Te Kaporeihana Āwhina
Hunga Whara

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Accident Compensation Commission

APIs: Core specification

Software specification

Version 1.0, 23 March 2018

Key changes since last published version

Where	Change
throughout: UI suggestions	Added the user-interface name previously published in separate mapping documents. The row labelled 'UI suggestion' shows what a user might think the field is for, and what content to expect.
section 1.1.2	added the Change diagnosis endpoint
section 2	diagram and notes updated; section 2.5.1 adjusted to refer to section 5 for code translation
sections 2.4, 5	new: diagnosis code translation (common input for queries is now in section 6)
section 2.5	response codes, added EM02-006
section 3.2.3	date errors updated; added email address validation
sections 4.4.1, 6.1	all claim identifiers now defined in this document; section 6.1.2 new
section 4.7	diagnosis code type, code, side, and description are always required
section 4.9	NHI number error message
section 4.12.1	vendor ID, now includes medical certificate and Change diagnosis
section 6.3.1, 6.5.1	added Invoice number and Payment reference, from Query invoices

Table of contents

1   APIs: Overview

The APIs enable vendors to submit requests that are processed by the eChannel gateway, and on success passed on to the relevant ACC system.

This document describes functions, components, and validation common to all the APIs:

- this section lists the APIs, lists source documents, and defines common terms

- section 2 outlines the general process for all endpoints

- section 3 describes principles and validation common throughout

- sections 4 and 6 specify common input formats and input validation for submitting a request and submitting queries, respectively

- section 5 describes translating read and SNOMED codes.

All remaining details are specified in separate documents for each API; these may extend or override the common specifications given here.

In sections 4 and 6, the 'UI suggestion' value shows what a user might think the field is intended for, and what content to expect. It's not a required standard—the user experience is up to you. You may choose different names to label the same fields in different APIs.

1.1   Summary of APIs

The following APIs are available.

1.1.1   Claims

URI	Description
POST/claims	Create a claim
GET/claims/summary/status	List claims submitted by an organisation
GET/claims/summary/patient	List claims for a given patient
GET/claims/summary/{claimNumber}	List claims with a given claim number
GET/claims	Get details of a claim selected from a list
POST/claims/status	Get the registration status of a list of claims
GET/claims/status/filter	Get the registration status of selected claims
GET/claims/status	Get the registration status of a given claim

Table 1 Claims endpoints

The Claims API enables a vendor to submit a new claim request to be processed by the eChannel gateway, and offers various ways for a health provider to find information about claims that have been submitted to eChannel, and possibly processed by Eos, as shown in Table 5, section 2.

1.1.2   Medical certificate and change diagnosis

URI	Description
POST/claims/medical-certificates	Create a new medical certificate
POST/claims/change-diagnosis	Add a diagnosis to a submitted claim, or change or delete an existing diagnosis

Table 2 Medical certificate and Change diagnosis endpoints

A health provider can use these APIs to submit a medical certificate request, or a request to add, change or delete a diagnosis, for a claim that has been submitted to ACC.

1.1.3   Invoices and payments

URI	Description
POST/claims/vendors/invoice	Create a new invoice for the given vendor
GET/claims/vendors/submissions	List invoices submitted by this vendor
GET/claims/vendors/invoices/batch	Get a summary of this vendor's invoices
GET/claims/vendors/invoice/{scheduleId}	Get details of the given invoice
GET/claims/vendors/payments	List payments to this vendor
GET/claims/vendors/payments/summary/{paymentReference}	Get a summary of a given payment made to this vendor
GET/claims/vendors/payments/details/{paymentReference}	Get details of a given payment made to this vendor

Table 3 Invoices and payments endpoints

This API enables a vendor to submit a schedule of invoices to be processed by the eChannel gateway, and offers several ways to find information about schedules of invoices that have been submitted to the eGateway, and possibly processed by MFP. Vendors can also search for the payment status of an invoice, and payment advice details.

1.2   Terms and abbreviations

Terms	Description
ACC18	The ACC medical certificate form.
ACC40	The form for a schedule of invoices submitted electronically to ACC, also referred to as an eSchedule.
ACC45	The ACC injury claim form
Facility	The building, site, or location where a health provider has treated an ACC claimant. Example: Wellington Hospital A facility has an HPI-FAC identifier, like FB1032, in the Health Practitioner Index.
Invoice	Although the terms 'invoice' and 'schedule' are used interchangeably, in fact each schedule line item is an invoice, with a contract identifier, service details, and amount.
Organisation	The employer of a health provider, or the umbrella group including that employer. Example: Southern Cross An organisation has an HPI-ORG identifier, like GA1234.
Provider	A health professional such as a doctor or physiotherapist, with an HPI-CPN identifier like 12ABCD; or a person providing services, such as a taxi driver or home help worker.
Schedule	Often referred to as an invoice, a schedule contains one or more line items, each one being an invoice for a given amount.
Service code	Identifies the health service that has been provided, for which the cost is charged to ACC. A service code is always linked to a contract, a purchase order, or a regulation identifier, and identified with a flat fee, or a unit, time, or distance measure. Sometimes called an 'unload reference'.
Vendor	A business providing health treatment. Example: Capital Coast Health A vendor has a GST number and a bank account, and one or more contracts with ACC. (In this case, vendor does not refer to a software vendor, the supplier of a software system used for instance by medical practices.)

Table 4 Terms and abbreviations

2 The API process

Table 5 outlines the process flow, using Claims as an example.

