
Uppsala
Monitoring
Centre

UMC IDMP API: Publication of IDMP identifiers

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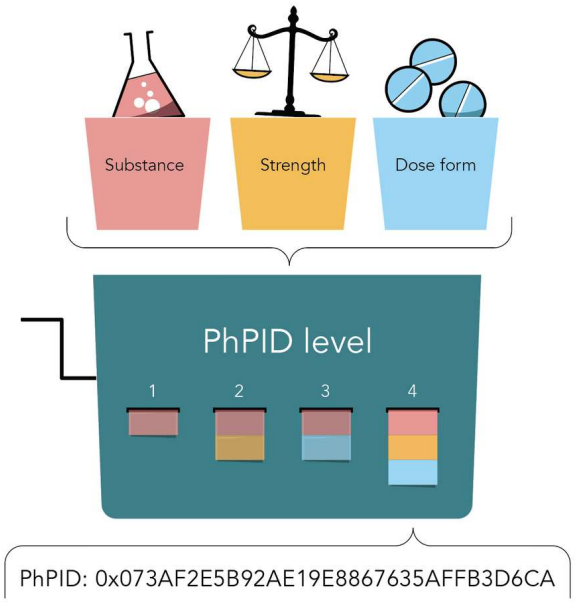
Agenda

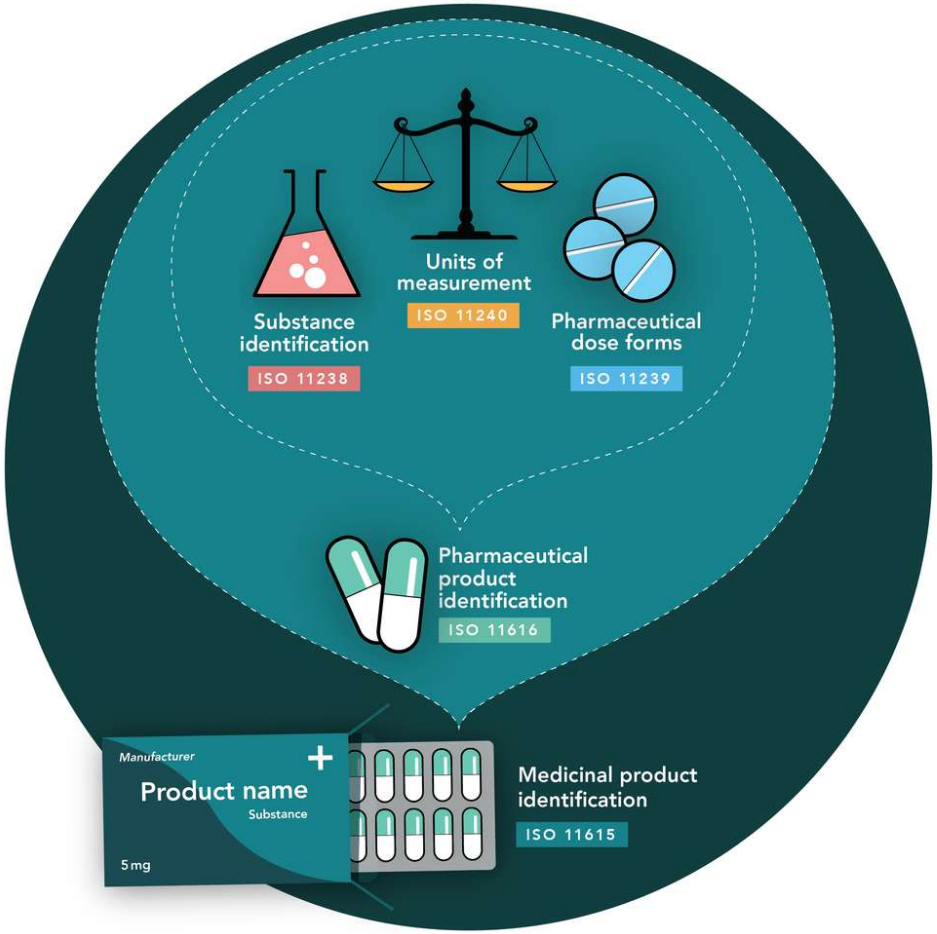
- Introduction UMC
- IDMP and GIDWG
- Introduction to UMC's IDMP API
- UMC's planned development

THIS IS UMC

- **Independent, self-funded, non-profit foundation** (est. 1978) dedicated to safer use of medicines and vaccines.
- **Through an agreement** between the Government of Sweden and the World Health Organization (WHO), UMC operates the Programme for International Drug Monitoring
- **Supports over 180 member countries** and regions in strengthening safety surveillance, and maintains VigiBase, the WHO global database of adverse event reports.
- **Provides international standards** and related digital solutions for secure exchange of pharmacovigilance data, including a global medicine and vaccine terminology for identification of medicinal products.
- **Advances the science of pharmacovigilance** and transforms its practice through technological innovation.

IDMP - ISO identification of medicinal products





Global IDMP Working Group

- **Launched in 2021** — outcome of the 2019 WHO IDMP Workshop (Geneva)
- **Why?**
  A global body demonstrating real-world IDMP implementation was needed.
- **The Focus:**
  - Deliver projects aiming for implementation of IDMP to support **global use cases (pharmacovigilance, cross-border prescriptions, drug shortages)**
  - Build a practical framework: business rules, best practices, and operating model

GIDWG – Who are we?

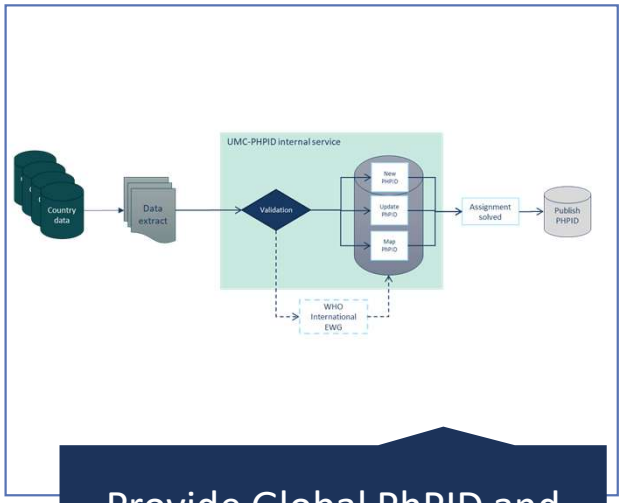
More information?
Contact:
idmp@who-umc.org

