



National Trauma Research Repository
(NTRR)

Quick Start Guide

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Introduction

BRICS is a disease agnostic data store and catalog that supports all phases of NTRR's research data repository lifecycle: from structuring, capturing, cataloguing, finding, synthesizing, visualizing, managing, to analyzing research data. BRICS is a modular system – meaning that modules can be added or moved – and is made up of eight modules. Seven of the modules will be covered here.

1. Request an account/Login

1. First review instructions for how to get an account: <https://ntrr-nti.org/get-started>.
2. Afterward, create an account: <https://ntrr-nti.org/portal/publicAccounts/createAction!create.action>.
3. Once your account is approved, login here:
https://ntrr-nti.org/cas/login?service=https%3A%2F%2Fntrr-nti.org%2Fportal%2Fj_spring_cas_security_check

2. Account Module

Purpose:

- Update your profile
- Change your password
- Upload documentation

Actions:

Update your profile

1. Under “My Profile” in the “Account Management” section click “Edit my Profile” at the bottom of the screen.
2. Update your profile information.
3. Click “Update Profile” at the bottom of the screen to save.

Change your password

1. Click “Change Password” from the “Account Management” section.
2. Enter your current password.
3. Enter a new password.
4. Retype the new password.
5. Click “change password”.

Note: Passwords are case sensitive and must contain three different kinds of characters: a capital letter, a lowercase letter, numbers and/or special characters.

Upload documentation

1. Under the “Account Management” section click “Upload documentation”.
2. Choose a file type and click “choose file” to locate the file you want to upload.
3. Click “Upload” to upload the file.

3. GUID Module

Purpose:

- Generate unique IDs for subjects (required for submission)

- View your existing GUIDs and Pseudo GUIDs

Important things to know:

- GUID is a global unique identifier used to de-identify PII.
- GUIDs track people over space and time without exposing PII.
- Each subject should have a unique GUID.
- To generate a GUID, you need 7-8 (middle name is optional) required pieces of information
- If you do not have these, you can create a Pseudo GUID.

NTRR Note on GUIDs:

NTRR requires all studies to include a Global Unique Identifier (GUID) for each subject. Since many studies submitted to NTRR may not have all the PII required to generate a GUID for each subject, investigators can generate Pseudo GUIDs, an alternate unique ID.

Actions:

Create Pseudo GUIDs

1. Click Create GUIDs
2. Click to launch the GUID tool
3. From the “Functions” menu dropdown, click “Generate Pseudo GUID”
4. Click “Yes”
5. Click to “Copy” the generated Pseudo GUID or click “OK” and then “Copy Pseudo GUID” from the GUID tool screen.
6. Add Pseudo GUID to your data for the subject.

Create Multiple Pseudo GUIDs (must have Admin role in GUID module)

1. Click Create GUIDs
2. Click to launch the GUID tool
3. From the “Functions” menu dropdown, click “Generate Multiple Pseudo GUIDs”
4. Enter the number of Pseudo GUIDs to create.
5. Click “OK”.
6. Click “Generate”.
7. Select a location on your local machine to save the file with the Pseudo GUIDs.
8. Click “Save”.
9. Locate file on local machine where saved and open to copy and paste Pseudo GUIDs into your data for each of your subjects.

4. Data Dictionary Module

Purpose:

- Create, manage, and search data elements (CDE/UDE), form structures, and eForms

Actions:

Search data elements

1. On the Data Dictionary landing page, click the menu on the left side tool bar to open the menu.
2. Click “Search” under the “Data Elements” heading.

3. Using the search text-box, enter the search keyword to search. Keyword search will be performed within the form fields using the Search Locations (Keywords, Definition, Permissible Values, External IDs, Variable Name, Created Date).
4. You may also narrow your search by selecting the check-box beside the criteria you wish to search (Ownership, Status, Modified Date, Element Type, Form Types, Standardization, , Diseases, Population).
5. Click the “Search” icon (magnifying glass) to run the search.
6. Click on the title of a search result to open the Data Element.

Create data elements

1. On the Data Dictionary landing page, click the menu on the left side tool bar to open the menu.
2. Click “Create” under the “Data Elements” heading.
3. Fill out all required fields and use the top chevrons to navigate through creating a data element or click the “continue” button at the bottom of each screen: (1. Basic Information, 2. Documentation, 3. Attributes, 4. Keywords and Labels, 5. Details, 6. Review).
4. On the “6. Review” chevron, click the “Save and Finish” button when you are done.

Publish data elements

1. Request publication from the data element screen itself.
2. Data element will be published automatically when requesting the publication of a form structure with the draft data element attached.

Edit data elements

1. Click on the title of a data element to open.
2. Click the “Edit” link in the top right.
3. Edit details.
4. Under “Step 6. Review” click the “save and finish” button.

