

Data Mapping and Transformation Tool





CHAPTER 9 – DATA MAPPING AND TRANSFORMATION TOOL

he Data Mapping and Transformation (DMT) tool is a combination of web-based Java application and downloadable tool that can be run on virtually any Java-enabled platform such as Windows, UNIX, or Macintosh OS X. The DMT tool (available via the Data Repository module), runs locally as a Java Web Start application on a user's computer (requires the Java runtime environment). The tool supports data definition, data mapping, data transformation, and data access through the research cycle.

To ensure the quality of uploaded data and to make data easy to load, data should be in a specific format and range values should comply with the values defined in the data dictionary. All submitted research data must be validated against values defined in the data dictionary prior to submission. Using the Data Mapping and Transformation (DMT) standard user-interface and analysis tools,

researchers at remote sites (via the internet) can easily load Data Elements (DEs) and Permissible Values (PVs) to be paired with eligible BRICS elements and values thereby decreasing the time and effort required to input data to the BRICS system. The DMT tool allows users to save off properly formatted file for the validation tool.

The DMT tool accepts the data (in the form of a **CSV file**) from a researcher, switches the variables and validates the source Data Elements (DEs) and Permissible Values (PVs) file.

To help researchers to map and transform data to the data dictionary, BRICS provides a set of tools that includes:

- Mapping Tool allows users to map Data Elements (DEs) and Permissible Values (PVs) to elements and value from the BRICS Data Dictionary.
- Transform Tool takes the source data file and the mapping file to create a properly formatted output file.



9.1 SYSTEM REQUIREMENTS

The Data Mapping and Transformation tool runs locally on your machine. **Note** that the most recent version of <u>Java Runtime Environment (JRE)</u> (8 or higher) is required to run the tool. Make sure your computer has it installed.

The **Data Mapping and Transformation** tool (including any sub-modules) are available within the **Data Repository** module.

9.1.1 Input and Output

Module Input:

- ◆ CSV files with clinical data within form structure templates from the data dictionary.
- ✤ Source DEs and PVs file

Module Output:

- ✤ CSV files with clinical data.
- ✤ An error log with validation errors and warnings (if any).

9.1.2 CSV Checklist

Before populating the form structure template in the form of a CSV file with data make sure ensure that the downloaded template contains the following:

- ✤ All data elements needed to capture data are included into the CSV file (and the form structure).
- ◆ The **form structure** short name is entered in the cell A1 in the CSV file.
- * The **Main group** (will all data elements) is present in the CSV file.
- The column A, starting from the A2 cell has no data, but has marks (x) that represent the beginning of a new record.
- ◆ The columns that correspond to require DEs in the FS are populated with data.
- ◆ The group (if any) and data element names are the same as in the FS.

Note: the external checked – aka: there is an "X" in the "record" column for each new record. Ensure there are no edits to the template and that the form hasn't changed since it was downloaded.



9.2 LAUNCHING/RUNNING THE DATA MAPPING AND TRANSMISSION TOOL

The **Data Mapping and Transmission** tool are available within the **Data Repository** module. For steps downloading the CSV template, refer to the <u>Data Dictionary</u> module.

To submit imaging data to the BRICS repository, you are required to run a Java Web Start application, to properly prepare your data for Validation and Upload. Using the MIPAV Image Submission Package Creation Tool, you can prepare your image data for submission by following the steps outlined in the next sections.

To launch the Data Mapping and Transmission tool: Perform the following actions:



1. Navigate to your Workspace,

2. Click the Data Repository module from your Workspace,





3. Click on the Menu collapsible menu button to expand the Data Repository menu options on the left tool bar.

View Studios					
View Studies lists the studies that the user has permissions to view. The provided filters will allows users to filter the list by ownership, data submission stat	tus, and data type. The search ca	pability allows us	sers to search by S	Study Title, Study ID, P	rinciple
Investigator (PI), and by the Permission Type that the user holds for a particular study (Owner, Admin, Read, Write).					
Results are shown in a tabular format to include the following:					
Ownership all V All studies V All data types V			Search:		
Ownership: all v All studies v All data types v		∧ Pl ∧	Search:	PERMISSION	A
Ownership: all • All studies • All data types • mnE Development of normative datasets for assessments used in patients with post concussive symptoms due to mild traumatic brain injury (NORMAL)	STUDY ID FITBIR-STUDY0000364	PI Jane Doe	Search: DATA TYPES	PERMISSION Read	٥
Ownership: all 	STUDY ID FITBIR-STUDY0000364 FITBIR-STUDY0000366	PI Jane Doe Jane Doe	Search: DATA TYPES	PERMISSION Read Read	٥
Ownership: all 	STUDY ID FITBIR-STUDY0000364 FITBIR-STUDY0000366 FITBIR-STUDY0000367	PI O Jane Doe Jane Doe John Doe	Search: DATA TYPES	PERMISSION Read Read Read	٥
Ownership: all All data types TTLE	STUDY ID FITBIR-STUDY0000364 FITBIR-STUDY0000366 FITBIR-STUDY0000367	Pl Jane Doe Jane Doe John Doe First F	Search:	PERMISSION Read Read Read Read Read Read Read Read	¢

4. Click the **Data Mapping and Transmission Tool** on the left-side menu (**Note:** This is yet to be developed. Will update screen when the tool is placed here)

	ProFoRMS	GUID	Data Dictionary	Data Repository	Query	Meta Study	Account Managem	ent				
Data Rep	ository											
Manage Studies	hat the user h	ias permission	ns to view. The provid	ed filters will allows use	ers to filter the Read Write)	list by ownership, data	submission status	and data type. The search cap	ability allows us	sers to search by S	Study Title, Study ID, Pr	rinciple
View Studies	format to incl	ude the follow	ina:	and (Owner, Parini, P	read, strate,							
	1011101 10 110.											
Create Study												
Create Study Submission Tools	15	✓ All data ty	ipes 🔹							Search:		_
Create Study Submission Tools	15	✓ All data ty	vpes 💌	_	_	_	_) PI 🗘	Search: DATA TYPES	PERMISSION	0
Create Study Submission Tools MIPAV Tool	tasets for as	All data ty sessments us	rpes • sed in patients with po	ost concussive symptor	ms due to mile	d traumatic brain injury	(NORMAL)	STUDY ID	PI O	Search: DATA TYPES	PERMISSION Read	0
Create Study Submission Tools MIPAV Tool	25 Itasets for as	All data ty sessments us (Alzheimer's o	rpes rpes	ost concussive symptor	ms due to mile	d traumatic brain injury	(NORMAL)	STUDY ID FITBIR-STUDY0000364 FITBIR-STUDY0000366	Jane Doe Jane Doe	Search: DATA TYPES	PERMISSION Read Read	0
Create Study Submission Tools MIPAV Tool	rs tasets for as welopment of hronic Post-1	All data ty sessments us (Alzheimer's o Traumatic Hea	rpes sed in patients with pr disease following rep adaches in OEF/OIF/I	ost concussive symptor etitive head trauma OND Service Members.	ms due to mile and Veterans	d traumatic brain injury s with Mild TBI	(NORMAL)	STUDY ID FITBIR-STUDY0000364 FITBIR-STUDY0000366 FITBIR-STUDY0000367	PI Jane Doe Jane Doe John Doe	Search: DATA TYPES	PERMISSION Read Read Read	0

