



ATLAS History and Future

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OHDSI Community Call

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Topics

- Evolution of Atlas since 2015: 1.0 to 2.14
- Atlas 3.0 Development Plans
- Atlas 4.0 Redesign Efforts with Data4Life
- Survey 1 of 5



Atlas History: Previous Tools

- Hermes: Vocabulary Exploration Tool
- Achilles: Database Characterization
- Calypso/Circe: Define Cohorts
- Heracles: Cohort Characterization tool



Atlas 1.x Review



Atlas 1.x Release Timeline

1.0
04/2016

Data Sources reports
Vocabulary search
Concept Set Builder
Cohort Definition Editor
Heracles Reports
Patient Profiles
View Configuration
Feedback Link

1.1
06/2016

Cohort Inclusion Rules
Inclusion Rule Report

1.2
08/2016

CohortMethod Designer
Color-coding Concepts
Concept Set Copy

1.3
09/2016

Incidence Rates
Unsaved Change Icon
Cohort End Dates

1.4
01/2017

Cohort End Dates
Cohort Nested Criteria
Export IR Analysis Data

2.0
02/2017



Atlas 1.0 – Home

ATLAS

Home

Data Sources

Vocabulary

Concept Sets

Cohorts

Profiles

Jobs

Configuration

Feedback

Home

Welcome to ATLAS

ATLAS is an open source application developed as a part of [OHDSI](#) intended to provide a unified interface to patient level data and analytics.
 The ATLAS user guide can be found [here](#).

Getting Started

Define a New Cohort

Begin performing research by defining the group of people you intend to study

Search the Vocabulary

Search the different ontologies used to describe patient level data around the world

Release Notes

ATLAS Version 1.1.0 Current Release Notes

- Fix: Cohort Definition UI bugfixes
- Fix: Data Sources report fixes (Measurement reports and trellis graph rendering NaNs)
- Feature: Cohort Definitions (CIRCE) UI and Backend Changes: Inclusion rules and Inclusion Rule Impact Reports
- Feature: Patient Profiles

WebAPI Version 1.2.0 Current Release Notes

- Feature: Cohort generation update to support inclusion rules
- Feature: Inclusion rule impact analysis

[Prior Atlas releases](#)
[Prior WebAPI releases](#)



Atlas 1.0 – Vocabulary Search

ATLAS Q Vocabulary

Home Data Sources Vocabulary Concept Sets Cohorts Profiles Jobs Configuration Feedback

Search Advanced Results Import

type your search here

Recent Searches (number of results)

- bleed (2700)
- diabetes (5337)

Recent Concepts

- Bleeding

Q Vocabulary

Search Advanced Results Import

Search Results for

Vocabulary

SNOMED (1591)
Nebraska Lexicon (899)
ICD10CM (647)
Read (561)
KCD7 (244)
ICD10GM (189)
CIE10 (147)

Class

Clinical Finding (1777)
Read (561)
ICD10 code (457)
Procedure (291)
7-char billing code (260)

Show 15 entries

Filter:

Showing 1 to 15 of 5,337 entries

Previous 1 2 3 4 5 ... 356 Next

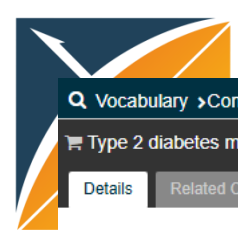
	Id	Code	Name	Class	RC	DRC	Domain	Vocabulary
	201820	73211009	Diabetes mellitus	Clinical Finding	645,689	273,225,330	Condition	SNOMED
	201826	44054006	Type 2 diabetes mellitus	Clinical Finding	65,711,896	235,562,298	Condition	SNOMED
	21000594	00000594	Type 2 Diabetes Mellitus	Indication	0	229,633,043	Drug	Indication
	21600712	A10	DRUGS USED IN DIABETES	ATC 2nd	0	223,377,407	Drug	ATC

UI Features:

Search and Results across different tabs!

Saved previous searches with result counts.

Incorporated RC and DRC from Achilles!



Atlas 1.0 – Concept Exploration

Vocabulary > Concept

Type 2 diabetes mellitus

DetailsRelated ConceptsHierarchyRecord Counts

PropertyValue

Concept NameType 2 diabetes mellitus

Domain IdType 2 diabetes mellitus

Concept Class IdDetailsRelated ConceptsHierarchyRecord Counts

Vocabulary Id▼ VocabularyShow 15 entriesFilter:

Concept IdNebraska Lexicon (22)Showing 1 to 15 of 172 entriesPrevious12345...12Next

Concept CodeICD10CM (16)Indication (10)

Invalid ReasonMedDRA (10)ICD10CN (10)ICD10GM (4)

Standard ConceptICD10GM (4)

Type 2 diabetes mellitus

DetailsRelated ConceptsHierarchyRecord Counts

Parents

	Id	Code	Name	Class	RC	DRC	Domain	Vocabulary
	201820	73211009	Diabetes mellitus	Clinical Finding	645,689	273,225,330	Condition	SNOMED

44054006 Type 2 diabetes mellitus

Children

	Id	Code	Name	Class	RC	DRC	Domain	Vocabulary
	4193704	313436004	Type 2 diabetes mellitus without complication	Clinical Finding	168,729,916	168,729,916	Condition	SNOMED
	4099651	190389009	Type 2 diabetes mellitus with ulcer	Clinical Finding	991,622	991,622	Condition	SNOMED
	4063043	199230006	Pre-existing type 2 diabetes mellitus	Clinical Finding	1,626	128,864	Condition	SNOMED

UI Features:

Concept Details with Vocabulary, Domain and Invalid Reason.

Related Concepts showing concept relationships.

Hierarchy showing immediate parent and children.

Add concepts to concept set via shopping cart!

Record Counts showing a tabular view of records counts by data source.



Atlas 1.0 – Concept Set Editor

Concept Set

SaveClose

Concept Set Expression

Included Concepts 0

Included Source Codes

Export

Show 25 entries

Search:

Showing 0 to 0 of 0 entries

PreviousNext

	Concept Id	Concept Code	Concept Name	Domain	Standard Concept Caption	Exclude	Descendants	Mapped
No data available in table								


■ Classification ■ Non-Standard ■ Standard

UI Features:

- Expression Editor
- Included Concepts view
- Included Source Codes view
- Import/Export functions
- Can only edit concept sets for either a cohort definition or repository concept set at a time!
- Concepts added by navigating to search and clicking shopping cart



Atlas 1.0 – Cohort Editor

 Cohort

GI Bleed

SaveCloseCopy

DefinitionConcept SetsGenerationReportingExploreExport

Description:

PrimaryAdditionalInclusionAll

Primary Criteria

People having any of the following: Add Primary Event Filters...

a condition occurrence of Bleeding Add Add Filter... Delete Filter

with continuous observation of at least 0 days before and 0 days after index

Limit primary events to: earliest event per person.

Limit final cohort results to: all events per person.

Additional Criteria

Add Additional Filters

Inclusion Rules

New Inclusion Rule

Please select an inclusion rule to edit.

UI Features:

- Primary Criteria (Cohort Entry Events)
- Inclusion Rules
- Can only edit concept sets for either a cohort definition or repository concept set at the same time!
- Generate Heracles reports from the Reporting tab
- View Profiles from Explore tab



Atlas 1.0 – Patient Profiles

Patient Profiles Provided a view to patient level data given a person_id.

ATLAS

Home

Data Sources

Vocabulary

Concept Sets

Cohorts

Incidence Rates

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Estimation

Jobs

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Feedback

Profiles

SAMPLE

33003282835

MALE

2039 events

Age 46 at index

Pharmacy visit (294)

Diabetic - poor control (91)

Diabetes mellitus without complication (91)

Essential hypertension (73)

Type 2 diabetes mellitus without complication (64)

insulin lispro 100 UNT/ML Injectable Solution [Humalog] (60)

quinapril 20 MG Oral Tablet (45)

Pure hypercholesterolemia (43)

Collection of venous blood by venipuncture (33)

atorvastatin 20 MG Oral Tablet (29)

insulin aspart, human 100 UNT/ML Injectable Solution [NovoLog] (26)

metformin (25)

3 ML insulin lispro 25 UNT/ML / insulin lispro protamine, human 75 UNT/ML Pen Injector [Humalog Mix] (23)

Office or other outpatient visit for the evaluation and management of an established patient, which requires at least 2 of these 3 key components: A detailed history; A detailed examination; Medical decision making of moderate complexity. Counseling and/o (21)

Domain

condition (510)

conditionera (360)

drug (340)

drugera (188)

visit (21)

Column visibility

Copy

CSV

Show 15 entries

Filter:

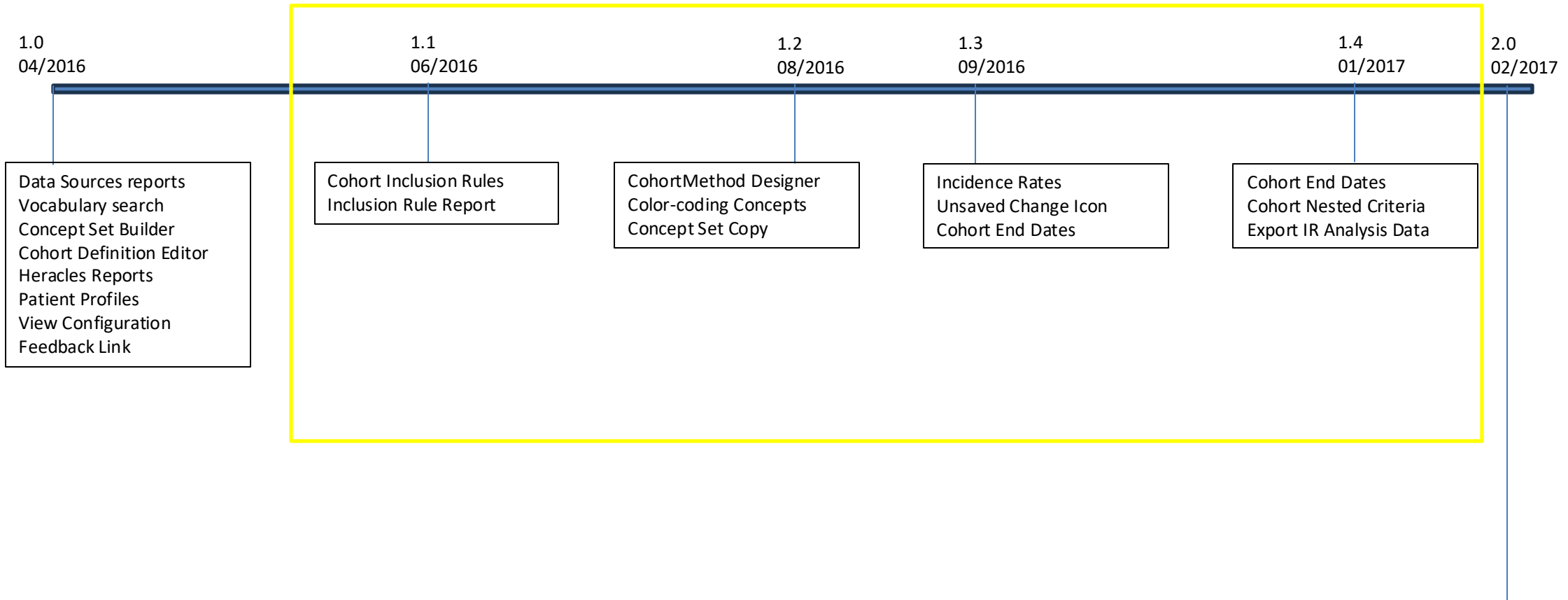
Showing 1 to 15 of 2,039 entries

Previous 1 2 3 4 5 ... 136 Next

Domain	Concept Id	Concept Name	Start Day	End Day
drugera	1502905	insulin glargine	0	25
drugera	1550023	insulin lispro	0	29
visit	581458	Pharmacy visit	0	0

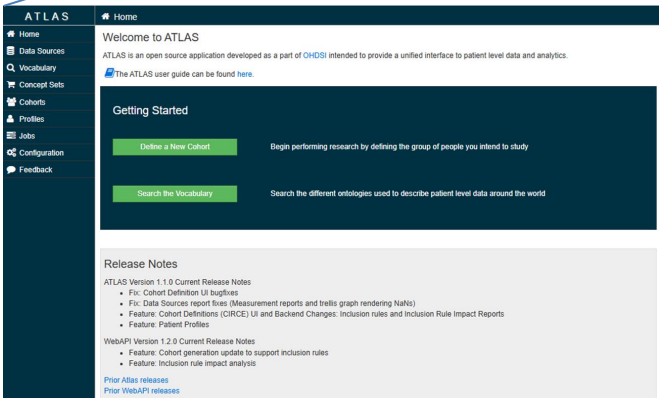


Atlas 1.x Release Timeline





Atlas 1.4 – Home



ATLAS

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Getting Started

Define a New Cohort

Search the Vocabulary

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Search the different ontologies used to describe patient level data around the world

Release Notes

[ATLAS Version 1.4.0 Release Notes](#)

[WebAPI Version 1.5.0 Release Notes](#)

This latest release contains **12** feature enhancements and issue resolutions:

Cohort Definition Inclusion Rule UI Enhancements

Export IR Analysis Results to CSV

Not handling empty inclusion rules

Release 1.4.0

Apply proper HTTP Verb in ajax requests

Bug in "Mapped" Select All

Limit cohort events is overwriting limit qualifying events setting in cohort definition

Empty initial inclusion criteria result in nonfunctional SQL code

Bring back Dataset profiling in Atlas public instance

Mapped checkbox in heading works for descendants checkboxes in rows

Condition Source Concept is not using value in cohort definition



Atlas 1.4 – Cohort Editor

Cohort definition: A cohort is defined as the set of persons satisfying one or more inclusion criteria for a duration of time. One person may qualify for one cohort multiple times during non-overlapping time intervals. Cohorts are constructed in ATLAS by specifying cohort entry criteria and cohort exit criteria. Cohort entry criteria involve selecting one or more initial events, which determine the start date for cohort entry, and optionally specifying additional inclusion criteria which filter to the qualifying events. Cohort exit criteria are applied to each cohort entry record to determine the end date when the person's episode no longer qualifies for the cohort.

