in the public domain for it to continue to be a significant driver of industry-wide operational efficiency.

- It is agreed by the PHISC representatives that competitive advantage in an operational sense for adopting organisations, is vested rather in the service / product / benefit designs, partnerships, sourcing arrangements, production processes of each individual adopter than the messaging standard and therefore every attempt has been made to ensure that the messaging standard does not contain their current and future choices in this regard.

April 2007 quarterly PHISC meeting presented an important inflection point in the process of defining the messaging standard for two reasons:

- PHISC had taken a decision to continue with the design of a home-grown standard for simple administrative functions in the industry rather than pursue HL7 v3 and agreed a portfolio of messaging products of interest starting with claims and remittance advices. Although the development of HL7 v3 would be monitored, it is anticipated to be more significant in messaging solutions for the transmission of clinical information.

- Discovery offered project management, administrative and design resources to accelerate the next phase of design: the definition of the electronic messaging and XML specification using the Standardised Claim Form specification as input.

A programme of open forum design workshops were scheduled and facilitated by Discovery. Starting on 8 May, two parallel streams of 9 Content Workshops and 8 Technical XML Workshops were run. The former further refining the content requirements for each conceptual message and the latter taken the content requirements as input and defining the schema and technical aspects of the electronic messaging specification. The latter also will feed back into the Content Workshops those elements of the design requiring further clarification or refinement.

A critical learning was the interplay between the Technical XML Workshops and the Content Workshops where the former brings the standard a step closer to implementation and raises practical issues which further refines the conceptual content design. This same pattern of learning was used in a more practical sense with the execution of a Proof-of-Concept in which several PMA vendors, switching intermediaries and Discovery Health set-up real-life implementations of the standard to further refine the standard, to make it more real and to bring an element of practical credibility to the standard.

1.2 Purpose of the document

The purpose of this document is:

- To introduce the PHISC XML messaging standard and the underlying design philosophy

- To clarify key design principles underpinning the standard

- Explain the message process flow and object model used in the construction of the various XML schemas

- State areas of constraint and flexibility in the standard

The target audience for this document is primarily the parties responsible for:

- Agreeing on messaging protocol in those areas where the standard is flexible

- Functional and technical implementation of the specific messaging solution

1.3 Summary of scope

1.3.1 In scope

The standard caters for the following:-

- Provider disciplines: GP, Dental, Auxiliaries, Specialists, Pharmacy, Optometry, Pathology and Radiology

- A Claim is defined by the following attributes:-
    - A **single patient** who is a member or a dependent of a member of a single Payor e.g. medical scheme
    - Across **multiple dates of service**
    - Treated by **multiple treating providers** in the same Claim and
    - Referred by **multiple referring providers**
    - Who, in turn, make use of the administrative facilities of a **single billing practice**.

- Message types:-
    - Claim
    - Amended Claim
    - Credit Note
    - Responses (applicable to all of above)

- Presentation formats discussed in this document:
    - Batch and/or real-time XML electronic submission.

1.3.2 Out-of-Scope

The following items are considered out-of-scope:

- The standard in general is not intended to address problems arising between trading parties as a result of the design of their respective business rules, benefit designs and/or production processes

- The standard is not intended to prescribe how trading parties should architect their systems to maximise the benefits to be derived from the standard

- This particular document is not intended to discuss the standards for the paper representation of any of the messages in particular the presentation of modifiers on paper

- The current version of the messages has not been fully designed for COID or MVA claims. Due to the differences in mandatory fields that these claims have to those defined herein, it is expected that COID and/or MVA claims may benefit from separate XML Schemas. The decision to exclude COID claims at this time is also premised on the fact that these claims must be sent directly to the Workman's Compensation Fund and not to Medical Schemes.

- The following message are not currently in the scope of this particular document, but are expected to be addressed in future releases by PHISC:

  - Hospital Claim

  - Hospital Credit Note

  - Hospital Amended Claim

  - Hospital Authorisations

  - Hospital Event Notifications

  - Hospital Response Messages for all message listed above

  - Hospital Electronic Remittance Advices

  - Generic Member Query and Responses

1.4 Other Reference Documents

- PHISC Standardised Claim Form V5-00

- PHISC XML Schemas V06

Our sincere thanks to all parties that have contributed in whatever manner to the formulation of these requirements and hope that this assists with increased service delivery and efficiency.

2. <u>Introduction and General Information</u>

This section explains key elements of the messaging standard's design in support of the structure, content and use of the various messages. It also defines terms to improve the efficiency of interpretation of the standard as well as principles that need to be adhered to in order to preserve the benefits of the standard.

The design of the PHISC messaging standard is founded on underlying assumptions about the structure of the South African private healthcare community from a claims administration perspective. These assumptions are summarised as follows:

1. The community is expected to continue to be decomposed into the following roles where organisations can play one or more of these roles simultaneously:

    a. Healthcare Service Providers organised as billing, treating and referring entities

    b. Practice Management Application (PMA) vendors who provide software solutions and services to healthcare service providers

    c. Bureaus who provide practice administration services to healthcare service providers

    d. Independent Practice Associations (IPA's) who provide consulting services to healthcare service providers

    e. Payors (meaning funders or medical schemes) who ultimate pay for healthcare services on behalf of their members

    f. Switching intermediaries responsible for electronic routing, aggregation and disaggregation of switching services in the trading community

    g. Processing Intermediaries responsible for processing of claims on behalf of Payors. This may range from hosting speciality benefit rules such as pharmacy or optometry benefit management to a complete medical administration service including the payment of claims on behalf of Payors

2. The community is expected to continue to evolve the distribution of these roles across organisations in an attempt to further unlock operational efficiencies through economies of scale arising from market consolidation or economies of learning through specialisation. In light of this, the PHISC messaging standard avoids predicting dominant business models and limiting e-commerce patterns for managing healthcare, and instead attempts to provide a flexible messaging model that will allow this evolution to continue. This flexibility is evident in the standard in the following design provisions which are discussed in more detail below:

    a. Distributed Processing (Section 2.1)

    b. Transparency for Outsource Processing (Section 2.2)

    c. Flexible Electronic Response Model (Section 2.11.1)

2.1 Distributed Processing

Distributed Processing occurs when a claim is part processed by two or more Processing Intermediaries on behalf of a Payor. However, this feature is limited to splitting the claim at an item level and not within an item; i.e. two processing intermediaries may not process the same item. An example may be where a PBM Processing Intermediary reimburses the medicine lines of a dispensing doctor claim and another Processing Intermediary processes the procedures and consults. To accommodate this, the standard provides for multiple electronic claim responses for the same claim from multiple Processing Intermediaries.

2.2 Transparency Regarding Outsourced Processing

When processing claims, Processing Intermediaries may identify missing or incorrect information which can easily be corrected on behalf of the Healthcare Service Provider to expedite claims processing rather than rejecting claims outright and increasing the operational costs of both parties. The need for this may be driven by the operational goals of the Processing Intermediaries or may be required by their client; the Payor.

In any case, the standard does not impose this function on the parties, but merely provides a mechanism to the trading parties for supporting such a mode of operation in a transparent manner. It therefore requires an explicit

decision in the trading community at design time. This model is taken from a philosophy of voluntary transparency to policing the integrity and non-repudiation of messages falls within the scope of messaging security which is not covered in this document.

The design elements which provide for this transparency are as follows:

1. The party performing the correction to the claim is able to indicate a modification to the claim by incrementing a Claim Version Number in the message envelope associated with the Original Billing Practice Claim Number. In other words, the original claim generated by the Healthcare Service Provider will be submitted as version 0. An intermediary modifying the claim will respond to the provider and switch the modified claim as version 1 to the Payor. If a trading party receives version number 0, it will indicate that the claim has not been modified by any upstream party. Modifications or corrections in this case are where the intermediary change the original information supplied by the provider. In instances where calculated or approved values are added by the intermediary, a **response** message will be returned to the provider and copied to the next processing intermediary if the message wasn't fully processed.

2. The original line item identifiers generated by the billing practice in the Billing Practice Line Item Identifier element, must not be altered. This is critical for response messages and electronic remittances to be reconciled back to the original claim generated by that provider.

3. A second line item identifier is used in the message for each trading party to keep track of additions and changes in sequencing of the line items. Therefore, when a claim is initially captured on the PMA, the Trading Party Line Item Identifiers will match the Billing Practice Line Item identifiers and will remain so as long as none of the trading parties in the value chain alter the lines in any way. Where new lines are added by the Payor or intermediaries, those lines (including subsequent lines) must receive new unique line item identifiers in the Trading Party Line Item Identifier element. This is important for the following two reasons:

    a. Processing Intermediary "A" adds a line and renumbers the items in the Trading Party Line Item Identifier element before switching the modified version 1 claim to Processing Intermediary "B". "B" then responds to all of the original lines and the new line. Since "B" echoes back all claim and item references supplied by "A", the latter is able to unambiguously reference original and new lines added. See table below for example.

    b. A PMA or intermediary receiving a response back with more lines than originally submitted to the respective trading party must be able identify the added lines and reference them appropriately with the responding party if a query is raised.

4. If no modifications are made to the original Claim, then the intermediary should leave this field unchanged.

5. As a consequence of points 2 and 3, any line item in a claim or a response must always have a Trading Party Line Item Identifier, but may not always have a value for the Billing Practice Line Item Identifier.

Example on Line Item Identifiers

Snapshot of identifiers in a claim as it leaves the Billing Practice's PMA system:

Billing Practice Line Item Identifier	Trading Party Line Item Identifier
1	1
2	2
3	3

Snapshot of identifiers after Processing Intermediary "A" adds a new line after item 2 and transmits to Processing Intermediary "B":

Billing Practice Line Item Identifier	Trading Party Line Item Identifier

1	1
2	2
	3
3	4

2.3 Electronic and Paper Interactions

The approach taken in the design of the standard involved reviewing the information requirements of the claim administration process from claim submission to payment and delivery of remittance advices. An attempt was made to construct a conceptual information model which could then be used as the basis for designing paper and electronic message representations of this model. Separate specifications were then created for these representations. The paper standard caters for the claim, amended claim and credit note. The electronic standard presented as XML messages caters for all of the paper messages mentioned as well as claim response message. It is ultimately envisioned that the XML representation of the claim be used as the source for generating the electronic message and/or a fully PHISC-compliant paper claim through the use a PHISC XML style sheets.

One of the design principles was to ensure that the standard did not prevent Processing Intermediaries from sending electronic responses for paper claims received. Instances where electronic responses for paper claims were envisaged:

1. Electronic channel service is interrupted for the duration of claim submission, but the service is restored soon enough to allow meaningful electronic response messages to be sent.

2. Processing Intermediaries are unable to receive certain types of claims electronically, but are able to generate responses once the paper claims are captured and processed.

A implementation challenge which the trading community would need to consider if they agree to allow for this mode of operation is whether their systems will be able to determine the correct destination for electronic responses based on the content presented in the paper claim. It may be necessary for Processing Intermediaries to establish a mechanism for determining routing and delivery mechanisms for asynchronous and/or unsolicited messages for such trading parties in any case; e.g. delayed asynchronous electronic responses to electronic claims as well as delivery of unsolicited electronic remittance advice messages. Similar mechanisms may also serve this mode of operation. Two considerations are:

1. The registration of trading party profiles at the Processing Intermediary which contains target addresses such as email or IP addresses.

2. The implementation of FTP or mailbox pick-up points at the Processing Intermediary where trading parties can collect asynchronous responses and unsolicited messages.

2.4 Claim and Item Level Reference Numbers

In keeping with the objective of improving operational efficiencies in the channel, three primary targets are:

1. Reduce paper claim submission as far as possible

2. Reduce the cost of calls through-out the communication channel as it relates to queries

3. Reduce the cost associated with reconciling payments made by Payors to Healthcare Service Providers with claims that were submitted

In respect of points 2 and 3, the standard defines a single set of reference numbers which uniquely identifies the transaction to the entire communication channel. These are the Billing Practice Claim Number or Credit Note Number and the Billing Practice Line Item Identifier. Both reference numbers are preserved throughout the communication channel by the trading parties by using the standard message format. In order to derive maximum benefit from these numbers pursuant to objective 1 above, all trading parties should use these reference numbers as the basis for referencing and supporting queries relating to the transaction and ultimately must also be returned back to the Service Provider's PMA system in the Electronic Remittance Advice to permit automated reconciliation.

