SNOMED International

Delivering SNOMED CT

SNOMED Role in IPS

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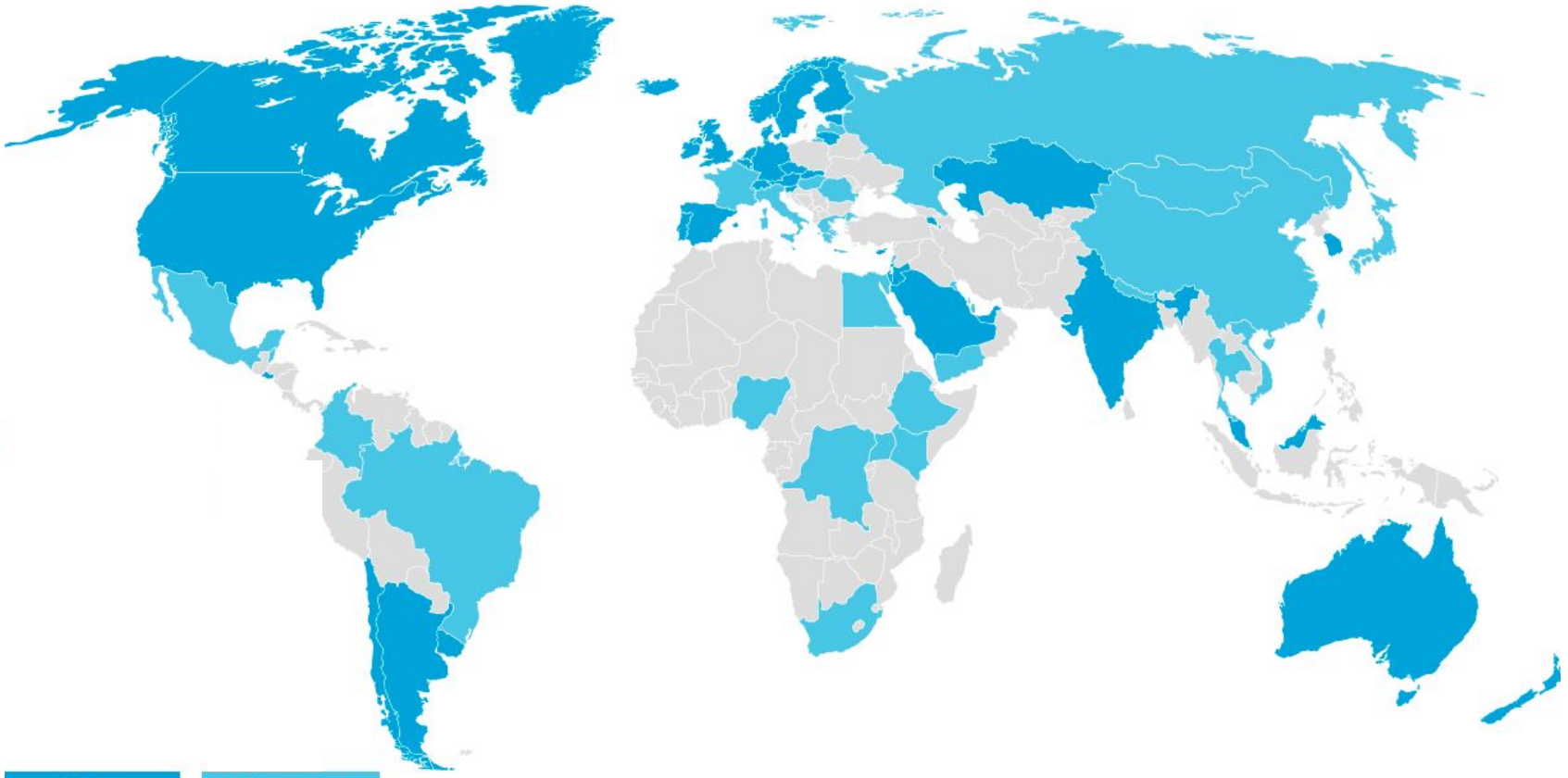
SNOMED International







Member

Affiliate Licensee

AMERICAS

Argentina
Canada
Chile
El Salvador
United States
Uruguay

EUROPE, MIDDLE EAST & AFRICA

Austria
Belgium
Cyprus
Czech Republic
Denmark
Estonia
Finland
Germany
Iceland
Ireland
Israel
Jordan
Lithuania
Luxembourg
Malta
Netherlands
Norway
Portugal
Republic of Slovenia
Saudi Arabia
Slovak Republic
Spain
Sweden
Switzerland
United Kingdom
United Arab Emirates

ASIA PACIFIC

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Brunei
Hong Kong, China
India
Kazakhstan
Malaysia
New Zealand
Republic of Armenia
Republic of Korea
Singapore

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About the IPS



Provides a healthcare summary for an individual at the point of care, at a point in time