All Cohort Entry Criteria Cohort Exit Criteria

Initial event cohort: Events are recorded time-stamped observations for the persons, such as drug exposures, conditions, procedures, measurements and visits. All events have a start date and end date, though some events may have a start date and end date with the same value (such as procedures or measurements). The event index date is set to be equal to the event start date.

People having any of the following:

Add Initial Event...

a condition occurrence of

Bleeding

Add

Add criteria attribute...

Delete Criteria

with continuous observation of at least

0

 days before and

0

 days after event index date

Limit initial events to:

earliest event

 per person.

Add initial event inclusion criteria

Additional qualifying inclusion criteria: The qualifying cohort will be defined as all persons who have an initial event, satisfy the initial event inclusion criteria, and fulfill all additional qualifying inclusion criteria. Each qualifying inclusion criteria will be evaluated to determine the impact of the criteria on the attrition of persons from the initial cohort.

New qualifying inclusion criteria

Please select a qualifying inclusion criteria to edit.

Limit qualifying cohort to:

all events

 per person.

Cohort Exit Criteria

Cohort exit criteria: For all persons who entered the cohort, there must be a specification of when each person exits the cohort. A person must exit the cohort at the end of the observation period spanning the qualifying initial event start date, but additional cohort exit criteria may be also considered.

Add a cohort exit criteria:

- [Based on a fixed time period relative to initial event start or end date](#)
- [Based on the end of an era of persistent exposure to any drug within a defined concept set](#)

New Features:

- Added documentation info-boxes
- Changed 'primary events' to 'initial events'
- Added cohort exit criteria
 - Fixed Time
 - Continuous drug exposure



Atlas 1.4 – Incidence Rates

Incidence Rate Analysis

Bleed among T2DM

SaveCloseCopyDeleteGenerate...

DefinitionConcept SetsGenerationUtilities

Study Cohorts

Target Cohorts

Outcome Cohorts

#6: Type 2 Diabetes#1: GI Bleed

Add Target CohortAdd Outcome Cohort

Time At Risk

Time at risk defines the time window relative to the cohort start or end date with an offset to consider the person 'at risk' of the outcome.

Time at risk starts with

start date

plus

0

days

Time at risk ends with

end date

plus

0

days

No study window defined.

Add Study Window

Stratify Criteria:

You can provide optional stratification criteria to the analysis that will divide the population into unique groups based on their satisfied criteria.

New stratify criteria

Please select a qualifying inclusion criteria to edit.

1. Age <65

2. Male

Export Analysis to CSV

Remove

Source	Name	Persons	Cases	Proportion [+/-] per 1k persons	Time At Risk (years)	Rate [+/-] per 1k years	Started	Duration
SAMPLE	Sample	87,300	15,425	176.69	221,392	69.67	2025-05-21, 2027	00:00:09

Showing target cohort: Type 2 Diabetes and outcome cohort: GI Bleed

	Persons	Cases	Proportion [+/-] per 1k persons	Time At Risk (years)	Rate [+/-] per 1k years
Summary Statistics:	87,300	15,425	176.69	221,392	69.67
Stratify Rule	N	Cases	Proportion [+/-] per 1k persons	Time At Risk (years)	Rate [+/-] per 1k years
1. Age <65	35,772	4,809	134.43	85,927	55.97
2. Male	43,946	7,189	163.59	112,413	63.95

43.0747.0851.1055.1159.1263.1367.1471.1075.1779.18

Produce Incidence Rates for all combinations of Targets and Outcomes, for a specified Time at Risk.

View Incidence Rates across a stratified population.



Atlas 1.4 – CohortMethod Analysis Designer

Population Level Effect Estimation

Specification Results Utilities

Choose your target cohort:

Choose your comparator cohort:

Choose your outcome cohort:

Specify the statistical model used to estimate the risk of outcome between target and comparator cohorts:

Define the time-at-risk window start, relative to target/comparator cohort entry:

days from cohort start date

Define the time-at-risk window end:

days from

Minimum washout period applied to target and comparator cohorts:

Minimum required days at risk, applied to target and comparator cohorts:

Remove patients who enter both cohorts?

Remove patients who have observed the outcome prior to cohort entry?

Use propensity score adjustment as a confounding adjustment strategy for baseline covariates?

Which types of baseline covariates do you want to include in the propensity score model?

- Demographics
 - ☐ Gender
 - ☐ Age group (5-year bands)
 - ☐ Index year
 - ☐ Index month
 - ☐ Race
 - ☐ Ethnicity
- Conditions
 - ☐ In prior 30d
 - ☐ In prior 365d
 - ☐ In prior 180d within inpatient setting
 - ☐ All time prior
 - ☐ Overlapping index date
- Condition aggregation
 - ☐ SNOMED
 - ☐ MedDRA
- Drugs
 - ☐ In prior 30d
 - ☐ In prior 365d
 - ☐ All time prior
 - ☐ Overlapping index date
- Drug aggregation
 - ☐ Clinical Drug
 - ☐ Ingredient
 - ☐ ATC Class
- Procedures
 - ☐ In prior 30d
 - ☐ In prior 365d
- Measurement
 - ☐ Existence in prior 30d
 - ☐ Existence in prior 365d
 - ☐ Count in prior 365d
 - ☐ Has latest prior numeric value below normal range
 - ☐ Has latest prior numeric value above normal range
- Risk scores
 - ☐ Charlson
 - ☐ CHADS2

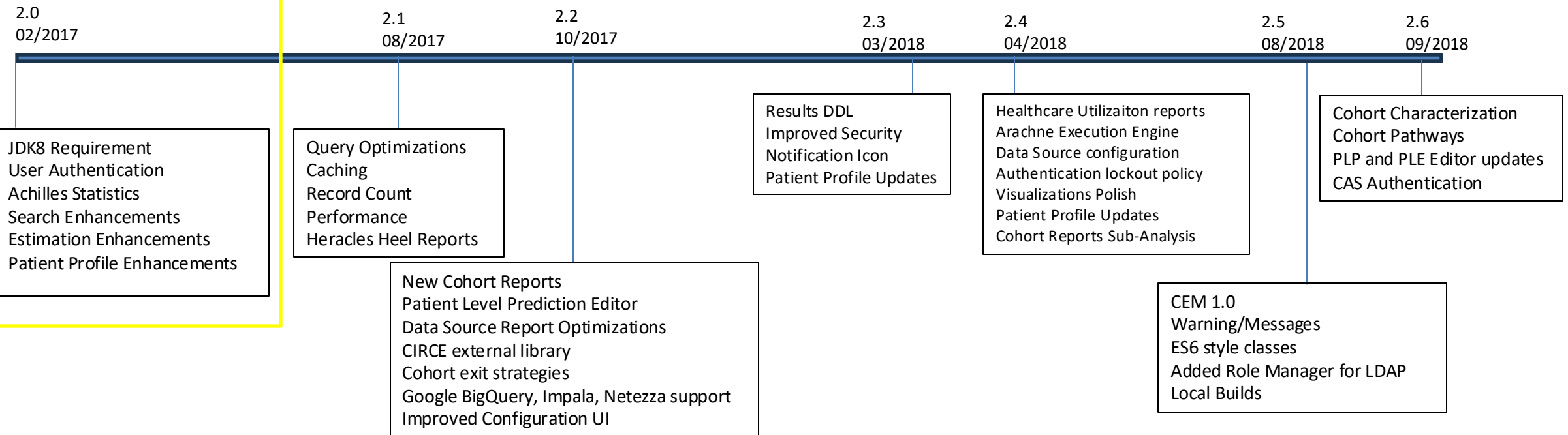
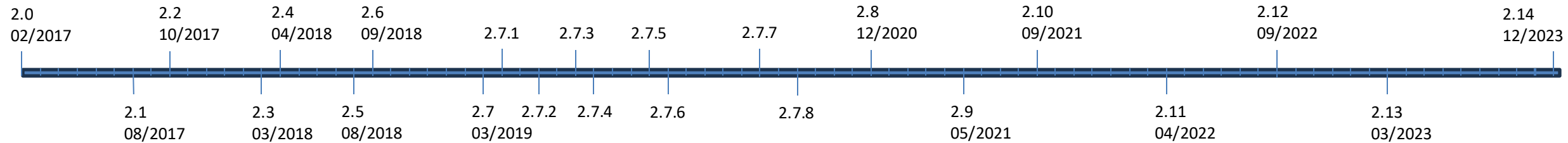
Create CohortMethod (Population Level Estimation) analysis R packages.



Atlas 2.x Review

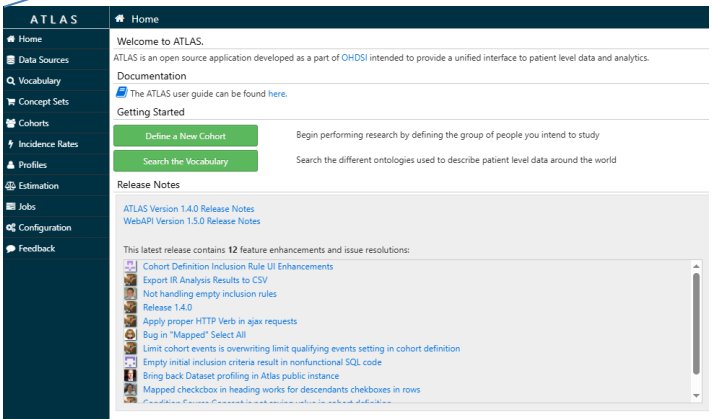


Atlas 2.x Release Timeline





Atlas 2.0 – Home



ATLAS

Home

Data Sources

Vocabulary

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Cohorts

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Jobs

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Sign In

Home

Welcome to ATLAS.

ATLAS is an open source application developed as a part of [OHDSI](#) intended to provide a unified interface to patient level data and analytics.

Documentation

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Getting Started

Define a New Cohort

Search the Vocabulary

Release Notes

ATLAS Version 2.0.0 Release Notes

WebAPI Version 2.0.0 Release Notes

This latest release contains 30 feature enhancements and issue resolutions:

Release 2.0.0

Handle missing evidence

Inconsistent concept name link/text background colors/color key info for classification concepts

Vocabulary search results view "search results for" display field sometimes missing search text

Concept set optimization hangs

Initial startup of app hangs on splash with an error 'No component name specified'.

Going to Concept Sets from Home results in two requests to WebAPI/conceptset

initialization failure does not display error on interface

Configure Vocabulary does not switch source that is queried.

Concept set comparison

Sign In

Begin

Logged in as 'NA\cknoll1' (exp: 5/26/2025, 2:32:56 PM)

Search

Sign Out

Close



Atlas 2.0 – Search Update

ATLAS

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Sign In

Vocabulary

Search

Import

diabetes

Search

Advanced Options

Column visibility

Copy

CSV

Show 15 entries

Filter:

Showing 1 to 15 of 5,337 entries

Previous 1 2 3 4 5 ... 356 Next

	Id	Code	Name	Class	RC	DRC	Domain
	201820	73211009	Diabetes mellitus	Clinical Finding	645,689	273,225,330	Condition
	201826	44054006	Type 2 diabetes mellitus	Clinical Finding	65,711,896	235,562,298	Condition
	21000594	00000594	Type 2 Diabetes Mellitus	Indication	0	229,633,043	Drug
	21600712	A10	DRUGS USED IN DIABETES	ATC 2nd	0	223,377,407	Drug
			Diabetes	Clinical			