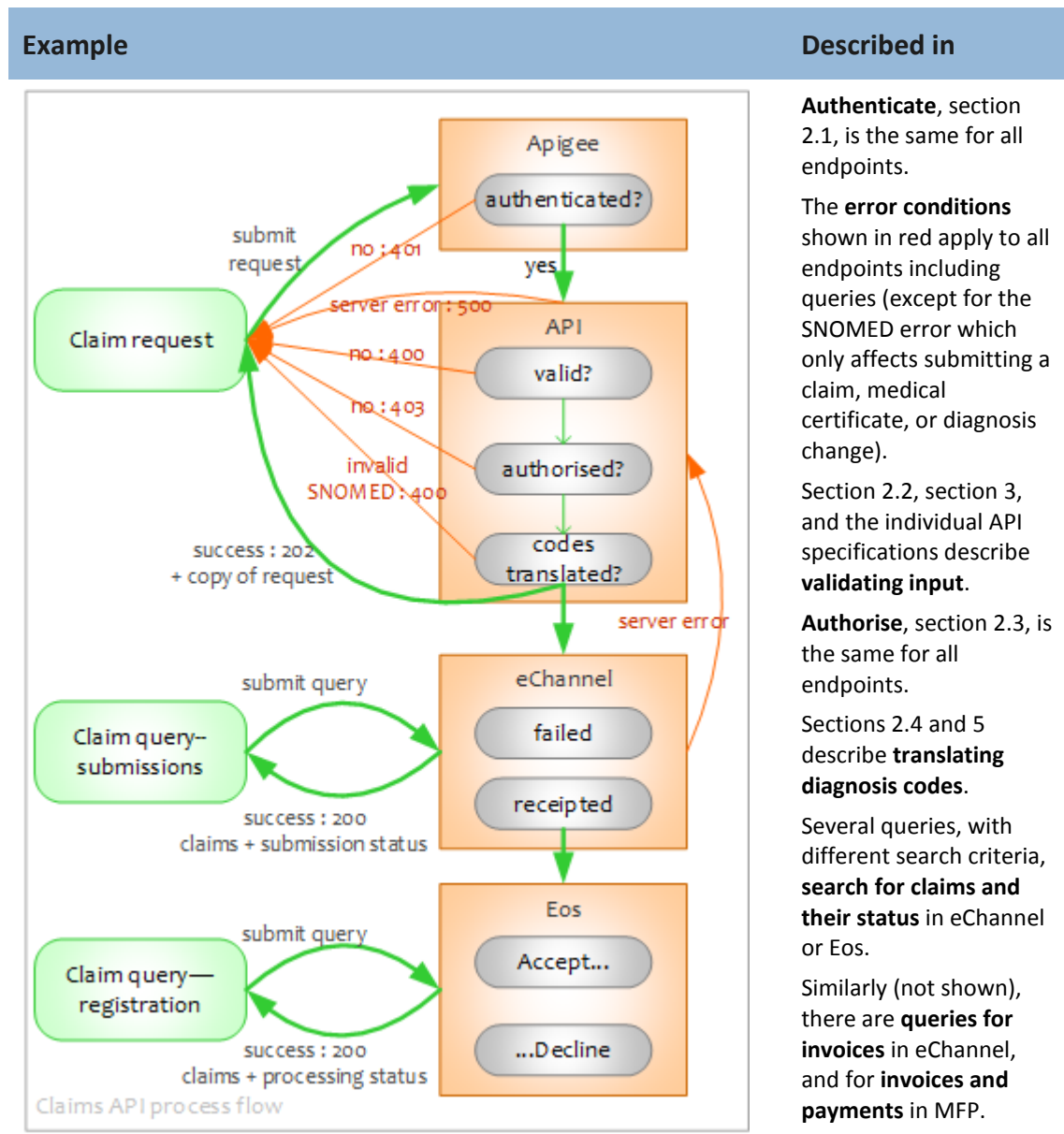| Example	Described in
Claims API process flow	**Authenticate**, section 2.1, is the same for all endpoints. The **error conditions** shown in red apply to all endpoints including queries (except for the SNOMED error which only affects submitting a claim, medical certificate, or diagnosis change). Section 2.2, section 3, and the individual API specifications describe **validating input**. **Authorise**, section 2.3, is the same for all endpoints. Sections 2.4 and 5 describe **translating diagnosis codes**. Several queries, with different search criteria, **search for claims and their status** in eChannel or Eos. Similarly (not shown), there are **queries for invoices** in eChannel, and for **invoices and payments** in MFP.

Table 5 API process flow

Section 2.6 lists all the possible response codes.

2.1 Authenticate

Apigee, not the API, authenticates the request. If the sender does not have a valid digital certificate, the SSL handshake is not completed and the transaction does not take place; Apigee may return an error message about the SSL certificate.

2.2 Validate

The API validates each input field of an authenticated request, and transforms the request into an XML object that can be submitted to the target system. Sections 4 and 5 of this document describe validation that applies to more than one endpoint. API-specific validation is specified separately for each API.

If a request fails validation, the API returns all relevant error messages to the sending application, with no further processing.

In the current release, the APIs validate fields **except** when this requires looking up a code table (which must currently be done on-premises, not in the cloud). Code-table values are passed through to the legacy system as if they are valid, with no error message from the API. The legacy system carries out all the usual validation, including verifying codes with the relevant code table, and returns an error message if appropriate.

2.3 Authorise

A provider must be authorised to submit a request, or to use the API queries.

When a request or query has been validated, the API:

• gets from Apigee the email address from the sender's digital certificate

• verifies that the account with this email address is authorised to make the request or query.