Minimal and non-exhaustive



Specialty-agnostic and condition-independent, but still clinically relevant



Designed to be simple and implementable



Usable anytime, in any place, by anyone



Multi-beneficiaries: individuals, healthcare providers, governments, society

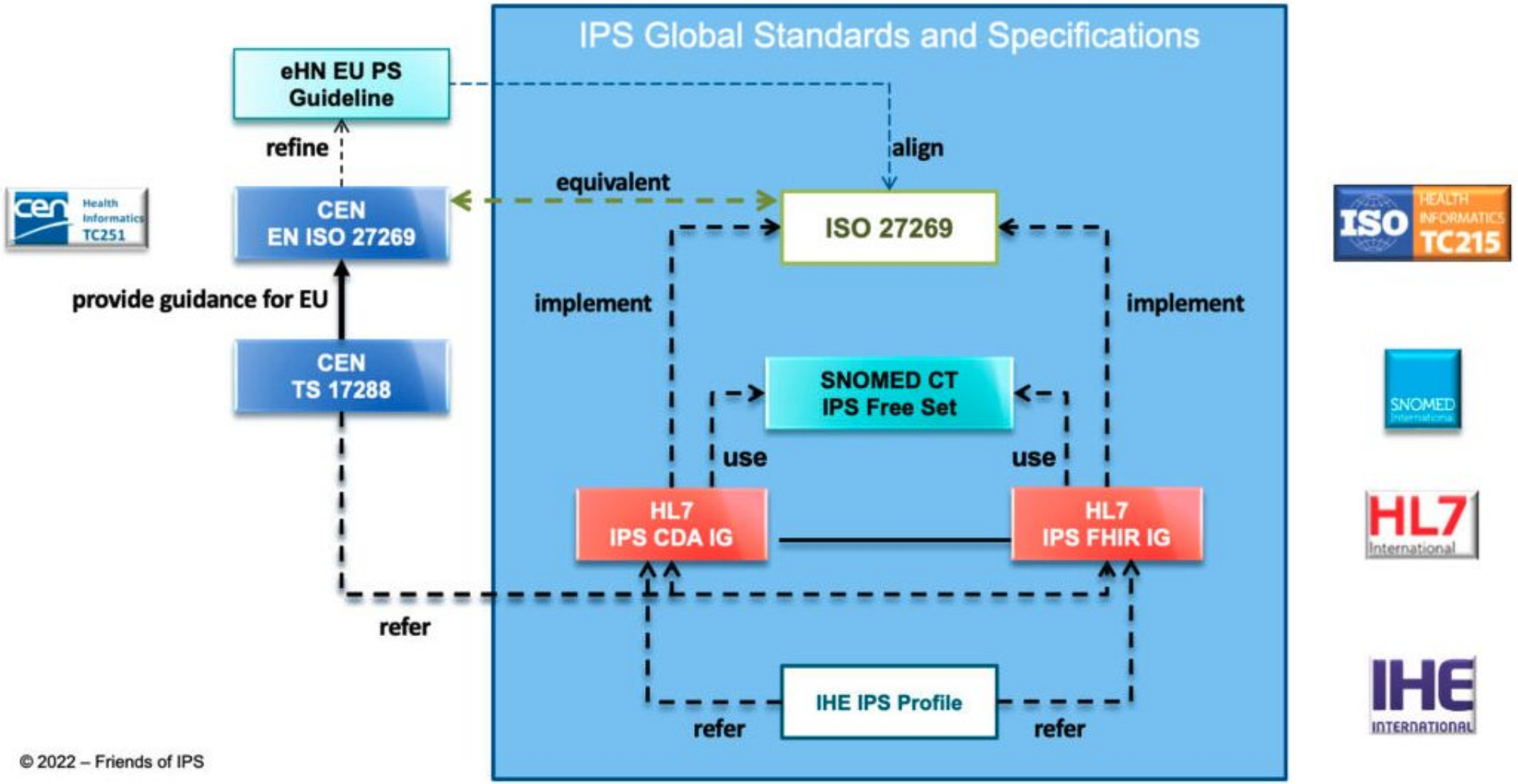
M. Nusbaum, 2022 - https://international-patient-summary.net/

Cross-SDO initiative



https://international-patient-summary.net/

Cross-SDO resources



https://international-patient-summary.net/ips-links-to-standards-and-specifications/

SNOMED CT Resources for IPS

SNOMED CT HL7 IPS Free set

A freely available flat-list of SNOMED CT terms.