Additional SMEs from WHO-PVG, EDQM, WHO-INN, USP, HL7, HMA-SVG, US-NIH, ISO/CEN, CHTADEL

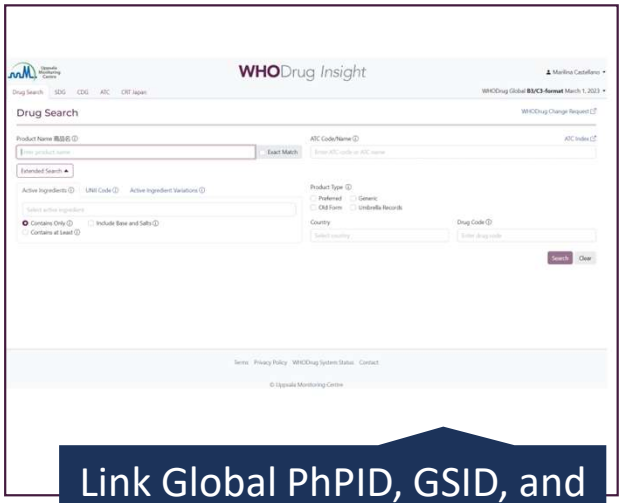
Global IDMP Working Group

UMC´s role

Act as ambassador and collaborator



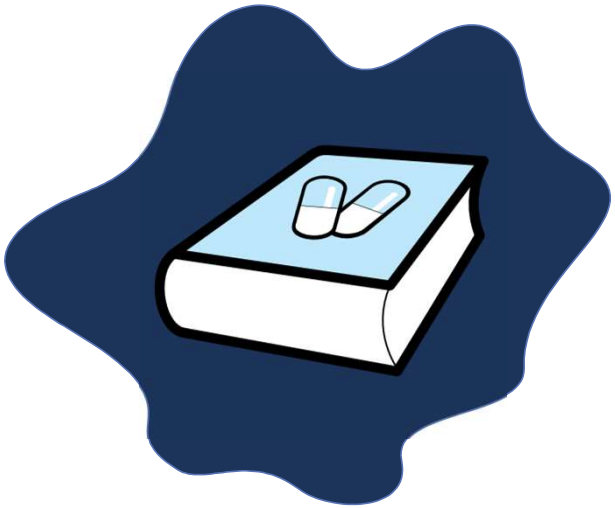
Provide Global PhPID and GSID



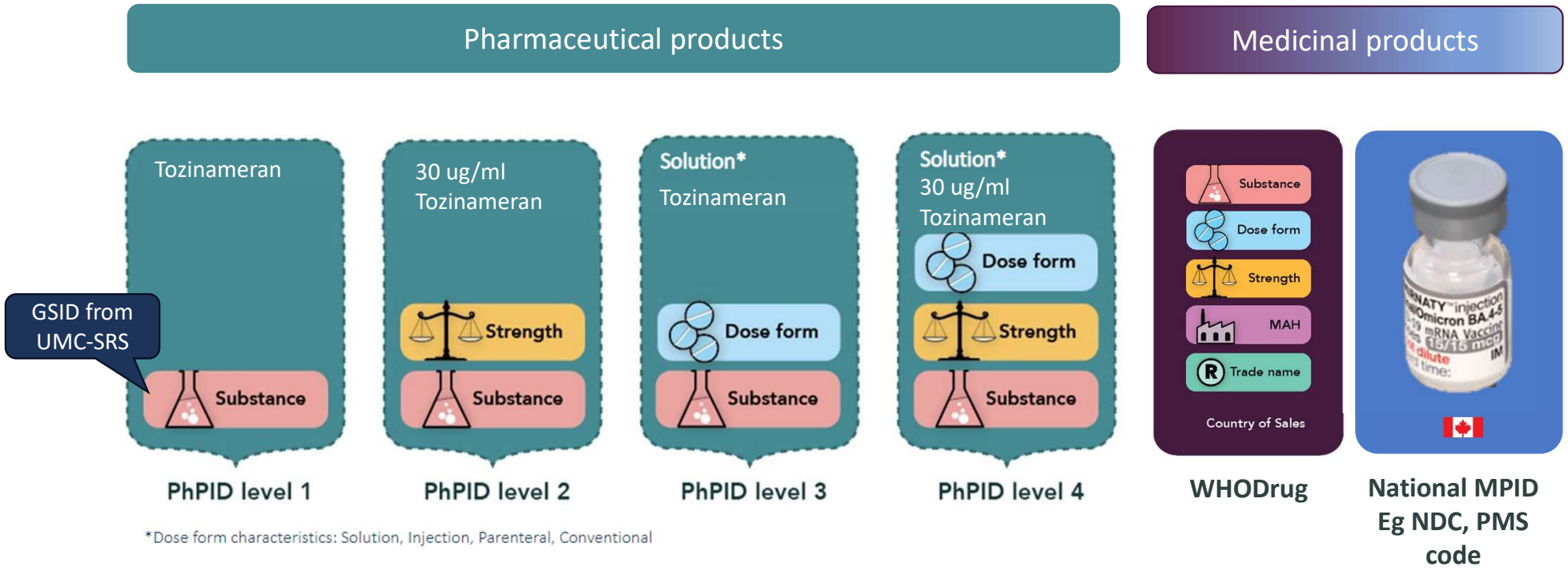
Link Global PhPID, GSID, and medicinal products via WHODrug Global

WHODrug Global – What?

- A global and standardised terminology for medicines and vaccines.
- Developed, maintained and distributed by Uppsala Monitoring Centre.
- From March 2026, also including global PhPIDs.