If the account is not authorised, a log file records the specific error, but the error message returned to the sender is the same in all cases:

'You are not authorised to access this service. Contact ACC Digital Operations on 0800 222 994 option 1 to arrange permission.'

2.4 Translate diagnosis codes

This applies to Claim requests, Medical certificate requests, and Change diagnosis requests.

The API accepts ICD-9 and ICD-10 codes as valid, and includes them in the request payload with no translation.

Section 5 of this document describes translating read codes to SNOMED codes, and SNOMED codes to read codes.

If any diagnosis has an invalid SNOMED code, that request is not submitted to eChannel.

2.5 Submit

2.5.1 Submit requests

1. **Submit to eChannel**. When:

   a. a claim request with valid diagnosis codes has been authorised, the API submits it as an ACC45 to the eChannel gateway

   b. a medical certificate or change diagnosis request with valid diagnosis codes has been authorised, the API submits it as an ACC18 to the eChannel gateway

   c. a schedule (invoice) request has been authorised, the API submits it as an ACC40 to the eChannel gateway.

2. **Return a copy**. The API returns a copy of the request to the sender as a JSON file, with the code 202 'accepted'.

   The copy returned to the sender matches the request originally sent to the API, not the transformed version submitted to eChannel. But it also includes:

   a. for a claim, medical certificate, or change diagnosis request, diagnosis code translations as defined in section 5

   b. for an invoice request, these values created by the API (as defined in the Invoice API specification):

      i. the `invoiceNumber`, identifying the schedule

      ii. each `scheduleLineId`.

3. **eChannel validation**. The eChannel gateway carries out its own validation, retaining results in its database. If a request is:

   a. validated, it is put on the queue for processing in the target system (see step 4), with submission status 'RECEIPTED' (that is, successfully received)

   b. not validated, its submission status is 'FAILED'. In this case the request won't be processed by Eos, but it is recorded in the eChannel database which can be searched.

4. **Submit to the ACC system**. On success, the gateway passes:

   – an ACC45 to Eos (where it may be accepted—'registered'—or rejected)

   – an ACC18 (medical certificate or change of diagnosis) to Eos

   – an ACC40 to MFP.

5. **Result**. Eos and MFP return the final result of the request to the sender.

2.5.2   Submit queries

When a query request has been authorised, the API queries the target and returns results as follows:

Query endpoint	Target and key result values
• `GET/claims/summary/status` • `GET/claims/summary/patient` • `GET/claims/summary/{claimNumber}` • `GET/claims`	eChannel database The claim submission status 'FAILED' or 'RECEIPTED'
• `POST/claims/status` • `GET/claims/status/filter` • `GET/claims/status`	Eos The registration (processing) status, such as 'Accept' for each claim selected
• `GET/claims/vendors/submissions`	eChannel database The schedule submission status 'FAILED' or 'RECEIPTED'
• `GET/claims/vendors/invoices/batch`	MFP The processing status (such as Authorised, Partially Paid) of each schedule
• `GET/claims/vendors/invoice/{scheduleId}`	MFP Details including payment status (such as Paid, Payment Cancelled) of the selected schedule
• `GET/claims/vendors/payments`	MFP A list of payments to the selected vendor
• `GET/claims/vendors/payments/summary {paymentReference}` • `GET/claims/vendors/payments/details /{paymentReference}`	MFP A summary or details of a selected payment.

Table 6 Queries and results

Sometimes a query can only return some of the results in the search. In this case, the missing results are shown with null values.

In the following conditions, a valid query returns no results:

Condition	Code	Message
Legacy system reports an error— for instance when the vendor or provider given is not found or not active, or the payment reference given is not found	400	[error message from the legacy system]
The following conditions are all met: • a required identifier is not found in the ACC database • no error is reported from the legacy system • there are no other matching results	200	Your search has returned no results. Please modify your search.
These conditions are both met: • a required identifier is found in the ACC database, but not for this vendor or other search criteria • there are no other matching results	200	Your search has returned no results. Please modify your search.

Table 7 When a query returns no results

2.6 Summary of response codes

HTTP code	Database	Description
200	EM00	Successful query request
200	EM02-150	Your search has returned no results. Please refine your search.
202	-	Successful submission request
400	EM02-001	Vendor record is not currently active or in use
400	EM02-002	Provider record is not currently active or in use
400	EM02-003	Schedule not registered at ACC
400	EM02-006	NHI client number not held at ACC.
400	EM02-009	Validation error
400	EM02-600	NHI client number and date of birth does not return unique record—please contact ACC Provider Helpline 0800 222 070
401	-	Authentication error [user account not known]
403	-	Authorisation error [user account doesn't have the right security]
404	-	'not found', for instance when an endpoint is mistyped, or a required field is omitted; various error messages, probably from the browser
500	-	Internal server error

Table 8 Response codes

3 Standard behaviour

3.1 Input

3.1.1 Strings and number

The API trims leading and trailing spaces from all string input.

Integer and decimal numbers must be entered without commas. The JSON maximum for an integer is 2,147,483,647; for a long integer, 9,223,372,036,854,775,807.

3.1.2 Dates and times

Dates and times follow W3C standards:

Data type	Example	Reference
Date	2018-03-31	https://www.w3.org/TR/xmlschema-2/#date
Time	15:03:30 15:03:30.153 15:03:30.153+12:00	https://www.w3.org/TR/xmlschema-2/#time
DateTime	2017-12-31T15:03:30.153 2017-12-31T15:03:30.153+12:00	https://www.w3.org/TR/xmlschema-2/#dateTime

Table 9 Format of dates and times

3.2 Error messages

3.2.1 System error

When a system error (error code 500) occurs, the API returns this message:

'There is an ACC system issue. Advise ACC Digital Operations on 0800 222 994 option 1. You'll need to resubmit your content later.'