Harmonized with, and supports the contents of the HL7 International Patient Summary and artifacts and CEN's European Standard for the Patient Summary value sets

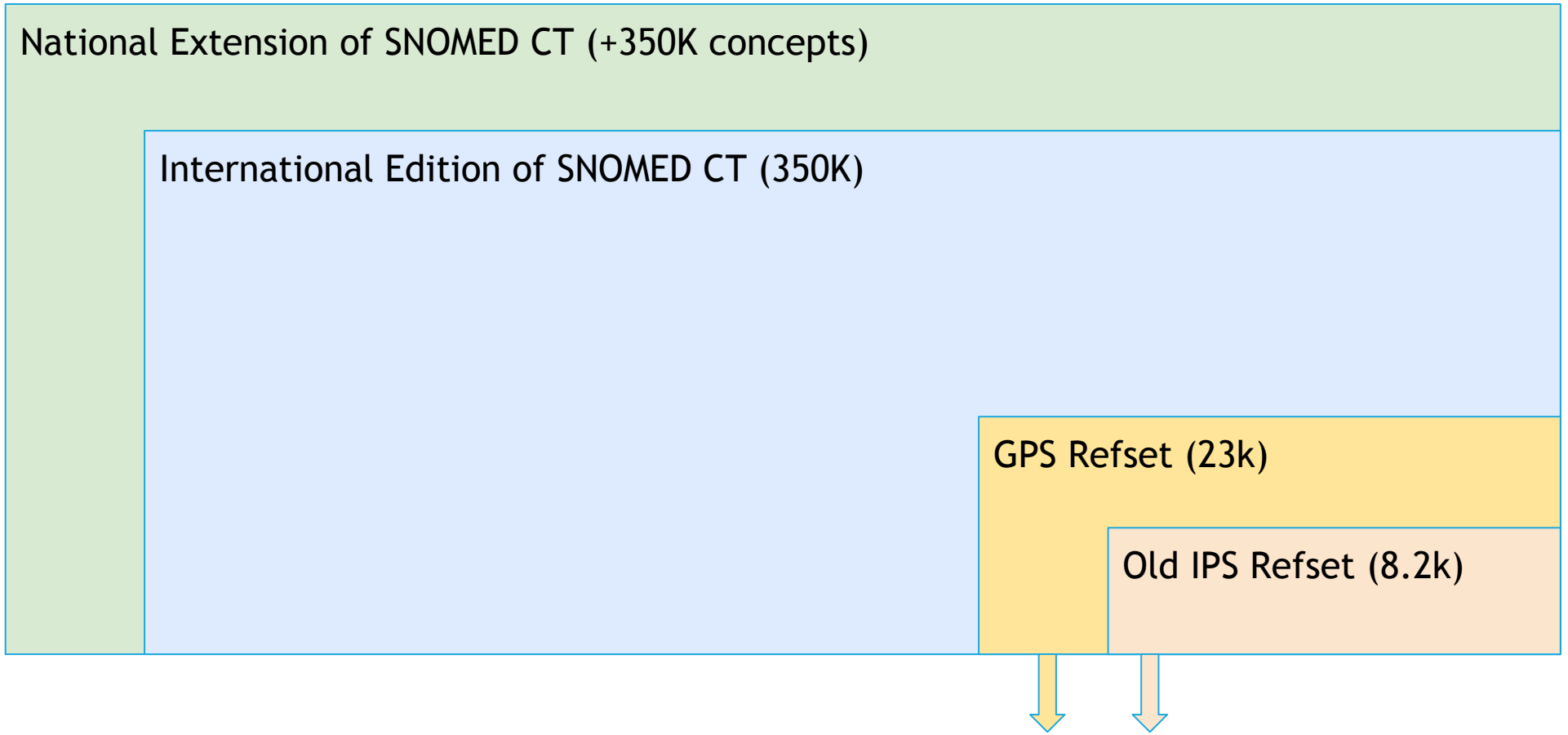
SNOMED CT IPS Reference Set

The Free set published in SNOMED CT RF2 specification for Members & Affiliates

IPS Terminology

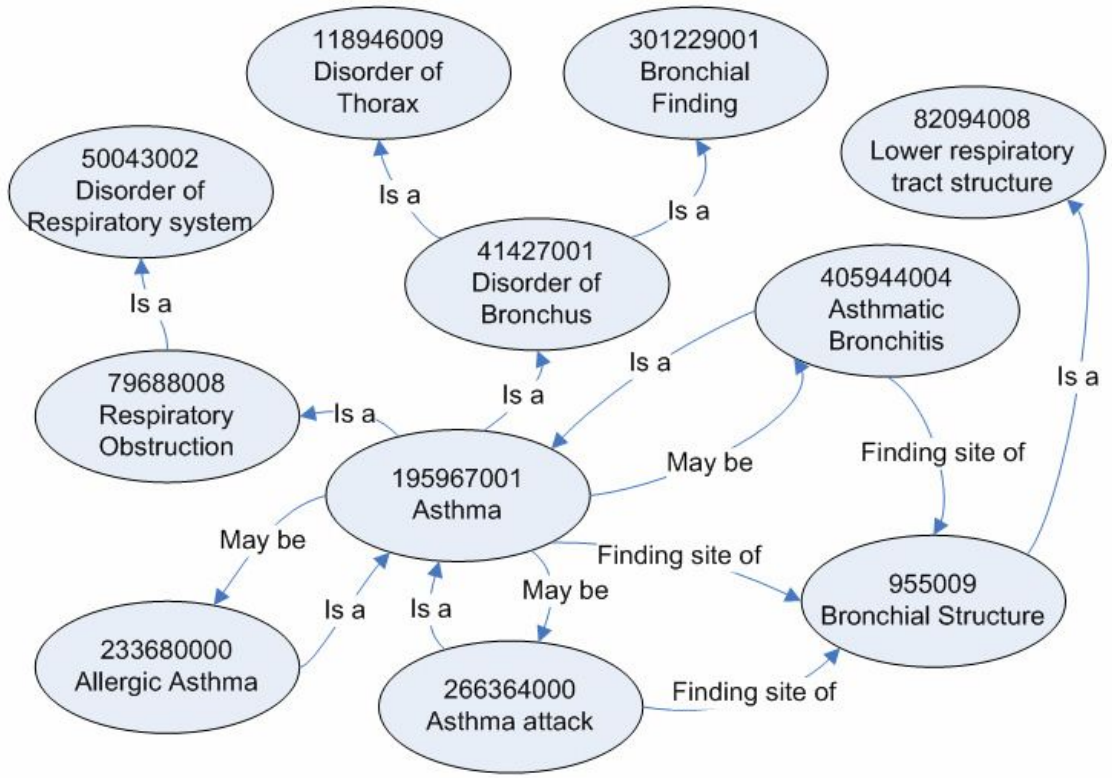
NEW SNOMED CT resource to provide implementers with an open product that can be used in healthcare solutions using the power of SNOMED CT through its query language and hierarchies

