



13

# BRICS USER GUIDE

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## FHIR Tool



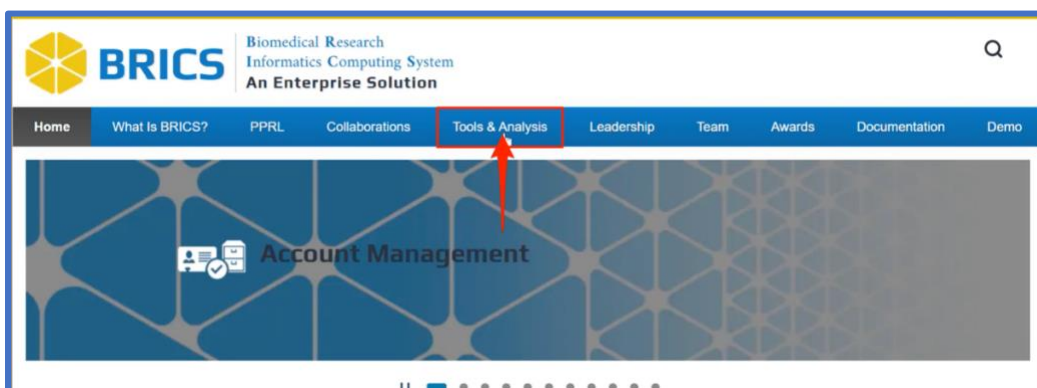
## CHAPTER 13 – FHIR Tool

### 13.1 FHIR Objective

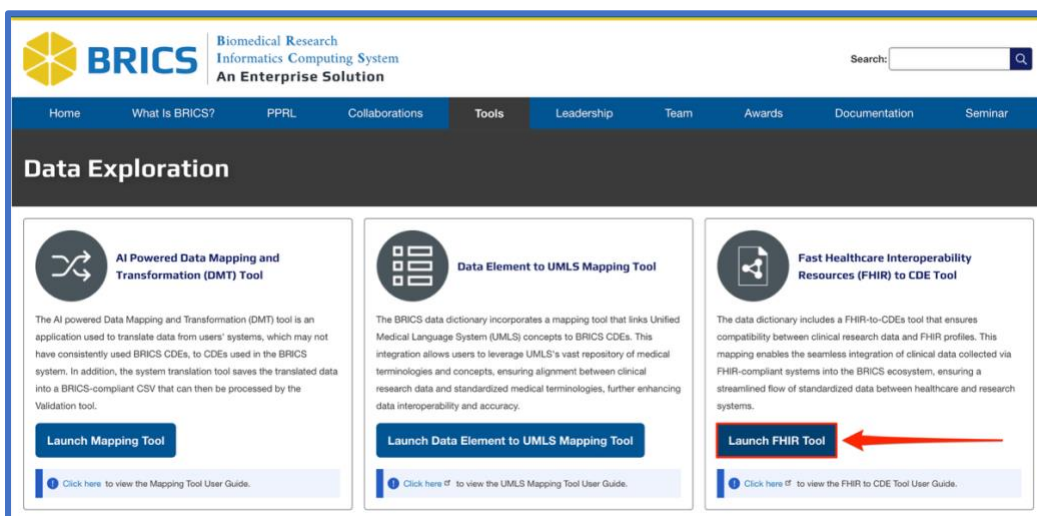
The data dictionary includes a **FHIR-to-CDEs** tool that ensures compatibility between clinical research data and **FHIR** profiles. This mapping enables the seamless integration of clinical data collected **via FHIR-compliant systems** into the **BRICS** ecosystem, ensuring a streamlined flow of standardized data between healthcare and research systems.