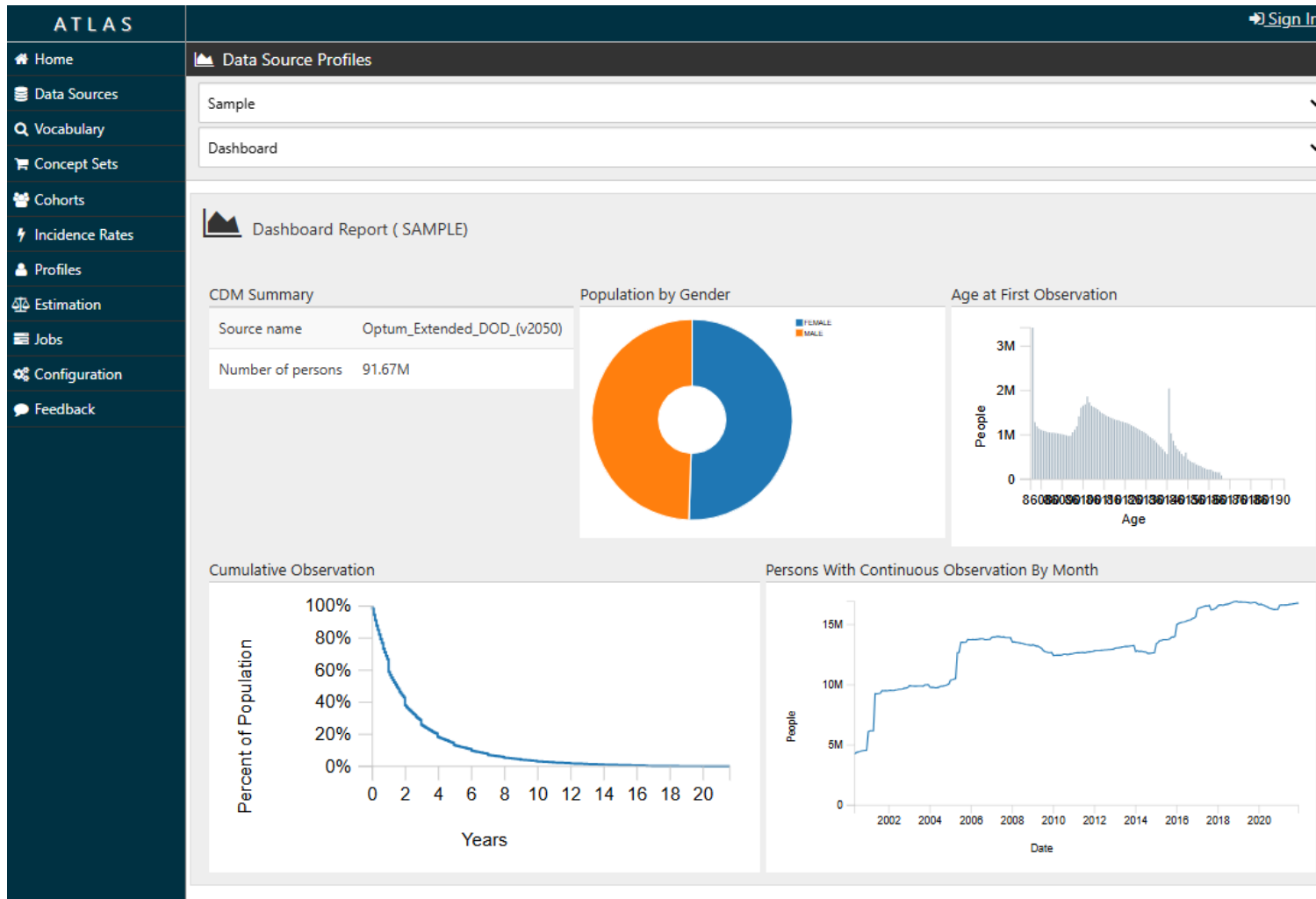
Searching became more streamlined with the search results appearing directly beneath the search box, and it no longer saves your prior searches.

You can also create concept sets directly from the search screen via the Import tab.

- You can import by concept Id, source codes or JSON.



Atlas 2.0 – Data Sources Polish



Data Sources got a UI cleanup by using Bootstrap UI elements, and some visualization updates.

However, moving from reading JSON files from Achilles to REST endpoints and direct SQL did incur a performance hit which would be later addressed by caching.



Atlas 2.0 – Read Only Views

ATLAS

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Sign In

Cohort

Type 2 Diabetes

Save

Close

Copy

Delete

Definition

Concept Sets

Generation

Reporting

Explore

Export

Cohort definition: A cohort is defined as the set of persons satisfying one or more inclusion criteria for a duration of time. One person may qualify for one cohort multiple times during non-overlapping time intervals. Cohorts are constructed in ATLAS by specifying cohort entry criteria and cohort exit criteria. Cohort entry criteria involve selecting one or more initial events, which determine the start date for cohort entry, and optionally specifying additional inclusion criteria which filter to the qualifying events. Cohort exit criteria are applied to each cohort entry record to determine the end date when the person's episode no longer qualifies for the cohort.

Initial Event Cohort

People having any of the following:

- a condition occurrence of Type 2 Diabetes¹

with continuous observation of at least 0 days prior and 0 days after event index date, and limit initial events to: **earliest event per person.**

Limit qualifying cohort to: **earliest event per person.**

No end date strategy selected. By default, the cohort end date will be the end of the observation period that contains the index event.

With the introduction of security, assets can now be granted read or write permissions. For those that only have read permission, a read-only view was created for each of our assets (Concept sets, cohort definitions, etc)



Atlas 2.0 – Authorship on Asset Lists

Cohorts

New Cohort

Column visibility

Copy

CSV

Show 15 entries

Filter:

Showing 1 to 2 of 2 entries

Previous 1 Next

Id	Name	Created	Updated	Author
8	Type 2 Diabetes	5/22/2025	5/22/2025	NA\cknoll1
9	GI Bleed	5/22/2025	5/22/2025	NA\cknoll1

Last Modified

This Week (2)

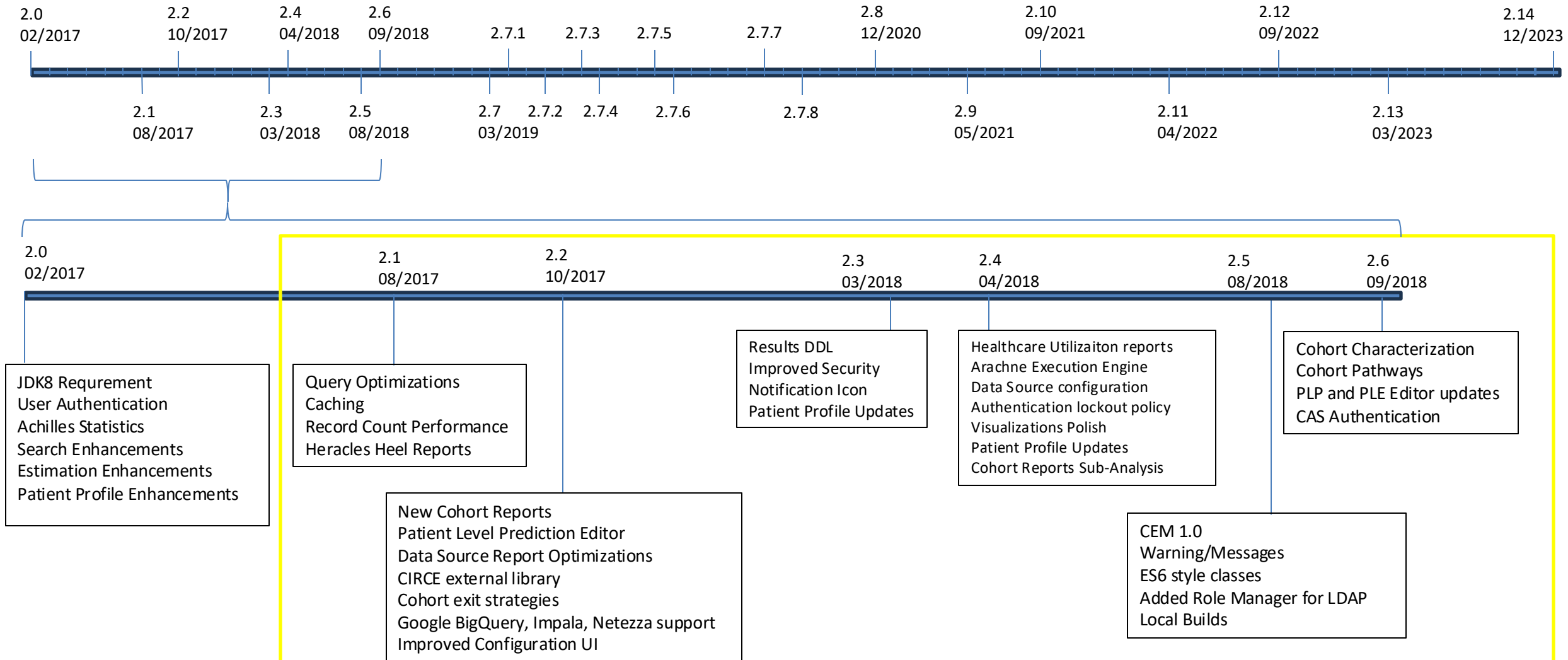
Author

NA\cknoll1 (2)

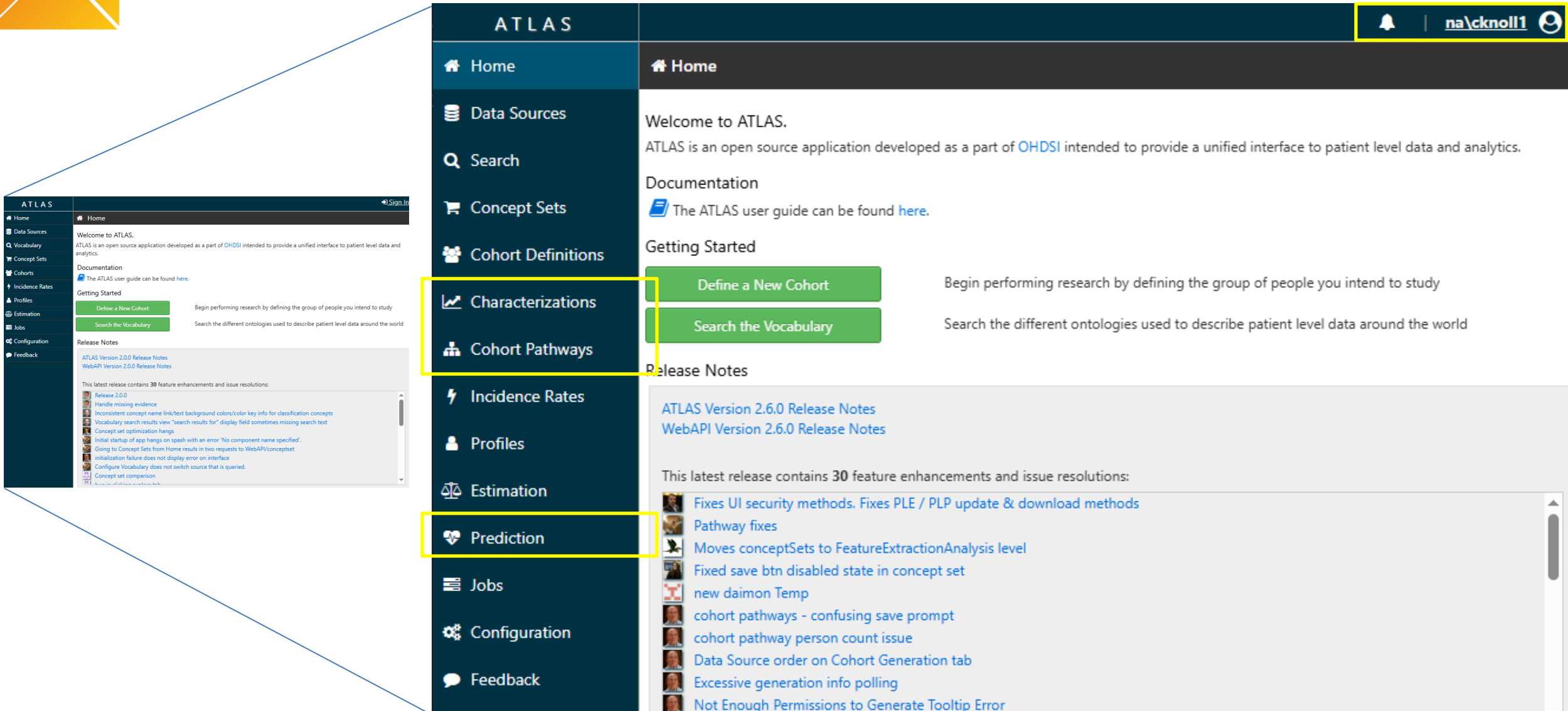
In addition to read and write permissions, assets now have authorship, so asset list views (Cohort Definition list, seen here) were modified to include the author and allow filtering via the Author facet.



Atlas 2.x Release Timeline



Atlas 2.6 Home



The image displays the Atlas 2.6 Home interface, which is a web application for patient-level data and analytics. The interface is divided into a left sidebar, a top header, and a main content area. The sidebar contains navigation links for Home, Data Sources, Search, Concept Sets, Cohort Definitions, Characterizations, Cohort Pathways, Incidence Rates, Profiles, Estimation, Prediction, Jobs, Configuration, and Feedback. The top header shows the ATLAS logo, a home icon, and a user profile. The main content area displays a welcome message, documentation links, and a 'Getting Started' section with buttons for 'Define a New Cohort' and 'Search the Vocabulary'. A 'Release Notes' section is also present, detailing the latest release (2.6.0) and its features.

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[Define a New Cohort](#) Begin performing research by defining the group of people you intend to study

[Search the Vocabulary](#) Search the different ontologies used to describe patient level data around the world

Release Notes

[ATLAS Version 2.6.0 Release Notes](#)
[WebAPI Version 2.6.0 Release Notes](#)

This latest release contains **30** feature enhancements and issue resolutions:

- Fixes UI security methods. Fixes PLE / PLP update & download methods
- Pathway fixes
- Moves conceptSets to FeatureExtractionAnalysis level
- Fixed save btn disabled state in concept set
- new daimon Temp
- cohort pathways - confusing save prompt
- cohort pathway person count issue
- Data Source order on Cohort Generation tab
- Excessive generation info polling
- Not Enough Permissions to Generate Tooltip Error



Atlas 2.6 – Concept Set Editor

New Features:

- Optimize: remove redundant concepts from your concept set expression
- Explore Evidence: Using CEM, identify concepts from the included concepts that have references in literature and product labels
- Compare Concept Sets: Allows the selection of two concept sets to compare, which will show which concepts are in one, the other, or both.

