

SHRINE 3.1 Webclient Help

Tour of the Web Client

Introduction

The functionality described in the user guide assumes that you have received the necessary prior authorizations to access a SHRINE network at your institution. The process for this authorization varies according to your institution and network.

Most SHRINE networks use a tool called the Data Steward Application to request and approve query topics prior to use of the SHRINE Web Client. Your local administrator or network contact will provide information about this prerequisite step, if applicable.

Details of shots presented in this document may vary from network to network. Each network uses a different ontology and may be uniquely configured. We have attempted to note in this document where these situations may be expected. If you have questions, please contact your local network representative.

The SHRINE Webclient Contains 2 main views:

I. The Find Patients Tab

II. View Results Tab

I. The Find Patients Tab

The default view on login is the Find Patients tab (1). Researchers will build and define their patient cohort by selecting and dropping medical concepts (2) into inclusion and exclusion criteria panel (3). Once defined, they can select various options before searching the network (4).

The screenshot displays the 'The ACT Network' web interface. At the top, a blue navigation bar contains the 'ACT' logo, the text 'The ACT Network Powered by the NCATS CTSa Program', and three tabs: 'FIND PATIENTS' (highlighted), 'VIEW RESULTS', and 'NEXT STEPS'. A user profile icon is on the right. Below the navigation bar, the interface is split into two main panels. The left panel, titled 'Medical Concepts List' (callout 2), features a search bar set to 'All Concepts' and a 'GO' button. Below this is a tree view of medical categories: Covid-19, Demographics, Diagnoses, Laboratory Tests, Medications, and Procedures, each with sub-items. The right panel, titled 'Define Inclusion and Exclusion Criteria' (callout 3), includes a 'CLEAR ALL' button, radio buttons for 'Find patients', 'with', 'without', and 'when', and a large drag-and-drop area with the instruction 'drag a concept here to define the first inclusion or exclusion criteria'. At the bottom, a 'Search ACT Network' section (callout 4) contains a 'Select a topic' dropdown, an 'Enter name' field, an 'Include demographic distributions' checkbox, and a 'COUNT PATIENTS' button.

1. Medical Concepts List

The Medical Concepts List consists of standardized medical billing domains that include diagnosis, procedures, laboratory tests, medications and demographics information and visit details. There are over 2 million concepts to select from. To help search and find the concept of choice, this panel contains features to help locate a specific code.

A researcher can type the medical concept and view corresponding search results (1), can select a filter to narrow down the domain of the search results (2), or can browse the medical concept tree by manually opening and closing folders (3).

The screenshot shows the 'Medical Concepts List' interface. At the top is an orange header with the title. Below it is a search bar with a dropdown menu currently set to 'All Concepts' (callout 2). Under the search bar is a text input field with the placeholder 'begin typing criteria' (callout 1) and a 'GO' button. To the left of the main content area is a tree view of medical domains (callout 3). The tree includes: Covid-19 (with sub-item ACT COVID-19), Demographics (with sub-item ACT Demographics), Diagnoses (with sub-items ACT Diagnoses ICD-9-CM, ACT Diagnoses ICD-10, and ACT Diagnoses ICD10-ICD9), Laboratory Tests (with sub-items ACT Laboratory Tests and ACT Laboratory Tests (Provisional)), Medications (with sub-items ACT Medications Alphabetical and ACT Medications VA Classes), Procedures (with sub-items ACT Procedures ICD-9-Proc, ACT Procedures CPT-4, ACT Procedures HCPCS, and ACT Procedures ICD-10-PCS), and Visit Details (with sub-item ACT Visit Details).

1. Searching for a concept: As the user types in the search field, autosuggest terms will appear in a dropdown below. These terms are ranked by frequency of occurrence within the medical concept list. Select a term and click the "GO" button to view results below.

