Learning System Data Management (LSDM) Data Management, Analysis, and Reporting System (DMARS) User Manual

DMARS 1.5

Prepared for:

U.S. Department of Health and Human Services

Centers for Medicare & Medicaid Services (CMS)

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Glossary

Term	Definition
Entity Type	A data type (e.g., “Event”)
Entity	A record within an entity type (e.g., data for a specific Event within the “Event” entity type)
Question or Column	Field or data element within an entity type (e.g., “Date of Event”)
Answer	The value entered for a question (e.g., “4/27/2017”)
Linked Entity Type	An entity type that is linked to another entity type through a single question (e.g., the “Learning System” entity type is linked to the “Event” entity type through the “Learning System” question)
Unique Combination	The set, or combination, of questions within an entity type whose answers produce a unique entity (e.g., the combination of questions “Learning System,” “Learning System: Attending Model Join,” “Event Title,” and “Event Start Date” that make an Event entity unique)

Acronyms

Acronym	Definition
Admin	Administrative User
CMMI	Center for Medicare & Medicaid Innovation
CMS	Centers for Medicare & Medicaid Services
COR	Contracting Officer's Representative
CSV	Comma Separated Values file format
DMARS	Data Management, Analysis, and Reporting System
EIDM	CMS' Enterprise Identity Management System
IC	Innovation Center
ID	Identification
JSON	JavaScript Object Notation
LSDM	Learning System Data Management
MFA	Multi-Factor Authentication
PII	Personally Identifiable Information
Super-Admin	Super-Administrative User

1. About DMARS

Overview

LSDM DMARS is the designated repository for all LSDM-related data and documentation, providing a single access point where CMMI, the LSDM contractor, and learning system contractors can access data for CMMI model learning system events. The system implements data validity checks as data are entered into the system to facilitate quality assurance and allows users to view the data in dashboards and customized reports.

Features

DMARS contains the following features, which are explained in depth in their respective sections below:

- **Enter Data** allows users to enter data through data entry forms. Only one entity, or record, can be entered at a time.
- **Data Import** allows users to enter multiple records at once by importing a configured Excel file.
- **Edit Data** allows users to view and edit previously entered data through data entry forms.
- **Entity Data Reports** allows users to view and download data from the system in tabular format. These tabular reports can also be filtered, saved, and shared with other users.
- **Dashboards** allows users to view summary information for data within the system through graphs and tables. These dashboards can be filtered and downloaded.
- **Training** contains hyperlinks to training materials and other resources.
- **Helpdesk** contains contact information for those in need of technical assistance.

Permissions

DMARS manages access permissions to protect the privacy and integrity of LSDM data. There are four user roles, each with associated access permissions, which are outlined in Table 1.

- **Admin-View User** – CMMI Contracting Officer's Representatives (CORs) and learning system leads.
- **Edit/View User** – Learning system contractor users who are authorized to edit data.
- **Admin User** – CMMI users who are authorized to edit data and access select administrative features.
- **Super-Admin User** – LSDM contractor users authorized to access all administrative features.

Table 1. Permissions Matrix

Permissions Group	User Role			
	Admin-View	Edit/View	Admin	Super-Admin
Administrative Features			X	X
Entity Data Reports	X	X	X	X
Dashboards	X	X	X	X
Training	X	X	X	X

Permissions Group	User Role			
	Admin-View	**Edit/View**	**Admin**	**Super-Admin**
Helpdesk	X	X	X	X
Enter Data		X	X	X
Data Import		X	X	X
Edit Data		X	X	X

Access to data is tiered so that Super-Admin, Admin, and Admin-View users can access data for all learning systems, whereas Edit/View users can only access data for the learning systems with which they are associated.

Data Structure

The DMARS entity types were designed to capture the data described in the LSDM Data Dictionary. There are several differences between the DMARS entity types and the LSDM Data Collection Template, as DMARS is a relational database that allows users to capture relationships that an Excel template cannot capture. The LSDM Data Dictionary provides more detailed information regarding how the data fields in the Data Collection Template map to the questions in the DMARS entity types. Each entity type has a unique combination, or set of questions, whose answers make an entity unique. The unique combinations for each of the primary entity types are listed below. See Appendix A: High-Level Entity Type Relational Diagram for a visual representation of how the DMARS entity types are linked.

