



Update on the OHDSI Standardized Vocabularies

03 March 2026



Overview



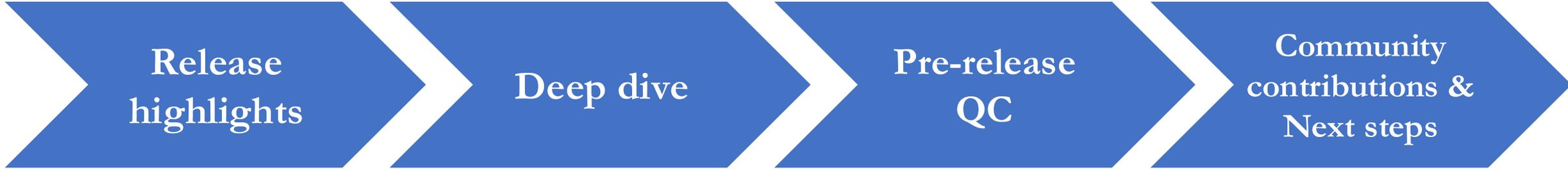
Masha
Khitrun



Dima
Dymshyts



Anna
Ostropolets





Who contributed to this release



Masha Khitrin



Aliaksei Katyshou



Anton Tatur



Dima Dymshyts



Anna Ostropolets



Polina Talapova



Denys Kaduk



Andy Kanter



Alexander Davydov



Melanie Philofsky



Ed Burn



Katy Sadowski



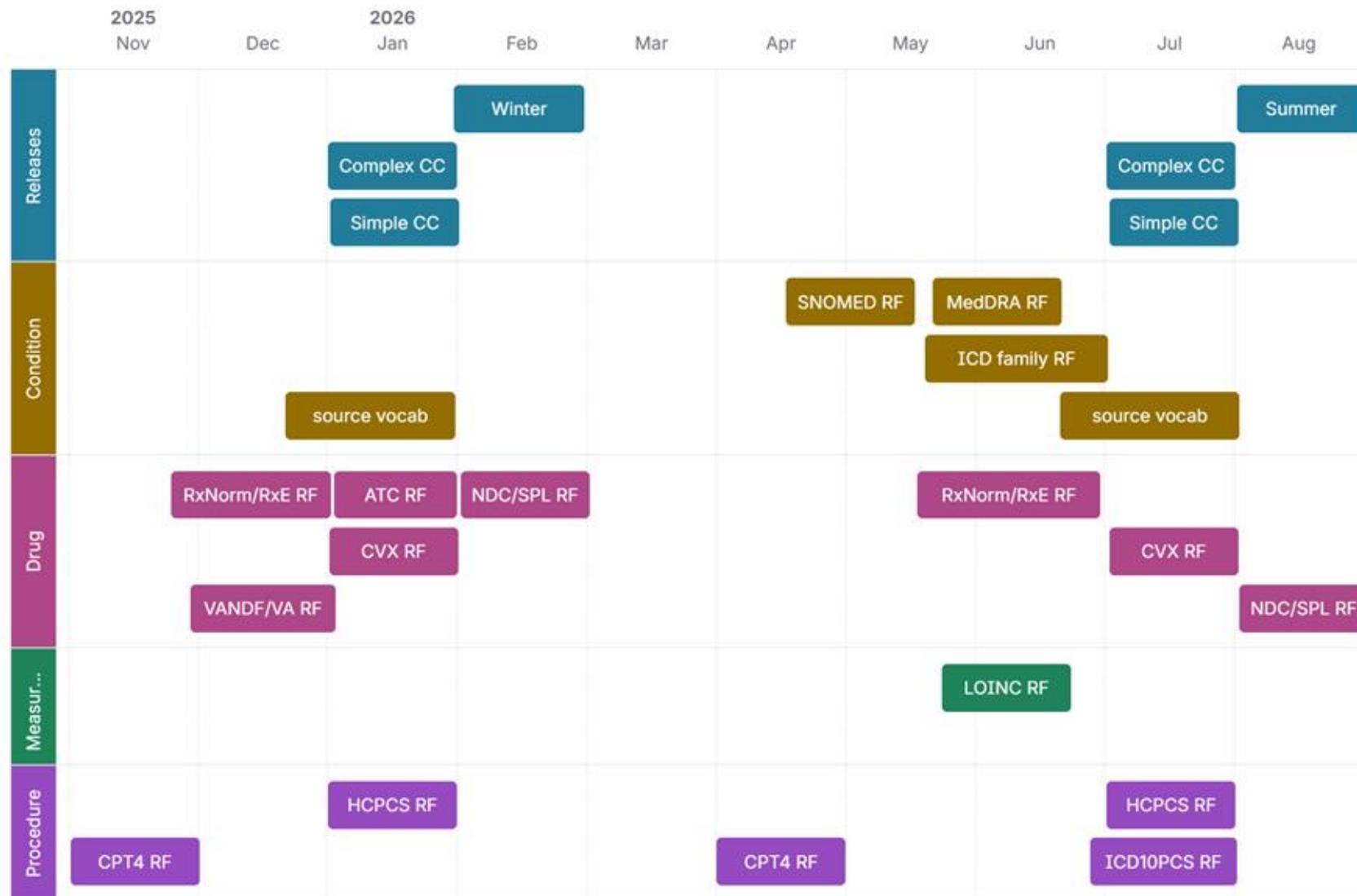
Yiju Park



Cindy Cai



Roadmap: February 2026 Release

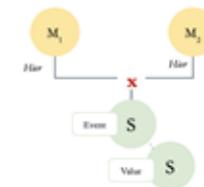




Why you need to download this release

New content

- Mixed domain: refresh of CEIL, EDI, HCPCS, CPT4
- Drugs: +25k new concepts and mappings from NDC, VA Class, CVX, ATC
- Special cases: new concepts for visual acuity and type concept



Detailed
release notes:





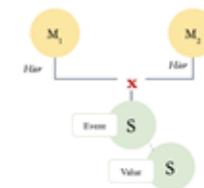
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Improved mappings

- +2k curated mappings and fixes of mapping errors



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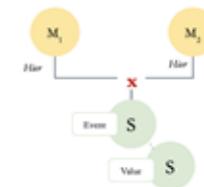
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Improved hierarchies and structures

- HCPCS-SNOMED expanded hierarchy
- RxNorm-RxE deduplication (-27k duplicates)
- Improved ATC



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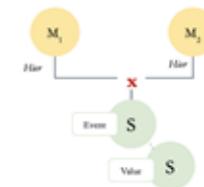
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Improved hierarchies and structures

- CPT4/HCPCS-SNOMED expanded hierarchy
- RxNorm-RxE deduplication (-27k duplicates)
- Improved ATC

We closed 36 GitHub issues!



Detailed
release notes:





Vocabularies maintenance



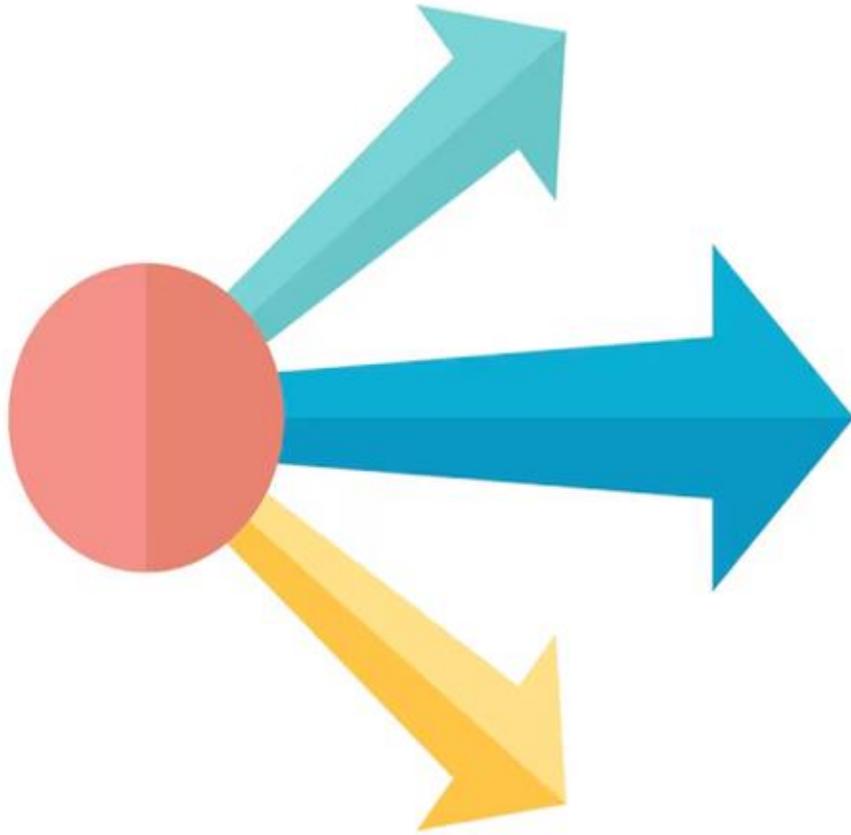
Drug Vocabularies



vocabulary_id	new version	content added
ATC	v2026-02-01	+99 concepts
CVX	v2025-11-20	+ 2 concepts
VANDF/VA Class	v2026-01-05	+1,336 concepts +3k mappings to RxNorm
NDC, SPL	v2026-02-22	+64k concepts
RxNorm	v2026-01-05	+2k concepts
RxNorm Extension	v2026-01-14	



Drug Vocabularies



ATC name changes

ATC code	old concept_name	new concept_name
L04AA06	mycophenolic acid; systemic	mycophenolic acid; oral, parenteral

ATC relationship improvement

-10k imprecise 'ATC-RxNorm sec up' relationships

VANDF/VA Class mapping coverage expanded

+ 2k new mappings to RxNorm



RxNorm/RxNorm Extension deduplication

Deduplication

A large yellow rectangular area containing the word "Deduplication" in white text. In the bottom-right corner of this area is a white rounded rectangle containing the POWTOON logo, which consists of a stylized purple and blue icon and the text "CREATED USING POWTOON".



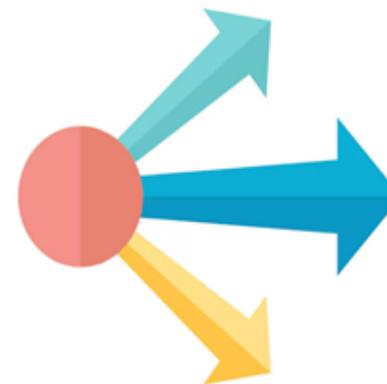
Procedure Vocabularies



CPT4 v2025AB

HCPCS v2026-01

+236 new concepts



CPT4 concept name fixes:

concept_code	old concept_name	new concept_name
80169	Everolimus	Measurement of everolimus

HCPCS-SNOMED hierarchy:

+120 'Is a' relationships



Other vocabularies

Mapping propagation and curation:

+2k curated mappings

AMIS, AMT, BDPM, CDISC, CTD, CDISC, DA_France, DPD, GGR, GRR, Gemscript, HemOnc, ICD10PCS, JMDC, KDC, LPD_Australia, NCCD, OMOP Invest Drugs, UK Biobank, dm+d

OMOP Extension:

- deduplication of stages/scales (n=10)
- new visual acuity concepts (n=3)



Pre-release QC: Dima



Pre-release QC: Checks applied

- overall comparison of counts in tables in previous and current release
- missing mappings:
Conditions (ICD10s), procedures: CPT4, HCPCS, ICD9Proc
 - fully missing, OR one of the target concepts is missing
- Procedures possibly containing drugs without mapping to a drug
- Changes of mappings of our drugs
- overall mapping differences assessed: LLMs chooses if old or new mapping is better
- overall impact on the cohorts due to vocabulary changes: ancestry, mapping, domain changes
- Existing ICD10CM to SNOMED LLM classification if equal, uphill, downhill, **incorrect** - work in progress, a random batches of concepts were reviewed
- differences in ATC - RxNorm hierarchy



Pre-release QC: What is found

1) A few mappings that needs improvements

A	B	C	E	F	G	H
concept_id_1	concept_name_1	concept_id_2	concept_name_2	action		
36802855	Introduction of Afamitresgene Autoleucl Immunotherapy into Peripheral Vein, Percutaneous Approach, Ne	1734945	afamitresgene autoleucl	make non-standard, add proposed mapping		
36802866	Introduction of Afamitresgene Autoleucl Immunotherapy into Central Vein, Percutaneous Approach, Ne	1734945	afamitresgene autoleucl	make non-standard, add proposed mapping		
1568323	Epileptic seizures related to external causes, not intractable	4197485	Epileptic seizure	replace existing mapping		
35207797	Intracardiac thrombosis, not elsewhere classified	42538532	Thrombus of cardiac chamber	replace existing mapping		

