



CLAIM-it DATA EXCHANGE PROTOCOLS

XML SPECIFICATION

Version 2.1

CLAIM-it

The provider-end claims generation application

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Version History

Date	Versions	Details
2016-09-01	1.0	Initial version of document
2020-02-05	1.2	Updated to include principal GDRG
2022-12-01	2.0	Updated to accept HIN
2023-05-15	2.1	Updated to include Value Based Care details

1.0 GENERAL INFORMATION

This document specifies the various data communication standards acceptable by the CLAIM-it application. Communication can be via an Application Programming Interface (API), XML or JSON. This document concentrates on the XML format or structure accepted by the application.

2.1 XML SPECIFICATION

This section provides useful information on what the programmer needs to know in order to create the right XML file for the application. This section was written to be straight forward for easy understanding and implementation.

2.1 XML Structure

```
<?xml version="1.0" encoding="UTF-8" ?>
<claims> <!--Container for claim batch-->
  <claim> <!--Start of claim 1-->

    <claimID>156103</claimID> <!-- Unique ID of the claim -->
    <claimCheckCode>74374</claimCheckCode> <!-- Claims Check Code(CCC) for claim -->
    <preAuthorizationCodes>29841747</preAuthorizationCodes> <!-- All authorization codes separated by commas -->
    <physicianID></physicianID> <!-- Physician ID -->
    <memberNo>11111111</memberNo> <!-- Member no. of claim -->
    <surname>OWUSU AFRIYIE</surname> <!-- Surname of patient -->
    <otherNames>ENOCK</otherNames> <!-- Other names of patient -->
    <dateOfBirth>2005-5-11</dateOfBirth> <!-- Patient date of birth(e.g. 1952-08-01) -->
    <gender>M</gender> <!-- Patient Gender(e.g. F or M) -->
    <hospitalRecNo>2942 / 21</hospitalRecNo> <!-- Hospital record/folder no. -->
    <isDependant>0</isDependant> <!--1 for dependant, 0 for non-dependant -->
    <typeOfService>IPD</typeOfService> <!-- Type of service -->
    <isUnbundled>0</isUnbundled> <!-- Unbundled status -->
    <includesPharmacy>1</includesPharmacy> <!-- Pharmacy inclusive status -->
    <typeOfAttendance>EAE</typeOfAttendance> <!-- Type of attendance -->
    <serviceOutcome>DISC</serviceOutcome> <!-- Type of service outcome -->
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<!--Service Provision Dates: one or more -->
<dateOfService>2022-07-26</dateOfService> <!-- Date of service 1 [Admission Date] -->
<dateOfService>2022-07-28</dateOfService> <!-- Date of service 2 [Discharge Date] -->

<!-- Specialties attended: one or more where applicable -->
<specialtyAttended>MEDI</specialtyAttended> <!-- Specialty 1 -->
<specialtyAttended>DENT</specialtyAttended> <!-- Specialty 2 -->

<!-- Investigations: one or more where applicable -->
<investigation>
  <!-- Details for investigation 1 -->
  <serviceDate>2022-07-26</serviceDate> <!-- Date of inves. Service 1 -->
  <gdrGCode>INVE09D</gdrGCode> <!-- Investigation GDRG code 1 -->
</investigation>

<investigation>
  <!-- Details for investigation 2 -->
  <serviceDate>2022-07-26</serviceDate> <!-- Date of inves. Service 2 -->
  <gdrGCode>INVE10D</gdrGCode> <!-- Investigation GDRG code 2 -->
</investigation>

<!--Procedures: one or more, where applicable -->
<procedure>
  <!-- Details for procedure 1 -->
  <serviceDate>2022-07-27</serviceDate> <!-- Date of proc. 1 -->
  <gdrGCode>DENT01A</gdrGCode> <!-- Procedure GDRG code 1 -->
  <icd10>K01.0</icd10> <!-- ICD-10 for proc. 1-->
  <diagnosis>Embedded Teeth</diagnosis> <!-- Description of diagnosis for proc. 1 -->
</procedure>

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<procedure>
  <!-- Details for procedure 2 -->
  <serviceDate>2022-07-27</serviceDate> <!-- Date of proc. 2 -->
  <gdrCode>DENT01A</gdrCode> <!-- Procedure GDRG code 2 -->
  <icd10>K01.1</icd10> <!-- ICD-10 for proc. 2-->
  <diagnosis>Impacted Teeth</diagnosis> <!-- Description of diagnosis for proc. 2 -->
</procedure>

<!-- Diagnosis: one or more, where applicable -->
<diagnosis>
  <!-- Details for diagnosis 1 -->
  <gdrCode>MEDI28A</gdrCode> <!-- GDRG code for diagnosis 1 -->
  <icd10>B50.9</icd10> <!-- ICD-10 code for diagnosis 1 -->
  <diagnosis>Plasmodium Falciparum Malaria</diagnosis> <!-- Description for diagnosis 1 -->
</diagnosis>

<diagnosis>
  <!-- Details for diagnosis 2 -->
  <gdrCode>MEDI31A</gdrCode> <!-- GDRG code for diagnosis 2 -->
  <icd10>J18.9</icd10> <!-- ICD-10 code for diagnosis 2 -->
  <diagnosis>Pneumonia</diagnosis> <!-- Description for diagnosis 2 -->
</diagnosis>

<!-- Medicines: one or more, where applicable -->
<medicine>
  <!-- Details for Dispensary 1 -->
  <medicineCode>ARTESUIN3</medicineCode> <!-- Medicine code 1 -->
  <dispensedQty>3</dispensedQty> <!-- Dispensed Qty -->
  <serviceDate>2022-07-26</serviceDate> <!-- Date of Dispensary -->

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    <!-- Details for medicine prescription 1 -->
    <prescription>
      <dose></dose> <!-- Dose of medicine (e.g. 1 Tablet) -->
      <frequency></frequency> <!-- Frequency (e.g. 2 DAILY) -->
      <duration></duration> <!-- Duration (e.g. 2 MONTHS) -->
      <unparsed>86mg 0,bd,4days</unparsed> <!-- Alternative: free text prescription (e.g. ii tid prn) -->
    </prescription>
  </medicine>

  <medicine>
    <!-- Details for Dispensary 2 -->
    <medicineCode>DESOCHIN2</medicineCode> <!-- Medicine code 2 -->
    <dispensedQty>2</dispensedQty> <!-- Dispensed Qty -->
    <serviceDate>2022-07-26</serviceDate> <!-- Date of Dispensary -->

    <!-- Details for medicine prescription 2 -->
    <prescription>
      <dose></dose> <!-- Dose of medicine (e.g. 1 Tablet) -->
      <frequency></frequency> <!-- Frequency (e.g. 2 DAILY) -->
      <duration></duration> <!-- Duration (e.g. 2 MONTHS) -->
      <unparsed>11 st</unparsed> <!-- Alternative: free text prescription (e.g. ii tid prn) -->
    </prescription>
  </medicine>

  <principalGDRG>MEDI30A</principalGDRG> <!--Final billing GDRG Code: Optional for OPD-->

  <!-- Extra data for providers on Value Based Care program: Optional -->
  <extraData>
    <vitals><!-- First reading -->
      <date>2022-07-26T00:00:00.000Z</date> <!-- Date/time of reading of vital -->
      <weight>10.2 kg</weight> <!-- Weight recording in Kilograms -->
    </vitals>
  </extraData>