5. The **Data Mapping and Transmission** tool page appears. (**Note:** This is yet to be developed. Will update screen when the tool is placed here)





6. Click the Launch Data Mapping and Transmission Tool button to start the application verification process.

Starting application	×
Verifying application.	
Location: https://mipav.cit.nih.gov	Cancel

7. Once the application completes the verification process, the Java Web Start Launcher opens

Opening mipav-nightly.jnlp
You have chosen to open:
mipav-nightly.jnlp
which is: JNLP File
from: https://mipav.cit.nih.gov
What should Firefox do with this file?
Open with Java(TM) Web Launcher (default)
Do this <u>a</u> utomatically for files like this from now on.
OK Cancel



8. Select the Open with or Save File option to launch the DMT tool.

Opening mipav-nightly.jnlp
You have chosen to open:
mipav-nightly.jnlp
which is: JNLP File
from: https://mipav.cit.nih.gov
What should Firefox do with this file?
Open with Java(TM) Web Launcher (default)
Save File
Do this <u>a</u> utomatically for files like this from now on.
OK Cancel

9. Click the **Run** button to run the MIPAV application on your computer.

Do you wan	it to run t	x his application?
	Name:	MIPAV
<u></u>	Publisher:	National Institutes of Health
	Location:	https://mipav.cit.nih.gov
This application v and personal info and publisher abo	vill run with un rmation at risk ove.	nrestricted access which may put your computer k. Run this application only if you trust the location
Do not show t	his again for a	pps from the publisher and location above
More Info	rmation	Run Cancel



10. To continue, you **MUST** read and accept the warning banner by Clicking on the **Yes** button. Click the **No** button to exit the application.



11. The Data Mapping and Transformation Tools opens.

Get Form Structures Select Form Structure Load Sou cforence Form Structure: Group Element Name Title Type Reference PVs Required Source N	rce DEs PVsj PV Mappings
ference Form Structure: Group Element Name Title Type Reference PVs Required Source N. Source Type Source 1	PVs PV Mappings
Group Element Name inte type reterence PVS Required Source N_ Source type Source	rvs <u>rv</u> mappings
Output Directory for mapping result files: C:\Users\C401205\Desktop\BRICS_Ima Browse Save Load	
hut log	
put log	
put log	



9.3 USING THE MAPPING TOOL

The **Mapping Tool** allows users to add files by retrieving Form Structures from the BRICS Data Dictionary. You must first retrieve form structures before attempting to select Form Structures and loading DEs.

9.3.1 Mapping Files

To Map Files: Perform the following actions:

1. In the main Data Mapping and Transformation Tools window, Select the **Mapping Tool** tab option.

mapping 1001	Get Form Structu	ures		Select Form Structure	Select Form Structure Load Source DEs				
Reference Form	Structure:								
Group	Element Name	Title	Туре	Reference PVs	Required	Source N	Source Type	Source PVs	PV Mappings
		Output Directory for mapping r	esult files: C:\Users\C	C401205\Desktop\BRICS_Ima	Browse	Save	Load		
Output log									

2. Click the Click the Get Form Structures button.

Get Form Structures Select Form Structure Load Source DEs									
ference Form Stru	icture:								
Group	Element Name	Title	Туре	Reference PVs	Required	Source N	Source Type	Source PVs	PV Mappings
				-					
	Out	put Directory for mapping re	sult files: C:\Users\C40	01205\Desktop\BRICS_Ima	Browse	Save	Load		
put log									

3. The system runs to retrieve form structures from the BRICS data dictionary.

Data Mapping and	Transformation Tools - P	Seta version 0.3 (Demo)							
lelp									
Mapping Tool Tr	ansform Tool								
	Get Form Structu	Ires		Select Form Structure				Load Source DEs	
Reference Form Stre	ucture:								
Group	Element Name	Title	Туре	Reference PVs	Required	Source N	Source Type	Source PVs	PV Mappings



4. Click the Choose Form Structure button.

	Get Form Struc	tures		Select Form Structure				Load Source	DEs
Reference Form Str	ucture: BM_Preclinica	1							
Group	Element Name	Title	Туре	Reference PVs	Required	Source N	Source Type	Source P	PV Mappings
lain	GUID	GUID	GUID		REQUIRED				
lain	SubjectIDNum	Subject identifier number	ALPHANUMERIC		RECOMMENDED				
/lain	StudyProtocolName	Study protocol name	ALPHANUMERIC		RECOMMENDED				
lain	InjDateTime	Injury date time	ALPHANUMERIC		RECOMMENDED				
lain	AnimalSpeciesTyp	Animal species type	ALPHANUMERIC	Mice;Other, specify;Rats;Pigs	RECOMMENDED				
/lain	AnimalSexTyp	Animal sex type	ALPHANUMERIC	Male;Other;Female	RECOMMENDED				
/lain	AnimalBirthDate	Animal birth date	DATE		RECOMMENDED				
nimal Injury Info	AnimalInjuryGroupA.	Animal subject injury group assignm	ALPHANUMERIC	Anesthesia controls;Other, s	RECOMMENDED				
nimal Injury Info	AnimalInjuryGroupA.	Animal subject injury group assignm	ALPHANUMERIC		RECOMMENDED				
Equipment Info	TestApparatusMan	Test apparatus manufacturer name	ALPHANUMERIC		RECOMMENDED				
Equipment Info	TestApparatusMod	Test apparatus model name	ALPHANUMERIC		RECOMMENDED				
Equipment Info	TestApparatusCom	Test apparatus computer manufactur	ALPHANUMERIC		OPTIONAL				
Equipment Info	TestApparatusCom	Test apparatus computer model name	ALPHANUMERIC		OPTIONAL				
Equipment Info	VideoRecManufactI	Video recorder manufacturer name	ALPHANUMERIC		RECOMMENDED				
Equipment Info	VideoRecModelNa	Video recorder model name	ALPHANUMERIC		RECOMMENDED				
Equipment Info	BMTEquipWallsInd	Barnes Maze test - Equipment has w	ALPHANUMERIC	Unknown;No;Yes	RECOMMENDED				
Equipment Info	BMTEquipPlatform	Barnes Maze test - Equipment Platfor	NUMERIC		RECOMMENDED				
Equipment Info	BMTEquipPlatform	Barnes Maze test - Equipment platfor	NUMERIC		RECOMMENDED				
auipment Info	BMTEquipPlatform	Barnes Maze test - Equipment Platfor	NUMERIC		RECOMMENDED				
		Output Directory for mapping resu	It files: C:\Users\C	401205\Desktop\BRICS_Ima	Browse	Save	Load		
Destaured Inco									
/IIIIIIII 109									



5. The **Choose Form Structure** dialog window appears populated with i) form structure name ii) with description iii) Version, iv) status and, v) the disease. **Note**: This dialog window appears only after the Get For Structures had received all the data from the web service.