SNOMED CT and the IPS



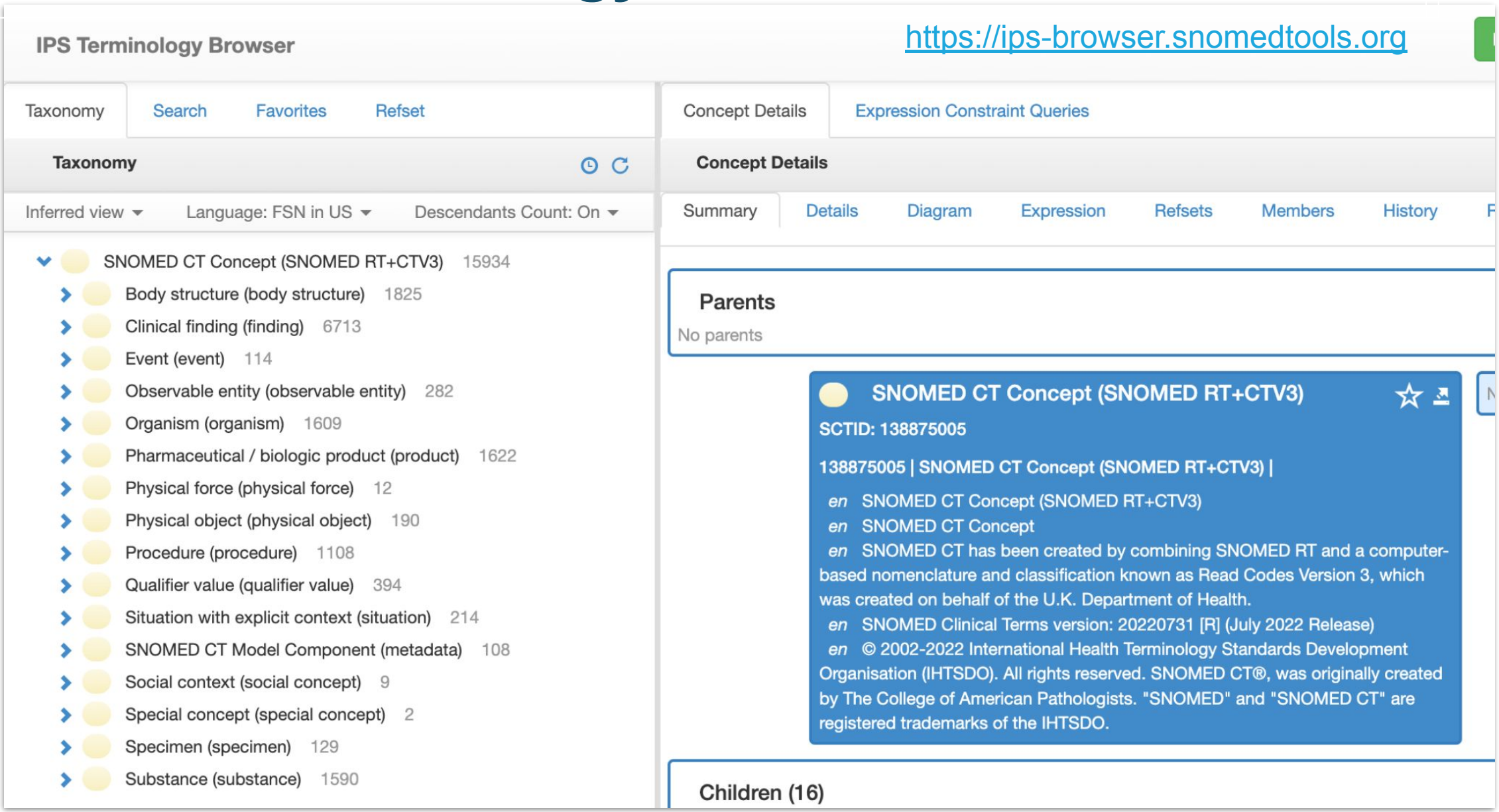
The IPS Terminology

- Using lists difficult implementation, as it is not possible to run ECL over a plain list
- The IPS Terminology is a sub-ontology based on the IPS Refset
  - Adds concepts for attribute, values, and some ancestors or groupers
  - Compatible with terminology servers
  - Compatible with ECL
  - **15k concepts**