3.2.2 Validation errors

When the API returns an error message that relates to a specific field, the name of that field is given with the error, for instance:

```
declarationDate.  The date format is invalid;  use YYYY-MM-DD.
```

3.2.3 Generic validation errors

The following validation error messages are returned whenever they apply:

Condition	Error message
The field is mandatory ('required'), and no value is present	This field is required.
The value submitted is longer than the maximum length allowed for the field (when the minimum value is 1)	The field cannot be more than <maximum length> characters.
The value submitted is shorter than the minimum length	This field must be at least <minimum length> and no more than <maximum length> characters long.
The value submitted is longer than the maximum length (when the minimum value is greater than 1)	This field must be at least <minimum length> and no more than <maximum length> characters long.
Invalid format—integer field	This value must be a whole number no greater than 2,147,483,647.
Invalid format—alphanumeric field	The <field name> can only contain letters and numbers, no more than <maximum length> characters in all.
Invalid date format or date—date field	The date does not exist, or the format is invalid; use YYYY-MM-DD.
Not in valid email address format	This email address may not work.

Table 10 Standard error messages

3.2.4 Legacy code tables

As noted in section 2.2, the current release doesn't verify any codes from legacy code tables held at ACC. The target system carries out further validation and returns relevant errors to the sender.

4   Common input for submissions

This section specifies the input format and validation for data elements common to two or more APIs, for **submitting requests**. See also:

- the standard errors in section 3.2

- the individual API specifications for all remaining details, such as the order of input, unique data elements, and variations or extensions from the common validation given here.

Variations in the required input format occur because requests to submit claims, medical certificates, and invoices must comply with different legacy schemas.

4.1   Accident

See section 4.6.1 for the accident date.

The Claim API specifies the accident or injury scene, location, causes, and whether the patient was admitted to hospital.

4.2   ACC assistance

See the Claim and Medical certificate API specifications for these data elements, which are specific to those requests.

4.3   Address

4.3.1   Address type

Field name	type	
APIs	Claim:	employer, patient, provider
	Medical certificate, Change diagnosis:	patient, provider
UI suggestion	Address type	
Data type	enum (Home, Postal)	
Note	Claim request: additional error conditions for employer's address	

Error condition	Code	Message
Value not in the enum list	400	This value must be one of [Home, Postal].

4.3.2 Address line 1

Field name	line1	
APIs	Claim:	employer, patient, provider
	Medical certificate, Change diagnosis:	patient, provider
UI suggestion	Address	
Data type	string	
Limit	Claim:	1-35 characters
	Medical certificate, Change diagnosis:	1-40 characters
Format		
Note	Claim: additional error conditions for employer's address	

4.3.3 Address line 2

Field name	line2	
APIs	Claim:	employer, patient, provider
	Medical certificate, Change diagnosis:	patient, provider
Data type	string	
Limit	Claim :	1-30 characters
	Medical certificate, Change diagnosis:	1-40 characters
Format		
Note	Claim: additional error conditions for employer's address	

4.3.4 Suburb

Field name	suburb	
APIs	Claim:	employer, patient, provider
	Medical certificate, Change diagnosis:	patient, provider
Data type	string	
Limit	Claim:	1-30 characters
	Medical certificate, Change diagnosis:	1-40 characters
Format		
Note	Enter the suburb if it's different from the town.	
	Claim: additional error conditions for employer's address	

4.3.5   Town or city

Field name	city	
APIs	Claim:	employer, patient, provider
	Medical certificate, Change diagnosis:	patient, provider
Data type	string	
Limit	Claim:	1-30 characters
	Medical certificate, Change diagnosis:	1-40 characters
Format		
Note	Claim: additional error conditions for employer's address	

4.3.6   Postcode

Field name	postCode	
APIs	Claim:	employer, patient, provider
	Medical certificate, Change diagnosis:	patient, provider
Data type	string	
Limit	Claim:	4-20 characters
	Medical certificate, Change diagnosis:	4-10 characters
Format		
Note	Although New Zealand postcodes are generally 4 digits, overseas postcodes may include alphabetic characters, such as 'NW1'. Claim: additional error conditions for employer's address Invoice: only required for New Zealand addresses	

4.3.7   Country

Field name	country	
APIs	Claim:	employer, patient, provider
	Medical certificate, Change diagnosis:	patient, provider
Data type	string	
Limit	Claim:	1-30 characters
	Medical certificate, Change diagnosis:	1-40 characters
Format		
Note	Claim: additional error conditions for employer's address	

4.4 Claim

Caution: see also section 6.1, which specifies the claim identifier requirements for queries.

4.4.1 Claim identifier

Field name	Claim, Medical certificate, Change diagnosis:	`claimNumber`
	Invoice:	`claimId`
APIs	Claim, Medical certificate, Change diagnosis, Invoice	
UI suggestion	Claim number (medical fees number for Invoice)	
Data type	String	
Limit	Claim:	1-7 characters
	Medical certificate, Change diagnosis, Invoice:	1-12 characters
Format	Claim:	`[A-Z]{2}[0-9]{5}`
	Medical certificate, Change diagnosis, Invoice:	alphanumeric
Note	Claim: the ACC45 claim number, which must be unique. Example: AB12345	
	Medical certificate, Change diagnosis, Invoice:	
	any one of: A123456, AA12345, 1234567, 12345678901, A1234567890 where A represents an alphabetic character and each digit represents any digit.	
	Invoice: the `ACC45ClaimNumber` or form number; also referred to as the Medical fees number. Examples:	
	form number: DS34534	
	claim number: 11145678901	
	The API doesn't verify whether the claim number exists.	
	The `claimNumber` identifier is used in claim queries.	