Get F	orm Structures	Select Form Struct	ture				Load Source DEs	
eference Form Structure:	R Change From Churcher							
Crown	at Name						Purce Pl/c	Pl/ Happings
Group	in Name	S	Search	Reset			uicervs	F v mappings
	Nama	Description		Version	Otatus	Disease		
	AnimalChar Bradinical	Animal characteristics as part of Core Common	Doto Elomo	1.0		Traumatic Prain Ini		
	Animalchaf_Predinical	2019 Animal bistory the latest and greatest as	and of Core	1.0	PUBLISHED	Traumatic Brain Inj	-	
	Auto Form Jun12 10 49 20	Form Structure Description	part of Cole	1.0		Traumatic Brain Inj		
	BlastExposure	In 2017 the Biomechanical Devices in Traumat	ic Brain Injur	10	PUBLISHED	Traumatic Brain Inj		
	BM Preclinical	This is the latest and greatest Barnes mare FS	The Barne	1.0	PUBLISHED	Traumatic Brain Inj		
	Demographics	This form contains data elements that are colle-	cted to descr	1.0	PUBLISHED	Parkingon's Disaa		
	DemogrEITBIR	FITBIR Demographics standard form	00000000000	1.0	PUBLISHED	Traumatic Brain Ini	-	
	GDS FITBIR	Developed to screen for depression without not	able focus o	10	PUBLISHED	General (For all di		
	GOSE Standard	The Glasgow Outcome Scale Extended (GOS-E) is a revisio	10	PUBLISHED	Traumatic Brain Ini		
	HAT Predinical	Preclinical Human Approach Test (HAT) Refere	nces: Spink	1.0	PUBLISHED	Traumatic Brain Ini		
	MoCA	The Montreal Cognitive Assessment (MoCA) wa	s created in	1.0	PUBLISHED	Parkinson's Disea		
	MWM Preclinical2018	This is the latest and greatest Morris Water Maz	e FS. Use thi	1.0	PUBLISHED	Traumatic Brain Ini		
	Parkinsonism Meds	Updated medication form to include medication	s not includ	1.0	PUBLISHED	Parkinson's Disea	H	
	PDBP_PSP	A comprehensive clinical disability rating scale	for Progressi	1.0	PUBLISHED	Parkinson's Disea		
	PEDI	ediatric Evaluation of Disability Inventory (PEDI)	lets you me	1.0	PUBLISHED	Traumatic Brain Inj		
	Physical_Exam_test	Test		1.0	PUBLISHED	General (For all di		
	PhysicalExamForm	Test		1.0	PUBLISHED	General (For all di	-	
			LIEBUR A	1			1	
		Select						
		000000000						

6. There are two ways in which you can load the form structures to the table: i) Double-click on the specific form structure to choose ii) Simply, click on the form structure and click the Select button. <u>Note</u>: You may also use the search text-box to search for the specific form structure you would like to load to the table.

Get Form St	ryctures	Select Form Structure	Load So	urce DEs
ference Form Structure:	Choose Form Structure			
Group Element Nam		Search Reset	urce	PVs PV Mappings
	Name	Description Version	Status Disease	
	AnimalChar_Preclinical	Animal characteristics as part of Core Common Data Eleme	JBLISHED Traumatic Brain Inj	
	AnimalHistPreclinical2018	2018 Animal history, the latest and greatest, as part of Core 1.0 PU	JBLISHED Traumatic Brain Inj	
	Auto Form Jun13 10 48 38	Form Structure Description 1.1 PU	JBLISHED Traumatic Brain Inj	
	BlastExposure	In 2017, the Biomechanical Devices in Traumatic Brain Injur 1.0 PL	JBLISHED Traumatic Brain Inj	
	BM Preclinical	This is the latest and greatest Barnes maze FS. The Barne 1.0 PL	JBLISHED Traumatic Brain Inj	
	Demographics	This form contains data elements that are collected to descr 1.0 PL	JBLISHED Parkinson's Disea	
	DemogrFITBIR	FITBIR Demographics standard form 1.0 PU	JBLISHED Traumatic Brain Inj =	
	GDS_FITBIR	Developed to screen for depression without notable focus o 1.0 PL	JBLISHED General (For all di	
	GOSE_Standard	The Glasgow Outcome Scale Extended (GOS-E) is a revisio 1.0 PL	JBLISHED Traumatic Brain Inj	
	HAT_Preclinical	Preclinical Human Approach Test (HAT) References: Spink 1.0 PL	JBLISHED Traumatic Brain Inj	
	MoCA	The Montreal Cognitive Assessment (MoCA) was created in 1.0 PL	JBLISHED Parkinson's Disea	
	MWM_Preclinical2018	This is the latest and greatest Morris Water Maze FS. Use thi 1.0 Pt	JBLISHED Traumatic Brain Inj	
	Parkinsonism_Meds	Updated medication form to include medications not includ 1.0 PU	JBLISHED Parkinson's Disea	
	PDBP_PSP	A comprehensive clinical disability rating scale for Progressi 1.0 PL	JBLISHED Parkinson's Disea	
	PEDI	ediatric Evaluation of Disability Inventory (PEDI) lets you me 1.0 PU	JBLISHED Traumatic Brain Inj	
	Physical_Exam_test	Test 1.0 PL	JBLISHED General (For all di	
	PhysicalExamForm	Test 1.0 PL	JBLISHED General (For all di	
	P. L. L. P.P.		Includes by the control land	
	_	Select		



7. Note: Upon loading the desired form structures, the **Reference Form Structure** (in this example, BM_Preclinical) appears in a table as shown below. The **Select Form Structures** button simply loads this table again. The **Search** bar is a partial search that allows the user to find a specific form needed for mapping. The Reset button pulls up the original table. By selecting a form structure and hitting the **Select** button, the form structure data is loaded into the main table.