The sequence of items in the claim as captured by the Healthcare Service Provider is considered significant and represents the intended order in which the items should ideally be processed. In order to preserve the sequence of

the items in the claim as captured on the PMA system, the Billing Practice Line Item Identifier is defined as a sequential number.

In order for all parties to be assured that the Billing Practice Claim Number is unique the following must be adhered to:

1. PMA vendors will need to ensure that the Claim Number generated in a Billing Practice is unique. If not in the industry then at least within the Billing Practice.

2. In cases where the PMA vendor can only achieve Claim Number uniqueness within the practice the entire trading channel will always need to view the Claim Number in context of the Billing Practice Number to ensure that uniqueness is achieved within the South African private healthcare community.

2.5 Portfolio of XML Schemas

Payors and their Processing Intermediaries require different information in claims for different Service Provider discipline types. An attempt was made to maximise the use of XML schema validation and create fairly 'tight' schema contracts as well as avoid a proliferation of schemas (one for every discipline). As a result the PHISC Standard has given rise to the following portfolio of XML schemas:

General

- ReusableAggregateBusinessInformationEntity-1p5.xsd: this is a combination of all simple and complex type definitions which are re-usable across the PHISC portfolio of schemas.

- CoreComponentsTechnicalSpecification-1p0.xs: provides the structure to be used when documenting data items in the other XSD's.

Claim

- ProviderClaim-1p6.xsd: this schema caters for all non-hospital discipline types including pharmacy, auxiliaries, medical specialists, optometry, dentistry and pathology. It makes provision for a DispensingProviderClaim that uses ClaimLineTariffItem, ClaimLineProductItem and ClaimLineModifierItem or a PathologyProviderClaim that uses the ClaimLineTariffItem.

- DispensingProviderClaim-1p5.xsd: schema to be used to construct a dispensing provider claim.

- PathologyProviderClaim-1p5.xsd: schema to be used to construct a pathology provider claim.

- ProviderClaimBatchEnvelope-1p5.xsd: Envelope for provider claims.

Response

- PreValidationResponse-1p3.xsd: this XSD is intended to be used as response upon receiving malformed XML messages.

- ProviderClaimResponse-1p5.xsd: caters for response message.

- ClaimResponseBatchEnvelope-1p5.xsd: Envelope for PreValidation or ProviderClaimResponse.

Credit Note

- CreditNote-1p0.xsd: the credit note caters for all disciplines that are currently in scope.

- CreditNoteBatchEnvelop-1p0.xsd: envelope detail that should be use to send credit note

- CreditNoteResponse-1p0.xsd: caters for the credit note response message

- CreditNoteResponseBatchEnvelope-1p0.xsd: envelope for credit note response message

Amended Claims for a particular discipline are catered for in the same schema as the Claim for that discipline. Given the simplicity of the CreditNote, it has been designed to cater for all discipline types.

Refer to Section 11 for the XML Design Policy used to construct the schemas.

2.6 Schema Validation

All party's transmitting and receiving XML messages are expected to parse those messages before transmission and on receipt using the approved PHISC schema for that message type. This will force a validation of the message against the PHISC messaging contract embodied in the schema. In other words the XML schema validation provides a quick and universal method for parties to check that their counterparts are complying with the majority of messaging standard requirements before consuming internal system resource processing the message any further.

Observe however that the PHISC messaging contract as described herein extends beyond the validation capability of XML schema. This is evident in the data dictionary where certain elements are denoted as "conditional mandatory" or "mandatory if …" in terms of being required in the message. XML schema is only able to define elements and attributes as being either "required" or "optional".

In this standard however, "mandatory" should be read to mean "required to be present in the message and **must** be populated with information compliant with the schema pattern". "Optional" should be read to mean that "neither the tag nor contents are obligatory".

The criteria for "conditional mandatory" elements have a couple of different flavours:

- The condition may depend on rules defined by the recipient and vary from one recipient to the next. Example: a dependent code on a claim cannot be made mandatory because certain Payors do not make use of dependent codes and therefore their Processing Intermediaries do use it for processing and therefore do not print the information on the membership cards.

- The condition may depend on the legitimate availability of alternative information. Example: If a claim contains assistant information, then the assistants PCNS or HPCSA number must be supplied. The population of the one is conditional on the non-availability of the other.

- The condition may depend on content somewhere else in the message. Example: Patient height and weight must be supplied if a modifier 0018 or 0019 is quoted in the claim.

- The condition may depend on the context of the healthcare engagement rather than a consensus of the business rule by recipients. Example: if the healthcare engagement was the result of a referral, then the referral doctors details must be supplied; or tooth information must be supplied if the procedure was a dental procedure

In all of these cases, the rule cannot be embedded in the XML schema for use in schema validation and must be processed by application logic in the recipient production system. As a consequence, **all** "conditional mandatory" fields in the data dictionary have to be defined as "optional" in the XML schema to allow for those scenarios where the condition for "conditional mandatory" information has not legitimately been met and therefore not supplied in a particular message

2.7 ICD10 Diagnosis Codes

Given the legislation of diagnosis codes in claims in 2007, specific attention was given to this matter in the design of the PHISC Standard. Two key areas were addressed:

- The representation of ICD10 codes in XML

- The distinction between diagnosing and non-diagnosing providers and how to represent diagnosis codes in each case.

2.7.1 *Representation of ICD10 in XML*

The original recommendation by the Message Standards Committee to the Diagnostics and Procedural Coding Committee was to use "/" as a separator between codes in the EDIFACT format. This happens to be the same separator used for morphology codes and is subject to misinterpretation by systems. Given the flexibility of XML, the XML workgroup of the Message Standards Committee identified an opportunity to enhance the delimitation of the ICD codes in XML in the course of the design process in 2007. The following was proposed and accepted by the Diagnostic & Procedural Coding committee for representation of ICD codes in XML on 27 July 2007:

- ICD codes will be separated into XML elements

- The "/' will not be used in the XML standard as a separator

- A sequence attribute will be added to ensure that the sequence in which ICD codes were captured by a user in the practice is preserved

- An attribute will be added to identify the primary diagnosis code

The current design makes provision for a standard re-usable Diagnosis type in the ReusableAggregateBusinessInformationEntity-1p5.xsd which caters for repeatable DiagnosisCode elements each with a sequence number attribute indicating the sequence in which the codes were initially captured. The XML team elected not to use a separate attribute to identify which code is primary and instead will rely on the code with sequence number '1' as the primary diagnosis.

This complex type is used consistently through-out all of the PHISC schemas.

2.7.2 *Diagnosing versus Non-Diagnosing*

The following business rules were assumed in the design of the PHISC claim messages:

1. Claims from non-hospital disciplines:

    a. Diagnosing treating providers must supply referring provider details as well as referring provider diagnosis information if applicable. Since the referring provider could not know which line items would be claimed, the referring provider diagnosis cannot be mandatory on all lines and therefore are defined as optional at the item level of the claim.

    b. Non-diagnosing treating providers must always supply referring provider details and referring provider diagnosis information on line level. This is due to the fact that treating provider is catered for and can change at the item level, and therefore necessitates referring provider information at the item level as well.

2. Claims from hospital disciplines

    a. ICD codes at the header level are required; i.e. the "referring" provider diagnosis as seen from the hospitals perspective

    b. ICD codes at the line level are not required since the hospital never diagnoses

This model would have enabled the definition of schemas that could clearly indicate when and where diagnosis information is required. However, the categorisation of providers into diagnosing and non-diagnosing is currently still in debate and not expected to be resolved quickly.

As a consequence, the DispensingProviderClaim is expected to be used by both Diagnosing and Non-Diagnosing disciplines. The PathologyProviderClaim is assumed to be Non-Diagnosing at this time.

The implications of this are as follows:

- DispensingProviderClaim-1p5.xsd

    o Item Level: contains an optional referring provider id (Referring to billing event level referring provider structure); meaning that the item could have referring information.

    o Item Level: contains a mandatory TreatmentInformation structure with a mandatory Diagnosis substructure; meaning that at least 1 diagnosis code must always be supplied with every line item.

- PathologyProviderClaim-1p5.xsd

    o Item Level: contains a mandatory ReferringProvider structure which contains a mandatory Diagnosis substructure. This means that referring provider information must always be supplied including the referring provider diagnosis.

    o Item Level: contains a mandatory TreatmentInformation structure with a mandatory Diagnosis substructure; meaning that at least 1 diagnosis code must always be supplied with every line item.

2.8 Envelopes

Purpose of the envelopes is to carry information to enable:

- Transmission management (Status of transaction)

- Routing management (Who submitted the message and previous routing information)

- Integrity of information through control totals

- Confidentiality of the sensitive information can be preserved in the payload, whilst making available non-sensitive routing information in the envelope

The PHISC standard makes provision for envelopes at two levels:

- Batch: This is used to batch a collection of claims, credit notes or responses intended for a specific recipient.

- Message: Main purpose of this envelope is to ensure confidentiality of information when encrypted.

Key business rules relating to envelopes:

1. Both envelopes are mandatory.

2. The batch envelope may consist of a batch of one message.

3. The standard does not require response batches to contain perfectly matching responses for each claim message in an equivalent claim batch. Therefore response batching is loosely coupled to claim batching and in itself is not required at all. Claims could be batched, but responses could be sent one by one. A response batch could contain responses for claims received in different claim batches.

4. The Batch envelope merely groups messages intended for a common technical destination.

5. Message Envelope will indicate the ultimate destination for the final execution of the message. In the case of a Claim Message Envelope, this will indicate the target Payor of that claim. This enables pure switching Intermediaries to perform content based routing using the envelope instead of inspecting an encrypted and confidential payload.

6. It may be that a PMA batches a collection of claims and transmits to switching Intermediary, where the ultimate destination of each individual claim in that batch may be different. In such cases the switching Intermediary would be expected to un-bulk the batch into its individual messages and either route them individually to their next hops or bulk into new destination-driven batches as required by the contract between the trading parties.

7. Malformed messages:

    a. In cases where message payloads are corrupt and cannot be opened, it is expected that a message envelope level response message status must be provided indicating as such

    b. In the case where message level envelopes are corrupt, the recipient is expected to provide a batch envelope response message status indicate as such

    c. Where the entire batch is corrupt, a failed transmission is expected to be handled by the relevant communication protocol or some form of manual escalation procedure triggered by the transmitting party.

8. When the message envelope does not contain the tracking information structure, the message is assumed to inherit the tracking information of the batch

9. When the message envelope contains the tracking information structure, is means the message tracking information takes precedence for that message

10. CorruptBatchContinueOnError/HonouredBatchContinueOnError indicator: This request indicator will indicate whether the billing practice would prefer that the Processing Intermediary reject the entire batch if one message fails or to process on an individual message basis. Observe that this indicator represents a request only. The Processing Intermediary may process the batch differently, but must indicate in the response whether the request was honoured by populating the HonouredBatchContinueOnError Indicator. Please note that this doesn't imply that the batch response should be kept together if the whole batch can

be processed. It is only in instances where there is a XML parser error that the response message for the whole batch will be sends back.

Example 1:

A batch of 10 claims is send to a processing intermediary. The first 9 claims in the batch are fine. The last claim doesn't have a TranscationType and the message is unable to parse. If the CorruptBatchContinueOnError is set to Yes, the response containing all 10 claims will be send back where none of the claims were forwarded for claims processing. The response for these 10 claims will always be sent back in one batch.

Example 2:

A batch of 10 claims is send to a processing intermediary. All claims in the batch parsed successfully and are forwarded for processing. The response messages for these 10 claims might not form part of the same batch.

2.9 Transaction Path Tracking

In the interest of fault finding and optimisation of the channel, information is accumulated in both envelopes for claim and response messages on every stage from trading party to trading party in the channel.