Autosuggest List

Search Results with highlighted search criteria

Medical Concepts List

Search: Covid-19

begin typing criteria

lung

X

GO

lung 1,567 concepts

approach lung 387 concepts

lung right 384 concepts

lobe lung 356 concepts

left lung 324 concepts

Severe Illness

Level of Care (Setting)

Medications

Other Variables of Interest

Prognostic Lab Tests

Respiratory Therapy Management

Diagnosis

Diagnostic Lab Tests

Total Patient Count

Medical Concepts List

Search: Covid-19

begin typing criteria

lung

GO

Covid-19

ACT COVID-19

Course Of Illness

Other Variables of Interest

Abnormal Chest Imaging

Abnormal Chest Imaging (Derived)

Other nonspecific abnormal finding of lung field (R91.8)

Auto-Immune Disease

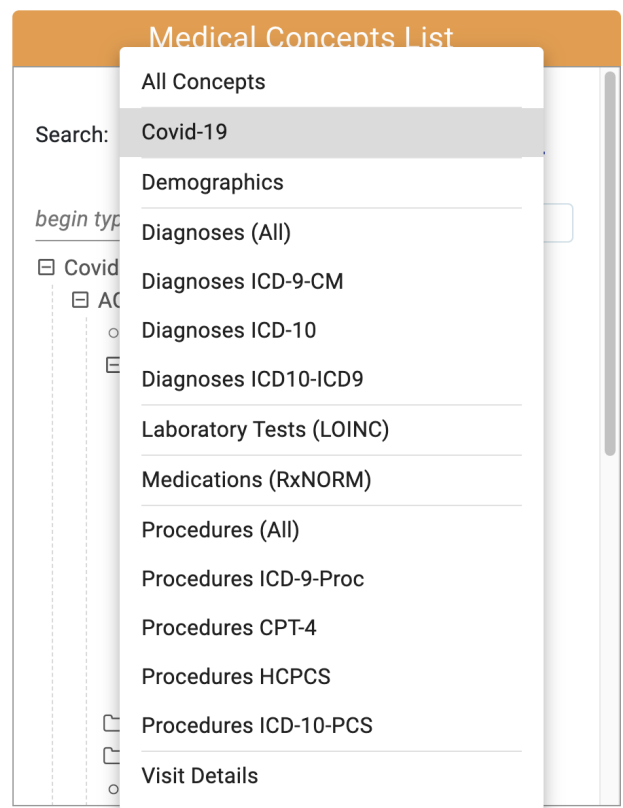
M05 Rheumatoid arthritis with rheumatoid factor

M05.1 Rheumatoid lung disease with rheumatoid arthritis

M05.10 Rheumatoid lung disease with rheumatoid arthritis of

2. Narrow search results with the filter menu: The "Search" field defaults to search the entire medical concepts list. A researcher can specify a specific domain or code set by selecting from the drop down list. The filter and search input field work in tandem to help researchers find the concept of choice.

Filter by code domain or specific code category



3. Browse the medical concept hierarchy. A researcher can browse the medical concept panel by expanding and collapsing the folder and drill down to locate a folder or an individual concept.

Click the concept to expand or collapse the folder.

Medical Concepts List

Search: Covid-19

begin typing criteria

GO

Covid-19

ACT COVID-19

Demographics

ACT Demographics

Diagnoses

ACT Diagnoses ICD-9-CM

ACT_2.0.1_UMLS_2018AA

001-999.99 Diseases And Injuries

E000-E999.9 Supplementary Classification Of External Causes Of Injury And Poisoning

V01-V91.99 Supplementary Classification Of Factors Influencing Health Status And Contact With Health Services

ACT Diagnoses ICD-10

ACT Diagnoses ICD10-ICD9

Laboratory Tests

ACT Laboratory Tests

2. Inclusion and Exclusion Criteria Panel

The Inclusion and Exclusion Criteria panel is how researchers will define their patient population. After finding medical concept(s), simply drag and terms and drop it into the first group.

The first group will default to a green inclusion panel. Toggle to "without" to specify an exclusion panel or toggle to "when" to specify an event based panel (1). Additional concepts added to this group will be related to one another by the OR operator (2). Specify a date range or occurrence (3, 4, 5). Date ranges can start, end, or occur between selected dates (4). View the code within its relational hierarchy (6). Delete an individual concept from a group (7) or delete an entire group (8). Additional groups will automatically appear below, connecting each group by the AND relational operator (9). Clear out the entire panel with "Clear All" button (10).