	Get Form Struc	turae		Salact Form Structure				Load Source	DEe	
D.4	Bet Form Suuc	Luies		Select rollin Structure				Loau Source	DES	
Kelerence Form St	ructure: BM_Frecinica			Defense Dite	Burndard				Phillippine in a s	
Group	Element Name	litte	Type	Reference PVs	Required	Source N	Source Type	Source P	PV Mappings	_
viain	GUID	GOID	GUID		REQUIRED					-
Main	SubjectiDivum	Subject Identifier number	ALPHANUMERIC		RECOMMENDED					-
Main	SugyProtocolName	Study protocor name	ALPHANUMERIC		RECOMMENDED					_
Main	InjDate Time	Injury date time	ALPHANUMERIC	MissiOther analityData:Diss	RECOMMENDED					-
Main	AnimalSexTyp	Animal species type		Male:Other:Eemale	RECOMMENDED					-
Main	AnimalBirthDate	Animal birth date	DATE	mare, ourer, rentale	RECOMMENDED					-
Animal Injury Info	AnimalIniur/GrounA	Animal subject injury group assignm	AL PHANLIMERIC	Anesthesia controls:Other s	RECOMMENDED					-
Animal Injury Info	Animallniur/GroupA	Animal subject injury group assignm.	AL PHANLIMERIC		RECOMMENDED					-
Equipment Info	TestAnnaratusMan	Test annaratus manufacturer name	AL PHANUMERIC		RECOMMENDED					_
Equipment Info	TestApparatusMod	Test apparatus model name	AL PHANUMERIC		RECOMMENDED					_
Equipment Info	TestApparatusCom	Test apparatus computer manufactur.	ALPHANUMERIC		OPTIONAL					_
Equipment Info	TestApparatusCom	Test apparatus computer model name	ALPHANUMERIC		OPTIONAL					
Equipment Info	VideoRecManufactI	Video recorder manufacturer name	ALPHANUMERIC		RECOMMENDED					
Equipment Info	VideoRecModelNa	Video recorder model name	ALPHANUMERIC		RECOMMENDED					
Equipment Info	BMTEquipWallsInd	Barnes Maze test - Equipment has w	ALPHANUMERIC	Unknown;No;Yes	RECOMMENDED					
Equipment Info	BMTEquipPlatform	Barnes Maze test - Equipment Platfor	NUMERIC		RECOMMENDED					
Equipment Info	BMTEquipPlatform	Barnes Maze test - Equipment platfor	NUMERIC		RECOMMENDED					
Equipment Info	BMTEquipPlatform	Barnes Maze test - Equipment Platfor	NUMERIC	1	RECOMMENDED					
		Output Directory for mapping resu	It files: C:\Users\C	401205\Desktop\BRICS_Ima	Browse	Save	Load			
Output log										
Successful retrieval of	form structures.									
Successful retrieval of	form structures									

Note: Some of the cells in the above table have tool-tips, double-clicking on any of the first four columns (Group, Element Name, Tittle, Type) will pull up the DATA Dictionary web page.

8. Click on the Load Source DEs button.

Help									
Mapping Tool T	ransform Tool								
	Get Form Struc	tures		Select Form Structure			\rightarrow	Load Source	DEs
Reference Form St	ructure: BM Preclinica	1							
Group	Element Name	Title	Type	Reference PVs	Required	Source N	Source Type	Source P	PV Mappings
Main	GUID	GUID	GUID		REQUIRED				
Main	SubjectIDNum	Subject identifier number	ALPHANUMERIC		RECOMMENDED				
Main	StudyProtocolName	Study protocol name	ALPHANUMERIC		RECOMMENDED				
Main	InjDateTime	Injury date time	ALPHANUMERIC		RECOMMENDED				
Main	AnimalSpeciesTyp	Animal species type	ALPHANUMERIC	Mice:Other, specify;Rats;Pigs	RECOMMENDED				
Main	AnimalSexTyp	Animal sex type	ALPHANUMERIC	Male;Other;Female	RECOMMENDED				
Main	AnimalBirthDate	Animal birth date	DATE		RECOMMENDED				
Animal Injury Info	AnimalInjuryGroupA.	Animal subject injury group assignm.	ALPHANUMERIC	Anesthesia controls;Other, s	RECOMMENDED				
Animal Injury Info	AnimalInjuryGroupA.	Animal subject injury group assignm.	. ALPHANUMERIC		RECOMMENDED				
Equipment Info	TestApparatusMan	Test apparatus manufacturer name	ALPHANUMERIC		RECOMMENDED				
Equipment Info	TestApparatusMod	Test apparatus model name	ALPHANUMERIC		RECOMMENDED				
Equipment Info	TestApparatusCom	Test apparatus computer manufactur	ALPHANUMERIC		OPTIONAL				
Equipment Info	TestApparatusCom	Test apparatus computer model nam	e ALPHANUMERIC		OPTIONAL				
Equipment Info	VideoRecManufactI	Video recorder manufacturer name	ALPHANUMERIC		RECOMMENDED				
Equipment Info	VideoRecModelNa	Video recorder model name	ALPHANUMERIC		RECOMMENDED				
Equipment Info	BMTEquipWallsInd	Barnes Maze test - Equipment has w.	. ALPHANUMERIC	Unknown;No;Yes	RECOMMENDED				
Equipment Info	BMTEquipPlatform	Barnes Maze test - Equipment Platfor.	NUMERIC		RECOMMENDED				
Equipment Info	BMTEquipPlatform	Barnes Maze test - Equipment platfor.	. NUMERIC		RECOMMENDED				
Eauipment Info	BMTEquipPlatform	Barnes Maze test - Equipment Platfor	NUMERIC		RECOMMENDED				
		Output Directory for mapping res		401205/Deskton/BRICS Ima	Browse	Savo	beol		
		output birectory for mapping rea	un mea. 0.10361310	ACT20500eaktopibitico_ima	Diowse	Juve	Loud		
Output log									
Successful retrieval of	form structures.								
Successful retrieval of	form structures.								
Successful retrieval of	data elements for form stri	scture: BM Preclinical							



9. The Load Source DEs button brings up the **Source Data Elements** dialog dialog window from where you can choose the proper Data Elements (DEs) and Permissible Values (PVs) file. If thus file is in the correct format, a dialog window with the user's DEs and PVs will load as shown below.