Example 1: All claim processing is done by the funder
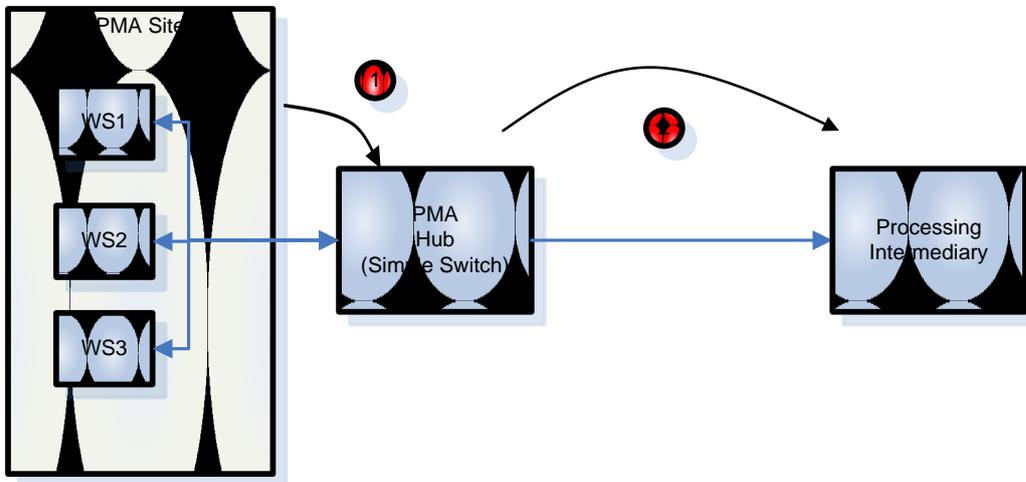
Example 1: All claim processing is done by the Processing Intermediary

The following table illustrates what the tracking information in the message should look like to the Processing Intermediary on receipt of the claim (Claim Number BPC001) from the PMA site. The same approach must be used in response messages.

ID	Description	Sending Trading party ID	Date Time Transmitted	Date Time Received	Transaction Ref	Amount of claims in message	Receiving trading party ID
1	PMA site send claim to PMA Hub	1400001	20070628 11:00		BPC001	5	PMAHub001

| 2 | PMA Hub to funder | PMAHub001 | 20070628 12:00 | 20070628 11:20 | PM1001 | 5 | 41807 |

The following rules will prevail:

Sending party	Trading Party Id
Billing Practice	Supplier / Billing Practice PCNS number
Intermediary	IntermediaryID (as determined by PHISC or CMS)

Example 2: Complex example with splitting of batches and processing done by a third party

In the next example, there are 2 PMA sites that will send claims through a "pure" switch (PMA Hub) which is only responsible for routing the entire message to the correct target. For this particular claim, the destination is Intermediary 1, which performs the function of "complex" switching, meaning that it is responsible for splitting and transmitting the claim to two additional Intermediaries; all procedure and consult lines are to be processed by Intermediary 3 and all medicine lines are to be processed by Intermediary 2.

Figure 2: Complex Transaction Message Path
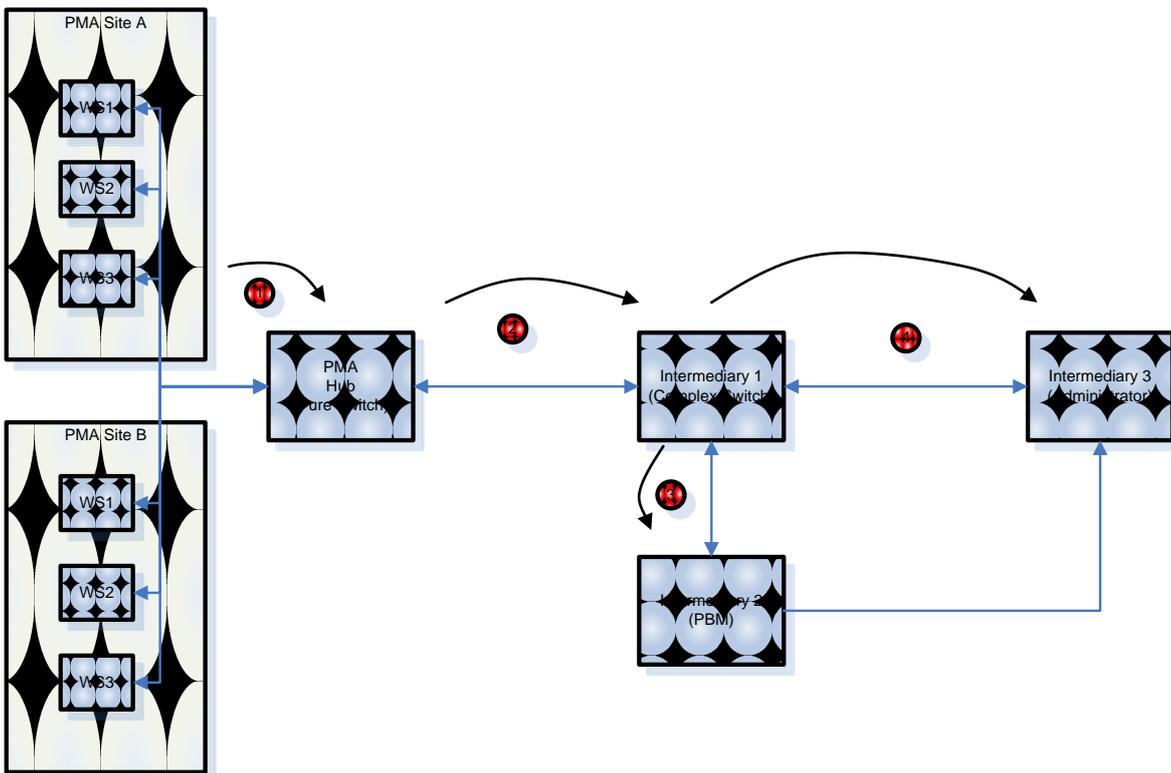
The Tracking information when the batch is received at Intermediary 2 will look as follows:

ID	Description	Sending Trading party ID	Date Time Transmitted	Date Time Received	Transaction Ref	Amount of claims in message	Receiving trading party ID
1	PMA site send claim to PMA Hub	1400001	20070628 11:00		BPC001	5	PMAHub001

| 2 | PMA Hub to Intermediary 1 | PMAHub001 | 20070628 11:20 | 20070628 11:05 | PM1001 | 5 | Intermed001 |
| 3 | Intermediary 1 send to Intermediary 2 for PBM | Intermed001 | | 20070628 12:05 | IM1001 | 5 | IM2001 |

The Tracking information when the batch is received at the funder will look as follows:

ID	Description	Sending Trading party ID	Date Time Transmitted	Date Time Received	Transaction Ref	Amount of claims in message	Receiving trading party ID
1	PMA site send claim to PMA Hub	1400001		20070628 11:00	BPC001	5	PMAHub001
2	PMA Hub to Intermediary 1	PMAHub001	20070628 11:05	20070628 11:20	PM1001	5	Intermed001
4	Intermediary 1 send to funder	Intermed001	20070628 11:24		IM1002	4	

Similarly, responses received by the PMA site will have a complete record of all steps from claim origination all the way through to receipt of response.

2.10 PMA System Information

Similar to the transaction path tracking information, certain system information of the Healthcare Service Provider's PMA system would greatly support fault finding and channel optimisation. The claim message allows for the population of certain system information. An example is the source ID, which is a unique reference in the Healthcare Service Provider's PMA system to indicate on which workstation/device the claim, was captured. The business rule is that if this information is populated, the exact same information must be echoed back in the response.

2.11 Response Messages

2.11.1 *Flexible Electronic Response Model*

Electronic responses to claims submitted are increasingly valued by all stakeholders in the trading community for different reasons. Uncertainty and variability in claims processing impacts the Healthcare Service Provider's financial risk. Attempts to manage this uncertainty through communications with Payors, and their agents, increases the latter's operational costs. Timely delivery of critical process status information in electronic response messages to the trading community is expected to positively impact this situation.

Given the unpredictable structure of the trading community and where the critical process touch points are, and will be in future, requires a response model that will allow a particular community to self-determine at design time when and who in the value chain will be responsible for generating what type of response information. To this end the response model allows:

1. Any trading party in the value chain performing any of the roles discussed in section 6 to transmit multiple responses to their adjacent trading parties.

2. For varying degrees of process information richness to be transmitted in the same message structure. This process information ranges from confirmation of receipt information to fully processed adjudication information.

The trading community would be ill-advised to agree on a PHISC-based messaging solution that results in the Healthcare Service Provider or any other party being bombarded with an excess of response messages. The usual attributes of quality information should apply:

1. Time Dimension: Timeliness, currency, frequency, time period

2. Content Dimension: Accuracy, relevance, completeness, conciseness

3. Form: Clarity, detail, order, presentation, media

However, the PHISC standard requires as a minimum that at least one Confirmation of Receipt response is generated in the value chain. If a minimalist position in this regard is intended, then it is recommended that the Confirmation of Receipt be generated by the final Processing Intermediary and at least then followed by the transmission of the Electronic Remittance Advice (to be defined later).

2.11.2 *Definition of Confirmation of Receipt Response Message*

Confirmation of Receipt will imply that the trading party as a minimum checked that the XML of the claim complies with the PHISC XML schema for that claim type and guarantees that the claim has been persisted to some form of non-volatile storage mechanism and cannot be 'lost'. In other words, on receiving a Confirmation of Receipt response message, the trading party can assume that the party who received the claim agrees that the message is well-formed, complies with the PHISC messaging standard's basic mandatory field requirements and that the message has been accepted for further processing/transmission. In this case the Claim header level Tracking Status should be set to "Received". Alternately, if the message fails on schema validation then the Tracking Status should be set to "Failed" with appropriate Reason structure populated to indicate the cause of the failure.

As indicated in the point above, a single message schema will define the format of the response message, regardless of the stage of processing, processing information or party responding. Even in the case where a response is limited to a Confirmation of Receipt, all claim item information must be responded on. This is to **explicitly** confirm that **all** items in the claim were received. In this particular scenario each item's Status in the response message should also be set to "Received". The originating party who receives this Confirmation of Receipt will then be able to check that the responding party receive the correct number of items.

2.11.3 *Encoded Response Statuses for PMA Administration Automation*

Header and item structures in the electronic response message makes provision for encoded status and processing reason codes that will allow systems receiving the responses to automate workflow and unambiguously differentiate between responses that are purely for information purposes (i.e. for expectation management) and those that must be acted on to mitigate financial risk. This need is discussed for the header and item level structures below.

2.11.4 *Header Level Status and Reasons*

Once a trading party has validated and/or processed the message and generates a response, the trading party is required to indicate the stage of processing that has been performed on the claim. This is catered for in two header level process Tracking Status elements. The reason for two is to cater for the case of an Amended Claim submission which implies a Credit Note. In such cases, the trading party must indicate the Tracking Status of the Amended Claim as well as its implied Credit Note.

Furthermore, trading parties may want to indicate where information in claim header was incorrect and what should have been sent. For example, the sending party sent the incorrect dependent code based on other information in the header. The processing party would then use the repeatable Reason structure to describe what was sent and what should have been sent.

To summarise the following minimum information must be conveyed in the response message:

1. Claim Tracking Status
2. Credit Note Tracking Status
3. Repeatable Reason Structure:
    a. Reason Code
    b. Reason Description
    c. Reason Code Priority enumerated as:

At this stage it is envisaged that PHISC may create a core list of reason codes with associated generally accepted meaning. In the interest of standardisation and reduced operational cost to all, trading parties would be expected to subscribe to the core list albeit it using their own wording in the Reason Description to achieve the semantic interpretation. Any reason codes required outside of this core set will then be considered free-style codes and descriptions to be defined by each trading party as required.

The following is the minimum requirement of the PHISC standard in the use of free-style codes and reason descriptions beyond the core list to be managed by PHISC:

a. The trading party cannot use a reason code already used by the PHISC core list

b. The trading party cannot use a free-style code for a reason description which is semantically equivalent with a reason description used by PHISC

c. The mapping between free-style codes and reason descriptions must be one-to-one and remain firm.

2.11.5 *Line Level Status and Reasons*

The PHISC Standard also allows for status information and reason structures per claim item. However, in the case of item level status, the meaning is different to that of the header. At the item level, a Process Status element is provided which enables the trading party to indicate the outcome of processing. The repeatable Reason structure described for the header is re-used at the item level.

2.12 *PHISC Message Standard as a Tool Box*

The design of the PHISC Messaging Standard attempts to balance two opposing needs:

• A set of conventions which are sufficiently prescriptive to be termed a "protocol" which reduces operational and systems costs, and

• Sufficient flexibility so as not to constrain the industry player's individual competitive / collaborative plans

To satisfy as much of these two needs simultaneously as possible, the PHISC Standard attempts to be a "toolbox" specifically designed for claims administration messaging together with a set of rules and modular components for any given trading community to construct a tailored instance of the PHISC Standard to meet their specific needs. This means that both the PHISC messages and their process flows provide a fairly rigid message framework with specifically targeted areas of flexibility.