New Concept Set

Bleeding

Concept Set Expression Included Concepts 1432 Included Source Codes Explore Evidence Export Compare

Explore Evidence: Evidence comes from the Common Evidence Model (CEM). The evidence base is comprised of evidence found in published literature, product labels and spontaneous reports. Use the evidence sources below to find out what evidence has been associated to the concepts included in this concept set.

Additional Information: [Obtaining Negative Controls from ATLAS](#) | [High level information on negative controls processing](#) | [Additional resources](#)

Evidence Sources

New Concept Set

Bleeding

Concept Set Expression Included Concepts 1432 Included Source Codes Explore Evidence Export Compare

Concept Set Comparison: Use this utility to compare the contents of two concept sets to see which concepts they may share.

Concept Set 1:

Bleeding

Concept Set 2:



Atlas 2.6 – Cohort Editor

Cohort #9

GI Bleed

Definition ? Concept Sets Generation Reporting Export Messages 1

enter a cohort definition description here

Cohort Entry Events ?

Events having any of the following criteria:

+ Add Initial Event

a condition occurrence of Bleeding + Add attribute... Delete Criteria

with continuous observation of at least 0 days before and 0 days after event index date

Limit initial events to: earliest event per person.

Restrict initial events

Inclusion Criteria ?

New inclusion criteria

Limit qualifying events to: all events per person.

Cohort Exit ?

Event Persistence:

Event will persist until: end of continuous observation

Censoring Events:

Exit Cohort based on the following criteria:

+ Add Censoring Event

No censoring events selected.

Cohort Eras

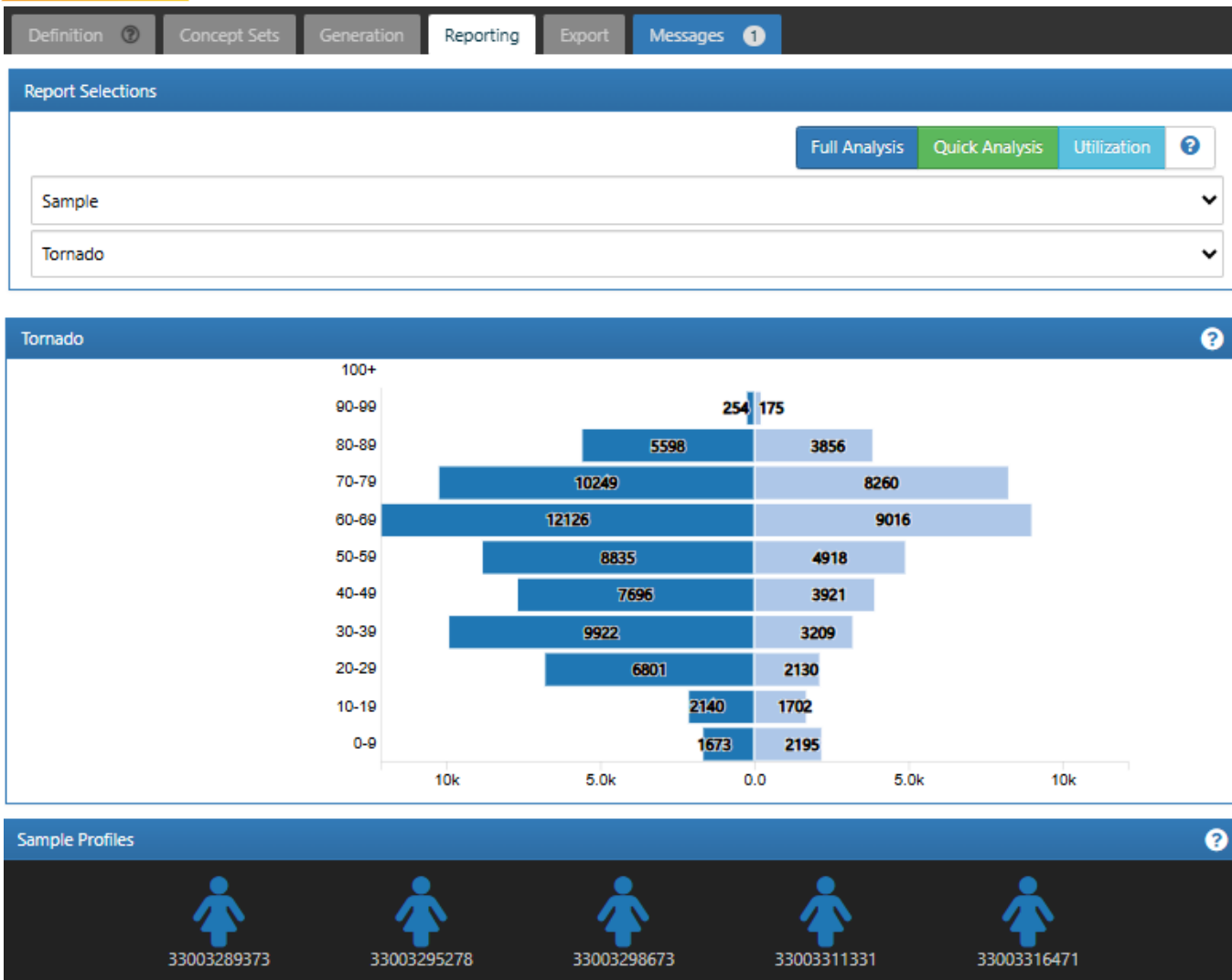
- Specify era collapse gap size: 0 days
- [add trimming options...](#)

New Features:

- Formalized Cohort Definition terminology:
 - Cohort Entry Events
 - Inclusion Criteria
 - Cohort Exit
- Added detailed documentation via the (?) popup dialogs
- Added Messages tab to present info/warnings/errors



Atlas 2.6 – Cohort Reporting

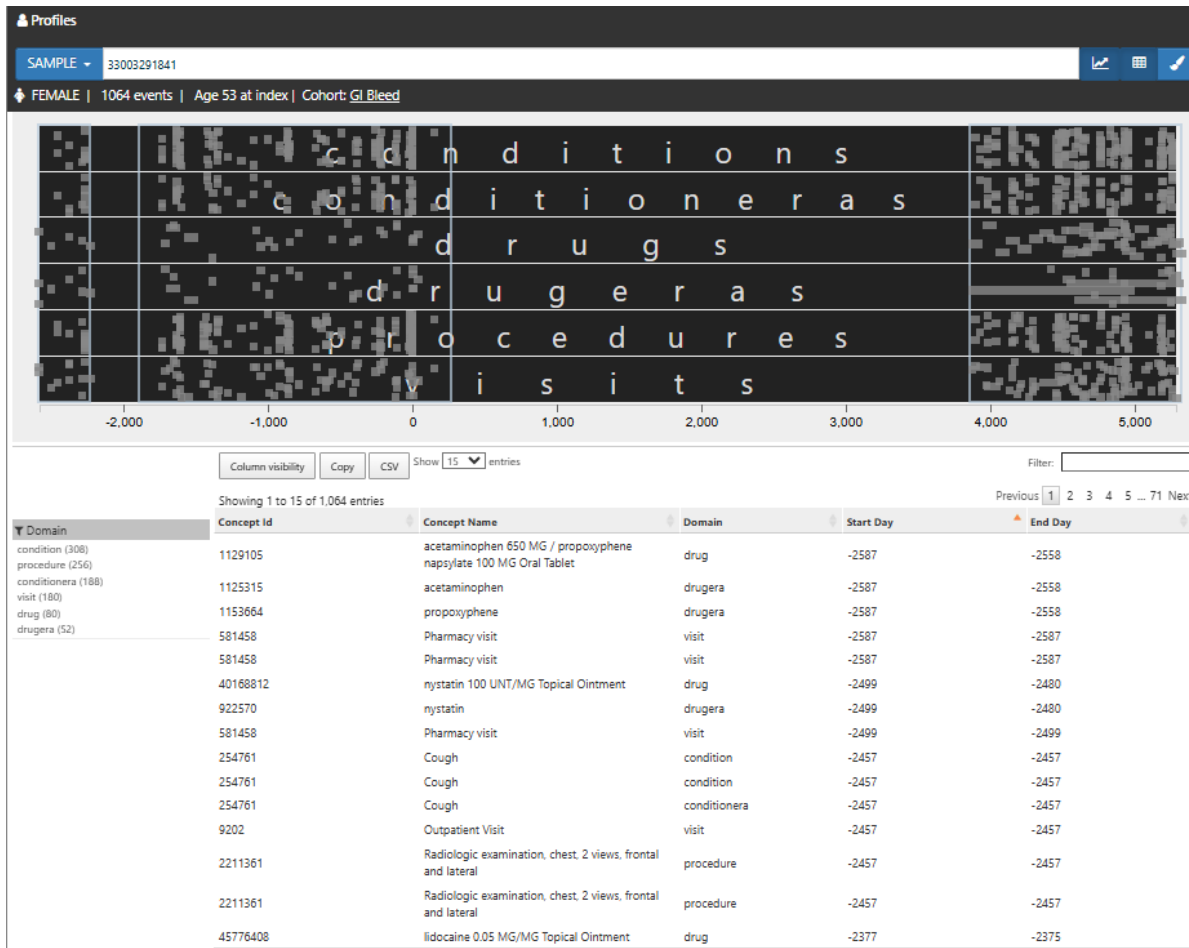


New Features:

- Utilization Reports
- Visualization Polish
- Quick Analysis vs. Full Analysis
- Patient profile Access via Tornado (shown)



Atlas 2.6 – Profiles V2



Features:

- Updated Color Scheme
- Removed left side quick-highlight in favor of an event highlighter:

Event Highlighting



Filter:

	Concept Name	Domain	Total Records
✓	Pharmacy visit	visit	69
✓	Knee pain	condition	16
✓	Palpitations	condition	15
✓	12 HR timolol 5 MG/ML Ophthalmic Solution	drug	14
✓	Office or other outpatient visit for the evaluation and management of an established patient, which requires at least 2 of these 3 key components: An expanded problem focused history; An expanded problem focused examination; Medical decision making of low	procedure	14

Showing 1 to 5 of 285 entries

Previous 1 2 3 4 5 ... 57 Next

Close



Atlas 2.6 – Cohort Characterization

T2DM Characterization

DesignExecutionsUtilities

Cohort characterization is defined as the process of generating cohort level descriptive summary statistics from person level covariate data. Summary statistics of these person level covariates may be count, mean, sd, var, min, max, median, range, and quantiles. In addition, covariates during a period may be stratified into temporal units of time for time-series analysis such as fixed intervals of time relative to cohort_start_date (e.g. every 7 days, every 30 days etc), or in absolute calendar intervals such as calendar-week, calendar-month, calendar-quarter, calendar-year.

Cohort definitions

Import

Show 10 entries Search:

ID	Name		
8	Type 2 Diabetes	Edit cohort	Remove
9	GI Bleed	Edit cohort	Remove

Showing 1 to 2 of 2 entries Previous 1 Next

Feature analyses

Import

Show 10 entries Search:

ID	Name	Description	Actions
67	Condition Occurrence Long Term	One covariate per condition in the condition_occurrence table starting in the long term window.	Remove
90	Condition Occurrence Short Term	One covariate per condition in the condition_occurrence table starting in the short term window.	Remove

Showing 1 to 2 of 2 entries Previous 1 Next

Characterization

T2DM Characterization

DesignExecutionsUtilities

Executions

Sample

Generate View latest result All executions (1)

Date	Design	Status	Duration	Results
05/23/2025 12:12:58 AM	-1022503040	COMPLETED	1 min 3 sec	View reports

Showing 1 to 1 of 1 entries Previous 1 Next

DesignExecutionsUtilities

Executions > Reports for Sample

Date: 05/23/2025 12:14:00 AM Design: -1022503040 Results: 2 reports

Filter panel

Cohorts Type 2 Diabetes, GI Bleed Analyses Condition Occurrence Long Term, Condition Occurrence Short Term

All prevalence covariates

Show 10 entries Search:

Covariate	Type 2 Diabetes		GI Bleed		Std diff
	Count	Pct	Count	Pct	
condition_occurrence during day -30 through 0 days relative to index 22q11.2 deletion syndrome	1	0.00%	1	0.00%	-0.0002
condition_occurrence during day -30 through 0 days relative to index 46, XX true hermaphrodite	1	0.00%		0.00%	0.0000
condition_occurrence during day -30 through 0 days relative to index 5,10-Methylenetetrahydrofolate reductase deficiency	17	0.02%	30	0.03%	0.0051
condition_occurrence during day -30 through 0 days relative to index Abdominal abscess	2	0.00%	4	0.00%	0.0023
condition_occurrence during day -30 through 0 days relative to index Abdominal actinomycosis	2	0.00%		0.00%	0.0000
condition_occurrence during day -30 through 0 days relative to index Abdominal aortic aneurysm	25	0.03%	33	0.03%	0.0023
condition_occurrence during day -30 through 0 days relative to index Abdominal aortic aneurysm without rupture	246	0.26%	457	0.44%	0.0216
condition_occurrence during day -30 through 0 days relative to index Abdominal aortic ectasia	11	0.01%	27	0.03%	0.0074
condition_occurrence during day -30 through 0 days relative to index Abdominal colic	1	0.00%	4	0.00%	0.0040

GI Bleed

Type 2 Diabetes

New Features:

- Designer
- Generation history
- Tabular Report View
- Cohort Comparison

Atlas 2.6 – Custom Features

Design

Concept Sets

Description

Condition

Design

Warning: You wouldn't be able to change the type of analysis after save.