- It's a free alternative to the standard SNOMED CT Edition, with advanced features derived from the ontology, only to be used in non-member countries
- Member countries can use the IPS refset included in the international edition to communicate with non-member countries



https://ips-browser.snomedtools.org

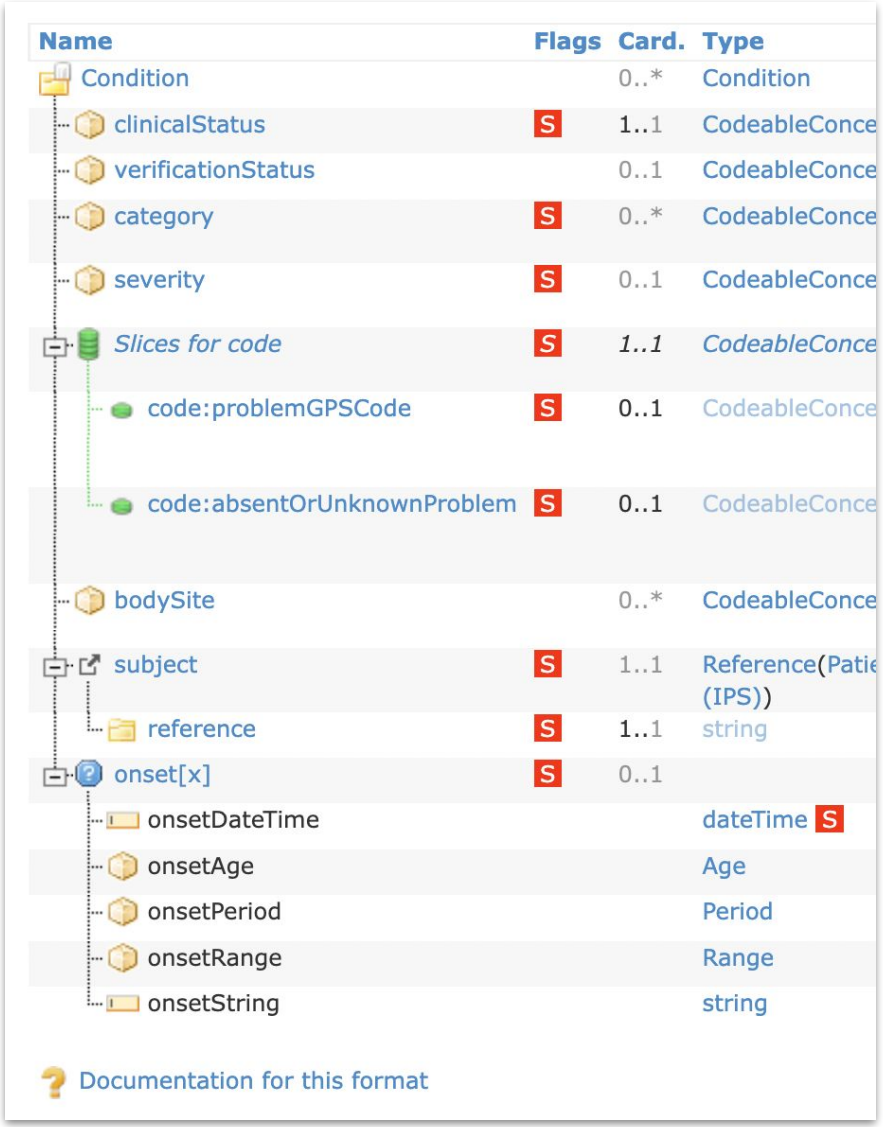
The IPS Terminology Browser



ECL and the Implementation of IPS

Implementing IPS with an **ECL compatible terminology server** we can highlight two use cases:

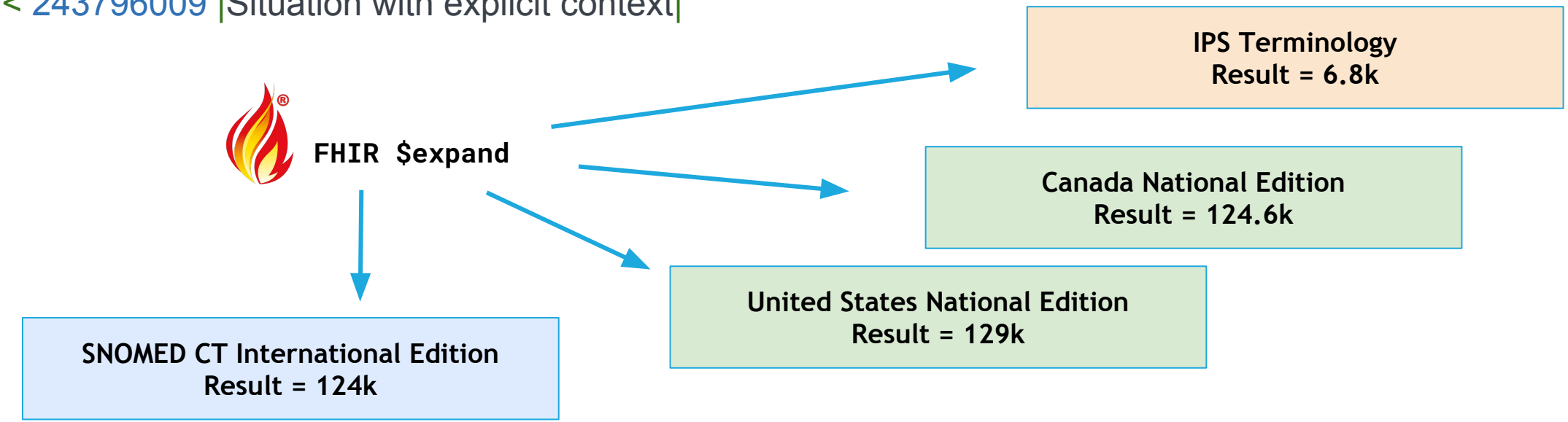
- **Terminology binding**: constraining SNOMED CT content for specific IPS Data Elements.
- **International Interoperability**: mapping to concepts in a common module or refset, e.g., the IPS Refset.



ECLs in Terminology Bindings

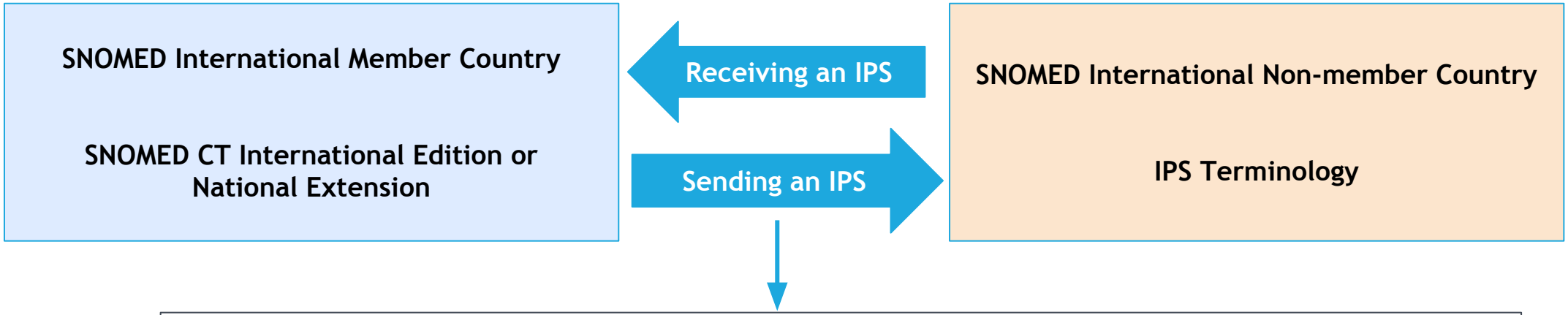
Example terminology binding from the official HL7 IPS Implementation Guide:

< 404684003 |Clinical finding|
OR < 272379006 |Event|
OR < 243796009 |Situation with explicit context|



ECLs Enabling International Interoperability

Obtaining the **proximal ancestor** for an international edition concept that is part of the IPS Refset:



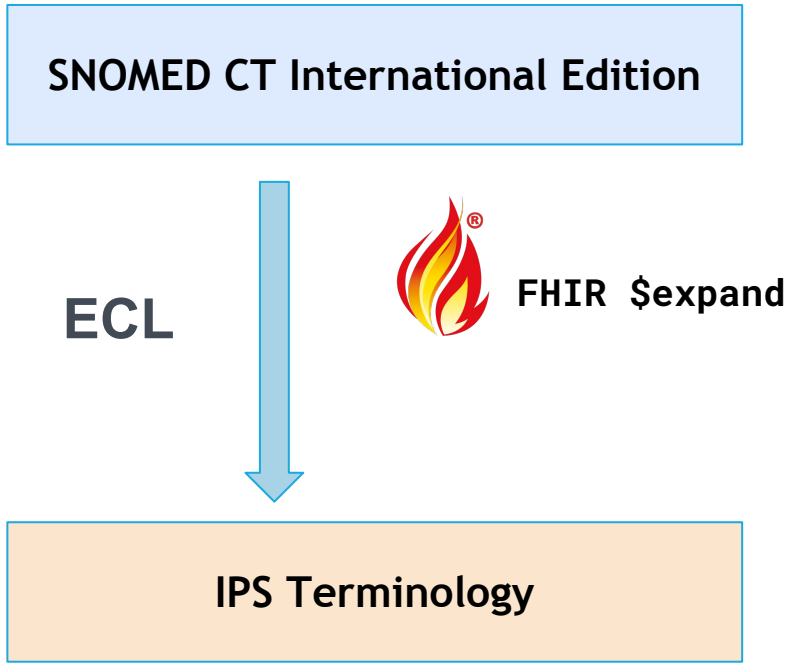
Options for sending an IPS between members and non-members:

- Send both the local codes and IPS Terminology codes (generated using ECL **transform**)
- Send only local codes and the receiver can (optionally) **transform** to an IPS Terminology code if a suitable terminology service is available

The transform from a local SNOMED CT concept to a concept part of the IPS Terminology can executed with an ECL query.

ECLs Enabling International Interoperability

Transform from an international edition concept to one that is part of the IPS Terminology using the **proximal ancestor** strategy:



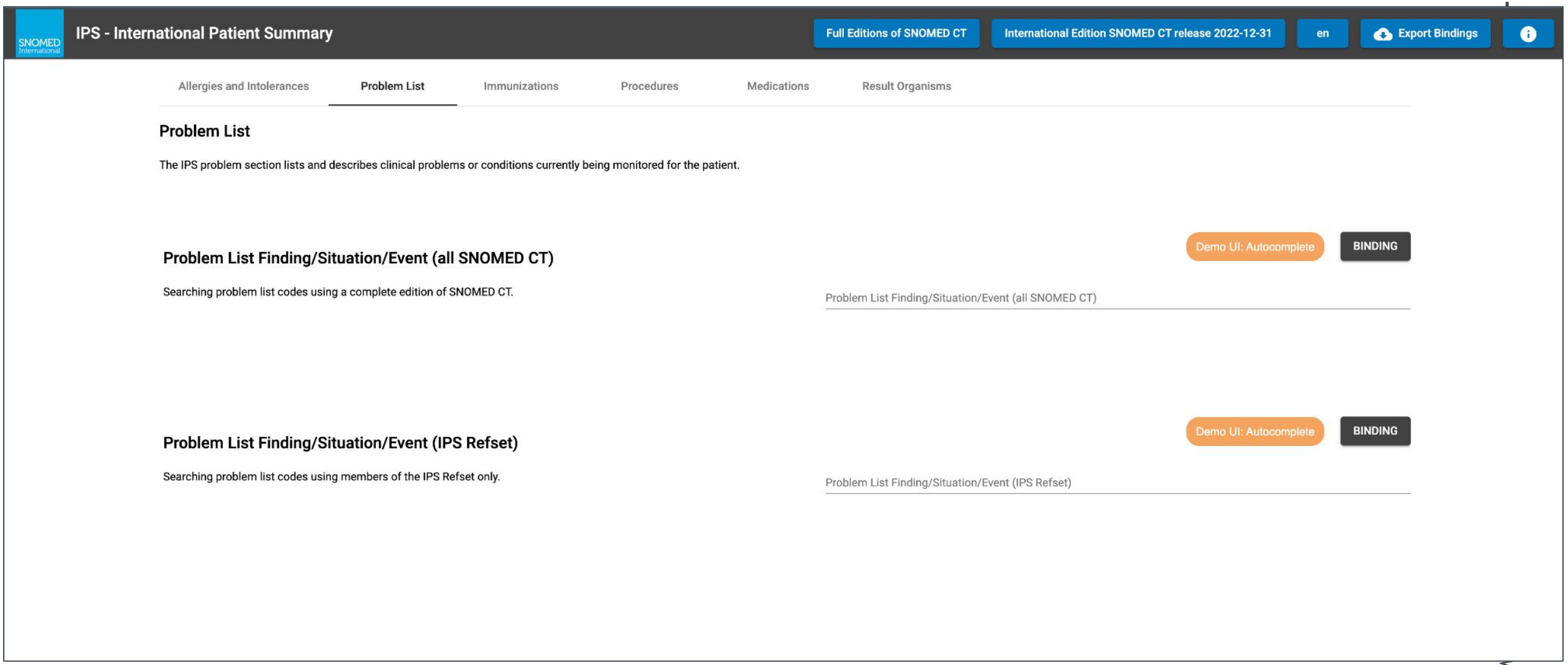

```
230400008 |Opercular epilepsy (disorder)|
```