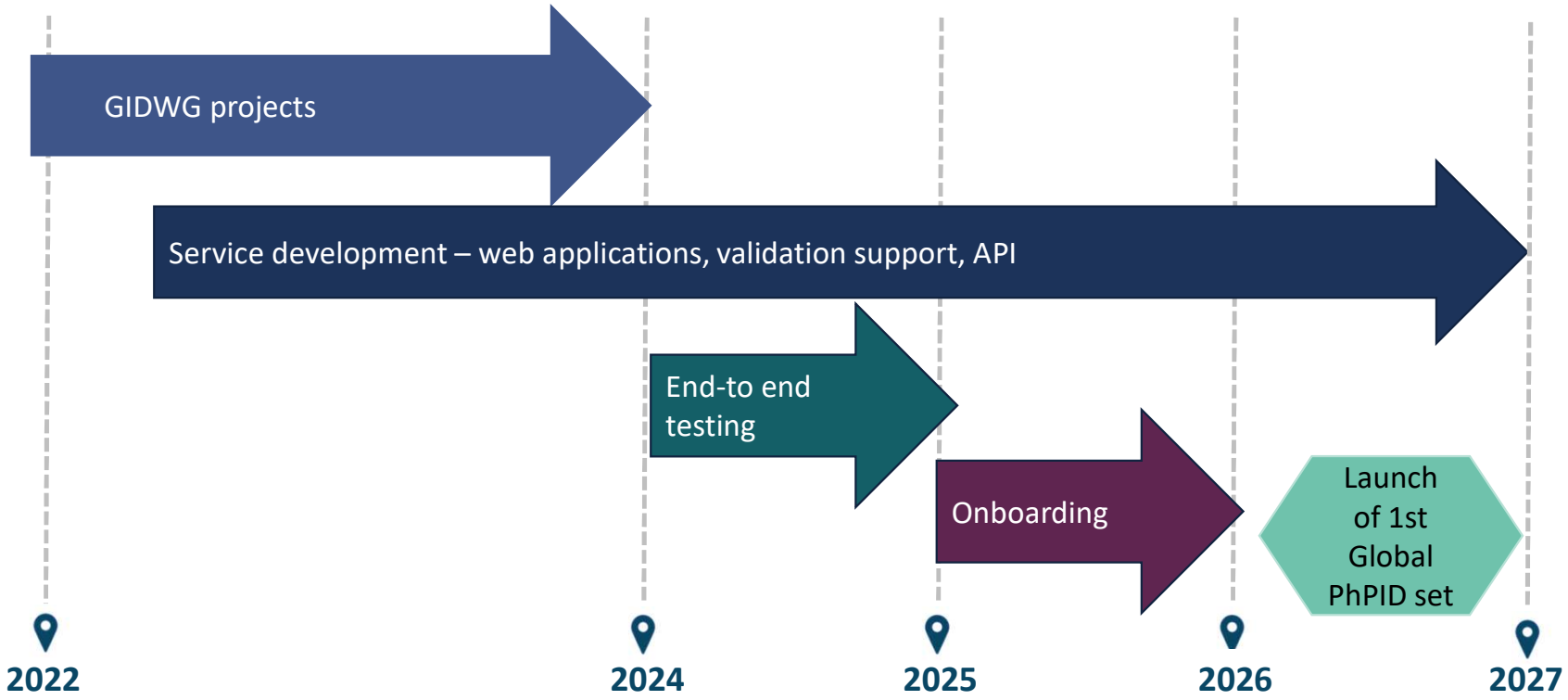


Global PhPID and connection to medicinal products

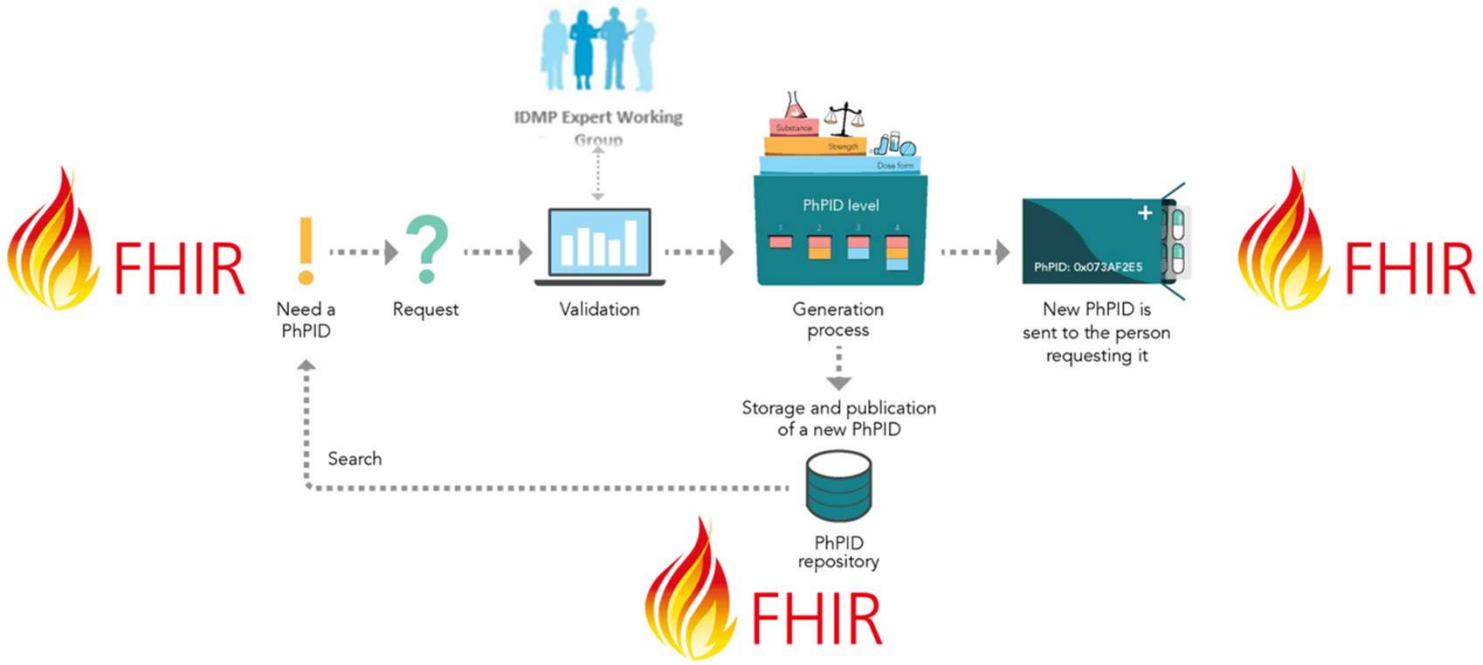


*Dose form characteristics: Solution, Injection, Parenteral, Conventional

Timeline IDMP project



PhPID Operating Model



Technical readiness - IDMP API

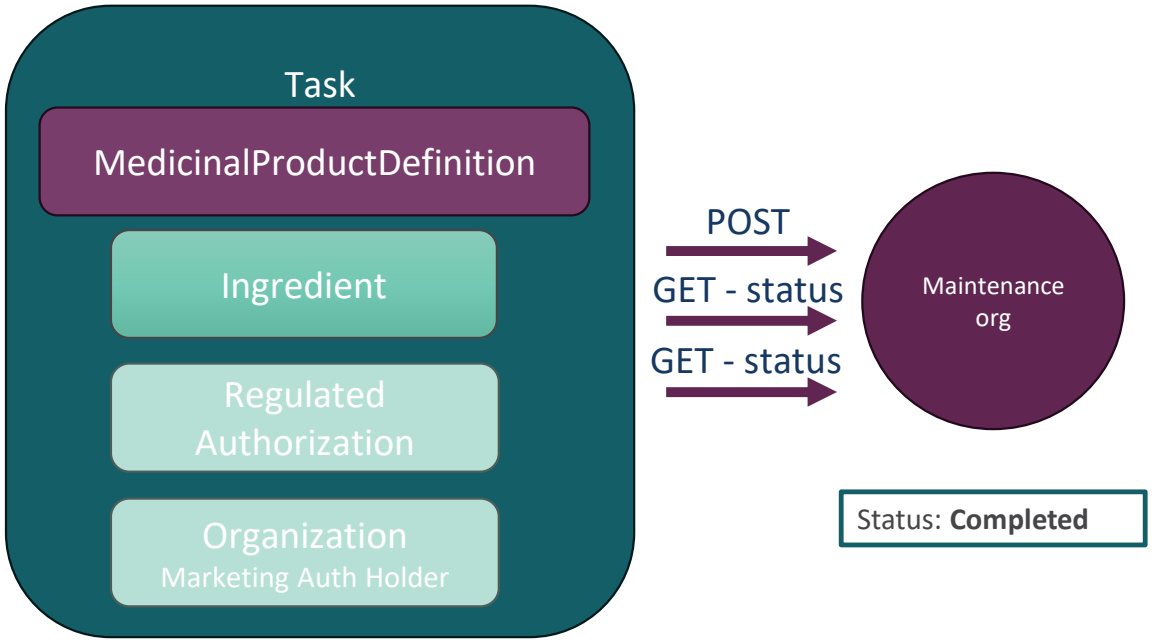
IDMP API request

- Possible to request Global PhPIDs by sending medicinal product information as FHIR **Task**s