Error condition	Code	Message--Claim
Format is invalid	400	The claim number format is invalid; it must be in the form A999999 or AA99999, where A is any capital letter, 9 is any single digit, and there are 7 characters altogether.
		Message—Medical certificate, Change diagnosis
		The claim number is not in valid form. Please resubmit with the ACC45 or Claim number from the PMS.
		Message--Invoice
		This field can only contain letters and numbers, no more than 12 characters in all.

4.5   Contact details

4.5.1   Email address

Field name	`emailAddress`	
APIs	Claim:	patient
	Medical certificate, Change diagnosis:	patient, provider
UI suggestion	Email address	
Data type	string	
Limit	1-255 characters	
Format	valid email form	
Note	Claim: see notes in the Claims API	
	valid email address format, as in http://rumkin.com/software/email/rules.php	

Error condition	Code	Message
Not in valid email address format	400	This email address may not work.

4.5.2   Mobile phone number

Field name	`mobilePhone`	
APIs	Claim:	patient
	Medical certificate, Change diagnosis:	patient, provider
UI suggestion	Mobile number	
Data type	string	
Limit	Claim:	1-20 characters
	Medical certificate, Change diagnosis:	1-30 characters
Format		
Note	Claim: If the patient has a cell phone number, please enter it.	

4.5.3 Work phone number

Field name	workPhone	
APIs	Claim:	patient
	Medical certificate, Change diagnosis:	patient, provider
UI suggestion	Work phone number	
Data type	string	
Limit	Claim:	1-20 characters
	Medical certificate, Change diagnosis:	1-30 characters
Format		
Note	No format validation	

4.5.4 Home phone number

Field name	homePhone	
APIs	Claim:	patient
	Medical certificate, Change diagnosis:	patient, provider
UI suggestion	Home phone number	
Data type	string	
Limit	Claim:	1-20 characters
	Medical certificate, Change diagnosis:	1-30 characters
Format		
Note	No format validation.	
	Claim: only retains the home phone number if there is no mobile number	

4.6 Dates

Note also the generic errors in Table 10, section 3.2.

4.6.1 Accident date

Field name	accidentDate
APIs	Claim, Medical certificate, Change diagnosis, Invoice
UI suggestion	Injury date, or Accident date
Data type	string date
Format	YYYY-MM-DD
Note	

Error condition	Code	Message
Date is earlier than 1972-01-01	400	The date cannot be before 1972-01-01.
Date is earlier than the patient's date of birth	400	The accident date cannot be before the patient's date of birth.
Date is later than the declaration date	400	The accident date cannot be later than the date of the declaration.

4.6.2 Declaration date

Field name	Claim, Medical certificate, Change diagnosis: providerDeclaration
	Invoice: declarationDate
APIs	Claim, Medical certificate, Change diagnosis, Invoice
UI suggestion	Declaration date
Data type	string date-time
Format	YYYY-MM-DD
Note	The date the form was signed, which is the effective date unless there is another date.

Error condition	Code	Message
Date is earlier than 1900-01-01	400	The date cannot be before 1900-01-01.
Date is later than the current date	400	That date is in the future; enter a date no later than today.

4.6.3   Fitness-for-work start date

Field name	`fromDate`
APIs	Claim, Medical certificate
UI suggestion	Start date of incapacity period
Data type	string date-time
Format	YYYY-MM-DD
Note	Additional error conditions **vary** in the Claim and Medical certificate APIs

Error condition	Code	Message
The from date is earlier than the patient's accident date	400	The period of time off work cannot start before the accident date.

4.6.4   Fitness-for-work end date

Field name	`toDate`
APIs	Claim, Medical certificate
UI suggestion	End date of incapacity period
Data type	string date-time
Format	YYYY-MM-DD
Note	Claim has additional error conditions

Error condition	Code	Message
This date is earlier than the from date for this period	400	The end date of a period of incapacity must be no earlier than its start date.

4.6.5 Patient's date of birth

Field name	`dateOfBirth`
APIs	Claim, Medical certificate, Change diagnosis, Invoice
UI suggestion	Date of birth
Data type	string date-time
Format	YYYY-MM-DD
Note	Since the declaration date can't be in the future, neither can the date of birth. **Different error conditions in the Invoice API**; for instance, the date of birth is optional, with a default value.

Error condition	Code	Message
Date is earlier than 1900-01-01	400	The date cannot be before 1900-01-01.
Date is later than the declaration date	400	The date cannot be later than the declaration date.

4.7　Diagnosis

4.7.1　Diagnosis action

Field name	`diagnosisAction`
APIs	Medical certificate, Change diagnosis
UI suggestion	Add, modify, or delete
Data type	string
Format	enum (add, modify, delete)
Note	Choosing 'change' or 'delete' implies that the diagnosis described already exists in the relevant claim. The API cannot verify this, but Eos will.

Error condition	Code	Message
Value not in the enum list	400	This value must be one of [add, modify, delete].

4.7.2　Primary diagnosis indicator

Field name	`primaryDiagnosisIndicator`
APIs	Medical certificate, Change diagnosis
UI suggestion	Principal diagnosis
Data type	string
Format	enum (False, True)
Note	In each request, exactly one diagnosis must be selected as primary.