- **Reporting Month**
  - Reporting Month (Example: 01/2019)
- **Company**
  - Company Abbreviated Name (Example: Lewin)
- **Learning System**
  - Learning System Abbreviated Name (Example: AHC)
- **Model**
  - Model Abbreviated Name (Example: AHC)
- **Event**
  - Learning System (Example: AHC)
  - Learning System: Attending Model Join (Example: AHC)
  - Event Title (Example: AHC Sample Event Title)
  - Date of Event (Example: 01/02/2019)
- **Model Participant**
  - CMS ID (Example: AH-12345)
- **Attendee**

- Attendee First Name (Example: John)
- Attendee Last Name (Example: Doe)
- Attendee E-mail (Example: john.doe@company.org)
- Event (Example: AHC#~#AHC#~#AHC Sample Event Title#~#01/02/2019)
- Learning System: Attending Model (Example: AHC)

- **Survey**
  - Event (Example: AHC#~#AHC#~#AHC Sample Event Title#~#01/02/2019)

- **Error Log**
  - Reporting Month (Example: 01/2019)
  - Unique Identifier (Example: Jan2019001)
  - Learning System (Example: AHC)
  - Entity Type (Example: Event)
  - Question (Example: Attendee Primary Role)

- **Data Log**
  - Learning System (Example: AHC)
  - Reporting Month (Example: 01/2019)
  - Submission Type (Example: Original Submission)

When an entity type is linked to another entity type through a specific question, the choices for the linked entity type appear in the drop-down menu for that question. When an entity type's unique combination is composed of more than one question, the combination of those values is displayed with delimiters separating each value (see the Survey example above).

System Requirements

DMARS can be accessed using Google Chrome, Mozilla Firefox, and Internet Explorer; however, users are encouraged to use either Google Chrome or Mozilla Firefox to optimize their user experience.

Handling Personally Identifiable Information

As a Federal Information Security Management Act Moderate system, DMARS hosts PII, including attendees' names and e-mail addresses, which are captured in the Attendee entity type. PII may be present in data import error messages and exports from DMARS. It is important to be mindful of PII when managing data outside the system.

To prevent security incidents, please follow the guidelines below when handling PII:

- Review data import messages through the interface prior to downloading them so that you are aware whether they contain PII.
- Whenever downloading PII from DMARS, ensure the files are shredded from computers

immediately after their use.

- If a file or screenshot containing PII needs to be shared, ensure that the file/screenshot is encrypted using a FIPS 140-2 standard and that the password is provided via a separate medium from the medium used to share the file itself.