- Possible to receive **AdministrableProductDefinition** representing PhPID as a task response

IDMP API publish **2026**

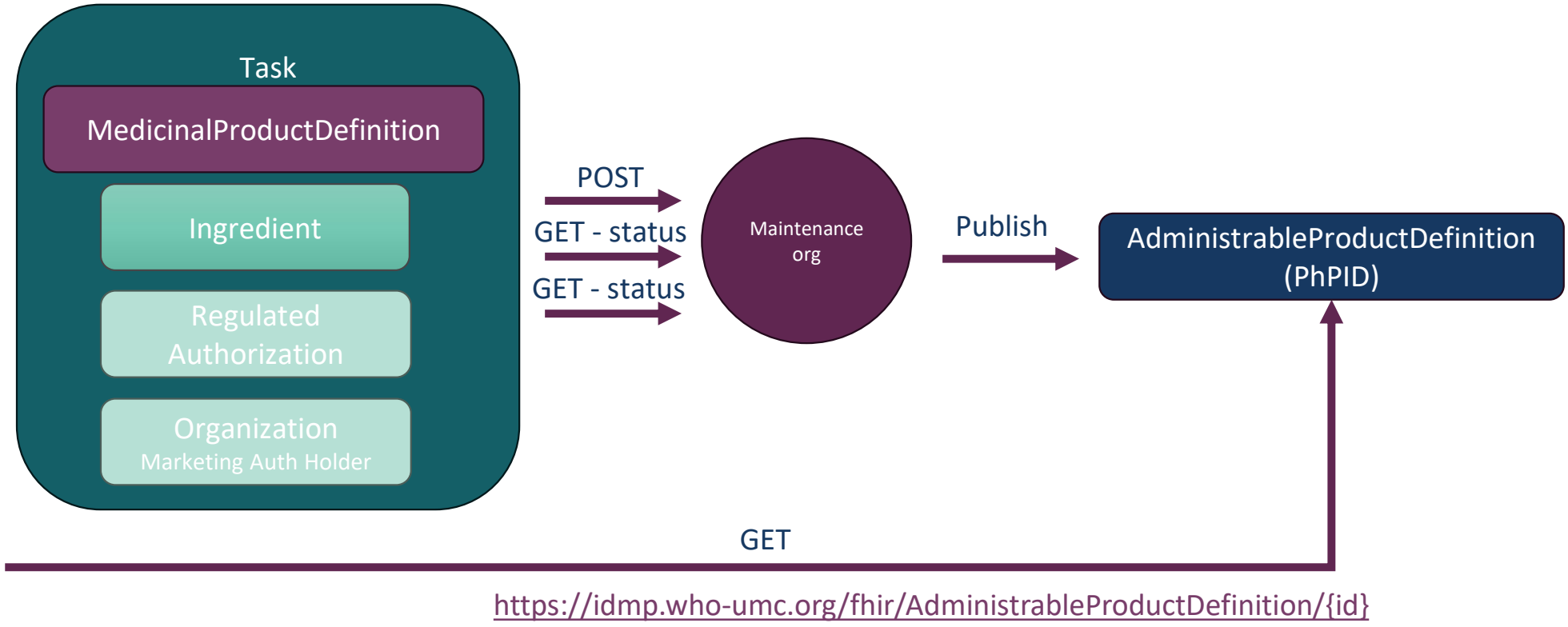
- Possible to GET all **AdministrableProductDefintion** resources (PhPIDs) that are published
- Possible to GET all **SubstanceDefinition** resources (GSIDs) that are published
- Possible to GET all **MedicinalProductDefinititon** resources that are published