### 13.1 Navigation to FHIR Tool

1. Navigate to the BRICS webpage
2. Select the Tools page at the top of the page

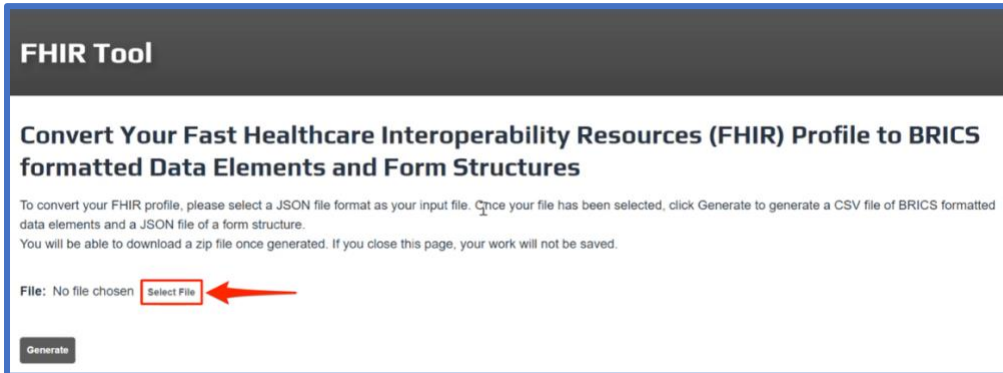


3. Select the FHIR Mapping Tool button to open the page



## 13.2 Using the FHIR Tool

1. Click **Select File** and select the **FHIR Profile** file to convert.



**FHIR Tool**

**Convert Your Fast Healthcare Interoperability Resources (FHIR) Profile to BRICS formatted Data Elements and Form Structures**

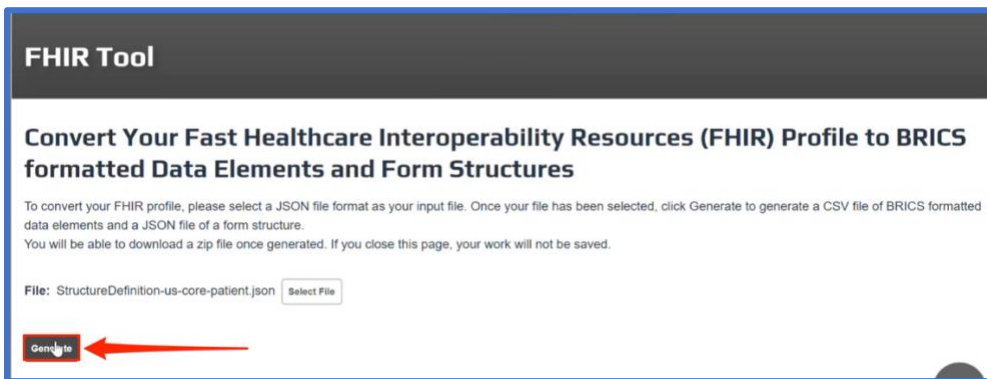
To convert your FHIR profile, please select a JSON file format as your input file. Once your file has been selected, click Generate to generate a CSV file of BRICS formatted data elements and a JSON file of a form structure.

You will be able to download a zip file once generated. If you close this page, your work will not be saved.

File: No file chosen **Select File**

**Generate**

2. Click the **Generate** button



**FHIR Tool**

**Convert Your Fast Healthcare Interoperability Resources (FHIR) Profile to BRICS formatted Data Elements and Form Structures**

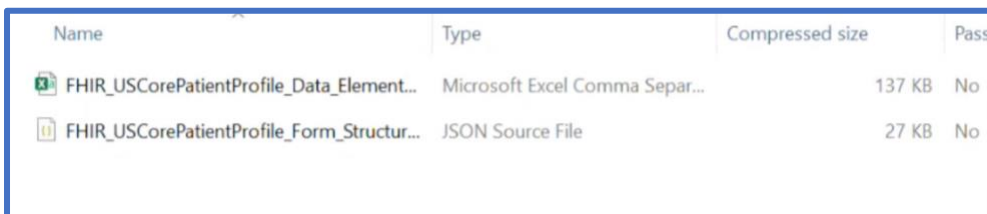
To convert your FHIR profile, please select a JSON file format as your input file. Once your file has been selected, click Generate to generate a CSV file of BRICS formatted data elements and a JSON file of a form structure.



You will be able to download a zip file once generated. If you close this page, your work will not be saved.

File: StructureDefinition-us-core-patient.json **Select File**

**Generate**

3. After processing, click the “Download Converted Files” and it will download the zip file containing the data elements and the form structures. Open the file to see the contents:



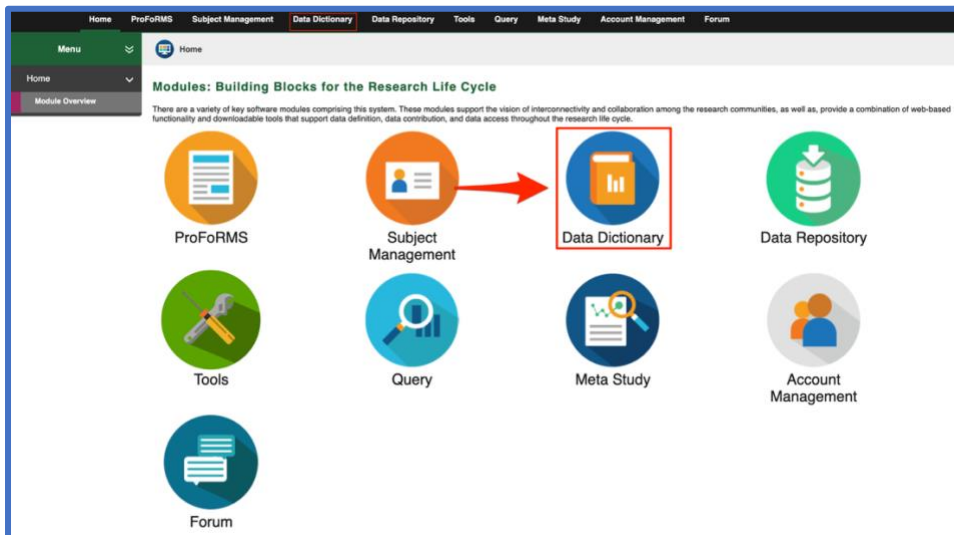
Name	Type	Compressed size	Pass
 FHIR_USCorePatientProfile_Data_Element...	Microsoft Excel Comma Separ...	137 KB	No
 FHIR_USCorePatientProfile_Form_Structur...	JSON Source File	27 KB	No

4. Users can extract the files from the zip file and upload them to their BRICS Instance. Make sure to import the Data Elements first and then import the Form Structures.

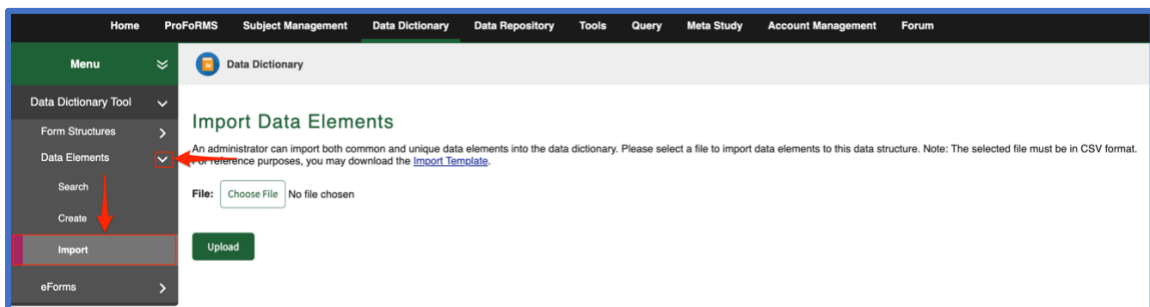
## 13.3 Importing Data Elements

To add the data to the BRICS system we need to import it. Navigate to your BRICS instance and login.

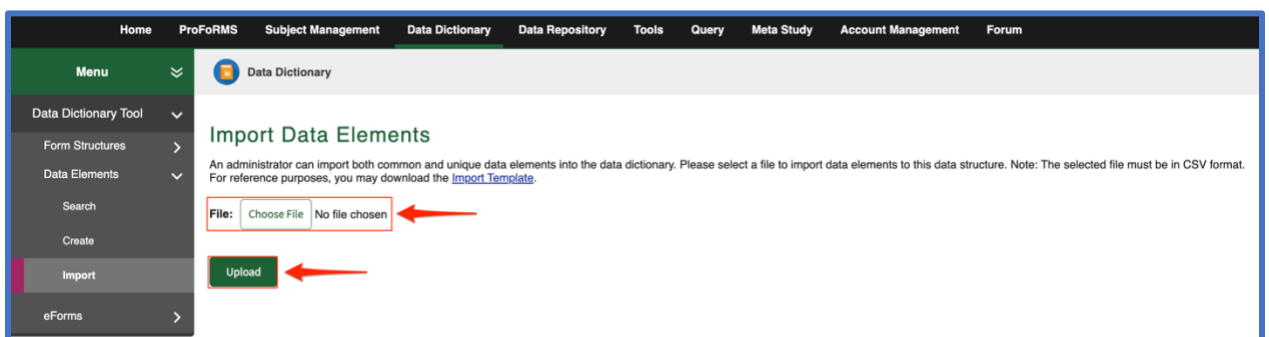
1. Open the Data Dictionary



2. In the side navigation expand **Data Elements** -> Select **Import**



3. Click **Choose File** and select the data elements file that was generated using the FHIR Tool and click **Generate**.



- A table displays showing the data elements found in the document to be imported. Use the **select at the top of the table** to select all the data elements or **individually select the Data Elements to import**.