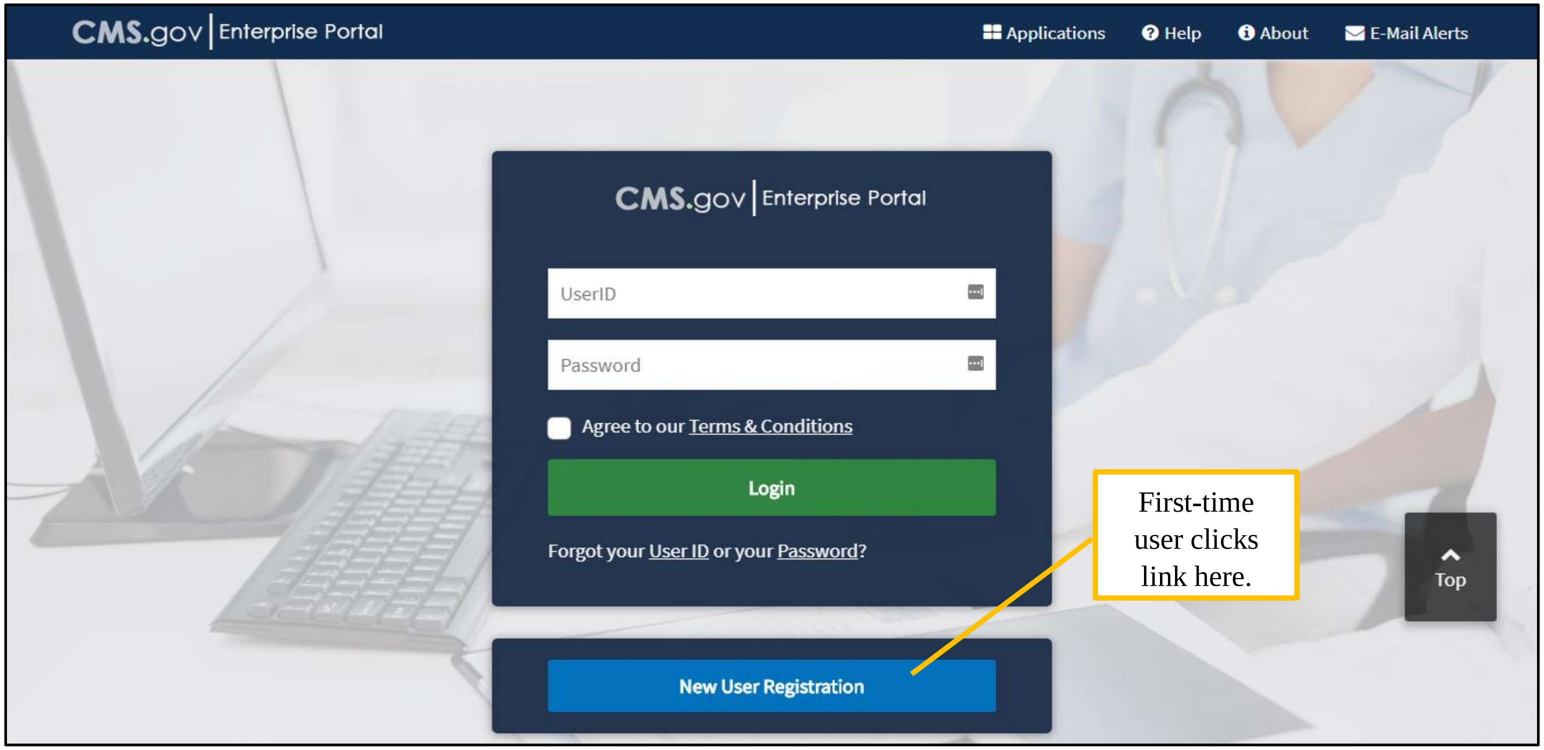
2. Access DMARS

Set Up an Account with CMS' Enterprise Identity Management System

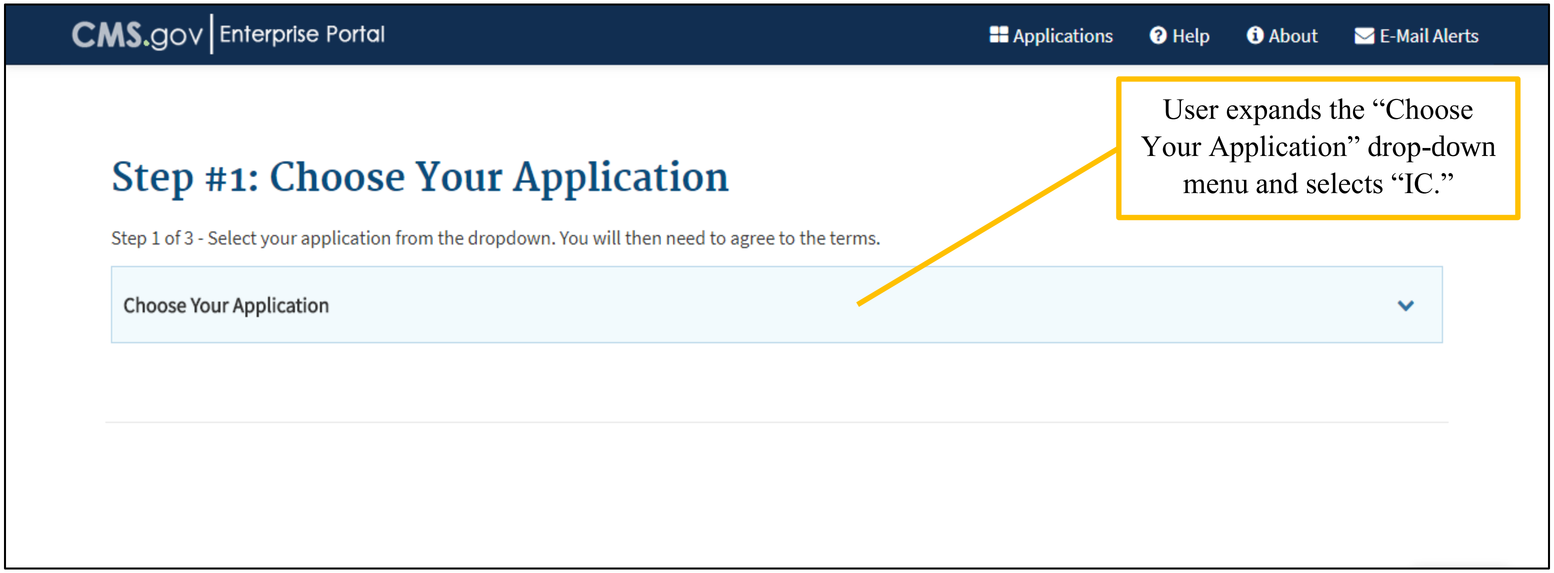
All users access DMARS through the Innovation Center (IC) landing page on the CMS Enterprise Portal. As such, you will need to set up a user account through the Enterprise Identity Management System (EIDM). If you already have an EIDM account, see the section titled Request Access to the Innovation Center that follows.