Error condition	Code	Message
Value not in the enum list	400	This value must be one of [False, True].

4.7.3　Diagnosis date

The API sets this to the current date.

4.7.4   Diagnosis coding system

Field name	`diagnosisCodeType`
APIs	Claim, Medical certificate, Change diagnosis
UI suggestion	Read or ICD or SNOMED
Required?	Yes
Data type	string
Limit	1 character
Note	Code-table values:
	1 read code or SNOMED code
	2 ICD-9
	3 ICD-10

Error condition	Code	Message
Value not in (1, 2, 3)	400	This value must be one of [1, 2, 3].

4.7.5   Diagnosis code

Field name	`diagnosisCode`
APIs	Claim, Medical certificate, Change diagnosis
UI suggestion	Diagnosis code
Required?	Yes
Data type	string
Limit	1-18 characters
Format	alphanumeric, also allowing '.'
Note	For coding system 1: • a read code contains exactly 5 characters, which must be alphanumeric, that is letters and digits, with a '.' also allowed • a SNOMED code is 6-18 digits long, with digits only. https://confluence.ihtsdotools.org/display/DOCRELFMT/5.1.+SCTID+Data+Type describes how SNOMED codes are represented; see examples at https://confluence.ihtsdotools.org/display/DOCRELFMT/5.8.+Example+SNOMED+CT+identifiers

Error condition	Code	Message
Coding system is 1 and length is more than 5 characters, but a non-digit character is included	400	This value is not a valid SNOMED code. SNOMED codes are 6-18 digits long.
Coding system is 1 and length is less than 6 characters, but an invalid character is included	400	This value is not a valid read code. Read codes are 5 characters long, with only letters, digits, and full stops allowed.

4.7.6   Laterality

Field name	`diagnosisSide`
APIs	Claim, Medical certificate, Change diagnosis
UI suggestion	Side
Required?	Yes
Data type	string
Limit	enum (notApplicable, left, right)
Note	

Error condition	Code	Message
Value not in the enum list	400	This value must be one of [notApplicable, left, right].

4.7.7　　Diagnosis description

Field name	`diagnosisDescription`
APIs	Claim, Medical certificate, Change diagnosis
UI suggestion	Diagnosis description
Required?	Yes
Data type	string
Limit	Claim:　　　　　　　　　　　　　　　　　　　　　　1-255 characters Medical certificate, Change diagnosis:　1-100 characters
Format	
Note	Mandatory, because the original description of a failed SNOMED translation is stored in a key-value pair.

4.7.8　　Diagnosis comment

Field name	`diagnosisComment`
APIs	Medical certificate, Change diagnosis
UI suggestion	Diagnosis comments (optional); can refer to any of the diagnoses; for instance complications, severity
Data type	string
Limit	1-185 characters
Format	
Note	

4.8 Fitness for work

4.8.1 Incapacity type

Field name	`incapacityType`
APIs	Claim, Medical certificate
UI suggestion	Fully unfit for work, or fit for some work
Data type	string
Format	enum (`Fitforselectedwork`, `Fullyunfitforwork`)
Note	**Additional error conditions vary** in the Claim and Medical certificate APIs

Error condition	Code	Message
Value not in the enum list	400	This value must be one of [`Fitforselectedwork`, `Fullyunfitforwork`].

4.8.2 Other work capacity details

See sections 4.6.3 and 4.6.4 for the start and end dates of an incapacity period.

See the Claim and Medical certificate API specifications for the other data elements, which are specific to each API.

4.9 Patient (claimant)

4.9.1 NHI number

Field name	nhi
APIs	Claim, Medical certificate, Change diagnosis, Invoice
UI suggestion	NHI number
Data type	string
Limit	exactly 7 characters
Format	alphanumeric
Note	A valid NHI number has 3 letters followed by 4 numbers

Error condition	Code	Message
Invalid format	400	The NHI number can only contain letters and numbers, and must have exactly 7 characters.

4.9.2 Other patient details

See:

- section 4.10, Personal name

- section 4.6.5, Patient's date of birth

- section 4.3, Address

- section 4.5, Contact details.

The patient's gender, ethnicity, employment status and details, and occupation status are only used in the Claim API.

4.10 Personal name

4.10.1 First name

Field name	firstName	
APIs	Claim, Medical certificate, Change diagnosis, Invoice: patient, provider	
UI suggestion	First name	
Data type	string	
Limit	Claim:	1-20 characters
	Medical certificate, Change diagnosis:	1-50 characters
	Invoice patient:	1-20 characters
	Invoice provider:	1-50 characters
Format		
Note		

4.10.2 Middle name or initials

Field name	middleName	
APIs	Claim, Medical certificate, Change diagnosis, Invoice: patient, provider	
UI suggestion	Middle name or initials	
Data type	string	
Limit	Claim:	1-20 characters
	Medical certificate, Change diagnosis:	1-50 characters
	Invoice patient:	1-80 characters
	Invoice provider:	1-50 characters
Format		
Note		

4.10.3   Family name

Field name	`surname`	
APIs	Claim, Medical certificate, Change diagnosis, Invoice: patient, provider	
UI suggestion	Family name or surname	
Data type	string	
Limit	Claim:	1-25 characters
	Medical certificate, Change diagnosis:	1-50 characters
	Invoice patient:	1-25 characters
	Invoice provider:	1-50 characters
Format		
Note		

4.11   Provider

4.11.1   Provider identifier

Field name	`providerId`
APIs	Claim, Medical certificate, Change diagnosis, Invoice
UI suggestion	ACC provider identifier
Data type	string
Limit	Claim: 1-6 characters Medical certificate, Change diagnosis: 1-8 characters Invoice: 2-8 characters
Format	Invoice: alphanumeric
Note	

4.11.2   Provider type code

Field name	`providerTypeCode`
APIs	Claim, Medical certificate, Change diagnosis
UI suggestion	Provider type
Data type	string
Limit	1 or 2 characters
Format	
Note	The provider type code tables include 55 entries, with values such as Audiologist, District Nurse, Radiotherapist, and codes 1 or 2 digits long.