CriteriaCustom

Analysis type:

Prevalence

Add Criteria feature

Prior Bleed

having all of the following criteria:

with at least 1 using all occurrences of:

a condition occurrence of Bleeding

where event starts between All days Before and 0 days After index start date add additional constraint

☐ restrict to the same visit occurrence

☐ allow events from outside observation period

+ Add attribute...

Delete Criteria

Prior T2DM

having all of the following criteria:

with at least 1 using all occurrences of:

a condition occurrence of Type 2 Diabetes

where event starts between All days Before and 0 days After index start date add additional constraint

☐ restrict to the same visit occurrence

☐ allow events from outside observation period

+ Add attribute...

Delete Criteria

Condition

Design

Warning: You wouldn't be able to change the type of analysis after save.

CriteriaCustom

Analysis SQL:

Copy Analysis SQL Template To Clipboard

```
SELECT covariate_id, covariate_name, concept_id, sum_value, average_value FROM (  
  
-- Custom analysis producing same results as Feature Extraction's "One covariate per drug in the drug_era table overlapping with any time prior to  
index."  
SELECT  
  CAST(drug_concept_id AS BIGINT) * 1000 + @analysis_id AS covariate_id,  
  c.concept_name AS covariate_name,  
  drug_concept_id AS concept_id,  
  COUNT(*) AS sum_value,  
  COUNT(*) * 1.0 / stat.total_cnt * 1.0 AS average_value  
FROM (  
  SELECT DISTINCT  
    drug_concept_id,  
    cohort.subject_id,  
    cohort.cohort_start_date  
  FROM @cohort_table cohort  
  INNER JOIN @cdm_database_schema.drug_era ON cohort.subject_id = drug_era.person_id  
  WHERE drug_era.start_date <= cohort.cohort_start_date  
    AND drug_concept_id != 0  
    AND cohort.cohort_definition_id = @cohort_id  
  ) drug_entries  
JOIN @cdm_database_schema.concept c ON drug_entries.drug_concept_id = c.concept_id  
CROSS JOIN (SELECT COUNT(*) total_cnt  
  FROM @cohort_table  
  WHERE cohort_definition_id = @cohort_id) stat  
GROUP BY drug_concept_id, c.concept_name, stat.total_cnt  
  
)
```

Available variables:

- @cdm_database_schema
- @cohort_table
- @cohort_id
- @analysis_id
- all variables specified in Cohort Characterization parameters

Custom features allows users to define the logic to create frequency statistics (proportion of population) through either Criteria expressions or custom SQL.



Atlas 2.6 – Cohort Pathways

Visualize sequence of event cohorts among a target population

Design

Executions

Utilities

Cohort Pathway is defined as the process of generating an aggregated sequence of transitions between the Event Cohorts among those people in the Target Cohorts.

Target Cohorts

Each of the Target Cohorts will be analyzed for the pathways through the event cohorts.

Import

Show 10 entries

Search:

ID	Name		
11	[EPI920] Ulcerative colitis Pediatric	Edit cohort	Remove
12	[EPI920] Crohns Disease Pediatric	Edit cohort	Remove

Showing 1 to 2 of 2 entries

Previous 1 Next

Event Cohorts

Each Event Cohort defines the step in a pathway that may occur for a person in the Treatment Cohort.

Import

Show 10 entries

Search:

ID	Name		
13	[EPI920] Golimumab for TxP	Edit cohort	Remove
14	[EPI920] Mesalamine for TxP	Edit cohort	Remove
15	[EPI920] Ustekinumab for TxP	Edit cohort	Remove
16	[EPI920] Natalizumab for TxP	Edit cohort	Remove
17	[EPI920] Certolizumab Pegol for TxP	Edit cohort	Remove
18	[EPI920] Infliximab for TxP	Edit cohort	Remove
19	[EPI920] Tofacitinib for TxP	Edit cohort	Remove
20	[EPI920] Vedolizumab for TxP	Edit cohort	Remove
21	[EPI920] Guselkumab for TxP	Edit cohort	Remove
22	[EPI920] Budesonide for TxP	Edit cohort	Remove

Showing 1 to 10 of 11 entries

Previous 1 2 Next

Design

Executions

Utilities

Executions > Pathway Report for Sample

Date: 05/23/2025 12:44:20 AM Design: 1734410953

Filter panel

Cohorts

[EPI920] Ulcerative colitis Pediatric, [EPI920] Crohns Disease Pediatric

Pathways Analysis for IBD Treatments

Legend

Target Cohort

[EPI920] Ulcerative colitis Pediatric

- Target cohort count: 31
- Persons with pathways count: 22
- Persons with pathways portion: 71.0%

Event Cohorts

- [EPI920] Infliximab for TxP
- [EPI920] Mesalamine for TxP
- [EPI920] Vedolizumab for TxP
- [EPI920] Ustekinumab for TxP
- [EPI920] Adalimumab for TxP
- [EPI920] Budesonide for TxP

Sunburst plot



Atlas 2.6 – PLE and PLP Editors

PLE and PLP Editors received an update, visually and to handle latest parameters

GI Bleed

Population Level Effect Estimation - Comparative Cohort Analysis

New Population Level Estimation Analysis

Specification Utilities

enter a description here (1000 characters max)

All Comparisons Analysis Settings Evaluation Settings

Comparative Cohort Settings

Comparisons + Add Comparison

Show 10 entries Filter:

Remove	Target	Comparator	Outcomes	NC Outcomes	Copy
No data available in table					

Showing 0 to 0 of 0 entries Previous Next

Effect Estimation Analysis Settings

Analysis Settings + Add Analysis Settings

Show 10 entries Filter:

Remove	Description	Copy
No data available in table		

Showing 0 to 0 of 0 entries Previous Next

Evaluation Settings

Negative Control Outcome Cohort Definition

This expression will define the criteria for inclusion and duration of time for cohorts intended for use as negative control outcomes. The type of occurrence of the event when selecting from the domain.

All occurrences

When true, descendant concepts for the negative control outcome concept IDs will be used to detect the outcome and roll up the occurrence to the concept ID.

Yes

What domains should be considered to detect negative control outcomes? (Hold control to select multiple domains)

- Condition
- Drug
- Device
- Measurement
- Observation
- Procedure
- Visit

Positive Control Synthesis

Patient Level Prediction

New Patient Level Prediction Analysis

Specification Utilities

enter a description here (1000 characters max)

All Prediction Problem Settings Analysis Settings Execution Settings Training Settings

Prediction Problem Settings

Target Cohorts + Add Target Cohort

Show 10 entries Filter:

Remove	Name
No data available in table	

Showing 0 to 0 of 0 entries Previous Next

Outcome Cohorts + Add Outcome Cohort

Show 10 entries Filter:

Remove	Name
No data available in table	

Showing 0 to 0 of 0 entries Previous Next

Analysis Settings

Model Settings + Add Model Settings

Show 10 entries Filter:

Remove	Model	Options
No data available in table		

Showing 0 to 0 of 0 entries Previous Next

Covariate Settings + Add Covariate Settings

Column visibility Copy CSV Show 10 entries Filter:

Remove	Options
No data available in table	

Showing 0 to 0 of 0 entries Previous Next

Population Settings + Add Population Settings

Column visibility Copy CSV Show 10 entries Filter:

Remove	Risk Window Start	Risk Window End	Washout Period	Include All Outcomes	Remove Subjects With Prior Outcome	Minimum Time At Risk
--------	-------------------	-----------------	----------------	----------------------	------------------------------------	----------------------



Atlas 2.6 – Configuration

Configuration

✓ Local (<http://localhost:8080/WebAPI/>) Change source priorities in: Current Session New Source

Source Name [Source Key]	Table Qualifiers	Dialect	Vocabulary Version	Evidence	Record Counts (RC / DRC)	Incidence	Check connection
✓ Eunomia [EUNOMIA]	Vocabulary: cdm Results: results	postgresql	<input type="radio"/> v5.0 18- JAN-19	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	▶ check
✓ Sample [SAMPLE]	CDM: cdm Vocabulary: cdm Results: results	postgresql	<input checked="" type="radio"/> v5.0 18- JAN-19	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>	▶ check

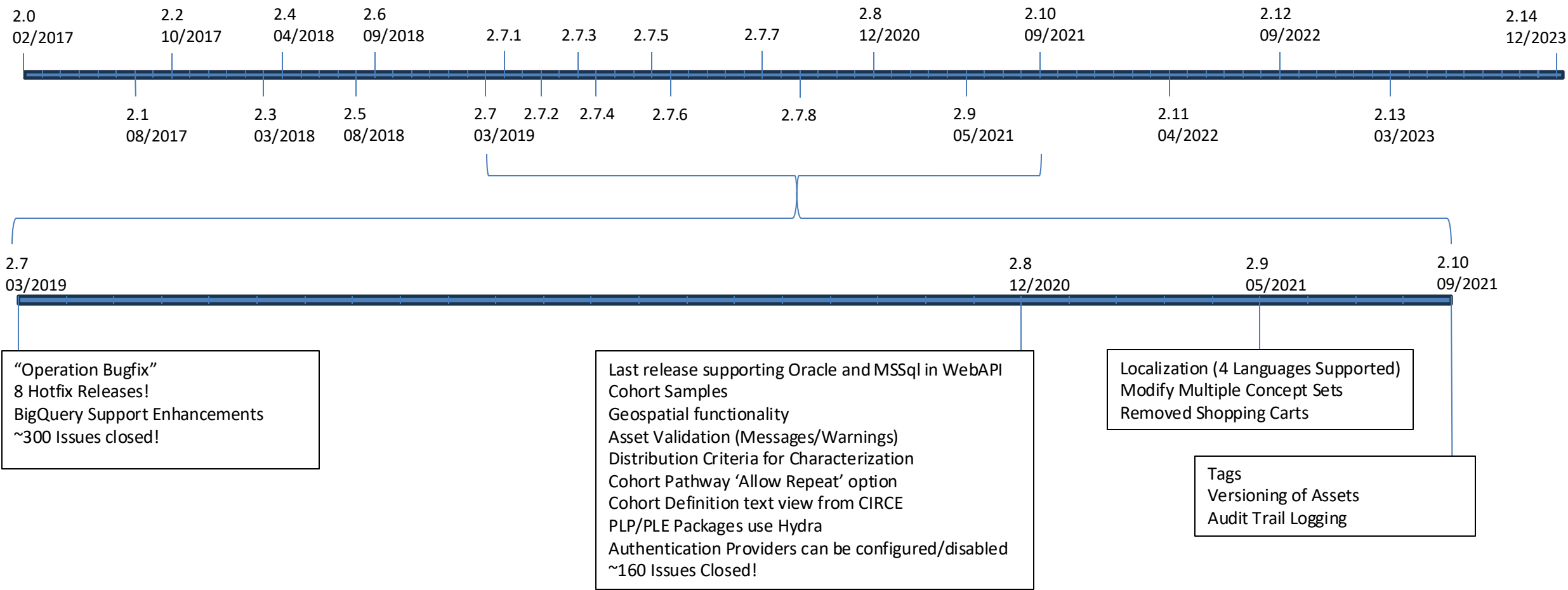
Clear Configuration Cache Manage Permissions Import Users from LDAP/AD

Configuration received following enhancements:

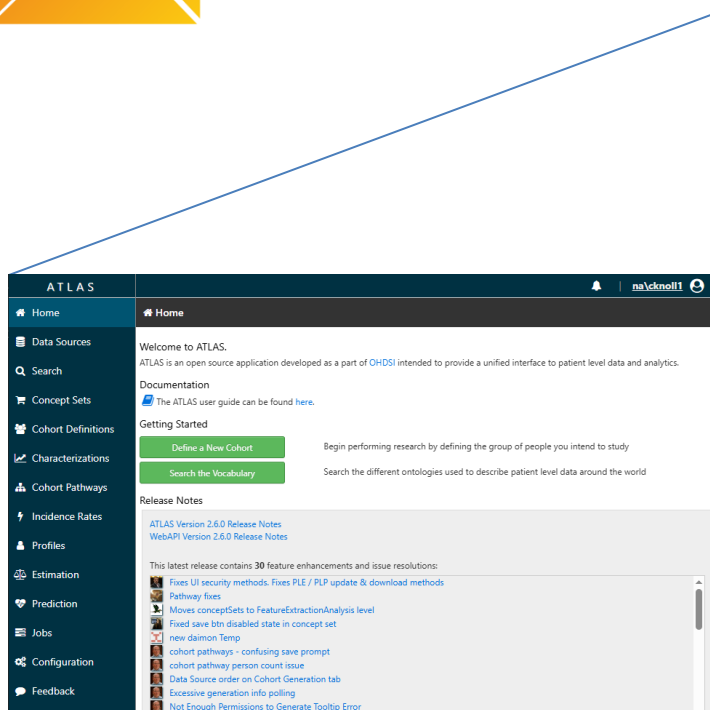
- Create data source via 'New Source'
- Check connectivity to with 'check'
- Clear server side caching
- Manage permissions to users
- LDAP Import utility



Atlas 2.x Release Timeline



Atlas 2.10 - Home



ATLAS

- Home
- Data Sources
- Search
- Concept Sets
- Cohort Definitions
- Characterizations
- Cohort Pathways
- Incidence Rates
- Profiles
- Estimation
- Prediction
- Jobs
- Configuration
- Feedback

Apache 2.0
open source software
provided by

English



na\cknoll1



Home

Welcome to ATLAS.

ATLAS is an open source application developed as a part of [OHDSI](#) intended to provide a unified interface to patient level data and analytics.

Documentation

The ATLAS user guide can be found [here](#).