PhPID Request process



https://idmp.who-umc.org/fhir/Task/{id}

PhPID Request process



IDMP Publish API – Available endpoints and Resources

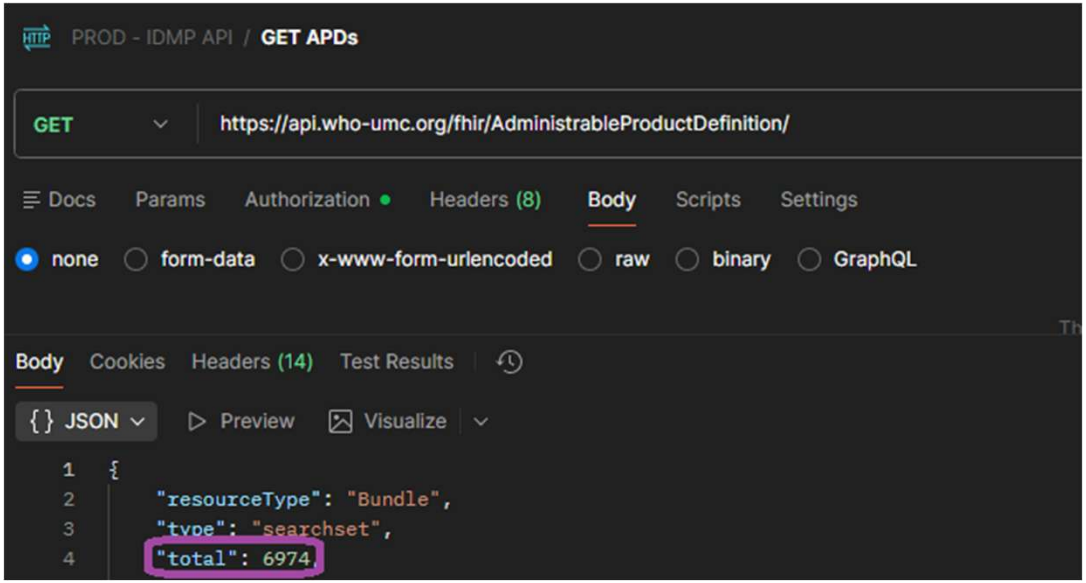
/AdministrableProductDefinition/ - GET
/AdministrableProductDefinition/{phpid} - GET

/SubstanceDefinition/ - GET
/SubstanceDefinition/{gsid} - GET

/MedicinalProductDefinition/ - GET
/MedicinalProductDefinition/{productid} - GET

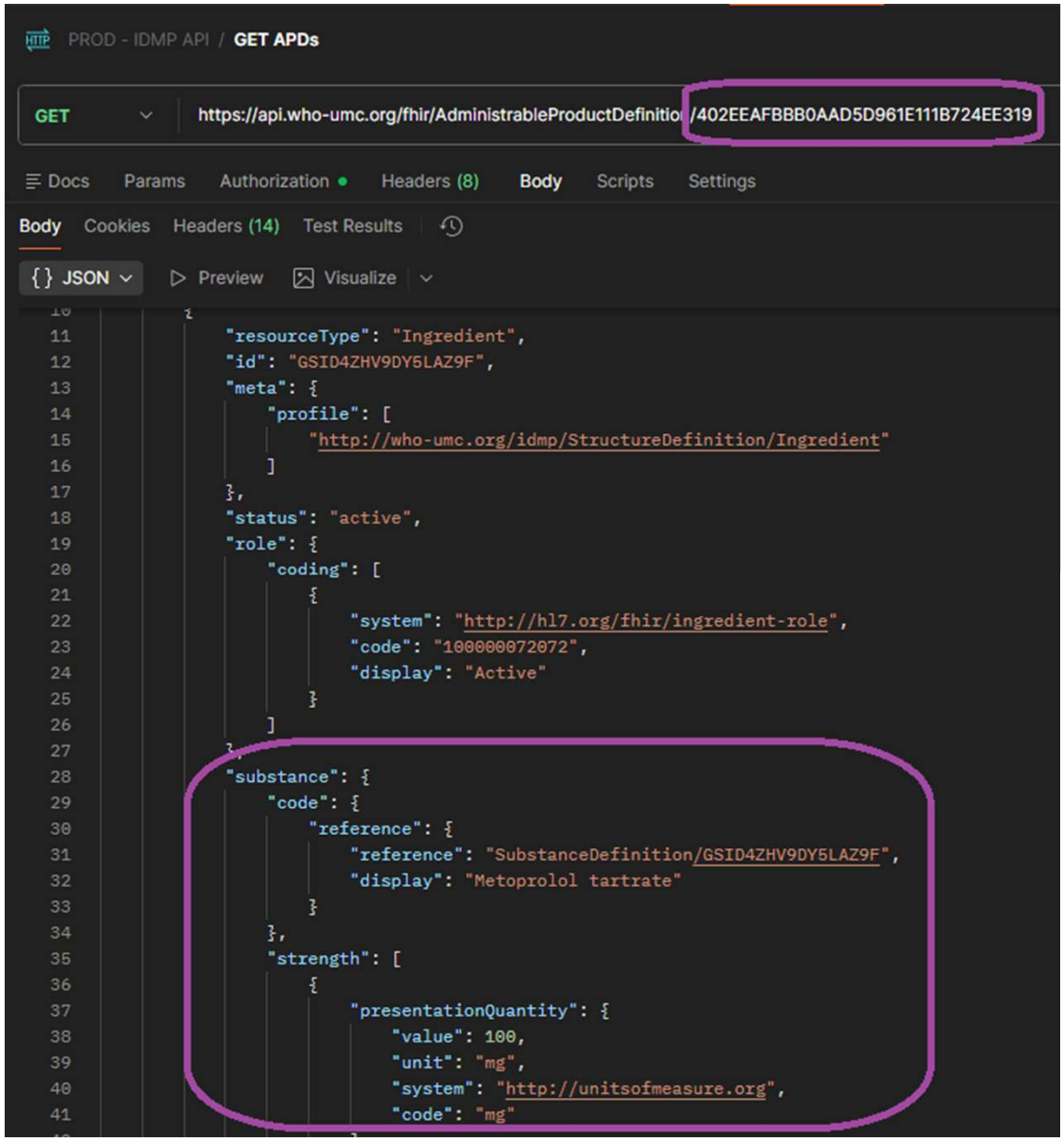
AdministrableProductDefinition (PhPIDs)