Import data elements

1. Use the data element import guidelines and template to bulk import data elements.
2. On the Data Dictionary landing page, click the menu on the left side tool bar to open the menu.
3. Click “Import” under the “Data Elements” heading.
4. Locate your file and click “Upload”.

Search form structures

1. After clicking on the “Data Dictionary” you will land on the “Search Form Structures” page.
2. Using the search text-box, enter the search keyword to search.
3. Click the “Search” icon (magnifying glass) to run the search.
4. You may also narrow your search by selecting the check-box beside the criteria you wish to search (Ownership, Status, Modified Date, Standardization, Diseases).

Create/Publish form structures

1. On the Data Dictionary landing page, click the menu on the left side tool bar to open the menu.
2. Click “Create” under the “Form Structures” heading.
3. Fill out all required fields and use the top chevrons to navigate through creating a data element or click the “continue” button at the bottom of each screen: (1. Basic Information, 2. Documentation, 3. Data Elements, 4. Permissions, 5. Review).

Note: Under “2. Documentation” it is strongly encouraged that you upload a copy of your case

report form!

4. Under “5. Review” review all the data elements and the order they are in. Click “finish” to save the form structure as a draft.
5. Open the form structure and click “Request Publication” if you are ready for it to be published.
6. An Admin/Data Dictionary Admin can publish the form structure by clicking on the menu under “Data Dictionary Administration” > “Manage” under Form Structures > Select “Status” as “Awaiting Publication” > Click on Form Structure > Click “Approve Publication”.

5. Data Repository Module

Purpose:

- Define and manage study information and access
- Contribute, upload, and store research data

Important things to know:

- Houses data by study
- View details of submitted studies
- Submit studies

Actions:

View/search studies

1. Click on the “Data Repository” icon from the “Workspace” landing page or from the top navigation.
2. By default, you are taken to the “View Studies” page.
3. If already in the “Data Repository” module on a different page, click on the “menu” icon and then select “View Studies”.
 - This page shows studies that the user has permissions to view.
 - User can filter studies by Ownership, Data Submission Status, and Data Type.
 - User can search by Study Title, Study ID, Principle Investigator (PI), and by the Permission Type that the user holds for a particular study (Owner, Admin, Read, Write).

Create a study

1. From the “Data Repository” menu, click “Create Study”.
2. Complete all required fields for the general study details. Make sure to expand the accordions below and fill out required fields.
 - All studies must have a Primary Principal Investigator under “Study Research Management”
 - All studies must have a primary site under “Study Information”
 - All studies must have a start and end date under “Study Information”
 - All studies must have a funding source under “Study Information”
 - All studies must have an approved submission document attached.
3. If available, add the form structures intended for use in the study under “Study Form Structure”.
4. Click “Submit Request” button.

Edit a study

A user can edit a study that they have permission to edit.

1. From the “View Studies” page, click on the study to edit.
2. Click the “Edit” button to edit details of the study. Use the chevrons at the top to navigate through the study metadata (1. Details, 2. Manage Documentation, 3. Manage Datasets, 4. Grant Permissions) and edit the study.

Notes:

- *Under “3. Manage Datasets” the user can request a change to the status of datasets (e.g., shared to private).*
- *Under “4. Grant Permissions” the user can give permissions to other system users.*

Prepare to submit data

1. Locate and export the form structure(s) you wish to use to collect data for your study against as a CSV. (Also download the data element report if you need it).
2. Enter data for each subject in the form(s).

Note: Each subject requires a GUID or Pseudo GUID, so use the GUID tool to generate these for each subject if you have not already. For each line with a GUID, include an “x” in the “record” column.

Validate data

1. Launch the Submission tool
2. Click “Browse” to locate the folder with the data you want to upload and click “Open”.
Note: Recommend storing data in a separate folder.
3. Click “Load Files”
4. Select the file(s) to validate (should say “Form Structure” under the “Type” column) and click the “Include Files” button.
5. Select all the other files you do NOT want to validate and click the “Exclude Files” button.
6. Click the “Validate Files” button. Errors in files will be shown in the window under “Description”. The errors must be fixed prior to uploading the data.

Submit/upload data

1. Once the files contain no errors, click on the “Build Submission Package” button on the “Validation Tool” tab of the Submission tool.
2. Once complete, select the study to upload data to under the “Upload Tool” tab of the Submission tool. You will only see your own studies or studies you have access to.

Note: Make sure to give your dataset a name with context.

3. Click the “Start Submission Upload” button to begin upload.
4. Click “Ok” on prompts that appear.
5. Verify under “Upload Progress” that all items are at 100% and that under “Status” the status is “Complete”.