```



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    <height>0.13 m</height> <!-- Height recording in meters -->
    <systolic>42 mmHg</systolic> <!-- Systolic recording in mmHg -->
    <diastolic>12 mmHg</diastolic> <!-- Diastolic recording in mmHg -->
    <glucose>4.6 mmol/L</glucose> <!-- Glucose recording in mmol/L -->
    <glucoseType>RBS</glucoseType> <!-- Type of glucose reading -->
  </vitals>
  <vitals><!-- Second reading -->
    <date>2022-07-26T00:00:00.000Z</date> <!-- Date/time of reading of vital -->
    <weight>10.2 kg</weight> <!-- Weight recording in Kilograms -->
    <height>0.13 m</height> <!-- Height recording in meters -->
    <systolic>42 mmHg</systolic> <!-- Systolic recording in mmHg -->
    <diastolic>12 mmHg</diastolic> <!-- Diastolic recording in mmHg -->
    <glucose>5.3 mmol/L</glucose> <!-- Glucose recording in mmol/L -->
    <glucoseType>FBS</glucoseType> <!-- Type of glucose reading -->
  </vitals>
</extraData>

<!-- Referral facility Information: where applicable -->
<referralInfo>
  <claimCheckCode></claimCheckCode> <!-- Referral CCC of patient (e.g. 62423) -->
  <facilityID></facilityID> <!-- Facility ID of referrer (e.g. 03-07-08271) -->
  <facilityName></facilityName> <!-- Name of referring facility -->
</referralInfo>