4.11.3   Provider's name

See section 4.10, Personal name

4.11.4   Provider's address

See section 4.3, Address

4.11.5   Provider's contact details

See section 4.5, Contact details

4.12   Vendor and facility

4.12.1   Vendor identifier

Field name	Claim, Medical certificate, Change diagnosis:	`hpiOrganisationNumber`
	Invoice:	`vendorId`
APIs	Claim, Invoice	
UI suggestion	HPI organisation	
Data type	string	
Limit	1-12 characters	
Format	Claim, Medical certificate, Change diagnosis: string	
	Invoice: alphanumeric, also allowing forward-slash '/'	
Note		

Error condition	Code	Message
Value contains non-alphanumeric characters other than forward-slash, or is longer than 12 characters.	400	The vendor ID is invalid; it can only contain letters, numbers, and '/', no more than 12 characters in all.

4.12.2   Facility number

Field name	Claim, Medical certificate, Change diagnosis:	`hpiFacilityNumber`
	Invoice:	`facilityId`
APIs	Claim, Medical certificate, Change diagnosis, Invoice	
UI suggestion	HPI facility	
Data type	string	
Limit	Claim:	1-8 characters
	Medical certificate, Change diagnosis:	1-12 characters
	Invoice:	1-6 characters
Format	Invoice: alphanumeric	
Note	Not always in HPI format	

4.12.3   Practice (facility) name

Field name	`practiceName`
APIs	Claim, Medical certificate, Change diagnosis
UI suggestion	Practice name
Data type	string
Limit	1-40 characters
Format	
Note	

5   Translate read or SNOMED codes

When a claim, medical certificate, or change-diagnosis request has been authorised, for each diagnosis which includes:

•   a read code, the API looks up the relevant SNOMED code

•   a SNOMED code, the API looks up the relevant read code and on success, replaces the SNOMED code in the request with the result (since the current XML schemas require read codes).

5.1   Read code to SNOMED code

If every diagnosis in a request has a read code, the API submits this request to the eGateway, regardless of the translation result—this translation never causes failure.

The API logs the result of each successful translation (the matched read and SNOMED codes, with the full message payload) in the ICS database.

Vendors can find translations for read and SNOMED codes as follows:

•   given a read code, find the SNOMED code:
https://accapi.snochillies.com/api/v1/readcode?readcode=G60...&accesskey=vHft2abDWsx8V1L

•   given a SNOMED code, find the read code:
https://accapi.snochillies.com/api/v1/snomedcode/439820062/CU3NjkT8NZpbtjx.

5.2   SNOMED code to read code

The Translation API returns an error message for every invalid SNOMED code submitted—that is, a code not in the SNOMED CT International edition.

For every valid SNOMED code, it returns:

•   the **mapped read code** and read description, if available

•   if no mapping is found, an **exception read code** and read description

•   the original SNOMED code ('concept ID') and description (the fully-specified name).

Both the mapped read code and the exception read code count as success; a request with one or more exception read codes is still submitted to the eGateway. Examples:

SNOMED code	SNOMED description	Result?	Read code	Read description
1261007	Fracture of multiple ribs (disorder)	valid, mapped	S1270	Multiple fractures of ribs
417697003	Irresistible craving for drugs (finding)	valid, not mapped	Z…	Unspecified Conditions
1234567890	[any]	invalid	-	-

Table 11 SNOMED to read examples

The values the Translation API returns are shown in blue; 'Unspecified Conditions' is the actual text returned.

What goes where?

- translated read code payload diagnosis code field AND ICS database
- translated description payload diagnosis description field AND ICS database
- original SNOMED code payload—fields depend on the request type
- original description

For a claim request, the API appends the original SNOMED code and description to the translated description in the `diagnosisDescription` field. The original values may be truncated.

For a medical certificate or change-diagnosis request, the API stores the original SNOMED code and description in an Additional Information component of the XML file.

If any diagnosis in a request has an invalid SNOMED code (that is, one for which the Translation API returns an error, like the third example in Table 11 above), the API:

- returns all relevant error messages to the sender

- does not update the ICS database

- does not submit the request to eChannel.

6 Common input for queries

This section specifies the input format and validation for data elements used in more than one query endpoint.

See also the standard errors in section 3.2, and the individual API specifications for all remaining details.

Because queries can return data that was not submitted by the APIs, some of the validation here is less restrictive than for data elements in section 4, to allow for variations in data created over time, by different ACC systems.

6.1 Claim

See also section 4.4.1, which defines the claim identifiers for submitting a request: `claimNumber` for Claim, Medical certificate, Change diagnosis; `claimId` for Invoice.

For ease of reference, although the `claimId` search parameter is used in a single query endpoint, it is defined here in section 6.1.2.