View data

1. Locate and click on your study in the Data Repository.
2. Expand the “Dataset Submissions” accordion and verify that your dataset submission appears.
3. Click on dataset and click “Add to Download Queue”.
4. Refresh the screen and verify that under “Data Access Report” it shows the dataset and user name of the person who accessed the dataset.

Note: Data will not be visible in the query tool until the next business day.

Download data

1. From the Data Repository menu, click “Download Tool”.
2. Launch the “Download Tool” by clicking the button.
3. Once the download tool opens, select a folder where you want to download the data.
4. Check the box next to the data you want to download.
5. Files available to download include the data as a CSV file, the data as an XML file, and the form structure mapping.
6. Click the “Start Download” button to begin downloading the data.
7. Navigate to the folder selected in step 3 above and verify that your data downloaded.

6. Query Module

Purpose:

- Pulls data from the data repository and allows you to manipulate and filter the data based on your research question of interest.
- You may choose to download your data after applying filters.
- Allows you to sift through volumes of aggregated research data across studies

Important things to know:

- Data needs to be validated and uploaded first (Data repository).
- Can query data that belongs to a specific study
- Can query data that belongs to a specific form across multiple studies
- Can filter data within forms by data element
- Can join forms within and across (left outer join – matching data from primary form and secondary form, on GUID)
- View query results in a browser
- Download query results as a CSV

Actions:

Querying a particular study/form:

1. Click Query on the main menu to list all studies.
2. Select whether you would like to query by study, form, or data element.
3. Locate the study/form by entering the keyword in the search bar and click search (searches study names and metadata).
4. Search results:
 - Under the studies tab, the input is forms (left side) and the output is studies (right side). The number next to the form is the number of studies using that form.
 - Under the forms tab, the input is studies (left side) and the output is forms (right side). The number next to the study is the number of forms in that study.
5. Select the study/forms you wish to query and add them to your Data Cart.

Joining forms:

1. From the Filter Data select “Step 2: Refine Selected Data”.
This will allow you to join the forms from your data cart.
2. Select the primary and secondary forms that you would like to join, forming a left outer join.
 - Drag and drop.
 - Click join.

Filter the join/select criteria:

1. Click on “Select Criteria” tab in the right side.
2. Select which data elements from which forms you would like to query.
 - Select the answers or ranges you wish to query.
 - Select “Apply Filter(s)”.
3. Click on “Datatable View” to review the results of your query.

Download/save/share query:

1. Two download options
 - Download Data Cart to Queue.
Downloads all of the forms pre-query to your download queue
 - Download Datatable to Queue.
Downloads query results shown in the data table to your download queue.
2. Queries are downloaded via the Download Tool in the Data Repository module.

7. Meta Study Module

Purpose:

- Co-locate and aggregate data from other studies for additional analysis
- Reference findings in publications

Actions:

View meta studies

1. Click on the “Meta Study” icon from the “Workspace” landing page or from the top navigation.
2. By default, you are taken to the “View Meta Studies” page.
3. If already in the “Meta Study” module on a different page, click on the “menu” icon and then select “View Meta Studies”.
4. Click on the title of a study to view it.

Create a meta study

1. From the “Meta Study” menu, click “Create Meta Study”.
2. Complete all required fields for the meta study details (title, abstract, study type, first and last name, organization name, and primary funding source).
3. Use the chevrons at the top to navigate through additional meta study details (1. Details, 2. Documentation, 3. Data Artifact, 4. Keywords and Labels, 5. Preview)

Note: Add a saved query or file to the meta study under step 3. Data Artifact.

4. Click the “Create & Finish” button when finished.

Edit a meta study

A user can edit a meta study that they have permission to edit.

1. From the “View meta studies” page, click on the meta study to edit.
2. Click the “Edit” link to edit details of the meta study or the “Edit permissions” link in the right hand navigation to edit the meta study/permissions.

Publish a meta study

1. A non-admin user can request publication of a meta study by opening the meta study and clicking the “request publication” link in the right hand navigation on the meta study.
2. An admin user can publish a meta study by opening the meta study and clicking the “Publish” link in the right hand navigation.

Note: Once published, a meta study needs to be unpublished in order to edit further.

8. Reporting Module

Note: Only admins have access to the reporting module at this time.

Purpose:

- View and filter on study metadata and account metadata.
- Download study metadata and account metadata.

Actions:

View/download reports

1. By default, the user views the studies metadata report.
2. View the accounts report by selecting the report from the drop-down menu.
3. Filter on the reports by typing in a word to search on in the search box at the top right of the table and selecting which columns to search on. On the studies metadata report, you can also search by start/end date.
4. Click to download a report as an XLS, CSV, or PDF using the links on the page.