When designing a particular messaging solution to comply with the PHISC Standard the following areas of flexibility will need to be further constrained through consultation with all the stakeholders in that particular trading community as it will determine the degree of complexity of their particular solution:

1. Will Distributed Payment be a mode of operation used by the Processing Intermediaries or will a single Processing Intermediary be responsible for the final payment and electronic remittance advice? [6.1]

2. Choices on financial elements :

a. How much financial information is necessary for transmission in responses back to the Service Provider and forward to the next Processing Intermediary to reduce ambiguity in processing outcomes? Does the richness differ for these two destinations?

b. What other types of Deductions are important in responses other than the Levy and Co-Payment defined in the PHISC Standard? These must be clearly identified, defined and be sufficiently semantically distinct from Levy and Co-Payment to avoid confusion.

c. What other forms of Pricing Tariff models could be used for the Reference Price element other than those defined herein?

d. At what point does too much information create increased confusion, call rates and system costs?

3. Will Processing Intermediaries be permitted to modify claims that have incorrect or missing information or will these simply be rejected outright for correction by the Service Provider?   [6.2]

4. Will the trading community permit electronic responses to be sent for paper claims received? If so, what systems and operations process need to be implement to allow for the registration of electronic destinations for unsolicited electronic responses? Can it be the same as those used for asynchronous responses and electronic remittance advices which are also unsolicited? [6.3]

5. Batching of message [6.8]:

   a. Will the community be batching claims, credit notes and/or responses?

   b. Who will be responsible for un-bulking and re-bulking into new batches?

   c. Will the Processing Intermediaries allow for full batch processing or allow one-for-one claim processing in a batch?

   d. To what extent will the trading community allow for asynchronous (delayed) responses?

6. Which of the optional information in the batch envelope does the trading community value in terms tracking the messages through-out the value chain?

7. Which of the optional PMA System information does the trading community value for diagnostic support and response message workflow at the PMA?

8. Response messages:

   a. Who in the trading community will be responsible for transmitting response messages and to what degree of richness? [6.11.1]

   b. Which party will be providing at least the Confirmation of Receipt response? [6.11.2]

   c. Which of the Header Level Tracking Status values are valid for each of the response messages? [6.11.4]

   d. Which of the Line Item Level Process Status values are valid for each of the response messages? [6.11.5]

   e. What is the domain of valid reason codes and reason descriptions if they differ from the standard PHISC list (currently not defined)? [6.11.4]

3. <u>Message Transaction Flow</u>
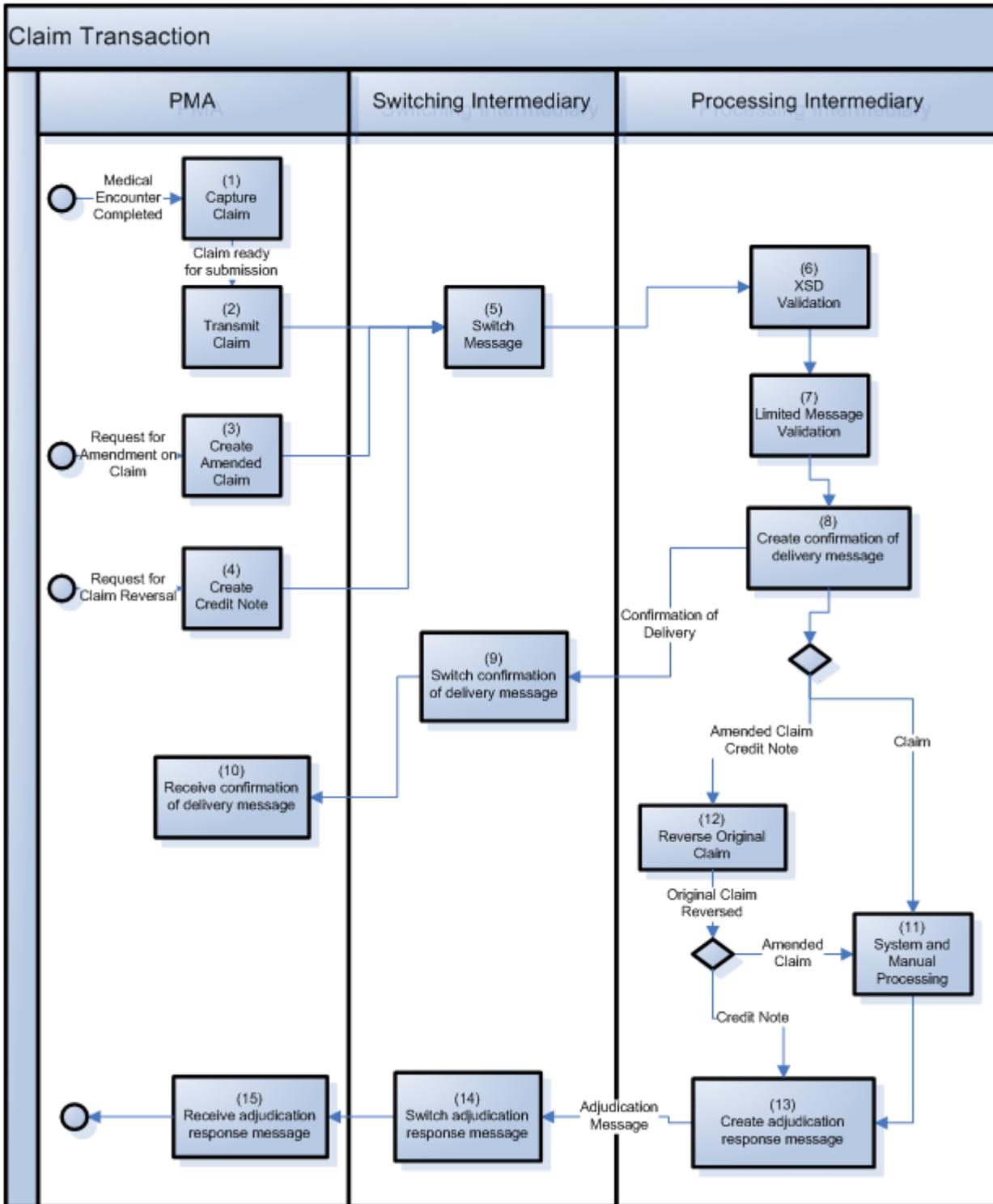
Description of Process Flow

Number	Description
1	Claim details are captured after a medical encounter took place. All fields that are required according to the data dictionary must be completed.
2	There could be a time lapse between the creation of the claim and the submission of the

	claim. At this stage the claim (Paper or electronic) will be constructed in the PHISC format.
3	It is possible that amendments are needed to the claim after the claim was submitted. An amended claim will be created. In the claim, it will be indicated that it is an amended claim.
4	It is also possible that a claim must be reversed. A credit note will be created for this purpose.
5	Claims, amended claims and credit notes could be sent to a switching party. Depending on capabilities and the contract with the intermediary, various functions could be performed by the intermediary. It could be as elementary as passing the message to the correct processing intermediary or performing upfront validations and splitting of messages or batches.
6	Assuming the Processing Intermediaries always validate the XSD as first step. If the message fails the XSD validation, the response message going back to the PMA will indicate that.
7	Depending on the Processing Intermediary, it is possible that they may perform more than just schema validation on the message before sending back an initial response. The level of additional processing will differ between processing intermediaries. It could be restricted to schema validation, or include at least header level validations like member and billing practice or full message validation.
8	Confirmation of Receipt message delivery will comply with all rules specified in section 6.11.2 of this document. The Processing Intermediary may also elect to reply with multiple responses in addition to the Confirmation of Receipt message before the final adjudication response.
9	The confirmation of delivery message will be switched back to the PMA by the switching intermediary.
10	The receiving of the confirmation of delivery message could trigger some processes to start in the PMA application. At least one confirmation of delivery message can be expected per message.
11	Depending on processing rules, both paper and electronic claims will go through system and/or manual processing. Any warnings, information or rejections will be indicated in the adjudication response message.
12	An amended claim and credit note imply that a claim was send previously. Therefore it is necessary that the original claim must be reversed. If it was a credit note, the adjudication response can be send immediately after the reversal was done. If it was an amended claim, the amended claim will be processed as if it is a new claim in step 11. It is possible that no claim exists to reverse. In that instance, the amended claim must still be processed. The adjudication message of the credit note will indicate that the reversal request could not be done, because the original claim could not be found.
13	The adjudication message will comply with all rules specified in section 6.11 of this document.
14	The adjudication message will be switched back to the PMA by the switching intermediary.
15	The receiving of the adjudication message could trigger some processes to start in the PMA application. It is possible that the adjudication message is not send to the PMA, but only the Remittance Advice.

4. <u>XML Structure</u>

Please refer to Appendix A for a detailed object model of the dispensing claim, pathology claim, and response message for both batch and message envelope. Refer to Appendix B for sample XML.

4.1.1 *<u>Billing Event Level</u>*

The Claim consists of a non repeatable header structure where the Claim Reference Information, Billing Practice, Payor, Member and Patient information is located. Control totals of all line financials can be found on the header level.

4.1.2 *<u>Clinical Encounter Level</u>*

The clinical encounter level is made up of either, but at least one of the following transaction types:

    a. Product Item. This item will be used if medicine was dispensed or administered during a consultation.

    b. Tariff Item. Any procedure will be claimed using this structure. Modifiers are repeatable per tariff item. Note that in the case of optometry and dental claims there are separate structures that need to be completed. Due to the changes of the designation of tooth numbers published in the SADA DENTAL CODES 2016 document, the super-numerary tooth numbers can now also be indicated with 2 numeric numbers followed by an "S", e.g. 23S.

    c. Modifier Item. To make provision for compound modifiers where the amount is made up of different line items, a separate line item type is required.

In instances where medicine and a procedure were performed, two line items will be created. One Nappi item for the medicine and one Tariff item for the procedure.

5. <u>Names used in XML</u>

Please refer to the content document for the formalised and defined dictionary of element names used in the PHISC namespace.

Content Section Description	Content Field Description	Size in content document	XML Name	Size in XML	XML Layout requirement
Date and Account Number	Date Transaction Created	8N Date format	DateTransactionCreated	DateTime	Mandatory
	Account Number	20AN	BillingPractice: AccountNumber	20AN	Mandatory
Supplier / Billing Practice Information	Supplier / Billing Practice PCNS number	18AN	BillingPractice: PCNSNumber	18AN	Mandatory
	Supplier / Billing Practice VAT Registration Number	20AN	BillingPractice:VATRegistrationNumber	String	Optional
	Supplier / Billing Practice Name	60AN	BillingPractice: Name	String	Mandatory
	Supplier / Billing Practice Address Line 1	25AN	ContactInformation:AddressLineOne	String	Optional
	Supplier / Billing Practice Address Line 2	25AN	ContactInformation:AddressLineTwo	String	Mandatory
	Supplier / Billing Practice Address Line 3	25AN	ContactInformation:AddressLineThree	String	Optional
	Supplier / Billing Practice Address Line 4	25AN	ContactInformation:AddressLineFour	String	Mandatory
	Supplier / Billing Practice Address Line 5	10AN	ContactInformation:AddressLineFive	String	Mandatory
	Supplier / Billing Practice Tel	10AN	ContactInformation:TelephoneOne	String	Optional