If you do not have an EIDM account, use the instructions below to set up an account.

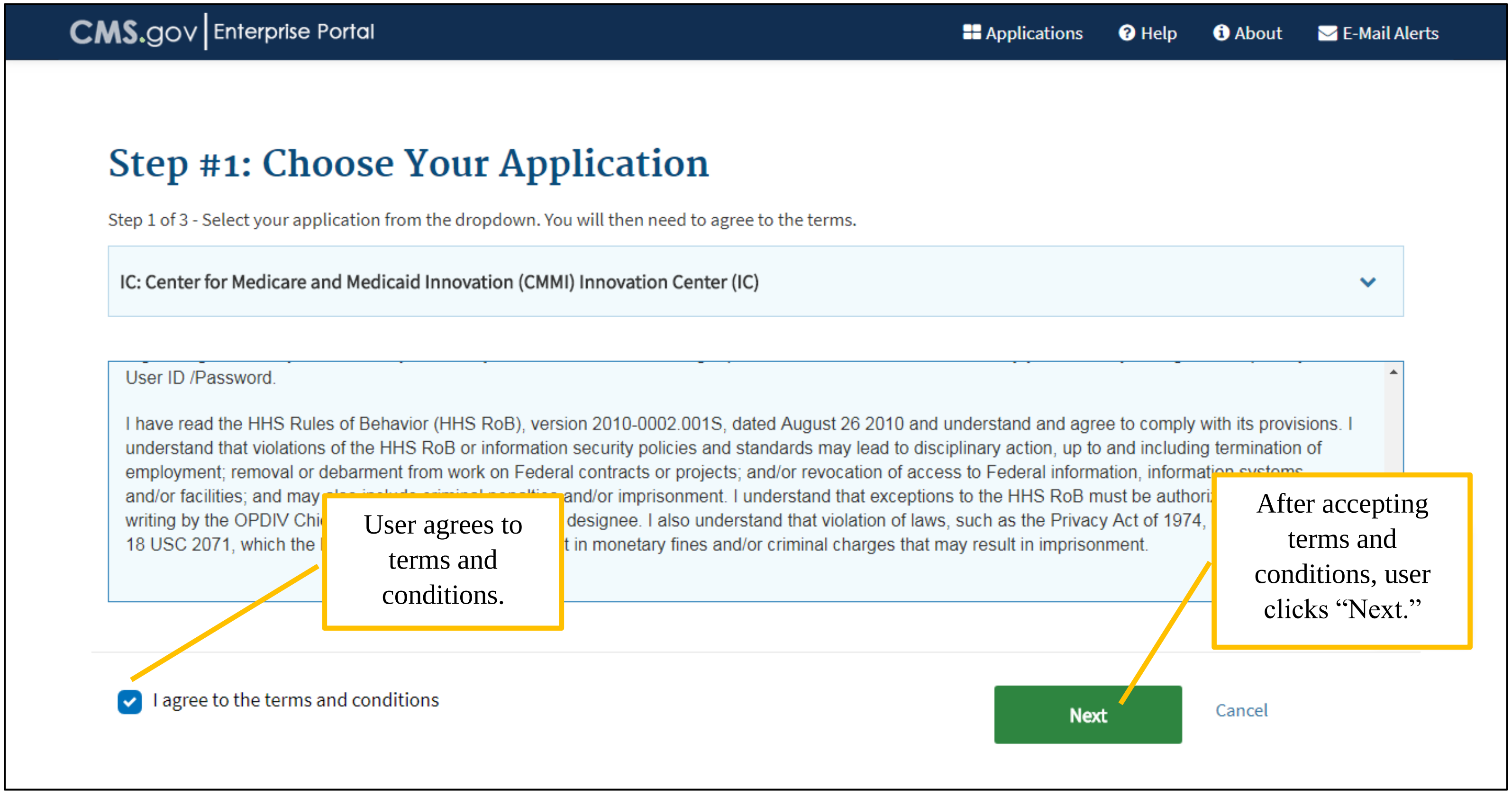
1. ***Navigate*** to https://portal.cms.gov.
2. ***Click*** the "New User Registration" button.