Getting Started

Define a New Cohort

Begin performing research by defining the group of people you intend to study

Search the Vocabulary

Search the different ontologies used to describe patient level data around the world

Release Notes

[ATLAS Version 2.10.1 Release Notes](#)
[WebAPI Version 2.10.1 Release Notes](#)

This latest release contains **10** feature enhancements and issue resolutions:

- atlas/webapi Versions tab - error when clicking on Preview link when security is disabled
- atlas/webapi 2.10.0 cohort definition version update error when security is disabled
- Missing filter CC Result filter options
- Cohort exit date text is wrong in Atlas > Prediction > Population settings
- A PLP analysis fails on an execution on an Apache Impala data source
- Reports have 0 figures for an Incidence Rate Analysis on an Apache Impala data source
- Selecting censoring event for visit creates a specimen entry instead
- Selecting Censoring event for Payer Plan period fails
- Generation results for impala are not visible for incidence rates
- A PLE analysis fails on an execution on a Google BigQuery data source

Atlas 2.8 – Cohort Sample

Cohort #9

GI Bleed

Definition Concept Sets Generation **Samples** Reporting Export Versions Messages 1

Sample Selections

Sample

Add new sample

Show columns Copy CSV Show 100 entries Filter: Search...

Showing 1 to 1 of 1 entries

Sample name	Number of patients	Selection criteria	Author	Created	Action
Adult Males Age 30+	25	Male, Greater than or equal 30	na\cknoll1	5/23/2025, 12:24:26 PM	

Showing 1 to 1 of 1 entries

Create new sample

* Mandatory fields

* Sample name

Adult Males Age 30+

* Number of patients (from 1 to 500)

25

Select age criteria

Greater or equal to

30

Indicate gender (leave empty to select all gender)

☐ Male

☐ Female

☐ Other

Sample name	Number of patients	Selection criteria	Author	Created	Action
Adult Males Age 30+	25	Male, Greater than or equal 30	na\cknoll1	5/23/2025, 12:24:26 PM	

Showing 1 to 1 of 1 entries

Show columns Copy CSV Show entries Filter: Search...

Showing 1 to 15 of 25 entries

Person ID	Gender	Age at index
33004016775	Male	47
33005134916	Male	79
33006905826	Male	50
33014096759	Male	48
33014559599	Male	35
33020146813	Male	44
33026783600	Male	57
33035557904	Male	36
33042930181	Male	38
33045030612	Male	43
33051484091	Male	61
33054225475	Male	67

Cohort Samples offer a quick and easy way to select people from your cohort that meet certain demographic criteria, and one-click access to Patient Profiles.



Atlas 2.9 – Localization

Choose from four different languages for your UI

ATLAS

English

na\cknoll1

Home

Data Sources

Search

Concept Sets

Cohort Definitions

Characterizations

Cohort Pathways

Incidence Rates

Profiles

Estimation

Prediction

Jobs

Apache 2.0
open source software
provided by
OHDSI

Cohort Definitions

New Cohort

Show columns Copy CSV Show 100 entries Filter: Search...

Showing 1 to 15 of 15 entries Previous 1 Next

	ID	Name	Created	Updated	Author
Created					
Within 24 Hours (13)	23	[EPI9201] Adalimumab for TxP	05/22/2025 8:23 PM	05/22/2025 8:23 PM	na\cknoll1
This Week (2)					
Updated					
Within 24 Hours (13)	22	[EPI9201] Budesonide for TxP	05/22/2025 8:23 PM	05/22/2025 8:23 PM	na\cknoll1
This Week (2)	21	[EPI9201] Guselkumab for TxP	05/22/2025 8:23 PM	05/22/2025 8:23 PM	na\cknoll1
Author					
na\cknoll1 (13)	20	[EPI9201] Vedolizumab for TxP	05/22/2025 8:23 PM	05/22/2025 8:23 PM	na\cknoll1
NA\cknoll1 (2)					
Designs					
My designs (13)	19	[EPI9201] Tofacitinib for TxP	05/22/2025 8:23 PM	05/22/2025 8:23 PM	na\cknoll1
Other designs (2)	18	[EPI9201] Infliximab for TxP	05/22/2025 8:23 PM	05/22/2025 8:23 PM	na\cknoll1
	17	[EPI9201] Certolizumab Pegol for TxP	05/22/2025 8:23 PM	05/22/2025 8:23 PM	na\cknoll1
	16	[EPI9201] Natalizumab for TxP	05/22/2025 8:23 PM	05/22/2025 8:23 PM	na\cknoll1

ATLAS

한국어

na\cknoll1

홈

데이터 소스

검색

컨셉 세트

코호트 정의

특성

코호트 경로

발생률

프로필

추정

예측

실행내역

Apache 2.0
open source software

코호트 정의

새 코호트

컬럼 보기 복사하기 CSV 100 항목 표시 검색: 검색...

15 가지 항목 중 1~15개 표시 이전 1 다음

	아이디	이름	등록일	수정일	등록자
등록일					
Within 24 Hours (13)	23	[EPI9201] Adalimumab for TxP	05/22/2025 8:23 PM	05/22/2025 8:23 PM	na\cknoll1
This Week (2)					
수정일					
Within 24 Hours (13)	22	[EPI9201] Budesonide for TxP	05/22/2025 8:23 PM	05/22/2025 8:23 PM	na\cknoll1
This Week (2)	21	[EPI9201] Guselkumab for TxP	05/22/2025 8:23 PM	05/22/2025 8:23 PM	na\cknoll1
등록자					
na\cknoll1 (13)	20	[EPI9201] Vedolizumab for TxP	05/22/2025 8:23 PM	05/22/2025 8:23 PM	na\cknoll1
NA\cknoll1 (2)					
설계					
My designs (13)	19	[EPI9201] Tofacitinib for TxP	05/22/2025 8:23 PM	05/22/2025 8:23 PM	na\cknoll1
Other designs (2)	18	[EPI9201] Infliximab for TxP	05/22/2025 8:23 PM	05/22/2025 8:23 PM	na\cknoll1
	17	[EPI9201] Certolizumab Pegol for TxP	05/22/2025 8:23 PM	05/22/2025 8:23 PM	na\cknoll1

ATLAS

Русский

na\cknoll1

Начало

Источники данных

Поиск

Наборы концепций

Когорты

Характеризации

Исходы когорты

Инцидентность

Профили

Оценочный анализ

Прогнозирование

Apache 2.0
open source software
provided by
OHDSI

Определения когорты

Новая когорта

Отображать колонки Копировать CSV Показывать по 100 записей Фильтр: Поиск...

Показано с 1 по 15 из 15 записей Назад 1 Далее

	ID	Наименование	Создано	Обновлено	Автор
Создано					
Within 24 Hours (13)	23	[EPI9201] Adalimumab for TxP	22.05.2025 20:23	22.05.2025 20:23	na\cknoll1
This Week (2)					
Обновлено					
Within 24 Hours (13)	22	[EPI9201] Budesonide for TxP	22.05.2025 20:23	22.05.2025 20:23	na\cknoll1
This Week (2)	21	[EPI9201] Guselkumab for TxP	22.05.2025 20:23	22.05.2025 20:23	na\cknoll1
Автор					
na\cknoll1 (13)	20	[EPI9201] Vedolizumab for TxP	22.05.2025 20:23	22.05.2025 20:23	na\cknoll1
NA\cknoll1 (2)					
Дизайны					
My designs (13)	19	[EPI9201] Tofacitinib for TxP	22.05.2025 20:23	22.05.2025 20:23	na\cknoll1
Other designs (2)	18	[EPI9201] Infliximab for TxP	22.05.2025 20:23	22.05.2025 20:23	na\cknoll1
	17	[EPI9201] Certolizumab Pegol for TxP	22.05.2025 20:23	22.05.2025 20:23	na\cknoll1
	16	[EPI9201] Natalizumab for TxP	22.05.2025 20:23	22.05.2025 20:23	na\cknoll1

ATLAS

中文

na\cknoll1

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数据来源

搜索

概念集

队列定义

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队列路径

发病率

数据概要

估计

预测

执行历史

Apache 2.0
open source software
provided by
OHDSI

队列定义

新建队列

显示各列 复制 CSV 显示 100 项 过滤 搜索...

显示15项中的1到15 上一页 1 下一页

	编号	名称	建立时间	更新时间	作者
建立					
Within 24 Hours (13)	23	[EPI9201] Adalimumab for TxP	05/22/2025 8:23 PM	05/22/2025 8:23 PM	na\cknoll1
This Week (2)					
更新					
Within 24 Hours (13)	22	[EPI9201] Budesonide for TxP	05/22/2025 8:23 PM	05/22/2025 8:23 PM	na\cknoll1
This Week (2)	21	[EPI9201] Guselkumab for TxP	05/22/2025 8:23 PM	05/22/2025 8:23 PM	na\cknoll1
作者					
na\cknoll1 (13)	20	[EPI9201] Vedolizumab for TxP	05/22/2025 8:23 PM	05/22/2025 8:23 PM	na\cknoll1
NA\cknoll1 (2)					
设计					
My designs (13)	19	[EPI9201] Tofacitinib for TxP	05/22/2025 8:23 PM	05/22/2025 8:23 PM	na\cknoll1
Other designs (2)	18	[EPI9201] Infliximab for TxP	05/22/2025 8:23 PM	05/22/2025 8:23 PM	na\cknoll1
	17	[EPI9201] Certolizumab Pegol for TxP	05/22/2025 8:23 PM	05/22/2025 8:23 PM	na\cknoll1
		[EPI9201] Natalizumab for TxP			



Atlas 2.10 – Tags

Cohort #9

GI Bleed

Definition

Enter a co

Cohort E

Events

Assign Tags [X]

Tag groups:

Show entries

Filter:

Name	Description	Type	Action
Cardiovascular	Cardiovascular	System	Show tags

Showing 1 to 1 of 1 entries


Previous Next

[+ Add Initial Event...](#)







Tags allow you to decorate an asset with a tag to give a category of other meta information about an asset.



Atlas 2.10 – Versions

 Cohort #9

GI Bleed

Definition | Concept Sets | Generation | Samples | Reporting | Export | Versions | Messages 2

Show columns | Copy | CSV | Show 100 entries | Filter: Search...

Showing 1 to 3 of 3 entries Previous 1 Next

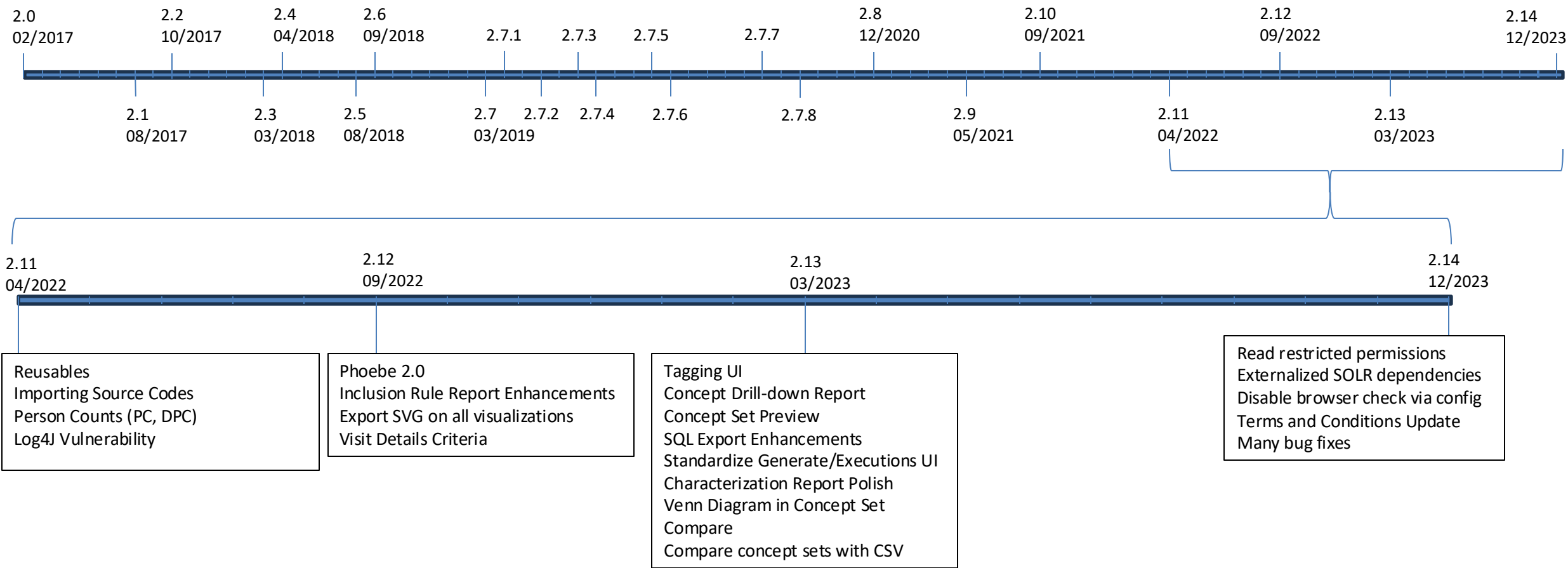
	Version	Author	Created	Comment	Preview	Copy
Created	Current	na\cknoll1	05/24/2025 12:11:32 AM			
Just Now (2)						
This Week (1)	2	na\cknoll1	05/24/2025 12:11:20 AM	Add comment	Preview	Create a copy
Author	1	NA\cknoll1	05/22/2025 7:50:13 AM	Add comment	Preview	Create a copy
na\cknoll1 (2)						
NA\cknoll1 (1)						