Mapping Tool	Transform Too				Search	Reset				
	Get F	Source Data Elements							DEs	
Reference Form	structure: Den	Mapped	Name	Type	PVs	PV Descriptions	Title		age first.	
Group	Eleme		GUID	GUID			GUID		PV Mappings	
tain Group	GUID		SubjectID	Alphanumeric			Subject identifier			
tain Group	SubjectIDE		AgeYears	Numeric			Age of subject			-
tain Group	AneYrs		Site	Alphanumeric			Site name		-	
tain Group	VisitDate	8	Gender	Alphanumeric	N:U:M:F;UK	Not reported Unspecifie.	Gender of subject			
tain Group	SiteName		HandPref	Alphanumeric	0:1:2:3	Both Left:Unknown Right	Hand preference			
tain Group	DaysSince	5	RaceUSA	Alphanumeric	American Indian or Alas	American Indian;Asian;	Race USA category			
tain Group	CaseCont		RaceSpec	Alphanumeric	Alaskan Native:Black Afr.	Alaskan Native Black Afr	Race category			
tain Group	GeneralNe	8	EthnUSA	Alphanumeric	Hispanic or Latino;Not	Hispanic/Latino;Not His.	Ethnicity USA category			
orm Administrati	on ContextTyr		BirthCntry	Alphanumeric			Birth country	1		
orm Administrati	on ContextTyr	0	CntryResdnceISO	Alphanumeric	Other;GB;AU;CA;US:MX	Other United Kingdom A	Country of residence co	-	1	
orm Administrati	on DataSourd		CntryResdnceName	Alphanumeric			Country of residence na			
Form Administrati	n DataSour		LanoPrimary	Alphanumeric	ger;Other fre;chi:spa;sg	German Other French C.	Primary language			
Subject Demogra	BirthDate		LangPrimryOTH	Alphanumeric			Primary language other			
Subject Demogra	GenderTyp		MartIStatus	Alphanumeric	D.W.NM.S.M.DP.Other	Divorced Widowed Not	Marital Status			
Subject Demogra	SexSubjed		MartIStatusOTH	Alphanumeric			Marital Status other text			
Subject Demogra	SexSubjec	5	SesPrimAdult	Alphanumeric	Alone;Child/children;Gr	Alone;Child/children;Gr.	Living situation of adult			
Subject Demogra	HandPref		SesPrimAdultOTH	Alphanumeric			Other primary person M			
subject Demogra	RaceUSAC	S	SesPrimChild	Alphanumeric	AP;FC;OF;Parents;UK;O	Adoptive parents;Foster	Living situation of juveni			
Subject Demogra	RaceCat		EduLevelUSA	Alphanumeric	NA/K;1;2;3;4;5;6;7;8;9;1	Never attended/kindger	Education level USA type			
			EduLevelUSAOTH	Alphanumeric			Education level USA typ			
			EduYearCount	Numeric			Education year count			
		0	EmplimtStatus	Alphanumeric	Not in paid workforce;Si	"Not in paid workforce;S.	at least minimum wage			
Output log			EmpimtStatusOTH	Alphanumeric			Employment status oth			
increase ful retrieval	f form standing		MilActive	Alphanumeric	0;1;2	Yes;No;Unknown	Military active status Indi	-		
Concessful retrieval	f data alamante									
servession lettiever	a Gata elettients									
				Particular Destand	Class	Church				

10. The **Search** text-box in the top bar allows you search for a particular DE or PV (partial search). The **Reset** button brings the original table back up. The **Close** button at the bottom will close the entire dialog window.

Manalan Taal Ta	undum Tee				Search	Reset				
Mapping Tool Tr	anstorm 100									_
	Get F	Source Data Elements							DES	
Reference Form Str	ucture: Den	Mapped	Name	Туре	PVs	PV Descriptions	Title			
Group	Eleme		GUID	GUID			GUID		PV Mappings	
Main Group	GUID		SubjectID	Alphanumeric			Subject identifier			
Main Group	SubjectIDI		AgeYears	Numeric			Age of subject			_
Main Group	AgeYrs		Site	Alphanumeric			Site name			
Main Group	VisitDate		Gender	Alphanumeric	N;U;M;F;UK	Not reported;Unspecifie	Gender of subject			
Main Group	SiteName		HandPref	Alphanumeric	0;1;2;3	Both;Left;Unknown;Right	Hand preference			
Main Group	DaysSince		RaceUSA	Alphanumeric	American Indian or Alas	American Indian;Asian;	Race USA category			
Main Group	CaseCont		RaceSpec	Alphanumeric	Alaskan Native;Black Afr	Alaskan Native;Black Afr	Race category			
Main Group	GeneralNo		EthnUSA	Alphanumeric	Hispanic or Latino;Not	Hispanic/Latino;Not His	Ethnicity USA category			
Form Administration	ContextTyp		BirthCntry	Alphanumeric			Birth country			
Form Administration	ContextTyp		CntryResdinceISO	Alphanumeric	Other;GB;AU;CA;US;MX	Other;United Kingdom;A.	Country of residence co			
Form Administration	DataSourd		CntryResdnceName	Alphanumeric			Country of residence na			
orm Administration	DataSourd		LangPrimary	Alphanumeric	ger;Other;fre;chi;spa;sg	German;Other;French;C	Primary language]		
Subject Demograp	BirthDate		LangPrimryOTH	Alphanumeric			Primary language other			
Subject Demograp	GenderTyp		MartiStatus	Alphanumeric	D;W;NM;S;M;DP;Other	Divorced;Widowed;Not	Marital Status			
Subject Demograp	SexSubjed		MartIStatusOTH	Alphanumeric			Marital Status other text			
Subject Demograp	SexSubjed		SesPrimAdult	Alphanumeric	Alone;Child/children;Gr	Alone;Child/children;Gr	Living situation of adult			
Subject Demograp	HandPref		SesPrimAdultOTH	Alphanumeric			Other primary person M			
Subject Demograp	RaceUSA		SesPrimChild	Alphanumeric	AP;FC;OF;Parents;UK;O	Adoptive parents;Foster	Living situation of juveni	1		
Subject Demoorap	RaceCat		EduLevelUSA	Alphanumeric	NA/K;1;2;3;4;5;6;7;8;9;1	Never attended/kindger	Education level USA type			
			EduLevelUSAOTH	Alphanumeric			Education level USA typ	1		
			EduYearCount	Numeric			Education year count			
			EmplimtStatus	Alphanumeric	Not in paid workforce;Si	"Not in paid workforce;S	at least minimum wage	1		
Output log			EmpImtStatusOTH	Alphanumeric			Employment status oth			
	form structure		MilActive	Alphanumeric	0;1;2	Yes;No;Unknown	Military active status Indi	-		
(Increased in the second secon	And show the second sec									

11. Select a row in both the main dialog table and the Source Data Elements table. Click the **Pair** button to place the data from the source data elements table unto the proper column



in the main dialog table. Use the **Pair: Append** button to map multiple source data elements to a single BRICS reference data element. The **Clear** button will clear the contents of the selected row in the main dialog table, as well as removing the red Yes that indicates ta value has been mapped.