</claim> <!-- End of Claim 1 -->

<!-- Start of Claim 2 -->

</claims> <!-- End of Batch -->

```

2.2 Related Information

Tag Name	Extra Information
<typeOfService>	OPD = Out patient service IPD = Inpatient service DIA = Diagnostic service PHC = Pharmacy service
<isUnbundled>	Accepted values: 1 = Unbundled service 0 = Bundled service (All inclusive service)
<includesPharmacy>	Accepted values: 1 = includes pharmacy 0 = does not include pharmacy
<typeOfAttendance>	Accepted values: EAE = Emergency/Acute Episode CFU = Chronic follow-up ANC = Antenatal PNC= Postnatal

<isDependant>	Accepted values: 0 = Not dependant (Where NHIS card belongs to patient) 1 = Dependant (Where baby is using NHIS card of parent)
<serviceOutcome>	Accepted values: DISC = Discharged DIED = Died TFOT = Transfer-out ABSC = Absconded
<specialtyAttended>	Accepted values: ENTH =Ear, Nose and Throat ASUR = Adult Surgery DENT = Dental OPHT = Ophthalmology ORTH = Orthopaedic MEDI = Adult Medicine PAED = Paediatrics PSUR = Paediatric Surgery OBGY = Obstetrics and Gynaecology RSUR = Reconstructive Surgery OPDC = Outpatient Consultation

<dose>	Format: Value [space] Unit e.g 1 Tablet, 2 Capsules, 1 Vial, etc
<frequency>	Format: Value [space] Unit e.g 1 HOURLY, 2 DAILY, etc allowed Units: HOURLY, DAILY
<duration>	Format: Value [space] Unit e.g 1 DAYS, 2 DAYS, 3 WEEKS, 1 MONTHS, 4 MONTHS, etc allowed Units: DAYS, WEEKS, MONTHS
<unparsed>	Prescription as a straight text. Note: it is recommended that this option be used for exception prescriptions where the prescription doesn't fit the typical dose x frequency x duration format
<principalGDRG>	This is an optional tag for instances where the health facility, for the avoidance of doubt, wishes to indicate the principal GDRG used in billing the claim. Note: <ol style="list-style-type: none"> 1. The CLAIMit application will ignore its billing rule and use this GDRG as the final billing code for the claim. 2. The GDRG code used should not be outside the set of GDRGs used in the claim.

	3. Principal GDRG is required for all IPD claims with multiple unique GDRGs
<extraData>	Root tag for all patient vitals. Note: Extra data is applicable only to facilities on the Value Based Care program.
<vitals>	Contains details for all readings. [i.e. weight, height, systolic, diastolic, glucose and date]
<weight>	Weight of patient in Kilograms. Eg. 10.2 Kg
<height>	Height of patient in meters. Eg. 0.13 m
<systolic>	The systolic blood pressure. Eg. 120 mmHg
<diastolic>	The diastolic blood pressure. Eg. 80 mmHg
<glucose>	The glucose reading of the patient. 4.3 mmol/L
<glucoseType>	Options are: FBS, RBS, 2HPP, HBA1C Note: Optional tag but defaults to RBS when left empty
<date>	Date and time of reading of vital. Eg. 2022-07-26T00:00:00.000Z

2.3 Required and Optional Fields

Field Name	Conditions	Extra Comments
ClaimID	Required	Should be unique for all claims regardless of batch
Member number /HIN	Required	Number should be 8 or 10 digits
Surname and Other names	Required	
Folder No./Hospital Record Number	Required	
Date of Birth	Required	
Age	Required	
IsDependant	Required	
Claim Check Code	Optional	Should be 5 digits
Date of Service	Required	Format: YYYY-mm-dd
Type of Service	Required	
Procedures	Conditional	<ol style="list-style-type: none"> 1. GDRGs used should be strictly procedure GDRGs. 2. Date of procedure and major diagnosis for procedure are required for all procedure entries.
Diagnosis	Required	Optional for Diagnostic only services
Icd-10 codes	Required	Should be a valid ICD-10 code
Investigations	Optional	Required for Diagnostic only services
Medicines	Optional	

Prescriptions	Required	Required for all medicine entries
Principal GDRG	Optional	GDRG should be part of the list of GDRGs used on the claim. Required for all IPD claims with multiple unique GDRGs. Optional for OPD claims.
Extra Data and vitals	Optional	Only applicable to providers on the Value Based Care program.