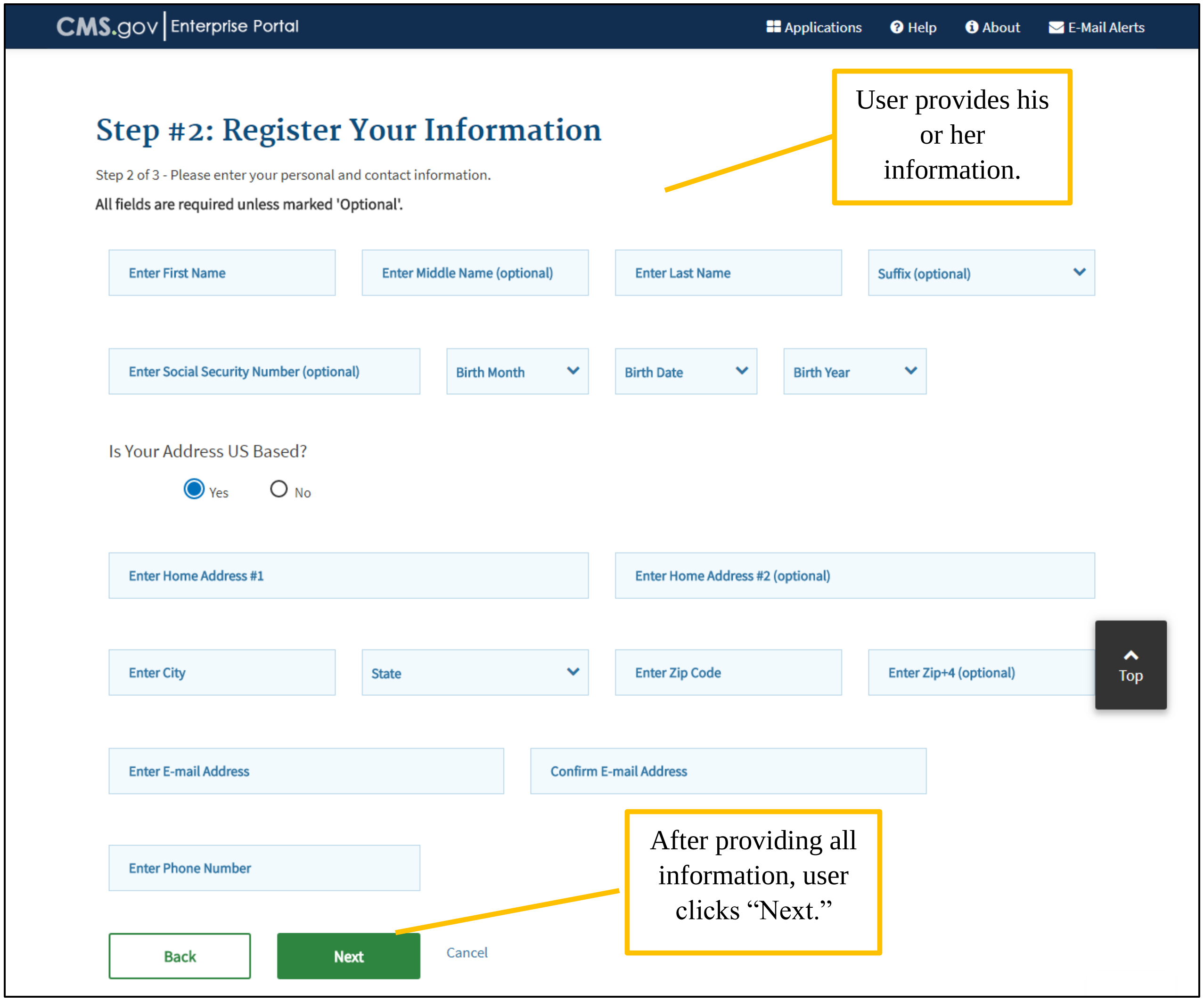
3. ***Choose*** "IC: Center for Medicare and Medicaid Innovation (CMMI) Innovation Center (IC)" from the "Choose Your Application" drop-down menu.