	Get Loom Store	the second s		Relact Loom Structure				Load Source	- 0Ec	Source Data Ele	Depts				
	Get Form Stron			Select rorm Sirectore				Loan source	AU LUEIN	Mapped	Name	Type	Pvs	PV Descriptions	Title
Reference Form Str	uture: Demogration		1	1	1	· la · · · · · · ·		in the second second		Yes	QUD	GUID			GUID
Group	Element Name	Title	Type	Reference PVs	Required	Source N.	Source Type	Source P.	PV Mappings		SubjectiO	Alphanumeric			Subject identifier
an cronb	CUID	Iduid	CUID		REQUIRED	CUID	GUID	1			AgeYears	Numeric			Age of subject
ain Group	SubjectioNum	Gubject identifier number	ALPHANAMERIC		OPTIONAL.						15/te	Alphanumeric			lote name
ain Group	AgeYes	Age in years	MARRIC		REQUIRED						Gender	Aphanumenc	NUMPUK	Not reported Uns.	Gender of subject
ain Group	VisitDate	Visit date	DATE		RECOMMENDED						HandPret	Aphanumeric	0.1.2.3	Eloth Left Unkno	Hand preference
tain Group	SteName	Site name	ALPHANUMERIC		RECOMMENDED						RaceUSA	Aphanumeric	American Indian	American Indian:	Race USA categ
tain Group	DoysSinceBaseline	Days since baseline	NUMERIC		OPTIONAL.	_					RaceSpec	Alphanumeric	Alaskan Native BL	Alaskan Natve BI	Race category
tain Group	CaseContrilled	Case centrol indicalor	ALPHANAMERIC	Unknown Case Control	OPTIONAL.						EthnUSA	Aphanumeric	Hispanic or Latin.	HispanicAatino	Ethnicity USA cat.
tain Group	GeneralNotesTid	General notes text	ALPHANI, MERIC		OPTIONAL						BirthCrity	Alphanumeric			Birth country
form Administration	ContextType	Contexttype	ALPHANUMERIC	Before injury Last 24 hours L.	RECOMMENDED						CntryResdncelSO	Alphanumeric	Other GB ALL CA	Other United Kin	Country of reside
Form Administration	ContentTypeOTH	Context type other text	ALPHANUMERIC		RECOMMENDED						CntryResdnceNa	Alphanumeric			Country of reside
Form Administration	DataSource	Data source	ALPHANUMERIC	Other, specify,Sister,Spouse.	RECOMMENDED						LangPrimary	Alphanumeric	ger Other the chi	German, Other Fr.	Primary language
Form Administration	DataSourceOTH	Data source other text	ALPHANUMERIC	and a second second second second	RECOMMENDED						LangPrimryOTH	Aphanumeric			Primary languag
Subject Demograp	BirthDate	Birth date	DATE		OPTIONAL						Mar#Status	Alphanumeric	D.W.NM.S.M.DP.	Divorced Widowe	Marital Status
Subject Demograp.	GenderTyp	Gendertype	ALPHANUMERIC	Not reported Unspecified Ma.	RECOMMENDED						Mar#StatusOTH	Aphanumeric			Marital Status offi
Bubject Demograp.	SexSubjectGenotyp.	Sex participant or subject genotype ty	ALPHANUMERIC	DOT:Unknown,XXX:Other. sp	RECOMMENDED						SesPrimAdult	Aphanumeric	Alone, Child/child.	Alone Childichild	Living situation o
Subject Demograp	SexSubjectGenotyp.	[Sex participant or subject genotype ct.	ALPHANUMERIC		RECOMMENDED	_					SesPrimAdultOTH	Aphanumeric			Other primary pa
Bubject Demograp	HandPrefTyp	Hand preference type	ALPHANUMERIC	Both hands Left hand Unkno.	RECOMMENDED						SesPrinChild	Alphanumeric	AP.FC.OF.Parent.	Adoptive parents;	Living situation o
Subject Demograp	RaceUSACat	Race USA category	ALPHANUMERIC	Native Hawaiian or Other Pa	RECOMMENDED						EduLevelUSA	Alphanumeric	N4K 1,2,3,4,5,6	Never attended/ki	Education level
Sublect Democrap	RaceCat	Race cateoon	ALPHANUMEROC	Inut Unincien White African	RECOMMENDED						EduLevelUSAOTH	Alphanumeric			Education level
		The second second second second									EduYearCount	Numeric			Education year c.
		Output Directory for mapping resu	ult files: C'Users'A	oretskym/iDocuments/	Browse	Save	Lond				3Emplmt3tatus	Alphanumeric	Not in paid world.	"Not in paid workf.	at least minima
											EmplimiStatusOTH	Alphanumeric			Employment stat.
											MIActive	Alphanumeric	0.1.2	Yes No; Unknown	statary active stat.
harper log															

12. For elements that have PV's, the values must also be mapped. This is indicated by the instruction placed in the PV mappings column. When the column is double clicked, a dialog containing the source PVs and the reference PVs is loaded. This allows you to map each of their PVs (left) to a BRICS PV (right). Note: You may map multiple PVs to a single BRICS PV, as well as map a variable to a blank. When mapping is complete click on the Done button to place the information in the PV mappings column.

	Get Form Struc	tures		Select Form Structure				Load Sou	rce DEs	
Deference Form Stor	sture: Demonstitui	2								
Crown	Elament Mamo	Tille	Tune	Deference DVr	Permised	Rousen M	Course Tope	Course D	D/ Mannings	
dain Group	CLUD	CLIED.	CLIED	Reference F vs	PEOL IIPED	CLUD	CUID	adurce P.	P v mappings	-
tain Group	SubjectioNum	Subject identifier number	6000		RECORED	GOIL	GOID			
Asin Group	AceVre	Age to vegra	R Map Permissible Valu	Jes						
tain Group	VisitDate	Visit date						-		-
dain Group	SiteName	Site name	Map Source PVs to Re	ference PVs				-		-
dain Group	DavsSinceBaseline	Days since baseline	R	Marganetal						-
fain Group	CaseContrillod	Case control indicator	2	rvot reported				-		_
fain Group	GeneralNotesTxt	General notes text	Е	Unspacified	-			-		_
orm Administration	ContextType	Context type		Competition				-		_
orm Administration	ContextTypeOTH	Context type other text	M	Male	-					_
orm Administration	DataSource	Data source								_
form Administration	DataSourceOTH	Data source other text	F	Female	-					
Subject Demograp	BirthDate	Birth date								
Subject Demograp	GenderTyp	Gender type	UK	Unknown	-	Gender	Alphanumeric	N;U;M;F;	Double Click to Map	
Subject Demograp	SexSubjectGenotyp	Sex participant or subject genotype								
Bubject Demograp	SexSubjectGenotyp	Sex participant or subject genotype								
Bubject Demograp	HandPrefTyp	Hand preference type								
Bubject Demograp	RaceUSACat	Race USA category		Done Cancel						
Subject Demograp	RaceCat	Race category						1		
		Output Directory for mapping re	esult files: C:\Users\kore	tskymj\Documents\	Brouse	Save	Load			

13. Note: The **Save** button on the main table is only activated after all required elements must have been mapped (required elements are highlighted in red). Click the **Browse** button at



the bottom to select the output folder that the mapping output file will be saved to. The **Save** button brings up another file chooser that allows the user to choose the **.txt** file that the mapping output should go into, as well as create a new file if necessary. The **Load** button allows you to reload the entire mapping table (shown below) from the mapping output file. This allows you user to be able to go back and edit mappings with less effort involved. If an improperly formatted file is being selected to load, an error message will be shown.