Content Section Description	Content Field Description	Size in content document	XML Name	Size in XML	XML Layout requirement
	No. 1				
	Supplier / Billing Practice Tel No. 2	10AN	ContactInformation:TelephoneTwo	String	Optional
	Supplier / Billing Practice Tel No. 3	10AN	ContactInformation:TelephoneThree	String	Optional
	Supplier/Billing Practice Service Location Identifier	5AN	CommonClaimLineItemInfo: ServiceLocation	String	Optional
Medical Scheme Information	Registration Number	15AN	NonProviderTradingParty: RegistrationNumber	18AN	Mandatory
	Registration Type	5AN	NonProviderTradingParty: typeOfBody	Fixed List	Mandatory
	Medical Scheme Name	50AN	Payor:Name	String	Mandatory
	Claim Option	AN	Payor:ClaimOption	String	Optional
	Medical Scheme Option / Plan Reference	10AN	Payor:OptionOrPlanReference	String	Optional
Member Information	Principal Member Title	5AN	PolicyOwner:Title	String	Mandatory
	Principal Member Surname	20AN	CommonPersonInfo: Surname	String	Optional
	Principal Member Initials	5AN	CommonPersonInfo:Initials	String	Mandatory
	Principal Member ID	20AN	CommonPersonInfo: IdentityNumber	String	Mandatory
	Principal Member VAT Registration Number	15AN	PolicyOwner:VATRegistrationNumber	String	Optional
	Principal member number	30AN	Policy: PolicyNumber	30AN	Mandatory
	Principal member Address Line 1	25AN	ContactInformation:AddressLineOne	String	Optional
	Principal member Address Line 2	25AN	ContactInformation:AddressLineTwo	String	Mandatory
	Principal member Address Line 3	25AN	ContactInformation:AddressLineThree	String	Optional
	Principal member Address Line 4	25AN	ContactInformation:AddressLineFour	String	Mandatory
	Principal member Address Line 5	10AN	ContactInformation:AddressLineFive	String	Mandatory
	Principal member Tel No. 1	10AN	ContactInformation:TelephoneOne	String	Optional
	Principal member Tel No. 2	10AN	ContactInformation:TelephoneTwo	String	Optional
	Principal member Tel No. 3	10AN	ContactInformation:TelephoneThree	String	Optional
Provider Information	Treating / Attending Provider PCNS number	13AN	CommonProviderInfo: PCNSNumber	18AN	Optional
	Treating / Attending Provider Council Registration No.	16AN	CommonProviderInfo: RegistrationNumber	18AN	Mandatory
	Treating / Attending Provider Council Type	2AN	CommonProviderInfo: typeOfRegistration	Fix list	Mandatory
	Treating Provider Title	5AN	FullName:Title	String	Mandatory
	Treating Provider Initials	5AN	FullName: Initials	String	Mandatory
	Treating Provider Surname	20AN	FullName: Surname	String	Mandatory
	Treating Provider Dispensing Licence Number	10AN	TreatingProvider: DispensingLincenseNumber	10AN	Optional
Claim Number Information	Transaction Type Indicator and Description	7AN	ClaimTransactionType	Fix list	Mandatory
	Resend Indicator and Description	1AN	CommonClaimHeaderInfo: resendIndicator	True/False	Mandatory
	Billing Practice/ Supplier Claim / Invoice / Credit Note Number	20AN	ClaimNumber	50AN	Mandatory
	Authorisation Number	20AN	CommonClaimHeaderInfo: AuthorisationNumber	20AN	Optional
	Supplier/ Billing Practice	20AN	CommonClaimHeaderInfo:	50AN	Optional

Content Section Description	Content Field Description	Size in content document	XML Name	Size in XML	XML Layout requirement
	Original Claim / Invoice Number		OriginalClaimNumber		
	Claim Number Version	2N	ClaimNumber: version	Decimal	Mandatory
	Original Claim Number Version	2N	OriginalClaimNumber: version	Decimal	Optional
	Credit Note Version Number	2N	CreditNoteNumber: version	Decimal	Mandatory
	Claim Response Version Number	2N	ClaimResponseNumber: version	Decimal	Mandatory
	Credit Note Response Version Number	2N	CreditNoteResponseNumber: version	Decimal	Mandatory
Referral Information	Referring Provider / Prescriber personal PCNS No.	18AN	CommonProviderInfo: PCNSNumber	18AN	Optional
	Referring Provider / Prescriber Council number	16AN	CommonProviderInfo: RegistrationNumber	18AN	Mandatory
	Referring Provider / Prescriber Council Type	2AN	CommonProviderInfo: typeOfRegistration	Fix list	Mandatory
	Referring Provider / Prescriber Title	5AN	FullName:Title	String	M andatory
	Referring Provider / Prescriber Initials	5AN	FullName: Initials	String	Mandatory
	Referring Provider / Prescriber Surname	20AN	FullName: Surname	String	Mandatory
	Diagnosis Code Sequence Number	2N	DiagnosisCode: sequence	Decimal	Mandatory
	Referring Diagnosis Code(s)	10AN	Diagnosis: DiagnosisCode	10AN	Mandatory
Patient Information	Patient Surname	20AN	CommonPersonInfo: Surname	String	Optional
	Patient First Name	20AN	Patient: FirstName	String	Optional
	Patient Initials	5AN	CommonPersonInfo:Initials	String	Mandatory
	Patient ID No.	20AN	CommonPersonInfo: IdentityNumber	String	Mandatory
	Patient Dependent Code	2AN	Patient: DependantCode	2AN	Optional
	Patient date of birth	8N Date	Patient: DateOfBirth	Date	Optional
	Patient Gender	1AN	Patient: Gender	Fix list	Optional
Claim Financial Information	Submitted Total Claimed Amount	9N	SubmittedClaimAmount	N9.2	Mandatory
	Calculated Total Claimed Amount	9N	CalculatedClaimAmount	N9.2	Optional
	Approved Total Claimed Amount	9N	ApprovedClaimAmount	N9.2	Mandatory
	Submitted Total Gross Amount	9N	SubmittedGrossAmount	N9.2	Mandatory
	Calculated Total Gross Amount	9N	CalculatedGrossAmount	N9.2	Optional
	Approved Total Gross Amount	9N	ApprovedGrossAmount	N9.2	Mandatory
	Submitted Total Discount Amount	9N	SubmittedTotalDiscount	N9.2	Optional
	Calculated Total Discount Amount	9N	CalculatedTotalDiscount	N9.2	Optional
	Approved Total Discount Amount	9N	ApprovedTotalDiscount	N9.2	Mandatory
	Submitted Total VAT Amount	9N	SubmittedVATAmount	N9.2	Optional
	Calculated Total VAT Amount	9N	CalculatedVATAmount	N9.2	Optional
	Approved Total VAT Amount	9N	ApprovedVATAmount	N9.2	Optional
	Submitted Payment Indicator	1AN	DoPayMember	Boolean	Optional
	Submitted Total Collection Amount	9N	SubmittedTotalCollections	N9.2	Mandatory
	Calculated Total Deduction	9N	CalculatedTotalDeduction	N9.2	Optional

23

Content Section Description	Content Field Description	Size in content document	XML Name	Size in XML	XML Layout requirement
	Amount				
	Approved Total Deduction Amount	9N	ApprovedTotalDeduction	N9.2	Mandatory
	Due By Payor To Member	9N	DueByPayorToMember	N9.2	Mandatory
	Due By Provider To Member	9N	DueByProviderToMember	N9.2	Mandatory
Transaction Event Financial Information	Submitted Transaction Event Discount Amount	9N	SubmittedBillingEventDiscount	N9.2	Mandatory
	Calculated Transaction Event Discount Amount	9N	CalculatedBillingEventDiscount	N9.2	Optional
	Approved Transaction Event Discount Amount	9N	ApprovedBillingEventDiscount	N9.2	Mandatory
	Deduction Type Indicator	9N	Deduction: type	Fix list	Optional
	Submitted Transaction Event Collection Amount	9N	SubmittedBillingEventCollections	N9.2	Mandatory
	Calculated Transaction Event Deduction Amount	9N	CalculatedBillingEventDeduction	N9.2	Optional
	Sum Submitted Clinical Encounter Discount Amounts	9N	SubmittedClinicalEncounterDiscount	N9.2	Mandatory
	Sum Calculated Clinical Encounter Discount Amounts	9N	CalculatedClinicalEncounterDiscount	N9.2	Optional
	Sum Approved Clinical Encounter Discount Amounts	9N	ApprovedClinicalEncounterDiscount	N9.2	Mandatory
	Sum Submitted Clinical Encounter Collection Amounts	9N	SubmittedClinicalEncounterCollections	N9.2	Mandatory
	Sum Calculated Clinical Encounter Deduction Amounts	9N	CalculatedClinicalEncounterDeduction	N9.2	Optional
			Disclaimer	String	Optional
Treatment Information	Date of Service, Treatment Start Date and Time	8N Date and Time	CommonClaimLineItemInfo: DateTimeOfTreatment	Date	Mandatory
	Treatment End Date, Time	8N Date and Time	CommonClaimLineItemInfo: EndDateTimeOfTreatment	Date	Optional
	Patient Place of Service Code	3N	CommonClaimLineItemInfo: PlacOfService	String	Mandatory
	Item/Tariff Authorisation No.	20AN	CommonClaimLineItemInfo: AuthorisationNumber	20AN	Optional
	Billing Practice Line Item Identifier	3N	CommonClaimLineItemInfo: BillingPracticeLineItemId	3N	Optional
	Trading Party Line Item Identifier	3N	CommonClaimLineItemInfo: TradingPartyLineItemId	3N	Mandatory
	System Reference Number	32AN	CommonClaimLineItemInfo: SystemReferenceNumber	32AN	Optional
	Procedural Coding Standard Identifier	3N	ProcedureCode: proceduralCodingStandardIdentifier	Fix list	Mandatory (for tariff line)
	Item Type Indicator	2AN	N/A		
	Procedure Code	10AN	ClaimLineTariffItem: ProcedureCode	10AN	Mandatory(for tariff line)
	Modifier Code	6AN	ClaimLineTariffItem and ClaimLineModifierItem: ModifierCode	6AN	Mandatory (for Modifier line) Optional (for tariff line)
	Product Coding Standard Indicator	3N	ProductCode: type	Fix list	Mandatory
	Product Code	15AN	ClaimLineProductItem: ProductCode	15AN	Mandatory

Content Section Description	Content Field Description	Size in content document	XML Name	Size in XML	XML Layout requirement
	Quantity	8N	CommonClainLineItemInfo: Quantity	8N	Mandatory
	Description / Narration of item	50AN	ClaimLineTariffItem: DescriptionOfItem	String	Mandatory
	Patient Height	3N	CommonClainLineItemInfo: Height	Decimal	Optional
	Patient Weight	6N	CommonClainLineItemInfo: Weight	Decimal	Optional
	Benefit Type Indicator	3AN	CommonClainLineItemInfo: BenefitTypeIndicator	String	Optional
Additional Information for Dental Items	Tooth Number	3AN	Tooth: Number	3AN	Mandatory (if dental procedure)
	Tooth Surface	5AN	Tooth: Surface	String	Mandatory (if dental procedure)
	Dental Laboratory Procedure Code	10AN	DispensingTarfiffLineItem: ProcedureCode	15AN	Mandatory for dental procedure
	Dental Laboratory Technician's PCNS Number	18AN	CommonProviderInfo: PCNSNumber	18AN	Optional
	Dental Laboratory Technician's Council registration number	16AN	CommonProviderInfo: RegistrationNumber	18AN	Mandatory
	Dental Laboratory Technician Council type	2AN	CommonProviderInfo: typeOfRegistration	Fix list	Mandatory
	Dental Laboratory Reference Number	32AN	DentalLabProcedure: ReferenceNumber	String	Mandatory
Additional Information for Pathology Items	Pathology Laboratory Requisition Number	32AN	ClaimLineTariffItem: LoboratoryRequisitionNumber	32AN	Mandatory
Additional Information for Dispensing Items	Daily Dosage	6N	ClaimLineProductItem: DailyDosage	Decimal	Mandatory
	Days of therapy	3N	ClaimLineProductItem: DaysOfTherapy	Decimal	Optional
	Basis of DOT	2N	DaysOfTherapy: basisOfDaysOfTherapy	Decimal	Optional
	Mixture Group Identifier	2AN	ClaimLineProductItem:MixtureGroupIdentifier	String	Mandatory
	Mixture Code	2N	MixtureGroupIdentifier: mixtureCode	String	Mandatory
	Repeat Number	2N	RepeatScript: RepeatNumber	Decimal	Optional
	Number of repeats authorised	2N	RepeatScript: NumberOfRepeatsAuthorised	Decimal	Optional
Item Diagnosis Information	Diagnosis Code	10AN	Diagnosis: DiagnosisCode	10AN	Optional
	Diagnosis Code Sequence Number	2N	DiagnosisCode: sequence	Decimal	Mandatory if Diagnosis Code is specified
Item Assistant Information	Assistant PCNS Number.	18AN	CommonProviderInfo: PCNSNumber	18AN	Optional
	Assistant Council Registration No.	16AN	CommonProviderInfo: RegistrationNumber	18AN	Mandatory
	Assistant Council Type	2N	CommonProviderInfo: typeOfRegistration	Fix list	Mandatory
Item Optometric Information	Eye Indicator	1AN	OptomLens: EyeIndicator	1AN	Mandatory for optom lenses
	Sphere	+nn.nnn / -nn.nnn	OptomLens: Sphere	String	Mandatory for optom lenses
	Cylinder	nn.nn	OptomLens: Cylinder	5N	Optional
	Axis	3N	OptomLens: Axis	3N	Mandatory for Cylinder
	Reading add	nn.nn	OptomLens: ReadingAdd	5N	Optional
	Prism	2N	OptomLens: Prism	2N	Optional
	Prism Base	2AN	OptomLens: PrismBase	2AN	Mandatory for Prism