6.1.1 Claim (medical fees) number

Path		`claimNumber`
APIs		1. Query claims GET/claims/status
		2. Query claims GET/claims/summary/{claimNumber}
		3. Query invoices
UI suggestion	1, 3	Claim number (using any claim-number format)
	2	Claim number (using only the ACC45 number)
Data type	string	
Format	1, 3	1-12 alphanumeric characters
	2	A999999 or AA99999
Note	1, 3	This may be the number of the ACC45 claim, or the Eos number.
		AICS-195 error message
	2	This endpoint uses the ACC45 number specifically.

Error condition	Code	Message--GET/claims/status, Query invoices
Invalid format	400	The claim number can only contain letters and numbers, no more than 12 characters in all.
		Message--GET/claims/summary/{claimNumber}
		The claim number format is invalid; it must be in the form A999999 or AA99999, where A is any capital letter, 9 is any single digit, and there are 7 characters altogether.

6.1.2   Claim database identifier

Path	`claimId`
APIs	Query claims GET/claims
UI suggestion	Claim identifier (the very long string) from a claim summary list, previously returned
Data type	string
Format	8-40 alphanumeric characters
Note	This is the unique string, up to 40 characters long, identifying one item in a successful claim summary search. It is **not**: • the ACC45 claim number, which has 7 characters—see section 4.4.1 • the Invoice claim identifier, also called `claimId`—see section 4.4.1 • the 11-digit claim ID issued by ACC and shown in correspondence.

Error condition	Code	Message
`claimId` is less than 8 or more than 40 characters long	400	The claim ID must be at least 8 and no more than 40 characters long.

6.2   Dates

6.2.1   Start date

Parameter	`startDate`
APIs	Query claims, Query invoices
UI suggestion	From
Required?	Required if `endDate` is supplied, otherwise not permitted (Query payments has additional requirements)
Data type	string date
Format	YYYY-MM-DD
Default value	Query claims: 14 days earlier than the current date Query invoices: for invoices, 93 days earlier than the current date for payments, 13 months earlier than the current date
Note	**See the API specifications for other error conditions.**

Error condition	Code	Message
`startDate` is present but `endDate` is not	400	Start and end dates are both required if one is entered.
Date is later than the end date	400	The start date must be earlier than the end date.
Date is later than the current date	400	That date is in the future; enter a date no later than today.

6.2.2　End date

Parameter	`endDate`
APIs	Query claims, Query invoices
UI suggestion	To
Required?	Required if `startDate` is supplied, otherwise not permitted (Query payments has additional requirements)
Data type	string date
Format	YYYY-MM-DD
Default value	current date
Note	The minimum time period is two days, when the start date is a day before the end date.

Error condition	Code	Message
`endDate` is present but `startDate` is not	400	Start and end dates are both required if one is entered
End date is earlier than the start date	400	The start date must be earlier than the end date.
Date is later than the current date	400	That date is in the future; enter a date no later than today.

6.3　Invoice (schedule)

6.3.1　Invoice number

Parameter	`invoiceNumber`	
APIs	Query invoices:	`GET/claims/vendors/submissions` `GET/claims/vendors/invoices/batch`
UI suggestion	Invoice number (schedule identifier)	
Data type	string	
Format	alphanumeric	
Limit	1-10 characters	
Note	This identifies the schedule of invoices. The identifier of a schedule submitted by the API comprises 'APG' followed by 7 alphanumeric characters.	

6.4 Page number and size

6.4.1 Page number

Parameter	page
APIs	Query claims, Query invoices
UI suggestion	The page number you want to see; the first page appears by default
Required?	Optional
Data type	integer
Limit	1 or more
Default value	1
Note	1 shows the first page of results. If there are too few results to reach the page number entered, the last page of results is shown, with no error message.

Error condition	Code	Message
Value is less than 1	400	The page number must be at least 1.

6.4.2 Number of results per page

Parameter	pageSize
APIs	Query claims, Query invoices
UI suggestion	The number of results you want on each page
Required?	Optional
Data type	integer
Limit	1 or more
Default value	25
Note	Includes the given number of results on each page in the list. If the number of results returned is less than the page size entered, all available results are shown.

Error condition	Code	Message
value is less than 1	400	The page size must be at least 1.

6.5 Payment

6.5.1 Payment reference

Parameter	`paymentReference`

APIs	Query invoices: `GET/claims/vendors/payments`
	`GET/claims/vendors/payments/summary/{paymentReference}`
	`GET/claims/vendors/payments/details/{paymentReference}`

UI suggestion	Payment ID
Data type	string
Format	alphanumeric
Note	The payment reference is shown in invoice details results and in lists of payments.

6.6 Provider

6.6.1 Provider ID

Parameter	`providerId`
APIs	Query claims, Query invoices
UI suggestion	ACC provider ID
Data type	string
Format	alphanumeric
Limit	1-12 characters
Note	This is the `ACC_Provider_Number`. The search parameter may also be used in a search which allows 12 characters.

Error condition	Code	Message
Invalid format	400	The provider ID can only contain letters and numbers, no more than 12 characters in all.

6.7   Vendor

6.7.1   Vendor ID

Parameter	`vendorId`
APIs	Query claims, Query invoices
UI suggestion	ACC vendor ID
Data type	string
Format	alphanumeric, also allowing forward-slash '/'
Limit	1-12 characters
Note	This is the `hpiOrganisationNumber`, not necessarily in HPI format. The search parameter maximum is 12 characters (although the eClaim schema allows 14 characters, the Claims API sets 12 characters maximum, to be consistent).

Error condition	Code	Message
Value contains non-alphanumeric characters other than forward-slash, or is longer than 12 characters.	400	The vendor ID is invalid; it can only contain letters, numbers, and '/', no more than 12 characters in all.