Showing 1 to 3 of 3 entries Previous 1 Next

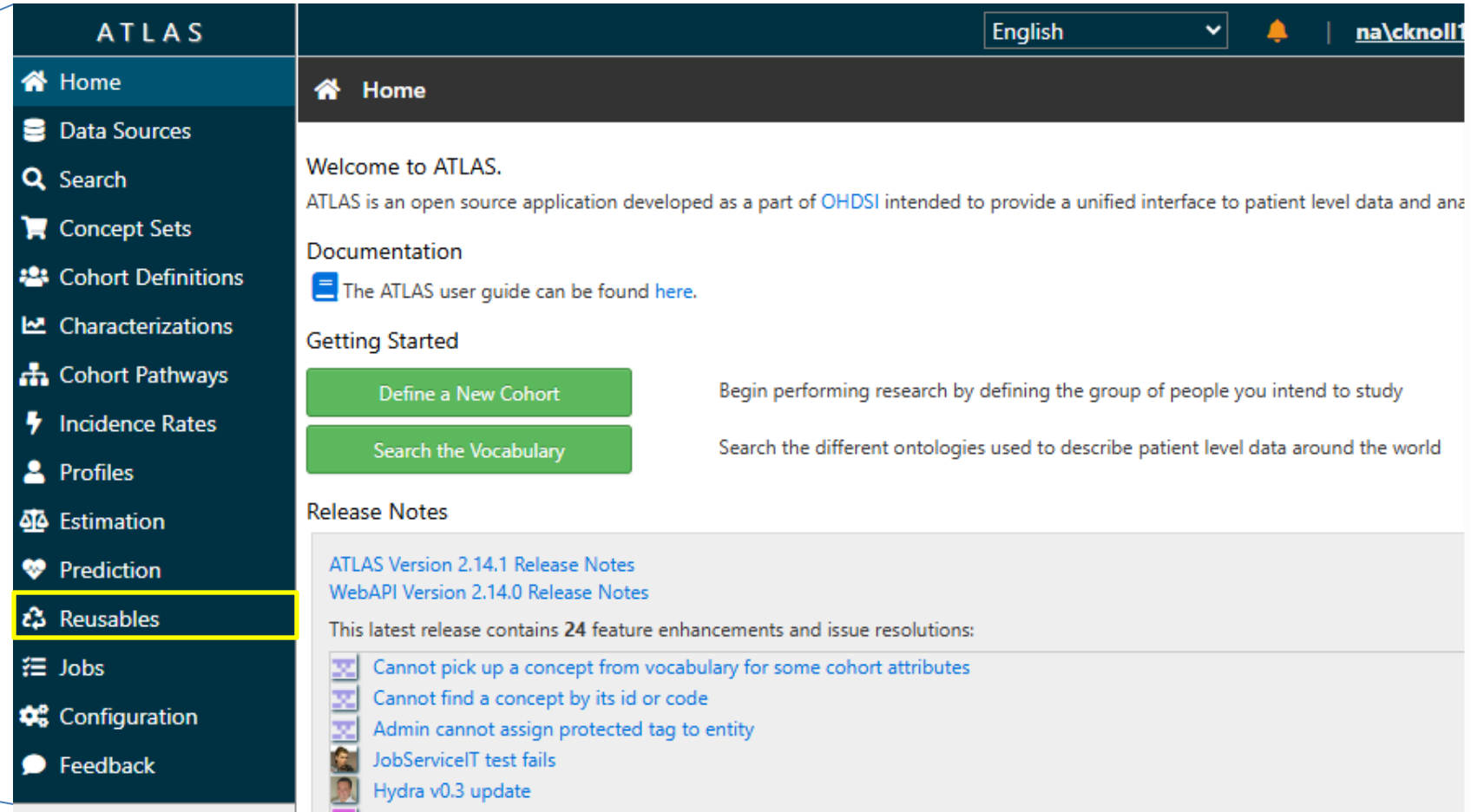
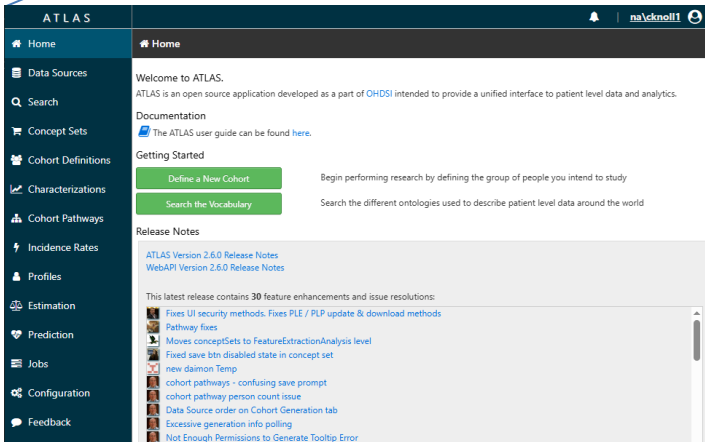
Saving any asset will create a snapshot of the asset, and the version UI allows you to create a copy from a prior version, preview, and assign a comment to it.



Atlas 2.x Release Timeline



Atlas 2.14 - Home





Atlas 2.11 – Reusables

Reusable #1

created by na\cknoll1 on 2025-05-27 10:33

Male T2DM Diagnosed

Design Concept Sets Versions

Reusable Type

Initial/Censoring Event reusables are only applicable to cohort Initial/Censoring Events.

Criteria Group reusables are applicable to any **subgroup** of criteria including Characterization subgroups, Feature Analysis criteria and Incidence Rates stratify criteria.

Attention: You can switch (and save) between both types in one reusable but only one type can be active at one time (the one you save Reusable with).

Initial/Censoring Event

Parameters

New parameter

No parameters defined

Design

Events having any of the following criteria:

+ Add Initial/Censoring Event

a condition occurrence of Type 2 Diabetes
with a gender of: MALE

+ Add attribute...

Delete Criteria

New Reusable

New User Exposure

Design Concept Sets Versions

Enter description here

Reusable Type

Initial/Censoring Event reusables are only applicable to cohort Initial/Censoring Events.

Criteria Group reusables are applicable to any **subgroup** of criteria including Characterization subgroups, Feature Analysis criteria and Incidence Rates stratify criteria.

Attention: You can switch (and save) between both types in one reusable but only one type can be active at one time (the one you save Reusable with).

Initial/Censoring Event

Parameters

New parameter

Show 50 entries

Filter: Search...

Name	Type	Actions
Parameter 1	Concept Set	Remove

Showing 1 to 1 of 1 entries

Previous 1 Next

Design

Events having any of the following criteria:

+ Add Initial/Censoring Event

a drug exposure of Parameter 1

+ Add attribute...

Delete Criteria

having all of the following criteria:

+ Add criteria to group...

with exactly 0 using all occurrences of:

a drug exposure of Parameter 1

+ Add attribute...

where event starts between

All days Before and 1 days Before index start date

add additional constraint

The index date refers to the drug exposure of Parameter 1.

☐ restrict to the same visit occurrence

☐ allow events from outside observation period

Delete Criteria

Reusables allow you to define entry event or criteria groups to be used in cohort definitions or custom features. You can also define concept set parameters!



Atlas 2.11 – Concept Set Import

New Concept Set

Essential Hypertension

Concept Set Expression

Included Concepts

Included Source Codes

Recommend

Export

Import

Compare

Versions

Messages

Concept Identifiers

Source Codes

Concept Set

Repository

Enter Source Codes [\(click to clear\)](#)

I10

Search concepts

Show columns

Copy

CSV

Show 100 entries

Filter: Search...

Showing 1 to 6 of 6 entries

Vocabulary

ICD10 (1)

ICD10CM (1)

ICD10CN (1)

ICD10GM (1)

Class

ICD10 Hierarchy (4)

KCD7 code (1)

3-char billing code (1)

Domain

<input checked="" type="checkbox"/>	Id	Code	Name	Class	RC	DRC	Domain	Vocabulary
<input checked="" type="checkbox"/>	45591453	I10	Essential (primary) hypertension	ICD10 Hierarchy	0	0	Condition	ICD10
<input checked="" type="checkbox"/>	42488326	I10	Essential(primary) hypertension	KCD7 code	0	0	Condition	KCD7
<input checked="" type="checkbox"/>	37609626	I10	Essential (primary) hypertension	ICD10 Hierarchy	0	0	Condition	CIM10
<input checked="" type="checkbox"/>	37084419	I10	Essential (primary) hypertension	ICD10 Hierarchy	0	0	Condition	ICD10GM
<input checked="" type="checkbox"/>	35207668	I10	Essential (primary) hypertension	3-char billing code	0	0	Condition	ICD10CM
<input checked="" type="checkbox"/>	1413708	I10	Essential (primary) hypertension	ICD10 Hierarchy	0	0	Condition	ICD10CN

Importing source codes provides a search preview allowing the user to select which concepts match the source code search before adding to the concept set.

Vocabulary search functions such as filtering by domain, class and Standard Concept are available in this view.

Concept Identifiers

Source Codes

Concept Set

Repository

Concept Set Expression JSON [\(click to clear\)](#)

Append Concept Set Expression

Overwrite Concept Set Expression

Importing a concept set JSON expression now provides the option to append to an existing concept set or overwrite.



Atlas 2.11 – Concept Person count

Search

diabetes

Advanced Options

View record count for: Sample

Filter: Search...

Show columns Copy CSV Show 100 entries

Showing 1 to 100 of 5,341 entries

Previous 1 2 3 4 5 ... 54 Next

Vocabulary

SNOMED (1591)

Nebraska Lexicon (899)

ICD10CM (647)

Class

Clinical Finding (1777)

Read (561)

ICD10 code (457)

Procedure (291)

Domain

Condition (3805)

Observation (919)

Procedure (176)

Device (138)

Standard Concept

Non-Standard (4112)

Standard (1048)

Classification (181)

Invalid Reason

Valid (4229)

<input checked="" type="checkbox"/>	Id	Code	Name	Class	RC	DRC	PC	DPC
<input checked="" type="checkbox"/>	40758528	55399-0	Diabetes tracking panel	Clinical Observation	0	215,252,272	0	43,476,383
<input checked="" type="checkbox"/>	21000594	00000594	Type 2 Diabetes Mellitus	Indication	0	229,633,043	0	38,443,019
<input checked="" type="checkbox"/>	21600712	A10	DRUGS USED IN DIABETES	ATC 2nd	0	223,377,407	0	35,094,753
<input checked="" type="checkbox"/>	21002553	00002553	Gestational Diabetes Mellitus	Indication	0	139,310,013	0	20,943,649
<input checked="" type="checkbox"/>	201820	73211009	Diabetes mellitus	Clinical Finding	645,689	273,225,330	156,910	16,826,468
<input checked="" type="checkbox"/>	442793	74627003	Complication due to diabetes mellitus	Clinical Finding	11,961,998	148,941,643	1,487,019	16,355,086
<input checked="" type="checkbox"/>	21004744	00004744	Nephrogenic Diabetes Insipidus	Indication	0	66,739,537	0	14,520,849
<input checked="" type="checkbox"/>	201826	44054006	Type 2 diabetes mellitus	Clinical Finding	65,711,896	235,562,298	3,666,061	12,294,800

Concept tables now contain Person Count (PC) and Descendant Person Counts (DPC) columns that aggregate record counts to distinct persons instead of raw row counts (RC and DRC).

Requires latest version of Achilles analyses which produces the Person Count statistics.



Atlas 2.12 – Phoebe 2.0

Search

diabetes

Advanced Options

New Concept Set

New Concept Set

The name of the concept set should differ from the default one.

Concept Set Expression

Included Concepts 133

Included Source Codes

Recommend

Export

Import

Compare

View record count

Show columns

Copy

CSV

Show 100 entries

Filter: Search.

Showing 1 to 100 of 292 entries

Vocabulary	<input checked="" type="checkbox"/>	Id	Code	Name	Class	RC	DRC
SNOMED (286)	<input checked="" type="checkbox"/>	442793	74627003	Complication due to diabetes mellitus	Clinical Finding	11,961,998	148,941,643
HCPSCS (3)	<input checked="" type="checkbox"/>	443732	422014003	Disorder due to type 2 diabetes mellitus	Clinical Finding	4,722,039	100,527,670
CPT4 (2)	<input checked="" type="checkbox"/>	443730	422088007	Disorder of nervous system due to diabetes mellitus	Clinical Finding	6,950,543	35,232,027
LOINC (1)							

Invalid Reason

Valid (290)

Invalid (2)

Class

Clinical Finding (271)

Context-dependent (9)

Procedure (6)

Atlas 2.12 allows a user to create a concept set based on a search term which will select the most similar concept based on text matching and then navigate to the Recommend tab in the Concept Set Editor.

The Recommended tab contents are populated by Phoebe 2.0 recommendations.

Any concept set can use the Recommend tab, not just those created by the concept search!