Content Section Description	Content Field Description	Size in content document	XML Name	Size in XML	XML Layout requirement
	Visual Acuity	Nn/nn +n	OptomExamination: VisualAcuity	String	Mandatory for optom Examination
	Visual Fields	Free text AN	OptomExamination: VisualField	String	Mandatory for optom examination
	Intra ocular pressure	5AN	OptomExamination: IntraOcularPressure	String	Mandatory for optom examination
	Laboratory Number	32AN	OptomLaboratory: Number	String	Mandatory for optom lab work
	Laboratory Order Number	32AN	OptomLaboratory: OrderNumber	String	Mandatory for optom lab work
Line Item Financial Information	Submitted Item Claimed Amount	9N	SubmittedClaimAmount	N9.2	Mandatory
	Calculated Item Claimed Amount	9N	CalculatedClaimAmount	N9.2	Optional
	Approved Item Claimed Amount	9N	ApprovedClaimAmount	N9.2	Mandatory
	Submitted Item Base Cost Amount	9N	SubmittedBaseCost	N9.2	Mandatory
	Calculated Item Base Cost Amount	9N	CalculatedBaseCost	N9.2	Optional
	Approved Item Base Cost Amount	9N	ApprovedBaseCost	N9.2	Optional
	Submitted Item Mark-up Amount	9N	SubmittedMarkup	N9.2	Optional
	Calculated Item MarkUp Amount	9N	CalculatedMarkUp	N9.2	Optional
	Approved Item Mark-up Amount	9N	ApprovedMarkup	N9.2	Optional
	Submitted Item Professional Fee Amount	9N	SubmittedProfessionalFee	N9.2	Optional
	Calculated Item Professional Fee Amount	9N	CalculatedProfessionalFee	N9.2	Optional
	Approved Item Professional Fee Amount	9N	ApprovedProfessionalFee	N9.2	Optional
	Submitted Item Gross Amount	9N	SubmittedGrossAmount	N9.2	Mandatory
	Calculated Item Gross Amount	9N	CalculatedGrossAmount	N9.2	Optional
	Approved Item Gross Amount	9N	ApprovedGrossAmount	N9.2	Mandatory
	Submitted Item Discount Amount	9N	SubmittedLineItemDiscount	N9.2	Mandatory
	Calculated Item Discount Amount	9N	CalculatedLineItemDiscount	N9.2	Optional
	Approved Item Discount Amount	9N	ApprovedLineItemDiscount	N9.2	Mandatory
	Submitted Pricing Tariff Indicator	2N	pricingTariffIndicator	Fix list	Mandatory
	Calculated Pricing Tariff Indicator	2N	pricingTariffIndicator	Fix list	Mandatory
	Approved Pricing Tariff Indicator	2N	pricingTariffIndicator	Fix list	Mandatory
	Submitted Item Collection Amount	9N	SubmittedLineItemCollections	N9.2	Mandatory
	Calculated Item Deduction Amount	9N	CalculatedLineItemDeduction	N9.2	Optional
	Approved Total Total Deduction	9N	ApprovedTotalDeduction	N9.2	Mandatory

Content Section Description	Content Field Description	Size in content document	XML Name	Size in XML	XML Layout requirement
	Amount				
	Item Deduction Type Indicator		Deduction: type	Fix list	Optional
	Sum of Line Item's Calculated Deduction Amount	9N	CalculatedTotalDeduction	N9.2	Optional
System Information	Operating System	50AN	SystemInformation:OperatingSystem	String	Mandatory
	Source identifier	15AN	SystemInformation: SourceId	String	Mandatory
	PMA Title	50AN	SystemInformation:SoftwareTitle	String	Mandatory
	PMA Version Number	10AN	SystemInformation:SoftwareVersion	String	Mandatory
XML Technical Implementation Information	Non-Provider Trading Party ID	2N	NonProviderTradingParty: id	Numeric	Mandatory
	Treating Provider ID	2N	TreatingProvider: id	Numeric	Mandatory
	Referring Provider ID	2N	ReferringProvider: id	Numeric	Mandatory
	Assisting Provider ID	2N	AssistingProvider: id	Numeric	Mandatory
	Dental Technician Laboratory ID	2N	DentalLaboratory: id	Numeric	Mandatory
	Patient ID	2N	Patient: id	Numeric	Mandatory
	Diagnosis ID	2N	Diagnosis: id	Numeric	Mandatory
	Financial Amount ID	2N	FinancialAmountId	Numeric	Mandatory
XML Financial Note Information	Financial Note ID	2N	Financial Note Id	Numeric	Mandatory
	Financial Note Code	5AN	Financial Note Code	String	Mandatory
	Financial Note Description	100AN	Financial Note Description	String	Mandatory
	Financial Note Amount	9N	Financial Note Amount	N9.2	Mandatory
XML Envelope Information	Sending Trading Party Batch Number	20AN	TrackingInformation: SendingTradingPartyBatchNumber	String	Mandatory
	Date Time Tracking Information Added	8N Date	TrackingInformation: DateTimeTrackingInformationAdded	DateTime	Mandatory
	Date/Time Transmitted	8N Date	TrackingInformation: DateTransmitted	DateTime	Optional
	Date/Time Received	8N Date	TrackingInformation: DateReceived	DateTime	Optional
	Number of Items in Batch	5N	TrackingInformation: NumberOfItemsInBatch	Decimal	Mandatory
	Submitted Claim Total Amount	9N	CommonBatchTrackingInformation: SubmittedClaimAmountTotal	Decimal	Mandatory
	Approved Claim Amount Total	9N	ResponseBatchTrackingInformation: ApprovedClaimAmountTotal	N9.2	Mandatory
	Corrupt Batch Continue On Error	1AN	ProviderClaimBatchEnvelope: CurruptBatchContinueOnError	True/False	Mandatory
	Honoured Batch Continue on Error	1AN	ClaimResponseBatchEnvelope: HonouredBatchContinueOnError	True/False	Mandatory
XML Response Message Information	Response Tracking Status	20AN	TrackingStatus	Fix list	Mandatory
	Response Process Status	10AN	ProcessStatus	Fix list	Mandatory
	Response Reason Code Sequence Number	5N	ProcessReasonCode: sequence	Integer	Mandatory
	Response Reason Code Type	10AN	ProcessReasonCode: Priority	Fix list	Mandatory
	Response Reason Code	10AN	ProcessReasonCode: Value	String	Mandatory
	Response Reason Code Description	50AN	ProcessReasonCode: Description	String	Mandatory
	Response Reason Code Source Indicator	1AN	ProcessReasonCode: IsDefinedByPHISC	True/False	Optional

6. <u>Design Principles</u>

#	Design Principle	Status	Status Date
1	No decision needs to be taken w.r.t the use of SAX or DOM parsers. This is an implementation detail which is independent of the XML message and doesn't affect any other party other than the implementer.	Accepted	8 May 2007
2	Base64 will be used to encode none text data such as images.	Accepted	8 May 2007
3	XSDs will be used to define the document and not DTDs based on the W3C XML Schema Recommendation.	Accepted	8 May 2007
4	Separate XSD's will be created for groupings of disciplines to maximise the use of schema validation (i.e. reduce the number of optional tags) and to reduce the impact of change on the disciplines.	Accepted	8 May 2007
5	Attributes to be used to add context to data and not content. 8 May 07: Agreed to revisit this issue once an initial version of the XSD is finalised by the workgroup. From an application point of view it might prove to be more difficult to code / derive objects. 28 Aug 07: Agreed that elements will be use to store information that is key to production process and attributes to store meta data.	Accepted	28 Aug 2007
7	Batched versus discrete message transmission: The XML design should not prevent the transmission of claim messages in batch from providers.	Accepted	8 May 2007
8	The XSD structure must be optimised for simplicity whilst still retaining a structure that is easily extensible for other disciplines by making use of OO design principles in the XSD.	Accepted	8 May 2007
9	All elements that are expected to be re-used in other discipline XSD's should be defined as a type in the Simple / Complex Type XSDs.	Accepted	8 May 2007
10	The PHISC website URL to be used as the target namespace of all PHISC schemas	Accepted	8 May 2007
12	Type declarations are done in the body of the schema as required and not at the beginning.	Accepted	8 May 2007
13	Empty comment lines are insert to improve readability of the XSD in text editors	Accepted	8 May 2007
16	Fields defined as conditional mandatory in the Standardised Claim Form must either be defined as Optional or Required in the schema. Where possible, fields should attempt to be defined as Required to improve the efficacy of schema validation; this may be achieved by spawning a separate XSD for a separate discipline group where the conditions of the rule are dependent on the discipline type. Where defining the field as Required is too restrictive and Optional must be used, then the conditions of the information need must be implement programmatically in the target production system that will process the message.	Accepted	8 May 2007
17	UTF-8 of the UCS-2 dataset will be used as the default encoding set.	In review	28 Aug 2007
18	The design of the XML Transactions will not impose any restrictions as far as communication protocol is concerned, any lock-in to any non-open, proprietary technology or intellectual property or vendor	Accepted	8 May 2007
19	The actual text of enumerated data will be used instead of numeric codes mapping to the descriptions of that data where: The description is less than 10 characters The enumerated list has 10 or less items The enumerated values are fairly static for a reasonable period of time Else numeric codes will be used to map to the enumerated list descriptions.	Accepted	28 Aug 2007
20	The naming convention of tags and attributes in the XSD will be 'camel case' with attribute names starting with lowercase and element names and type name starting with uppercase.	Accepted	8 May 2007

23	Simple Types are used when defining attributes on elements and simple elements. Complex Types are used when defining complex elements	Agreed	24 May 2007
24	Any date and time information defined in any of the PHISC schemas will be specified as a single date/time element.	Agreed	24 May 2007

Appendix A: Object Model

Concepts

Associations
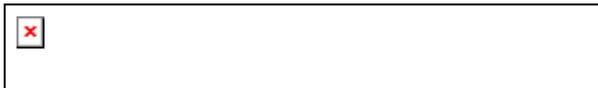
Class B is **associated** with Class A. Class B could live on its own and be re-used on its own in another place. E.g. DiagnosisCode Structure can be used together with the ReferringProvider or the TreatingProvider(ClaimLineItem)

Composition

Class A and Class B live and die together. E.g. Claim and claim lines.

Generalisation

Class B and C inherit elements and attributes from Class A. No inheritance was used in any of the models.