Available published PhPIDs today: ~7000



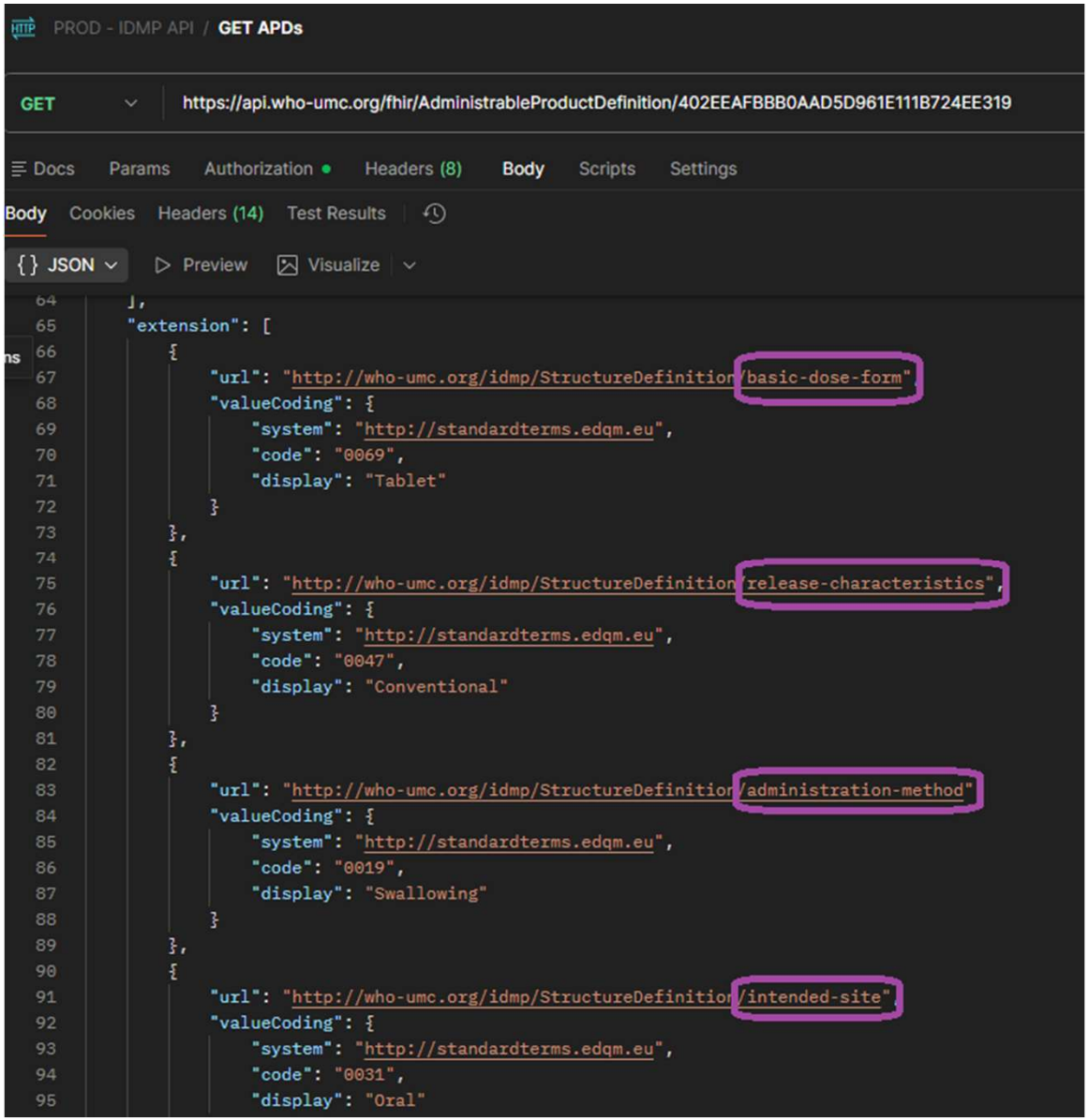
PhPID level 4

- Substance and strength



PhPID level 4

- Substance and strength
- Dose form

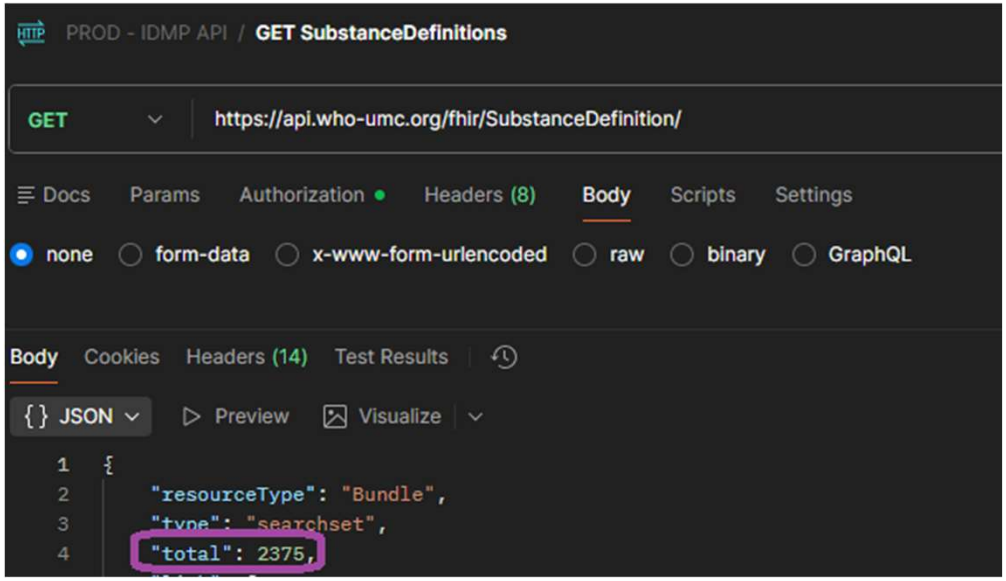


PhPID level 4

- Substance and strength
- Dose form
- PhPID level 1-3

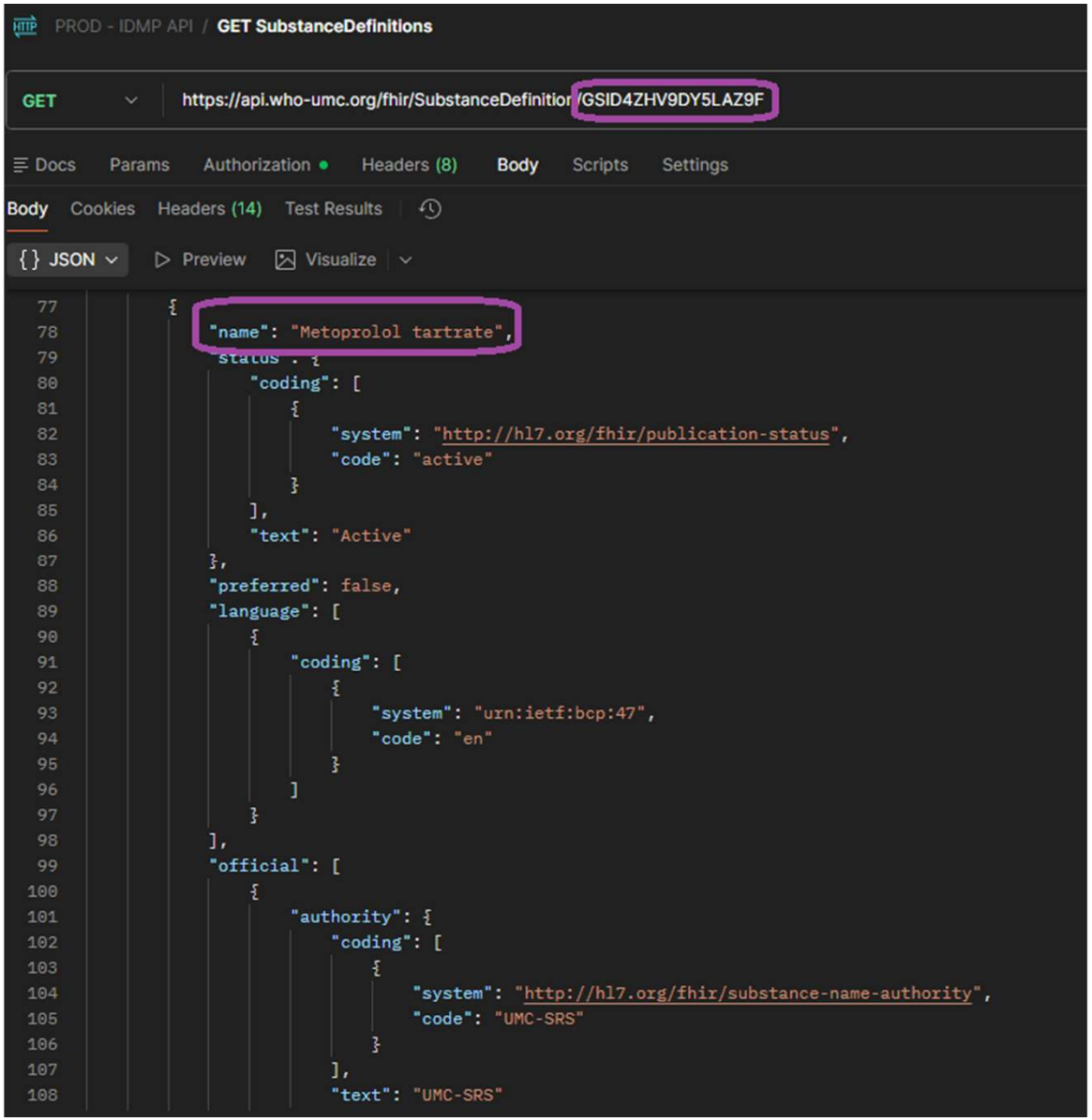
SubstanceDefinition (GSIDs)

Available published GSIDs today: ~2400



GSID

- Substance name



GSID

- Substance name
- Reference to other codes
  - SMS-ID will be available!

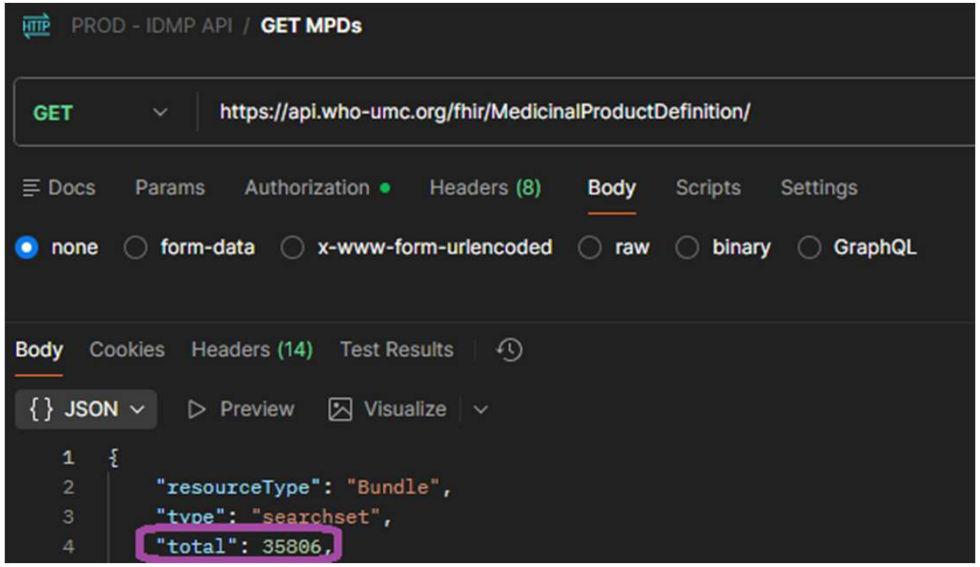
```
43      },
44      "code": [
45          {
46              "code": {
47                  "coding": [
48                      {
49                          "system": "https://open.fda.gov/data/unii",
50                          "code": "W5S57Y3A5L"
51                      }
52                  ]
53              }
54          },
55          {
56              "code": {
57                  "coding": [
58                      {
59                          "system": "https://open.fda.gov/data/usan",
60                          "code": "100000090389"
61                      }
62                  ]
63              }
64          },
65          {
66              "code": {
67                  "coding": [
68                      {
69                          "system": "http://terminology.hl7.org/CodeSystem/CAS",
70                          "code": "56392-17-7"
71                      }
72                  ]
73              }
74          }