Atlas 2.13 – Tag UI

Configuration

Local (<http://localhost:8080/WebAPI/>) Change source priorities in: Current Session New Source

Source Name [Source Key]	Table Qualifiers	Dialect	Vocabulary Version	Evidence	Record Counts (RC / DRC)	Incidence	Check connection	Refresh cache
✓ Eunomia [EUNOMIA]	Vocabulary: cdm Results: results	postgresql		Access denied			▶ check	
✓ Sample [SAMPLE]	CDM: cdm Vocabulary: cdm Results: results	postgresql	● v5.0 18-JAN-19	○	●	✓	▶ check	▶ refresh

Clear Configuration Cache Manage Permissions Import Users from LDAP/AD Tag Management Clear Server Cache

Tag Management

Tag Groups

Create Group

Show 50 entries Filter:

Name	Color	Icon	Mandatory	Show Column	Multiple	Free-form	Created	Author	Description			
Public		♥	✓				05/23/2025 11:56 PM	System	Public Tags	Hide tags	Edit	Remove

Showing 1 to 1 of 1 entries Previous 1 Next

Tags in Group 'Public'

Create Tag

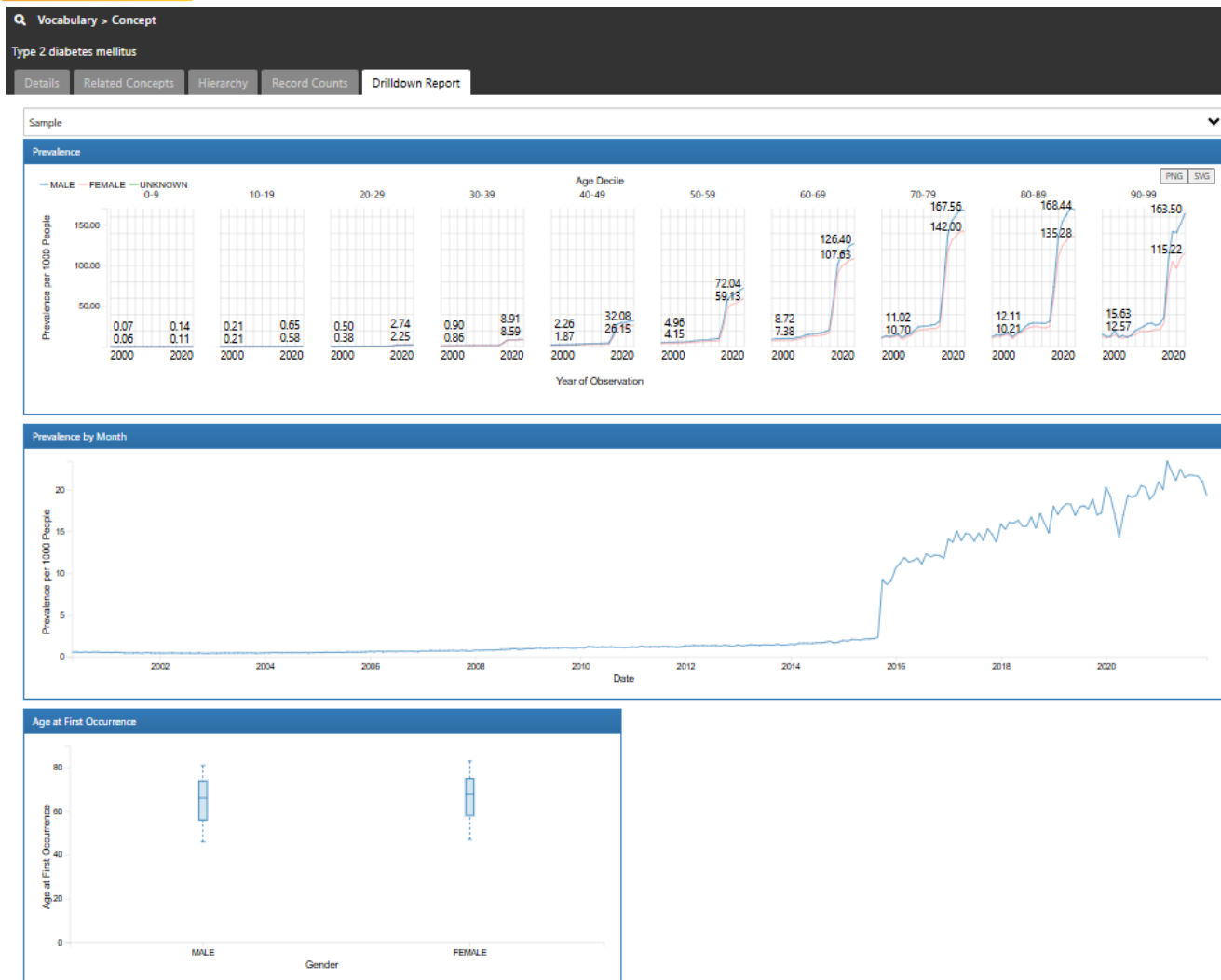
Show 50 entries Filter:

Name	Protected	Created	Author	Description	Usage count		
♥ Cardiovascular		05/27/2025 5:01 PM	na\cknoll1	-	0	Edit	Remove
♥ Neuroscience		05/27/2025 5:01 PM	na\cknoll1	-	0	Edit	Remove
♥ Oncology		05/27/2025 5:02 PM	na\cknoll1	-	0	Edit	Remove

The Tag UI allows creation of tag groups and tags directly in the Atlas UI, allowing you to create, update and delete without the need for direct database access.



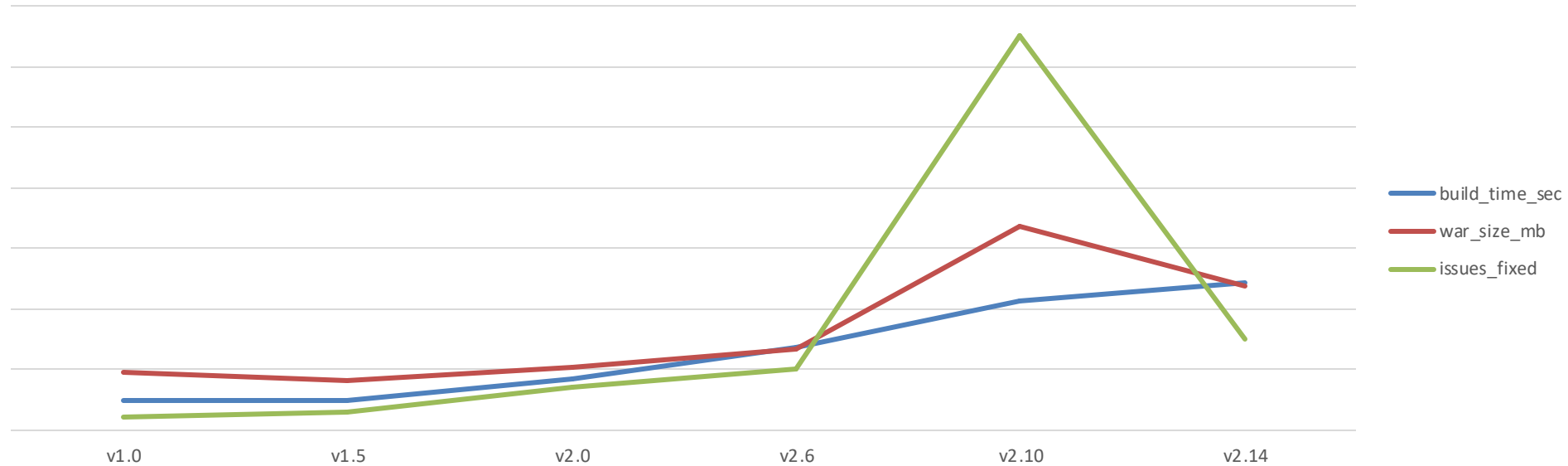
Atlas 2.13 – Concept Drilldown



The Datasource Drill Down report is accessible directly from the Concept view.



Atlas Build Statistics Over Releases



This graph shows build time, application size and issues fixed for each release. As the codebase expands, more complexity and functionality leads to longer build times, larger app size, and more sources of error.

In Atlas 3.0 can will work towards simplifying functions and reducing code bloat, leading to faster compile times (less developer idle time), smaller code size (less code complexity and external dependencies) and fewer bugs (simple machines break less).



Atlas Roadmap



Atlas Roadmap: Parallel Tracks

2.X

End of active development

Maintain current users

Hotfixes are welcome

3.X

Technical Upgrade: JDK 17+

Evaluate current functionality and decide what can be reduced, simplified or removed from codebase

- Major releases (2.x -> 3.x) provide an opportunity to relax backwards compatibility to implement significant changes

June Surveys will provide guidance on where to focus our efforts

4.X

Blue-sky for future design

New Ideas and Features

Implement new process of introducing features into Atlas:

- Socializing new features with community
- Establish buy-in from multiple organizations
- Assign roles and responsibilities for maintenance of those features

[Join the Atlas Working Group Tuesday Calls at 12 Noon EST](#)



Atlas 4.0 Planning

Peter Hoffmann

Data4Life



About Data4Life

Mission-driven and Collaborative.

In collaboration with leading domain experts, we digitalize health research to advance public health & personalized medicine.

Non-profit.

We are a nonprofit, funded by the Hasso-Plattner Foundation.

Open source.

We open source our software to make it accessible to everyone.





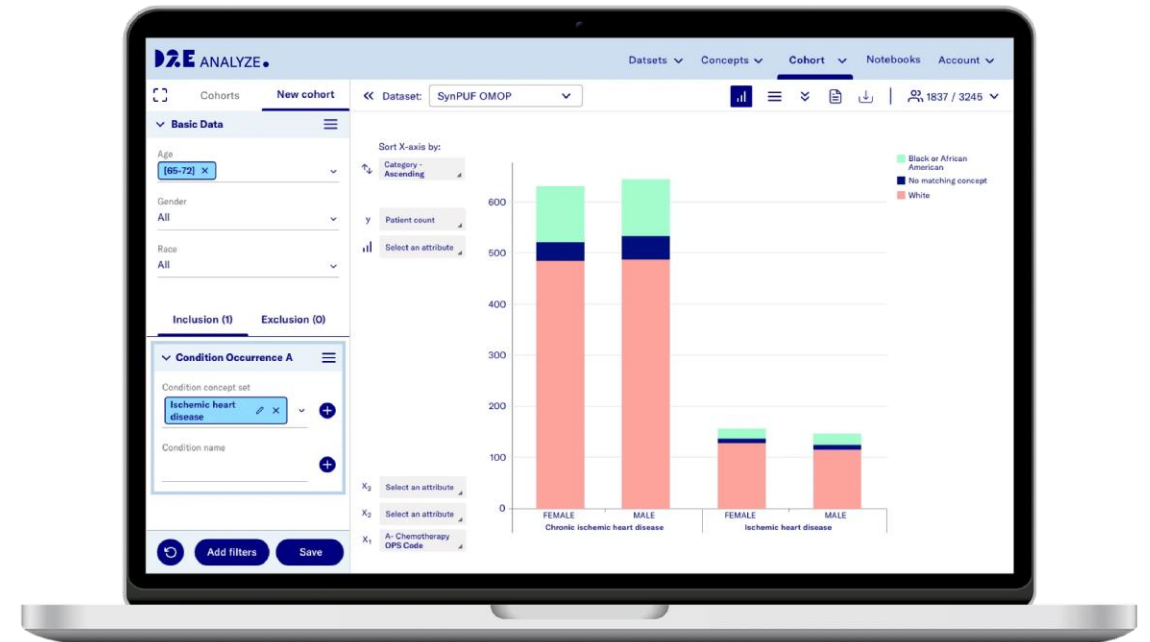
What does Data4Life do?

Development of Data2Evidence platform and other software solutions.

- What is Data2Evidence
 - An open source **end to end solution** for **OMOP data management and analysis** to make siloed data readily available for researchers.
 - Integrates multiple OHDSI solutions for data integration, cohort building and analysis into one platform.
 - More information:

<https://github.com/OHDSI/D2E>

<https://data2evidence.org/>





Data4Life and ATLAS - Goals and Workstreams

The overall goal of this endeavour between the ATLAS team and Data4Life is to reduce the entry barrier of novice users and non-technical users to using ATLAS.

To this effect, we have envisioned three workstreams:

- User interviews
- UX re-design
- Implementation of a new user interface

Initial wireframe of possible changes to the ATLAS user interface



ATLAS Redesign - User Interviews

- User Interviews covering various topics
 - Usage of ATLAS
 - Concept set selection and building
 - Cohort building
 - Analysis pipelines
 - Feedback on potential new UI/UX
- First batch of users interviewed - summarisation in progress
- More user interviews in the pipeline
- ATLAS usage and feedback survey ongoing - <https://forums.ohdsi.org/t/atlas-survey/>
- Please reach out to us if you are interested to talk to us about your experience with ATLAS



Survey 1

Atlas Overview



Survey 1: Atlas Overview

The purpose of Survey 1 is to collect information about Atlas users:

- Which version of Atlas?
- How frequently do you use Atlas?
- How important is Atlas to your work?
- How do you interact with the community? (Forums, GitHub, etc)
- For each section (ie: nav) of Atlas, rate your frequency of use and importance to your work.

Survey 1 Link: <https://forms.cloud.microsoft/r/g4g8We4twU>



Survey 1: Atlas Overview

Each survey will ask two questions about a series of features:

How frequently do you use the feature:

- Never used: you either did not know of, or never used this feature in Atlas
- Rarely used: you use this feature <25% of the time using atlas.
- Sometimes used: you use this feature 25% to 75% of time using Atlas.
- Often used: you use this feature most of the time in atlas (> 75%)

How important are these features in your work?

- Not Important: The item is of no significance.
 - Slightly important: The item has little significance and is often overlooked.
 - Moderately important: The item is somewhat significant and should be considered.
 - Extremely important: The item or factor is critical and cannot be ignored.
-



Thank You!



Backup Slides





Topics

- Evolution of Atlas since 2015: 1.0 to 2.14
 - 3.0 Ways of Working, Development Plans, Preview Feature
 - 4.0 Redesign Efforts with Data4Life
 - Survey 1 of 5
-