the second second	sform Tool								
	Get Form Struc	tures		Select Form Structure				Load Sou	Irce DEs
Reference Form Struc	ture: DemogrFITBIF	t.							
Group	Element Name	Title	Type	Reference PVs	Required	Source N.	Source Type	Source P.	PV Mappings
lain Group	GUID	GUID	GUID		REQUIRED	GUID	GUID		
tain Group	SubjectIDNum	Subject identifier number	ALPHANUMERIC		OPTIONAL				
tain Group A	AgeYrs	Age in years	NUMERIC		REQUIRED	AgeYears	Numeric		
tain Group	/isitDate	Visit date	DATE		RECOMMENDED				
tain Group	SiteName	Site name	ALPHANUMERIC		RECOMMENDED				
tain Group	DaysSinceBaseline	Days since baseline	NUMERIC		OPTIONAL				
lain Group	CaseContrilnd	Case control indicator	ALPHANUMERIC	Unknown:Case;Control	OPTIONAL	1	-		
lain Group	GeneralNotesTxt	General notes text	ALPHANUMERIC		OPTIONAL				
orm Administration	ContextType	Context type	ALPHANUMERIC	Before injury Last 24 hours:L	RECOMMENDED				
orm Administration	ContextTypeOTH	Context type other text	ALPHANUMERIC		RECOMMENDED				
orm Administration	DataSource	Data source	ALPHANUMERIC	Other, specify Sister Spouse;	RECOMMENDED	1			
orm Administration	DataSourceOTH	Data source other text	ALPHANUMERIC		RECOMMEND	COURCE AL	amante muet ha n	annad hafe	via enviro mannino fila
ubject Demograp E	BirthDate	Birth date	DATE		OPTIONAL	EQUIRED EN	ements musi de n	rapped ber	se saving mapping me.
ubject Demograp 0	GenderTyp	Gender type	ALPHANUMERIC	Not reported Unspecified;Ma	RECOMMENDED	Gender	Alphanumeric	NU.M.F	N:Not reported U Unspecified
ubject Demograp (S	SexSubjectGenotyp	Sex participant or subject genotype ty.	ALPHANUMERIC	XXY;Unknown;XXX;Other, sp	RECOMMENDED				
ubject Demograp S	SexSubjectGenotyp	Sex participant or subject genotype ot.	ALPHANUMERIC		RECOMMENDED		1		
ubject Demograp H	HandPrefTyp	Hand preference type	ALPHANUMERIC	Both hands;Left hand;Unkno	RECOMMENDED				
Subject Demograp F	RaceUSACat	Race USA category	ALPHANUMERIC	Native Hawaiian or Other Pa.	RECOMMENDED				
ublect Demoorap F	RaceCat	Race category	ALPHANUMERIC	Inuit Unknown White African:	RECOMMENDED				
		Output Directory for mapping rese	ult files: C.1Users\k	oretskym/\Documents\	Browse	Save	Load		



9.4 USING THE TRANSFORM TOOL

The **Transform Tool** allows users to choose files saved on your local machine to transform. Transform tool takes the source data and the mapping files to create a properly formatted output file.

9.4.1 Load Transform Table

To Load Transform Table: Perform the following actions:

1. In the main Data Mapping and Transformation Tools window, Select the **Transform Tool** tab option.

, Data Mapp	ing and Transformation	on Tools - Beta version 0.3 (D	emo)						
Anning Tool	Transform Tool	_							
mapping root	Get Form Struc	ctures		Select Form Structure				Load Source DEs	
Reference Form	Structure:								
Group	Element Name	Title	Туре	Reference PVs	Required	Source N	Source Type	Source PVs	PV Mappings
		Output Directory for mapping	result files: C:\Users\C	C401205\Desktop\BRICS_Ima	Browse	Save	Load		
utput log									
-									

2. The Transform Tool Table box appears.

	Remove Row Save Transform Table Lo	oad Transform Table
ansform file mapping table		
Source Data Files	Mapping Files	Output Files
Output directory for t	ansformed result files:	Browse Transform
tput log		



3. Double-click on the Source Data Files column to bring up the Choose Data Files to be Transformed dialog window where you may choose data files (CSV) to be transformed. Note: The path and file name will be written in to the cell.

lapping Tool	Transform Tool		
			Remove Row Save Transform Table Load Transform Table
ransform file r	napping table Source D	Data Files	Choose data file(s) to be transformed.
			Look in: Documents
			Custom Office Templates mappingTest.csv b.csv SourceDemonsTITBIR.csv
			BSI-18.csv D SourceDemogrfiTBIRsimple.csv
			Copy of Test-DJ-phenotype_SS.csv TransformedFile.csv
			DemoFITBIRmapping.csv
			C emptyTest.csv
			File Name:
			Files of Type: Comma separated value files (.csv)
		Output directory	Open Cancel Transform
tput log			
cessful retrieva	l of form structures.		
cesstul retrieva required data e	i of data elements for form lements have been mapped	n structure: DemogrFITBIR. d - mapping file can now be saved.	
ccessful retrieva l required data e	I of data elements for form lements have been mapped	n structure: DemogrFITBIR. d - mapping file can now be saved.	

4. **Double-click** on the **Mapping Files** column to bring up the **Choose Mapping Files** dialog window where you may choose mapping files associated with the source data loaded in the first column. **Note**: The path and file name will be written in to the cell.

eip						
Mapping Tool Transform Tool						
	Remove Row	Save Transform Table	Load Transform Table			
Transform file mapping table						
Source Data Files		Mapping Files			Output Files	
	🗴 Choose m	apping file.	_	×		
	Later -					
	LOOK IN:	Jocuments				
	Projects					
	DemoFITBI	Rmapping.csv				
	mappingTe	est.csv				
	test2					
	File Name:	DemoFITBIRmapping.csv				1
Output direct	tory for tra	All Filos		form		
Putput log	riles of Type.	All Flies				_
uccessful retrieval of form structures.			Open	Cancel		
uccessful retrieval of form structures.						
accessful retrieval of data elements for form structure: BM_Preclinical						



5. Double-click on the Output Files column to bring up the Edit Transform Output Name dialog window where you may name the output file from the transform tool. <u>Note</u>: The output file will be in CSV format.

apping Tool Transform Tool				
	Remove Row	Save Transform Table	Load Transform Table	
ansform file mapping table	1	Manning Files		Output Files
Source Data Files		mapping rites		Oupurries
				Bedit transform output file name. 333 Done Cancel
Output directory for tra	nsformed result files		Browse	Transform
tput log				
cessful retrieval of form structures.				
ccessful retrieval of form structures.				