```

GSID

- Substance name and structure
- Reference to other codes
  - SMS-ID will be available!
- Reference to base substance if salt

MedicinalProductDefinition (link between PhPID and product)

Available published MPDs today: ~36000



MPD

- UMC Product ID
  - Local/national/regional MPID will be available!

MPD

- UMC Product ID
  - Local/national/regional MPID will be available!
- Link to PhPID level 4
- Product name

IDMP API Go Live in production - March 2026

- PhPID Request API
- IDMP Publish API - APD (PhPID), SD (GSID) and MPD resources

- Already today – available in pre-production
  Try it out in the Proof of Concept API!
  https://api.umcterminologies.org/idmp/

Planned development

2026 — **2027**

IDMP API request & publish

- New API URL
- Published resources can be accessed through persistent URLs
- More references added (SMS-ID, PMS-ID, local MPID)
- More search options added

IDMP API change management

- Change management support implemented:
  - Subscription

Planned development: Change Management

- Subscription
  - Notification regarding own tasks
  - Notification regarding changed data

HL7® FHIR®

- The **Subscription resource** is used to request notifications for a specific client about a specific topic (as defined by a SubscriptionTopic).

- Conceptually, a subscription specifies:
  - a topic (SubscriptionTopic)
  - the notification channel (e.g., REST, websockets, email)
  - the notification payload (e.g., amount of detail, etc.)