ClaimHeader

Modified: 9-Jul-08

Attribute naming conventions:
Names starting in lowercase will be modelled as attributes in the XML Schema
Names starting in uppercase will be modelled as elements in the XML Schema

ClaimLineItem

CommonClaimLineItemInfo
-id
-BillingPracticeLineItemId
-TradingPartyLineItemId
-SystemReferenceNumber
-TreatingProviderId
-TreatingDiagnosisId
-PatientId
-DateTimeOfTreatment
-EndDateTimeOfTreatment
-ServiceLocation
-AuthorisationNumber
-Weight
-Height
-Quantity
-PlaceOfService
-BenefitTypeIndicator

ClaimLineItemFinancial
-DoPayMember

TreatingProvider
-id
-DispensingLicenceNumber

BillingPractice
-PCNSNumber
-VATRegistrationNumber
-AccountNumber
-Name

NonProviderTradingParty
-id
-typeOfRegistration
-RegistrationNumber

ProcessReasonCode
-sequence
-Priority
-Value
-Description
-NonProviderTradingPartyId
-IsDefinedByPHISC

ClaimLineResponse
-ProcessStatus
-ClaimLineItemId

Patient
-id
-FirstName
-DependantCode
-DateOfBirth
-Gender

Diagnosis
-id

DiagnosisCode
-sequence
-Value

ReferringProvider
-id
-ReferralTrackingNumber
-DiagnosisId

DispensingProductLineItem
-DailyDosage
-ReferringProviderId

ToothReasonCode
-ToothNumber

DispensingModifierLineItem

MixtureGroupIdentifier
-mixtureCode
-Value

Assistant
-id

Modifier
-sequence
-ModifierCode
-ModifierAmount
-AssistantId

PathologyTariffLineItem
-ReferringProviderId
-LaboratoryRequisitionNumber

ProductCode
-type
-Value

DaysOfTherapy
-basisOfDaysOfTherapy
-Value

DispensingTariffLineItem
-DescriptionOfItem
-ReferringProviderId

RepeatScript
-RepeatNumber
-NumberOfRepeatsAuthorised

LeftEyeExamination

OptomExaminationPerEye
-VisualAcuity
-VisualField
-IntraOcularPressure

OptomExamination

ProcedureCode
-proceduralCodingStandardIdentifier
-Value

DentalLabProcedure
-ReferenceNumber
-DentalLaboratoryId

RightEyeExamination

OptomFrameAndLenses

DentalLaboratory
-id

OptomFrame
-NVSTag

OptomLenses

DentalProcedure

Tooth
-Number

-choice

Prism
-Value
-Base

Surface
-Surface

CylindricalPower
-Value
-Axis

OptomLaboratory
-Number
-OrderNumber

Prescription

LeftEyePerscription

OptomLensPrescriptionPerEye
-Diameter

RightEyePerscription

SphericalPower
-MainLens
-Add

Attribute naming conventions:
Names starting in lowercase will be modelled as attributes in the XML Schema
Names starting in uppercase will be modelled as elements in the XML Schema

32

ClaimFinancial

FinancialAmountRefersToFinancialNote
-FinancialAmountId

FinancialAmountNote
-FinancialNoteId

FinancialNote
-id
-Code
-Description
-Amount
-NonProviderTradingPartyId

NonProviderTradingParty
-id
-typeOfRegistration
-RegistrationNumber

BaseCost
-pricingTariffIndicator

ProcessReasonCode
-sequence
-Priority
-Value
-Description
-NonProviderTradingPartyId
-IsDefinedByPHISC

SubmittedBaseCost
-id
-Amount

SubmittedMarkUp
-id
-Amount

SubmittedProfessionalFee
-id
-Amount

SubmittedLineItemDiscount
-id
-Amount

SubmittedLineItemCollections
-id
-Amount

SubmittedClaimAmount
-id
-Amount

SubmittedGrossAmount
-id
-Amount

ClaimNumber
-Value
-Version

CommonProviderClaimResponseInfo
-TrackingStatus

CommonClaimBaseFinancialInfo

ClaimHeader
-resendIndicator
-TransactionType
-DateTransactionCreated
-AuthorisationNumber

PreValidationResponse

ClaimResponseNumber
-Value
-Version

ClaimLineItemFinancial
-DoPayMember

ClaimHeaderFinancial
-Disclaimer

CommonClaimLineItemInfo
-id
-BillingPracticeLineItemId
-TradingPartyLineItemId
-SystemReferenceNumber
-TreatingProviderId
-TreatingDiagnosisId
-PatientId
-DateTimeOfTreatment
-EndDateTimeOfTreatment
-ServiceLocation
-AuthorisationNumber
-Weight
-Height
-Quantity
-PlaceOfService
-BenefitTypeIndicator

SubmittedVATAmount
-id
-Amount

SubmittedBillingEventCollections
-id
-Amount

SubmittedTotalCollections
-id
-Amount

SubmittedBillingEventDiscount
-id
-Amount

SubmittedTotalDiscount
-id
-Amount

SubmittedClinicalEncounterDiscount
-id
-Amount

SubmittedClinicalEncounterCollections
-id
-Amount

FinancialAmount
-Amount

PreValidationResponse

33

FinancialOutcome

Envelopes & CreditNote

Appendix B: XML Sample for Dispensing Provider Claim

The following is a sample of the elements that will be represented in a Dispensing Provider Claim and the sequence.

```xml
<DispensingProviderClaim xmlns="http://schemas.phisc.org.za/draft/claim" xmlns:ccts="http://schemas.phisc.org.za/draft/document"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://schemas.phisc.org.za/draft/claim
..DispensingProviderClaim-1p5.xsd">
    <CommonClaimHeaderInfo resendIndicator="false" schemaVersion="0">
        <ClaimNumber version="0"/>
        <OriginalClaimNumber version="0"/>
        <ClaimTransactionType/>
        <DateTransactionCreated/>
        <AuthorisationNumber/>
        <BillingPractice>
            <PCNSNumber/>
            <VATRegistrationNumber/>
            <AccountNumber/>
            <Name/>
            <ContactInformation>
                <AddressLineOne/>
                <AddressLineTwo/>
                <AddressLineThree/>
                <AddressLineFour/>
                <AddressLineFive/>
                <TelephoneOne/>
                <TelephoneTwo/>
                <TelephoneThree/>
            </ContactInformation>
            <TreatingProvider id="1">
                <CommonProviderInfo>
                    <RegistrationNumber typeOfBody=""/>
                    <PCNSNumber/>
                </CommonProviderInfo>
                <DispensingLicenseNumber/>
                <FullName>
                    <Title/>
                    <Initials/>
                    <Surname/>
                </FullName>
            </TreatingProvider>
        </BillingPractice>
        <Policy>
            <PolicyNumber/>
            <PolicyOwner>
                <CommonPersonInfo>
                    <Initials/>
                    <Surname/>
                    <IdentityNumber/>
                </CommonPersonInfo>
                <Title/>
                <VATRegistrationNumber/>
                <ContactInformation>
                    <AddressLineOne/>
                    <AddressLineTwo/>
                    <AddressLineThree/>
                    <AddressLineFour/>
                    <AddressLineFive/>
                    <TelephoneOne/>
                    <TelephoneTwo/>
                    <TelephoneThree/>
                </ContactInformation>
            </PolicyOwner>
            <Patient id="1">
                <CommonPersonInfo>
                    <Initials/>
                    <Surname/>
                    <IdentityNumber/>
                </CommonPersonInfo>
                <FirstName/>
```