* Not part of the IPS Terminology

```
(> 230400008 |Opercular epilepsy|
AND ^816080008 |International Patient Summary|)
MINUS
(> (> 230400008 |Opercular epilepsy|
    AND ^816080008 |International Patient Summary|))
```

```
230381009 |Localization-related epilepsy (disorder)|
```

IPS Terminology Bindings Demo



https://ihtsdo.github.io/iid-ips/

Snowstorm Terminology Server

- Great way to get started with Terminology Services
- Open source under Apache 2.0
- Stand up your own SNOMED CT FHIR Terminology Server in less than an hour
- Compatible with other CodeSystems
- Enhancement to support other code systems later this year

github.com/ihtsdo/snowstorm

github.com/ihtsdo/snowstorm-x

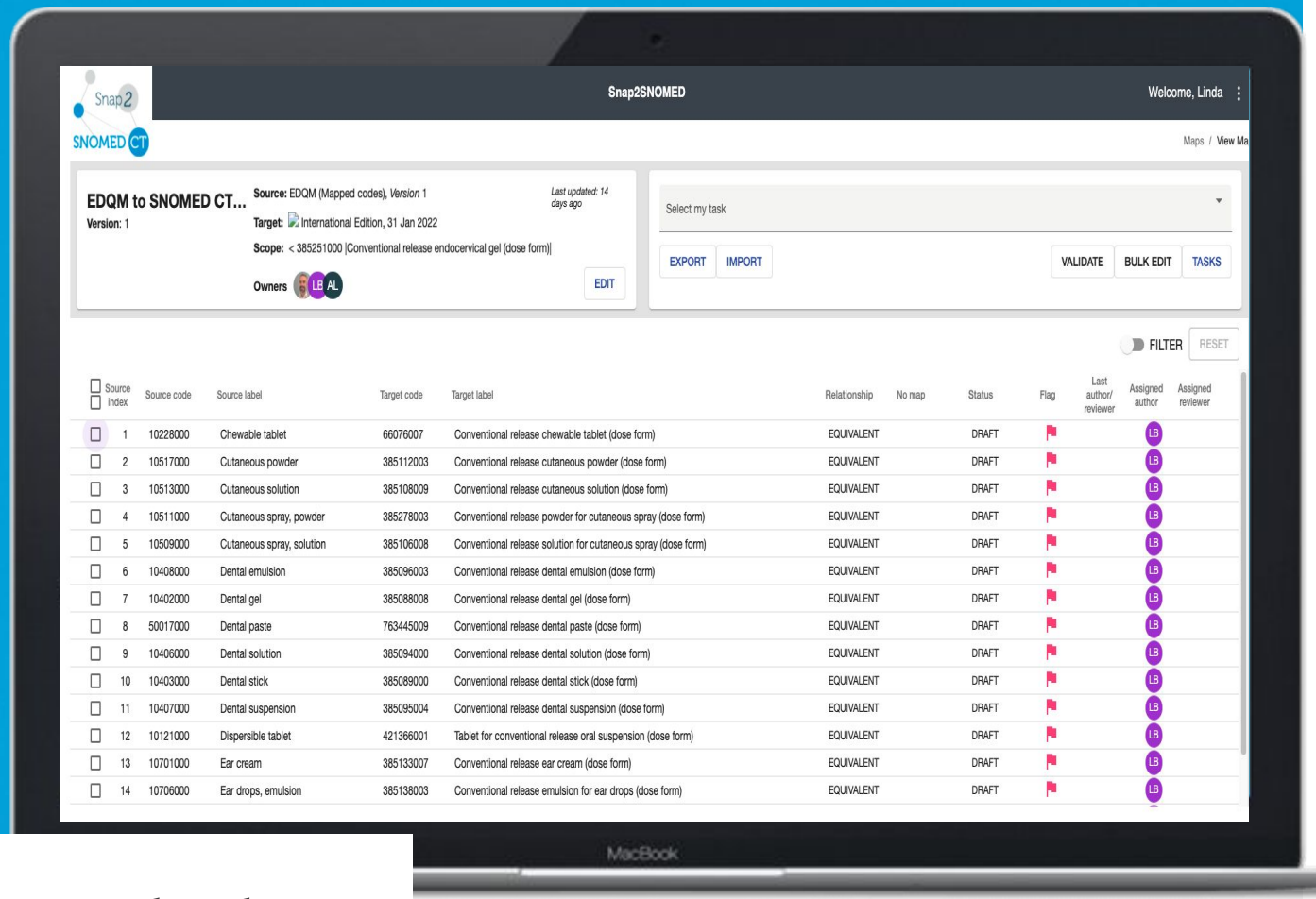


SNOWSTORM

by SNOMED International

Snap2Snomed Mapping Tool

An online tool to collaboratively create and maintain simple maps to SNOMED CT



Available at: **https://snap.snomedtools.org**

THANK YOU

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