1

Define Inclusion and Exclusion Criteria

10

CLEAR ALL

2

Find patients ☒ with ☐ without ☐ when

8

2

Diagnosis

E00-E89 Endocrine, Nutritional And Metabolic Diseases (E00-E89)

7

or drag additional concepts

3

SET DATE RANGE OR MULTIPLE OCCURRENCES

4

Concepts must occur from

to

MM/DD/YYYY

MM/DD/YYYY

Concepts must occur at least

1

times

5

and ☐ with ☐ without ☐ when

9

drag a concept here for the next inclusion or exclusion criteria

Click the info icon next to a concept to view its relational hierarchy

Define Inclusion and Exclusion Criteria

CLEAR ALL

Find patients ☒ with ☐ without ☐ when

x

Diagnosis

E00-E89 Endocrine, Nutritional And Metabolic Diseases (E00-E89)

Diagnoses

ACT Diagnoses ICD-10

E00-E89 Endocrine, Nutritional And Metabolic Diseases (E00-E89)

E00-E07 Disorders Of Thyroid Gland

E08-E13 Diabetes Mellitus

E15-E16 Other Disorders Of Glucose Regulation And Pancreatic Internal Secretion

E20-E35 Disorders Of Other Endocrine Glands

E36-E36 Intraoperative Complications Of Endocrine System (E36)

E40-E46 Malnutrition

E50-E64 Other Nutritional Deficiencies

E65-E68 Overweight, Obesity And Other Hyperalimentionation

E70-E88 Metabolic Disorders (E70-E88)

drag a concept here for the next inclusion or exclusion criteria

See examples of patient cohorts at the end of this document.

3. Event Based Panel

The event based panel allows researchers to construct a patient cohort with a sequence of events, where event A occurs before event B. To specify an event based panel, toggle to select the "when" radio button (1). The event panel contains 2 and only 2 events (2, 3). Each event must contain at least 1 concept. A researcher can specify the time gap between the two events (4, 5). An event based panel contains a clock icon to signify that it is a sequence based panel (6).

Define Inclusion and Exclusion Criteria

CLEAR ALL

Find patients ☐ with ☐ without ☒ when

Event 1

drag a concept here to define the first event in the sequence

the first occurrence of Event 1 occurs before the first occurrence of Event 2

Event 2

drag a concept here to define the second event in the sequence

See examples of event based patient cohorts at the end of this document.

4. Search Network Panel

After defining the inclusion and exclusion panel, select or create a new research topic (1), enter or autogenerate a name for this patient cohort (2), elect to include demographic distributions (3), and click "Count Patients" to view results (4).

Search ACT Network

1 Select a topic + Enter name 2

3 Include demographic distributions

4 COUNT PATIENTS

1. Research Topic: A research topic must be selected, or opt to create a new one. Select a previously created topic, or click the "+" icon to create a new one. After creating a topic, it will show up in the topic drop down where it can be selected.

Select a previously created topic

Select a topic

Covid-19 Patient Cohort

Older Adult Endocrine Disorder

Pediatric Endocrine Cohort

New Research Topic window. Include the topic name (1), description (2), and click "Create" (3). Click the "x" icon to exit the window (4).

New Research Topic

4

Topic Name1

Please describe the intent of your research2

3CREATE

2. Name Field: In addition to the Research Topic, the Name Field is required before searching the network. A researcher can enter a name, or click the thunderbolt icon to have a name autogenerate.

Enter name

Autogenerate name

3. Demographic Distributions: Selecting this checkbox will include a graphical display of the patient cohort by dimensions of age, race, sex, and vital status. This will be visible on the View Results tab.

4. Count Patient button. When all required fields are complete, and errors are cleared out, the Count patient button will become enabled.

Disabled button

Enabled button

COUNT PATIENTS

COUNT PATIENTS

II. View Results Tab

The View Results tab (1) is divided into 2 main panels - The Previous Results panel (2), and the View Patient Counts by Sites (3). The Edit Criteria button seamlessly reloads the entire criteria set back into the Find Patients tab (4).

- A green half filled circle indicates a query that is in progress.
- A green filled circle indicates a successfully completed query
- A red filled circle indicates a query that had an error retrieving results

2. The default sort is by recent run date. The previous results panel can also be sorted by status and name.
3. Flag a row to begin the process of obtaining medical
4. Click the pencil icon to edit the name.