36

```xml
            <DependantCode/>
            <DateOfBirth/>
            <Gender/>
        </Patient>
    </Policy>
    <Payor>
        <NonProviderTradingPartyId/>
        <ClaimOption/>
        <OptionOrPlanReference/>
        <Name/>
    </Payor>
    <Diagnosis id="">
        <DiagnosisCode sequence=""/>
        <DiagnosisCode sequence=""/>
    </Diagnosis>
    <Diagnosis id="1">
        <DiagnosisCode sequence=""/>
        <DiagnosisCode sequence=""/>
    </Diagnosis>
    <ClaimHeaderFinancial>
        <CommonClaimBaseFinancialInfo>
            <SubmittedGrossAmount id=""/>
            <SubmittedClaimAmount id=""/>
        </CommonClaimBaseFinancialInfo>
        <SubmittedTotalDiscount id=""/>
        <SubmittedBillingEventDiscount id=""/>
        <SubmittedClinicalEncounterDiscounts id=""/>
        <SubmittedTotalCollections id=""/>
        <SubmittedBillingEventCollections id=""/>
        <SubmittedClinicalEncounterCollections id=""/>
        <SubmittedVATAmount id=""/>
        <FinancialAmountRefersToFinancialNote>
            <FinancialAmountId/>
            <FinancialNoteId/>
            <FinancialNoteId/>
        </FinancialAmountRefersToFinancialNote>
        <FinancialAmountRefersToFinancialNote>
            <FinancialAmountId/>
            <FinancialNoteId/>
            <FinancialNoteId/>
        </FinancialAmountRefersToFinancialNote>
        <Disclaimer/>
    </ClaimHeaderFinancial>
    <ReferringProvider id="1">
        <CommonProviderInfo>
            <RegistrationNumber typeOfBody=""/>
            <PCNSNumber/>
        </CommonProviderInfo>
        <ReferralTrackingNumber/>
        <DiagnosisId/>
        <FullName>
            <Title/>
            <Initials/>
            <Surname/>
        </FullName>
    </ReferringProvider>
    <NonProviderTradingParty id="1">
        <RegistrationNumber typeOfBody="CMS"/>
    </NonProviderTradingParty>
    <NonProviderTradingParty id="2">
        <RegistrationNumber typeOfBody="HPCSA"/>
    </NonProviderTradingParty>
    <FinancialNote id="">
        <Code/>
        <Description/>
        <Amount/>
        <NonProviderTradingPartyId/>
    </FinancialNote>
    <FinancialNote id="1">
        <Code/>
        <Description/>
```
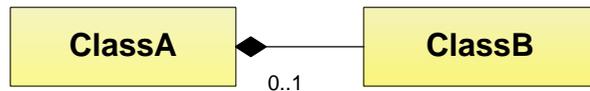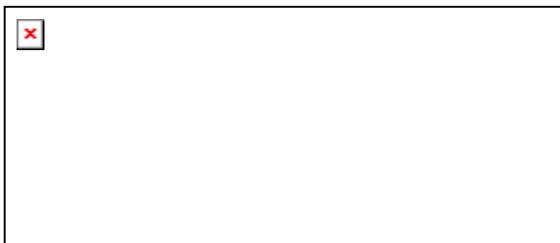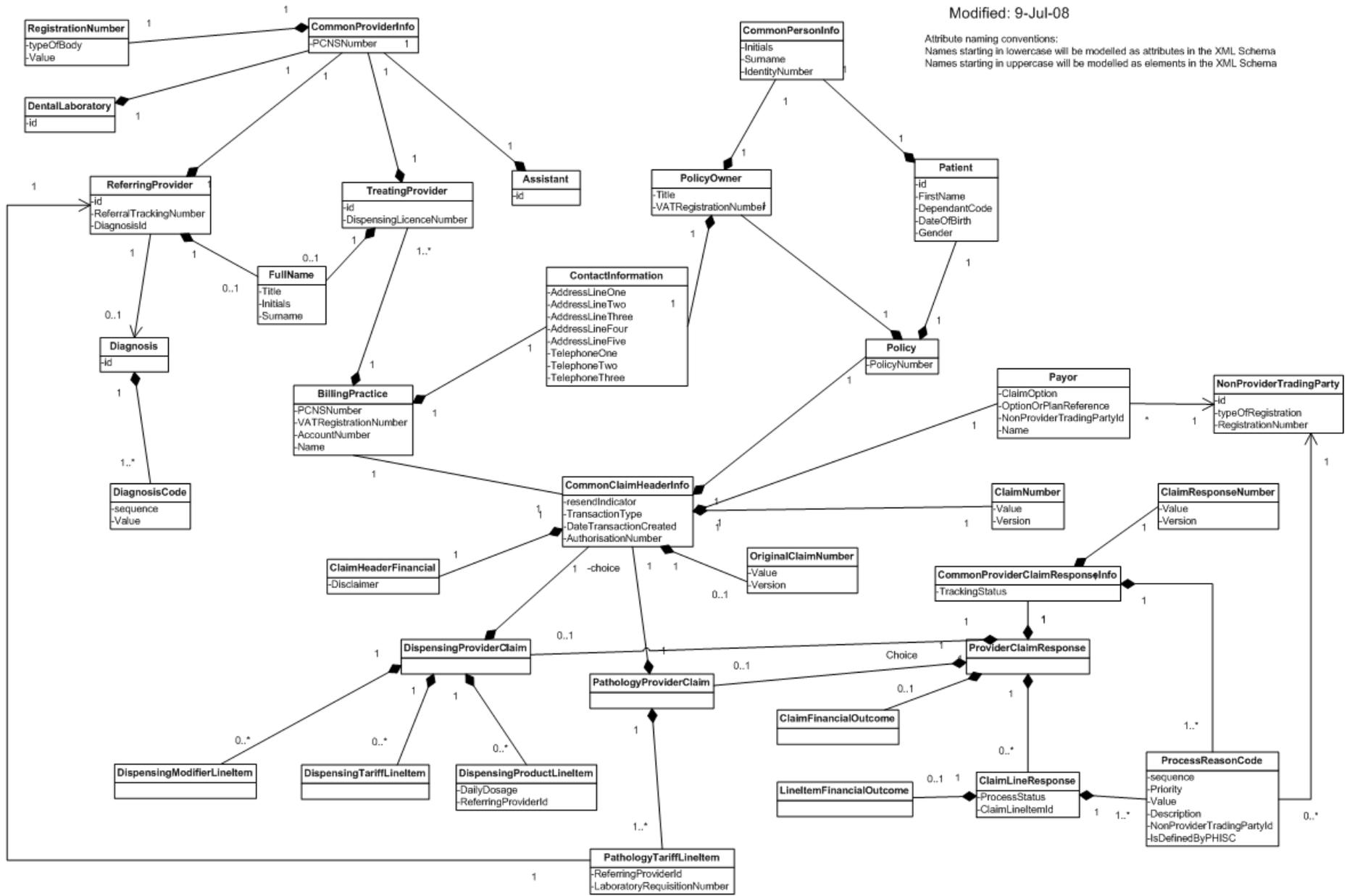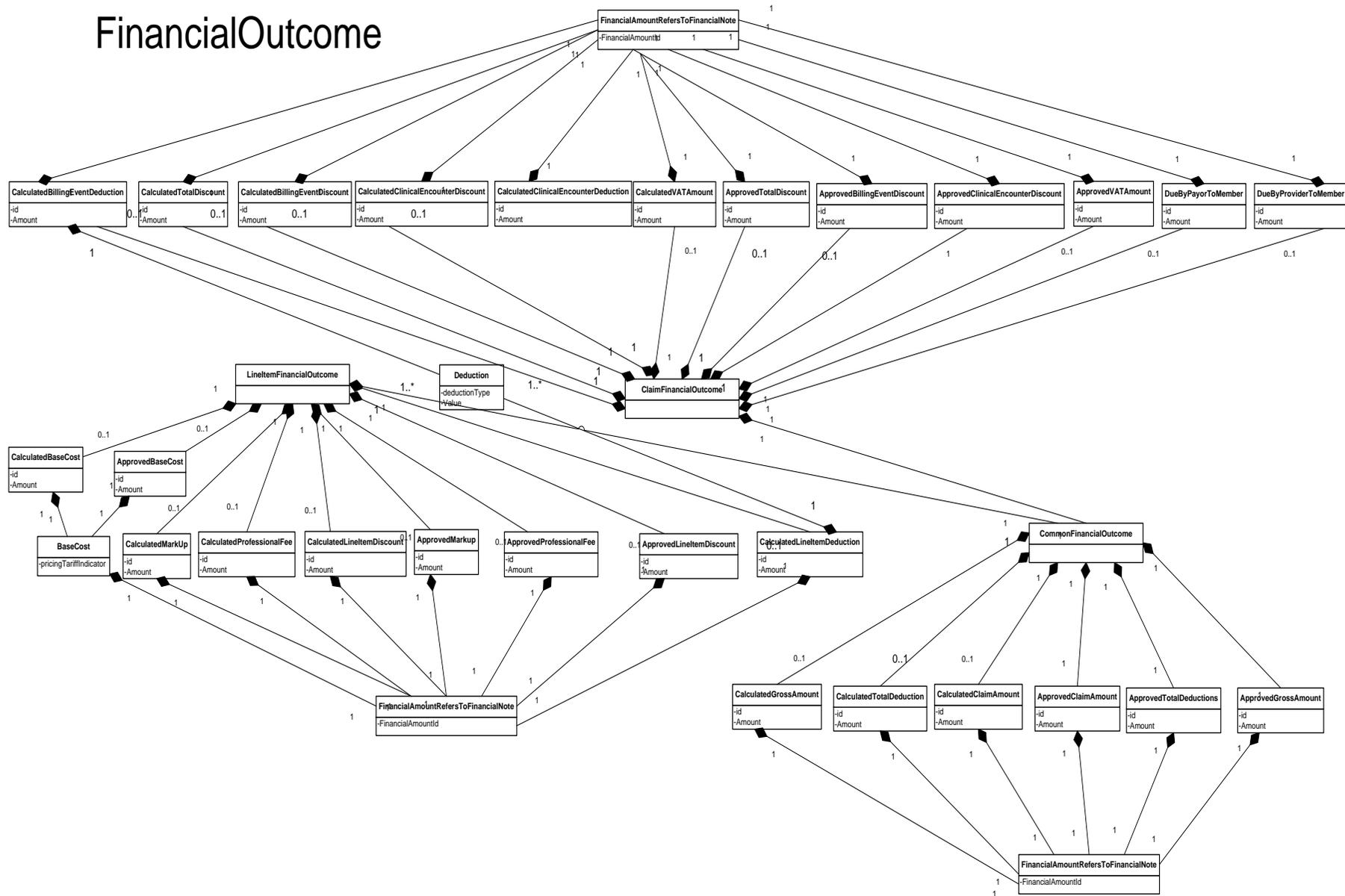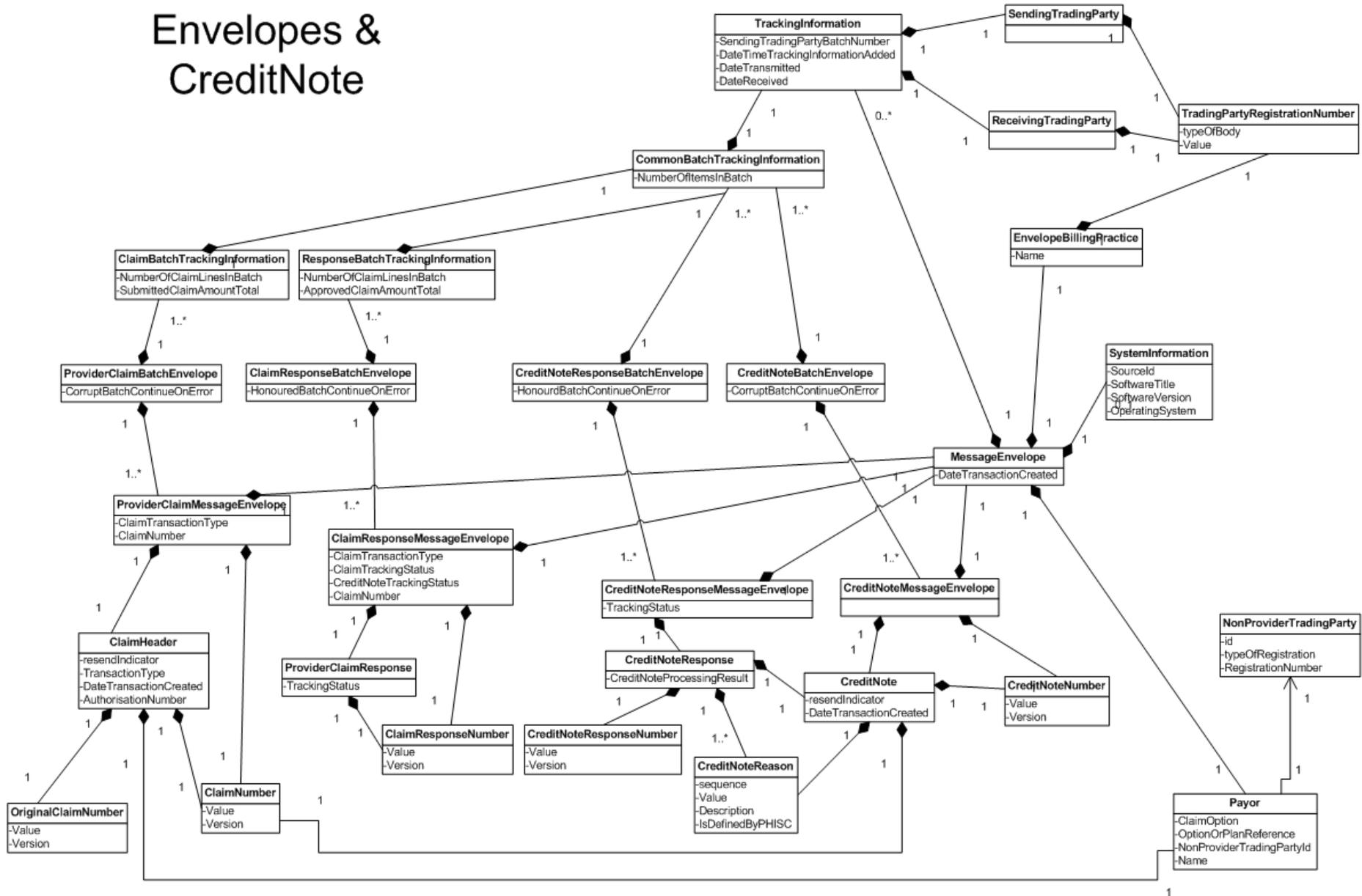
```xml
            <Amount/>
            <NonProviderTradingPartyId/>
        </FinancialNote>
    </CommonClaimHeaderInfo>
    <Assistant id="1">
        <CommonProviderInfo>
            <RegistrationNumber typeOfBody=""/>
            <PCNSNumber/>
        </CommonProviderInfo>
    </Assistant>
    <ClaimLineItem id="1">
        <ClaimLineTariffItem>
            <CommonClaimLineItemInfo>
                <BillingPracticeLineItemId/>
                <TradingPartyLineItemId/>
                <SystemReferenceNumber/>
                <TreatingProviderId/>
                <TreatingDiagnosisId/>
                <PatientId/>
                <DateTimeOfTreatment/>
                <EndDateTimeOfTreatment/>
                <Quantity/>
                <PlaceOfService/>
                <ServiceLocation/>
                <AuthorisationNumber/>
                <Weight/>
                <Height/>
                <BenefitTypeIndicator/>
                <ClaimItemFinancial>
                    <CommonClaimBaseFinancialInfo>
                        <SubmittedGrossAmount id=""/>
                        <SubmittedClaimAmount id=""/>
                    </CommonClaimBaseFinancialInfo>
                    <SubmittedBaseCost id="" pricingTariffIndicator=""/>
                    <SubmittedMarkUp id=""/>
                    <SubmittedProfessionalFee id=""/>
                    <SubmittedLineItemDiscount id=""/>
                    <SubmittedLineItemCollections id=""/>
                    <FinancialAmountRefersToFinancialNote>
                        <FinancialAmountId/>
                        <FinancialNoteId/>
                        <FinancialNoteId/>
                    </FinancialAmountRefersToFinancialNote>
                    <FinancialAmountRefersToFinancialNote>
                        <FinancialAmountId/>
                        <FinancialNoteId/>
                        <FinancialNoteId/>
                    </FinancialAmountRefersToFinancialNote>
                    <DoPayMember/>
                </ClaimItemFinancial>
            </CommonClaimLineItemInfo>
            <DescriptionOfItem/>
            <ProcedureCode proceduralCodingStandardIdentifier=""/>
            <ReferringProviderId/>
        </ClaimLineTariffItem>
    </ClaimLineItem>
    <ClaimLineItem id="2">
        <ClaimLineProductItem>
            <CommonClaimLineItemInfo>
                <TradingPartyLineItemId/>
                <TreatingProviderId/>
                <PatientId/>
                <DateTimeOfTreatment/>
                <Quantity/>
                <PlaceOfService/>
                <ClaimItemFinancial>
                    <CommonClaimBaseFinancialInfo>
                        <SubmittedGrossAmount id=""/>
                        <SubmittedClaimAmount id=""/>
                    </CommonClaimBaseFinancialInfo>
                    <SubmittedBaseCost id="" pricingTariffIndicator=""/>
```

```xml
                    <SubmittedMarkUp id=""/>
                    <SubmittedProfessionalFee id=""/>
                    <SubmittedLineItemDiscount id=""/>
                    <SubmittedLineItemCollections id=""/>
                    <FinancialAmountRefersToFinancialNote>
                        <FinancialAmountId/>
                        <FinancialNoteId/>
                        <FinancialNoteId/>
                    </FinancialAmountRefersToFinancialNote>
                    <FinancialAmountRefersToFinancialNote>
                        <FinancialAmountId/>
                        <FinancialNoteId/>
                        <FinancialNoteId/>
                    </FinancialAmountRefersToFinancialNote>
                    <DoPayMember/>
                </ClaimItemFinancial>
            </CommonClaimLineItemInfo>
            <ProductCode type="NAPPI"/>
            <DailyDosage/>
            <ReferringProviderId/>
            <MixtureGroupIdentifier mixtureCode="00"/>
            <RepeatScript/>
            <DaysOfTherapy basisOfDaysOfTherapy="1"/>
            <ProcedureCode proceduralCodingStandardIdentifier="NHRPL"/>
        </ClaimLineProductItem>
    </ClaimLineItem>
</DispensingProviderClaim>
```