1) This release improves existing mappings:

LLM assessed mapping changes: out of 49 changed mapping in this release, LLM decided which mapping better:

new - 44 rows

NA - 2

old - 3

After manual review, **all mapping changes were considered good**

1) ATC - RxNorm hierarchy changes (due to ATC proper update), sporadic improvements as well as inaccuracies, for example, hydroxyzine hydrochloride 25 MG Oral Tablet lost Is a to R06A | *ANTI-HISTAMINES FOR SYSTEMIC USE*

2) No significant impact on existing cohort definitions



Community contributions



Community Contributions: vocabularies

- **New vocabulary: Human Phenotype Ontology (HPO)**
 - +19,393 new concepts (Condition, Observation, Measurement, Meas Value domains)
 - +4,882 mappings
- **Vocabulary refresh: Columbia International eHealth Laboratory (CIEL)**
 - +7,468 new concepts
 - +12k new mappings and 4k mappings improved
- **Vocabulary refresh: Korean Electronic Data Interchange code system (EDI)**
 - +4.7k concepts
 - + 8.6k new mappings



Community Contributions: new concepts

Contribution type	Contribution content
New concept Cindy Cai	3 new measurements for visual acuity (ex. BRVA OS chart agnostic, letters read, distance or near, with or without pinhole)
New concept Melanie Philofsky	New type: Obituary
New concept Fred Bucek	Measurements from wearable devices (ex. Walking with double support, %) Submitted to LOINC and accepted



Many thanks to all the contributors!