3. View Patient Counts by Sites

Select a row from Previous Results to load the results in the View Patient Count by Sites panel. Information about the inclusion and exclusion criteria is displayed (1) including a readout of the criteria. A researcher can download a CSV file of the sites and corresponding counts (2). Demographics Distributions, if selected, are collapsed by default (3). Counts are default sorted in alphabetical order (4, 5), and can be sorted by site name (4) or status (5).

ACT

The ACT Network

Powered by the NCATS CTSA Program

FIND PATIENTS

VIEW RESULTS

NEXT STEPS

Previous Results

Type 1 unspecified cohort

2 hours ago

Type II DM cohort

2 hours ago

Unspecified Diabetes Type 1

2 hours ago

Diabetes unidentified cohort adult

2 hours ago

Diabetes female cohort adult

2 hours ago

female diabetes cohort adult

2 hours ago

Diabetes male cohort adult

2 hours ago

Diabetes broad cohort

2 hours ago

ACT Diagnoses ICD-10@16:57:08

2 hours ago

adult DM 1

2 hours ago

endocrine disorder Aug 1 count

2 hours ago

endocrine disorder July 4 count

2 hours ago

endocrine disorder July 3 count

2 hours ago

endocrine disorder July 2 count

2 hours ago

endocrine disorder July count

2 hours ago

endocrine disorder June count

2 hours ago

pediatric endocrine disorder

2 hours ago

Endocrine disorder

2 hours ago

18-34 years old-E11 Type 2 Diab...

2 hours ago

ACT Diagnoses ICD-10

2 hours ago

View Patient Count by Sites

EDIT CRITE

1

Name: 18-34 years old-E11 Type 2 Diab@16:55:58

Topic: Endocrine disorders

Criteria: Find patients with (Demographics 18-34 years old) or (Demographics 35-44 years old)

Status: In Progress - 30 sites with patients, up to 276,955 total patients

Last Updated: 9/23/21 at 16:56:03 EDT

2

3

DEMOGRAPHIC DISTRIBUTION

4

Site I

Site A

Site B

Site C

Site D

Site E

Site F

Site G

Site H

Site I

Site J

5

Status

Site Error [click for details](#)

Site Error [click for details](#)

10 patients or fewer

905 ± 10 patients

880 ± 10 patients

3,700 ± 10 patients

Sent to Site

12,530 ± 10 patients

10,035 ± 10 patients

Sent to Site

The Demographic Distributions section (1) are a set of 4 graphs that display the patient cohort by dimensions of age, race, sex, and vital status (2). A researcher can download the full set of results per site in a CSV format (3).

ACT

The ACT Network

Powered by the NCATS CTSA Program

FIND PATIENTS

VIEW RESULTS

NEXT STEPS

Previous Results

Type 1 unspecified cohort2 hours ago

Type II DM cohort2 hours ago

Unspecified Diabetes Type 12 hours ago

Diabetes unidentified cohort adult2 hours ago

Diabetes female cohort adult2 hours ago

female diabetes cohort adult2 hours ago

Diabetes male cohort adult2 hours ago

Diabetes broad cohort2 hours ago

ACT Diagnoses ICD-10@16:57:082 hours ago

adult DM 12 hours ago

endocrine disorder Aug 1 count2 hours ago

endocrine disorder July 4 count2 hours ago

endocrine disorder July 3 count2 hours ago

endocrine disorder July 2 count2 hours ago

endocrine disorder July count2 hours ago

endocrine disorder June count2 hours ago

pediatric endocrine disorder2 hours ago

Endocrine disorder2 hours ago

18-34 years old-E11 Type 2 Diab...2 hours ago

ACT Diagnoses ICD102 hours ago

View Patient Count by Sites

EDIT CRIT

Name:18-34 years old-E11 Type 2 Diab@16:55:58

Topic:Endocrine disorders

Criteria:Find patients with (Demographics 18-34 years old) or (Demographics 35-44 years old)

Status:In Progress - 30 sites with patients, up to 276,955 total patients

Last Updated:9/23/21 at 16:56:03 EDT

DEMOGRAPHIC DISTRIBUTION

1

2

Demographic Distribution by Age

3

0-9 years old

10-17 years old

18-34 years old

35-44 years old

45-54 years old

65-84 years old