Key take aways

PHPID GO-LIVE IN MARCH 2026

PUBLISHED PHPIDS AND GSIDS SUPPORT GLOBAL USE CASES

MORE GLOBAL IDS AND API FUNCTIONALITY DURING 2026

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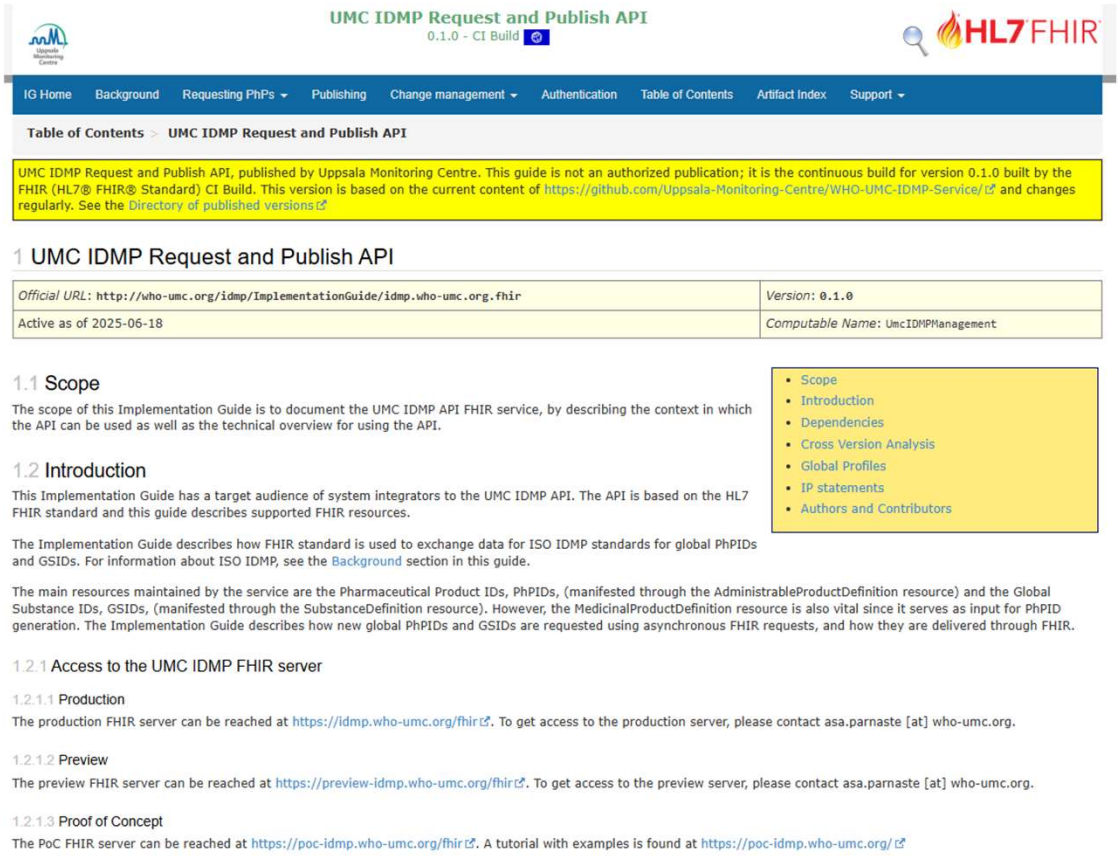
https://who-umc.org/
https://gidwg.org/

IDMP API Implementation Guide

https://build.fhir.org/ig/Uppsala-Monitoring-Centre/WHO-UMC-IDMP-Service/branches/main/index.html



UMC IDMP Request and Publish API

0.1.0 - CI Build

IG Home | Background | Requesting PhPs | Publishing | Change management | Authentication | Table of Contents | Artifact Index | Support

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UMC IDMP Request and Publish API, published by Uppsala Monitoring Centre. This guide is not an authorized publication; it is the continuous build for version 0.1.0 built by the FHIR (HL7® FHIR® Standard) CI Build. This version is based on the current content of https://github.com/Uppsala-Monitoring-Centre/WHO-UMC-IDMP-Service/ and changes regularly. See the Directory of published versions

1 UMC IDMP Request and Publish API

Official URL: http://who-umc.org/idmp/ImplementationGuide/idmp.who-umc.org.fhir	*Version*: 0.1.0
Active as of 2025-06-18	*Computable Name*: UmcIDMPManagement

- Scope
- Introduction
- Dependencies
- Cross Version Analysis
- Global Profiles
- IP statements
- Authors and Contributors

1.1 Scope

The scope of this Implementation Guide is to document the UMC IDMP API FHIR service, by describing the context in which the API can be used as well as the technical overview for using the API.

1.2 Introduction

This Implementation Guide has a target audience of system integrators to the UMC IDMP API. The API is based on the HL7 FHIR standard and this guide describes supported FHIR resources.

The Implementation Guide describes how FHIR standard is used to exchange data for ISO IDMP standards for global PhPIDs and GSIDs. For information about ISO IDMP, see the Background section in this guide.

The main resources maintained by the service are the Pharmaceutical Product IDs, PhPIDs, (manifested through the AdministrableProductDefinition resource) and the Global Substance IDs, GSIDs, (manifested through the SubstanceDefinition resource). However, the MedicinalProductDefinition resource is also vital since it serves as input for PhPID generation. The Implementation Guide describes how new global PhPIDs and GSIDs are requested using asynchronous FHIR requests, and how they are delivered through FHIR.

1.2.1 Access to the UMC IDMP FHIR server

1.2.1.1 Production

The production FHIR server can be reached at https://idmp.who-umc.org/fhir. To get access to the production server, please contact asa.parnaste [at] who-umc.org.

1.2.1.2 Preview

The preview FHIR server can be reached at https://preview-idmp.who-umc.org/fhir. To get access to the preview server, please contact asa.parnaste [at] who-umc.org.

1.2.1.3 Proof of Concept

The PoC FHIR server can be reached at https://poc-idmp.who-umc.org/fhir. A tutorial with examples is found at https://poc-idmp.who-umc.org/

https://idmpinfo.who-umc.org/training/index.html#/

THEORY

1. Why do we need global identifiers?
2. What is the purpose of ISO Identification of Medicinal Product standards?
3. How will pharmaceutical product identification link medicines globally?
4. How are the ISO standards used for generation of pharmaceutical product identifiers?
5. How will pharmaceutical product identifiers be generated?
6. What steps does one need to consider when implementing these standards?
7. Summary

FREQUENTLY ASKED QUESTIONS

FAQs


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