6. Click on the Browse button located at the bottom of the tool.

	Remove Row	Save Transform Table	Load Transform Table		
insform file mapping table		Manada - Film		Output Films	
Source Data Files		Mapping Files		Output Files	_
					_
					-
			N		
Output	directory for transformed result files		Browse	Transform	
out log					
assful retrieval of form structures					
essful retrieval of form structures.					
essful retrieval of data elements for form structure: BM Preci-	nical				



7. The Choose Output Directory for Transform Result Files dialog window appears where you can choose the folder that the output file will go into when it is successfully transformed.

apping root Transorm root				1	7		
	Rem	nove Row	Save Transform Table	Load Transform Table			
ransform file mapping table			Heening Files		1	Output Files	
Source Data Files			Mapping Files			Output Files	
	8	Choose ou	tput directory for trans	form result files	×		
			Jocuments	¥ 🖬 🗖			
		Projects					
	Fo	older name:	C:\Documents				
	E	les of Type:	All Files				
		ies of Type.	AITTIES			1	
	Output directory for transl			Open	Cancel		
itput log							
cessful retrieval of form structures.							
ccessful retrieval of form structures.	D. C. Destiniat						

8. Click on the **Transform** button which will take the data from the source and mapping files to switch out the source DEs and PVs for the ones that were mapped to in the mapping file. A new file will be created under the name specified in the third column. If all three columns in a row are not filled out correctly, this will create an error message. Additionally, if the source file and mapping file are inconsistent, an error message will appear.

fapping Tool Transform Tool					
	Remove Row	Save Transform Table	Load Transform Table		
ransform file mapping table				-	
Source Data Files		Mapping Files		Output Files	
\Users\koretskymj\Documents\SourceDemogrFITBIRsimple.csv	C:\Users\koretsk	mj\Documents\mappingOutp	ut tid	transformOutput.csv	
Output directory for t	ransformed result files	C:\Users\koretskymj\Docur	ments\ Browse	Transform	
utput log				Transformed files	
ccessful retrieval of form structures.					
ccessful retrieval of data elements for form structure: DemoerFITBIR					
I required data elements have been manmed - manning file can now be saved					

9. To remove the selected row from the, simply click on the Remove Row button.

Data Manning and Transformation Table Data up	vier 0.2 (Demo)	
Data Mapping and Transformation Tools - beta ver	sion 0.5 (Demo)	
elp		
Mapping Tool Transform Tool		
	Remove Row Save Transform Table Load Transform Table	
Transform file mapping table		
Source Data Files	Mapping Files	Output Files



BRICS

Transform file mapping table	Remove Row Save Transform Table Load Trans	sform Table
Source Data Files	Save transform table	Output Files
	Save In: Documents Custom Office Templates Documents Custom Office Templates Documents SourceDemogrFTBBR BSI:18.csv SourceDemogrFTBBR Copy of Test.DJ-phenotype_S5.csv TransformedFile.csv DemogrFTBBRSubject.csv emplyTest.csv File Name: Files of Type: Comma seperated value files (.csv)	csv simple.csv
Output directory	Sav	Cancel Transform
Output log accessful retrieval of form structures. accessful retrieval of data elements for form structure: DemogrFITBIR Ul required data elements have been mapped - mapping file can now be aver- ul required data elements have been manond - macrime file can now be aver-		Transform

11. Click the **Load Transform Table** button which will bring up the **Reload Transform Table** dialog window where you can select the file where the table was saved. When the Open is



selected, the contents of the previously saved table are written back into the table allowing you to edit the files you are using for the transformation tool.

	Remove Row Save Transform Table	Load Transform Table	
Fransform file mapping table			
Source Data Files	(8) Reload Transform Table	100	Output Files
	Look Ja: Documents Custom Office Templates mappingTe b.csv SourceBer B35-18.csv SourceBer Copy of Teil-0J-phenotype_S5.csv transform DoemoFTBIRMapping.csv transform DemoFTBIRStotpect.csv emptyTest.csv File Ijame: Files of Type: Comma separated value files (.cnv)		
Output directory		Open Cancel Transform	
wiper leg accessful retrieval of form structures. constill retrieval of data elements for form structure: DemogrifTTBUP. Il required data interasts have been mapped - mapping life can now be avail.			

12. The **Transform Table** showing the reloaded transform table with source data files, mapping files and output (CSV) files.

ab						
fanning Tool	Transform Tool					
			Construction Table	and Transform Table		
		Remove Row	Save Transform Table	Load Transform Table		
ransform file	mapping table					
	Source Data Files		Mapping Files		Output Files	
Userskorets	kym)\Documents\SourceDemogrFITBIR.csv	C:\Users\koretsk	ymj\Documents\mappingOutp	utcomplex.bit	a.csv	-
	Output directory for trai	isformed result file:	s: C:\Users\koretskymj\Docur	ments\ Browse	Transform	
utput log						
ccessful retriev	al of form structures.					
ccessful retriev	al of data elements for form structure: DemogrFITBIR					
I required data (elements have been mapped - mapping file can now be saved.					
I required data (elements have been mapped - mapping file can now be saved.					



9.4.2 Viewing Help Pages

The help pages provide you with some useful information that will help you to effectively perform the functions in the DMT tool.

To access the help pages: Perform the following actions:

1. In the main Data Mapping and Transformation Tools window, Select the **Help** tab option located on the top-left corner.

Transform file manning table	Remove Row	Save Transform Table	Load Transform Table			
Source Data Files		Mapping Files			Output Files	
						^
						=
						-
Output directory for trans	sformed result files	:	Browse	Transform		
Dutput log						
ccessful retrieval of form structures.						

2. The Help menu option opens. Click on the Help Web Page which loads the Data Dictionary site.

lp web page										
M information mple Source DE CS	Get Form Struct	ures		Select Form Structure			Load Source DEs			
Group	Element Name	Title	Туре	Reference PVs	Required	Source N S	Source Type Source P	Vs PV Mappings		
		Output Directory for mapping r	esult files: C:\Users	\koretskymj\Documents\	Browse	Save	Load			
itput log										



3. Click on the **JVM Information** option which pulls up an extensive information on the Java Virtual Machine running.

lp web page	m Tool								
M information	Get Form Struct	ures		Select Form Structure				Load Source DEs	
Group	Element Name	Title	Type	Reference PVc	Required	Source N	Source Type	Source PVs	PV Mannings
Group	Clement Marine	108	1366	Relefence PYS	reduied	30010814	Source Type	ource r va	г и марритуз
		Output Directory for mapping re	ault files: C:\Users\ko	oretskymj\Documents\	Browse	Save	Load		
terret la a									
itput log									

4. Click on the **Sample Source DE CSV** option which pulls up a dialog window showing the format that Data Elements and Permissible Values files must be in for mapping purposes.

ale Course DE	Get Sprm Structures	Select Form Structure Load Source DEs							
Group	Element Name	Title	Туре	Reference PVs	Required	Source N	Source Type	Source PVs	PV Mappings
		Itout Directory for mapping re	suit files: C:Ulsers\kor	etskymi/Documents\	Browse	Save	Load		
	00	the second							
ut log	Ou								

5. Sample CSV used for mapping data appears. Click the Close button to close the window.



Sample CSV Used for I 3RICSMap01 ID is nee BRICSMap01	Mapping Data. Note that PV De ded in first cell in order to map	scription and Title are Op files (shown above table	ptional a)	
Name	Туре	PVs	PV Description (Optional)	Title (Optional)
aderwe5	Numeric	1;2;3;5	High;Low;Lower;Lowest	This is a title
derwe6	Numeric	1;2;3;5;	High;Low;Lower;Lowest	This is a title2
ge014x	Numeric			Age of subject
extelement1	Alphanumeric	One;Two	One;Two	Alphanumica test
ruefalse1	Boolean	0;1	True;False	True/False test