**NOTE: Data Elements that are marked in red already exists in the system and will not be added.**

**Available Data Elements**

The following data elements were found in the CSV file. Please review these elements and select which ones you wish to import. Data Elements in the system or any elements available for import  
Text highlighted in red will overwrite pre-existing Data Elements.

<input type="checkbox"/>	TITLE	VARIABLE NAME
<input type="checkbox"/>	Patient identifier value	PatientIdentifierValue
<input type="checkbox"/>	Patient marital status coding	PatientMaritalStatusCoding
<input type="checkbox"/>	Patient identifier type coding user selected	PatientIdentifierTypeCodingUserSelected
<input type="checkbox"/>	Patient telecom period	PatientTelecomPeriod
<input type="checkbox"/>	Patient communication language coding display	PatientCommunicationLanguageCodingDisplay
<input type="checkbox"/>	Patient contact period start	PatientContactPeriodStart
<input type="checkbox"/>	Patient text status	PatientTextStatus
<input type="checkbox"/>	Patient identifier type	PatientIdentifierType
<input type="checkbox"/>	Patient active	PatientActive
<input type="checkbox"/>	Patient link modifier extension	PatientLinkModifierExtension
<input type="checkbox"/>	Patient identifier	PatientIdentifier
<input type="checkbox"/>	Patient meta security code	PatientMetaSecurityCode
<input type="checkbox"/>	Patient identifier type coding display	PatientIdentifierTypeCodingDisplay
<input type="checkbox"/>	Patient telecom use	PatientTelecomUse
<input type="checkbox"/>	Patient contact relationship coding user selected	PatientContactRelationshipCodingUserSelected

- After selecting the desired data elements to import then click the **Import Selected Data Elements** button to start the import.

<input checked="" type="checkbox"/>	Patient link id	PatientLinkId
<input checked="" type="checkbox"/>	Patient link extension	PatientLinkExtension
<input checked="" type="checkbox"/>	Patient name id	PatientNameId
<input checked="" type="checkbox"/>	Patient name period start	PatientNamePeriodStart
<input checked="" type="checkbox"/>	Patient identifier assigner type	PatientIdentifierAssignerType
<input checked="" type="checkbox"/>	Patient communication language coding system	PatientCommunicationLanguageCodingSystem
<input checked="" type="checkbox"/>	Patient link	PatientLink
<input checked="" type="checkbox"/>	Patient managing organization	PatientManagingOrganization
<input checked="" type="checkbox"/>	Patient modifier extension	PatientModifierExtension
<input checked="" type="checkbox"/>	Patient address period	PatientAddressPeriod
<input checked="" type="checkbox"/>	Patient telecom extension	PatientTelecomExtension

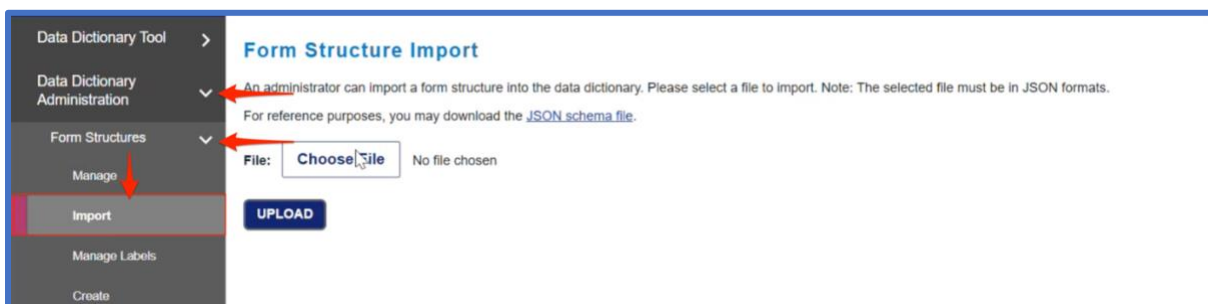
**IMPORT SELECTED DATA ELEMENTS**

## 13.4 Importing Form Structures

After importing the **Data Elements**, we can now import our Form Structure generated from the **FHIR Tool**.

**NOTE: Only users with Data Dictionary Administration permissions will be able to import Form Structures.**

1. Navigate to Data Dictionary page and in the side-navigation expand **Data Dictionary Administration** -> **Form Structures** -> Select **Import**



2. Click **Choose File** and select the **Form Structure** file that was generated by the **FHIR Tool**.



3. After clicking upload and the success dialog is shown, then the Form Structure has been created in **Draft** status.