Community Contributions: mappings

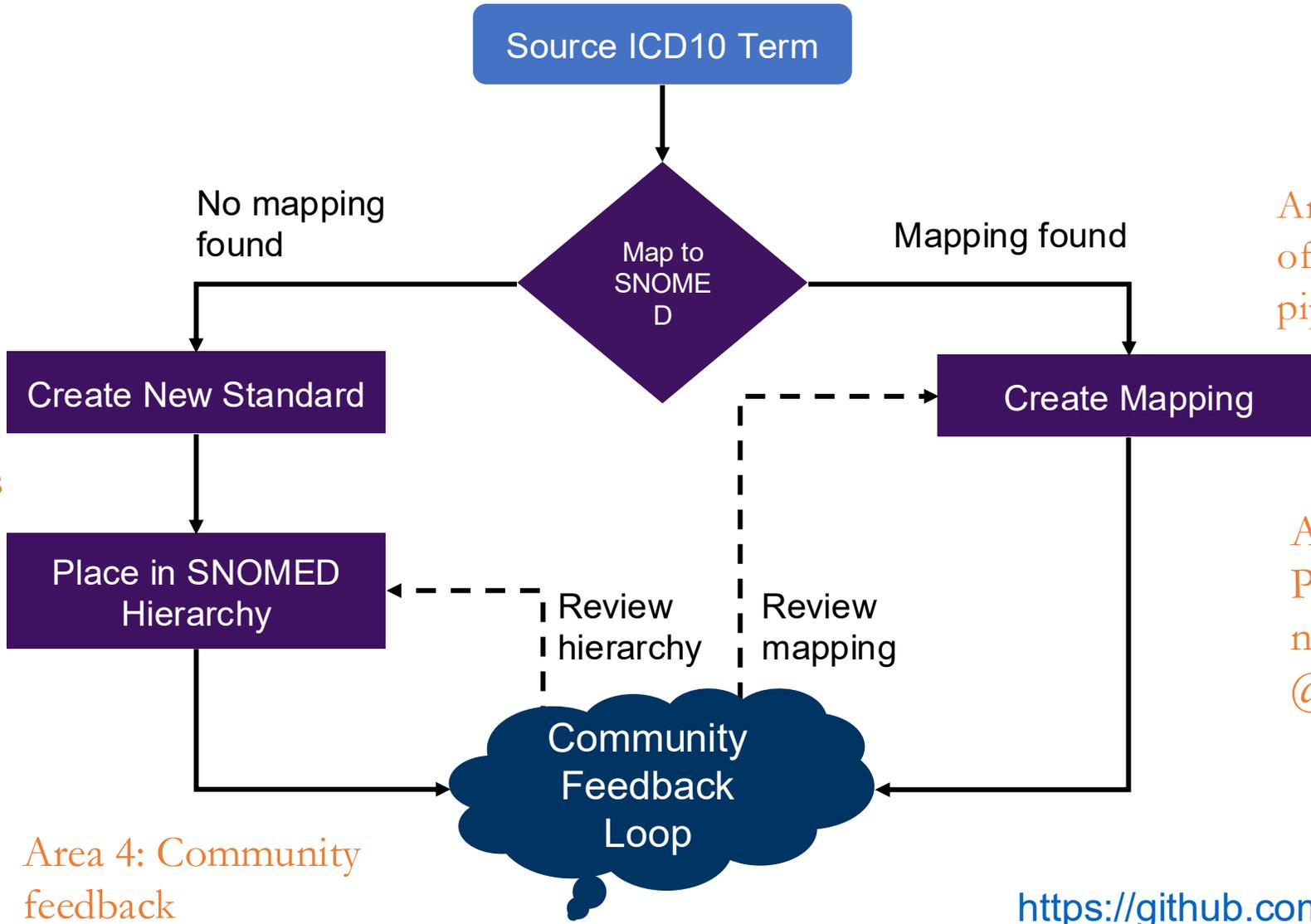
Contribution	Old mapping	New mapping
New mapping (3 ICD10CM) Dima Dymshyts	ICD10CM F10.22 Alcohol dependence with intoxication => SNOMED 435243 Alcohol dependence	F10.22 Alcohol dependence with intoxication => 435243 Alcohol dependence + 607208 Acute alcohol intoxication
Mapping change (ICD9Proc) Jin Qian	ICD9Proc 92.24 Teleradiotherapy using photons => SNOMED 4024005 External beam radiation therapy using protons	92.24 Teleradiotherapy using photons => 607996 External beam radiation therapy using photons
Mapping change (ICD family) Ed Burn	ICD10CM Z33 Pregnant state => 4307820 Unplanned pregnancy ICD10CN Z33 Pregnant state, incidental => 4307820 Unplanned pregnancy	ICD10CM Z33 Pregnant state => 4307820 Pregnant state ICD10CN Z33 Pregnant state, incidental => 4307820 Unplanned pregnancy



Upcoming work



2026 Vision: Vocabulary construction



Area 3: Hierarchies

Area 1: generalizability of condition mapping pipeline

Area 2: Procedure/Measurement mapping challenge @EU Symposium

Area 4: Community feedback



2026 Vision: Community feedback loop

Enabling seamless community contribution

- Complex contributions: development environment on the Vocabulary server
- Simple contributions: validation template



Validation Templates



[Validation] Template 1 - Non-Standard Concepts ☆ 📁 ☁



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A18 ▾ | *fx*

	A	B	C	D	E	F
1	concept_name	concept_code	vocabulary_id	domain_id	concept_class_id	valid_start_date
2	Obituary	TEST090909	OMOP Extension	Type	Type concept	2025-11-11
3						



Validation Templates



[Validation] Template 1 - Non-Standard Concepts



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A18



	A	B	C	D	E	F
1	concept_name	concept_code	vocabulary_id	domain_id	concept_class_id	valid_start_date
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[Validation] Template 1 - Non-Standard Concepts



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Defaul...



Validate Template

Submit Final Version

View Audit Log

A18



	A	B	C	F
1	concept_name	concept_code	vocabulary_id	start_date
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Validation Templates



[Validation] Template 1 - Non-Standard Concepts



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	A	B	C	D	E
1	Validation Summary				
2	Total Rows Validated	1			
3	Errors Found	2			
4	Warnings Found	0			
5	Status				
6					
7	Row	Level	Field	Message	Rule
8	2	ERROR	domain_id	Domain ID does not exist: Type	DOMAIN_EXISTS
9	2	ERROR	concept_class_id	Concept Class ID does not exist: Type concept	CONCEPT_CLASS_EXISTS
10					