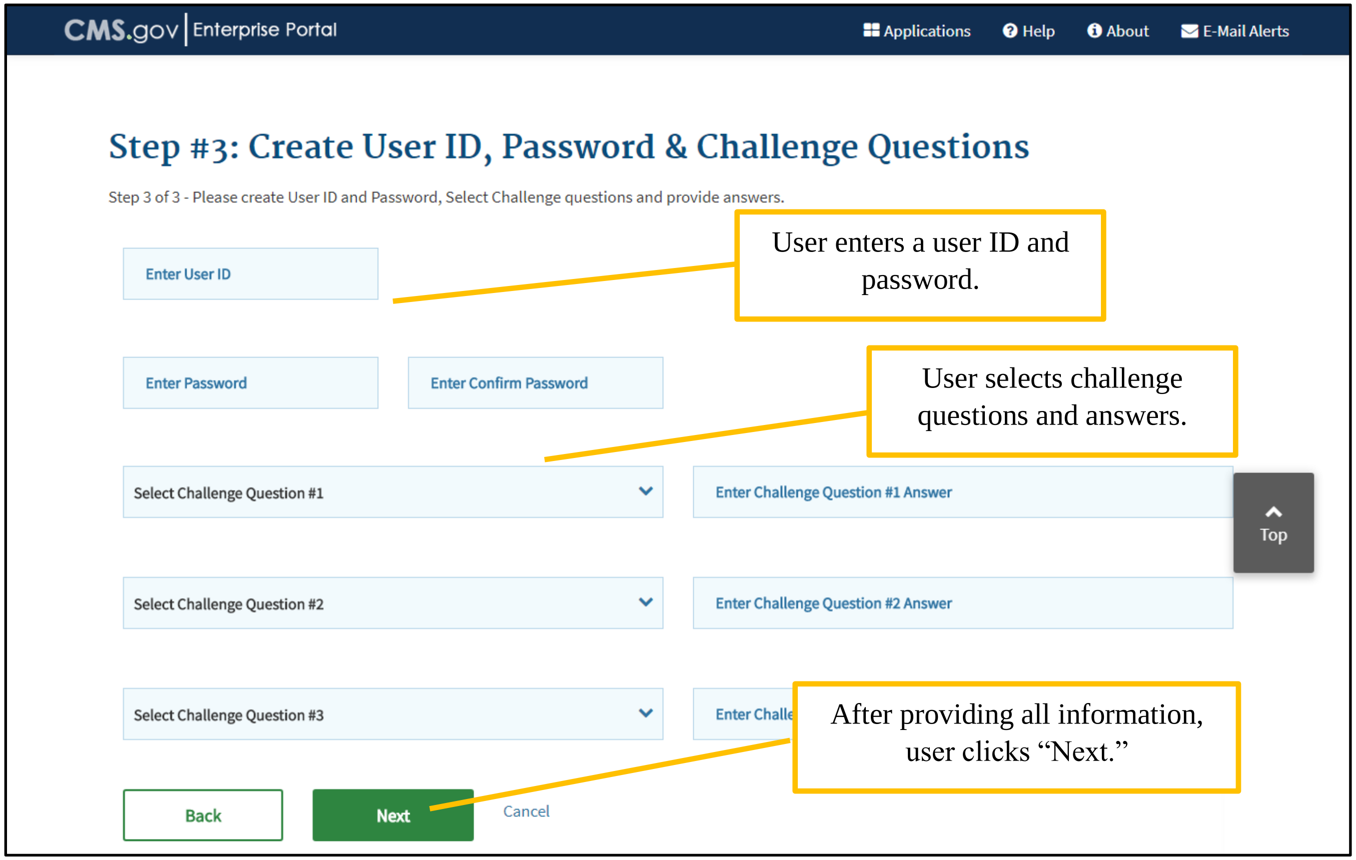
4. ***Accept*** the Terms and Conditions and ***click*** the "Next" button at the bottom of the screen.



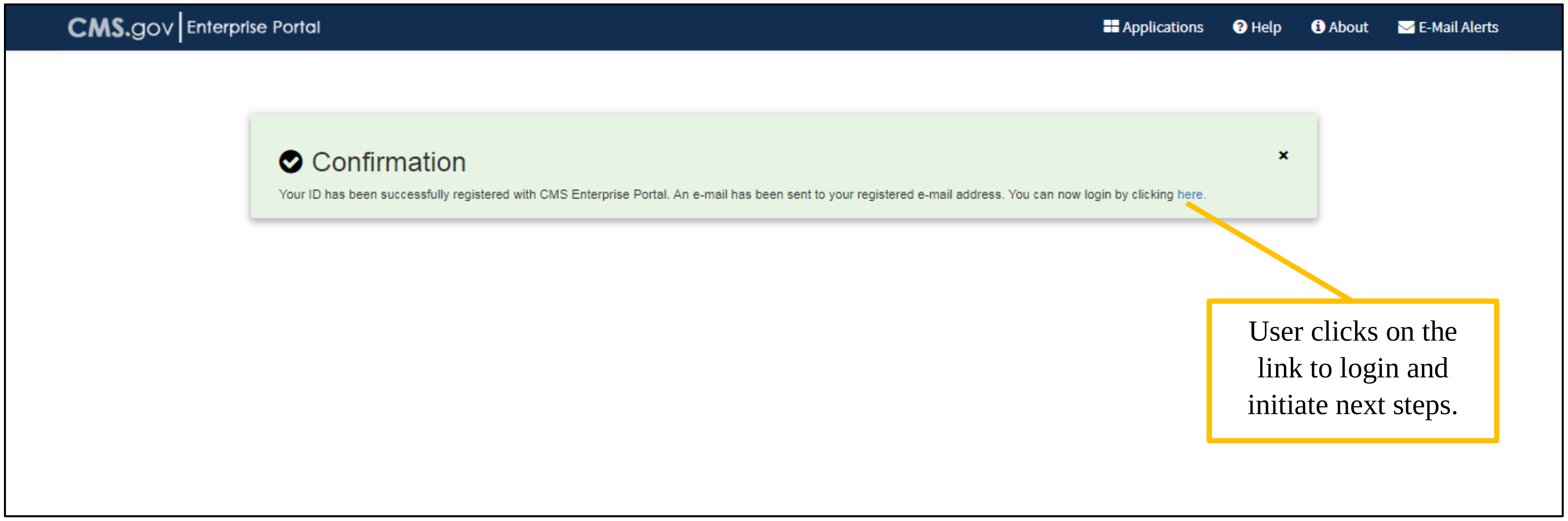
5. ***Provide*** the information requested on the “Register Your Information” page and ***click*** the “Next” button at the bottom of the screen.



6. ***Create*** a user identification (ID) and password on the "Create User ID, Password & Challenge Questions" page and ***complete*** the "Select Challenge Question" and "Answer" sections. Please note that these challenge questions will allow you to reset the password to your account if you are ever locked out.



7. In addition to receiving the confirmation message below, you will receive an e-mail confirming that your new account was created successfully. Please note that there are two additional steps that must be completed (see the next section, Request Access to the Innovation Center). Note that the Enterprise Portal recommends users wait approximately 10 to 15 minutes before trying to access their newly created EIDM accounts.

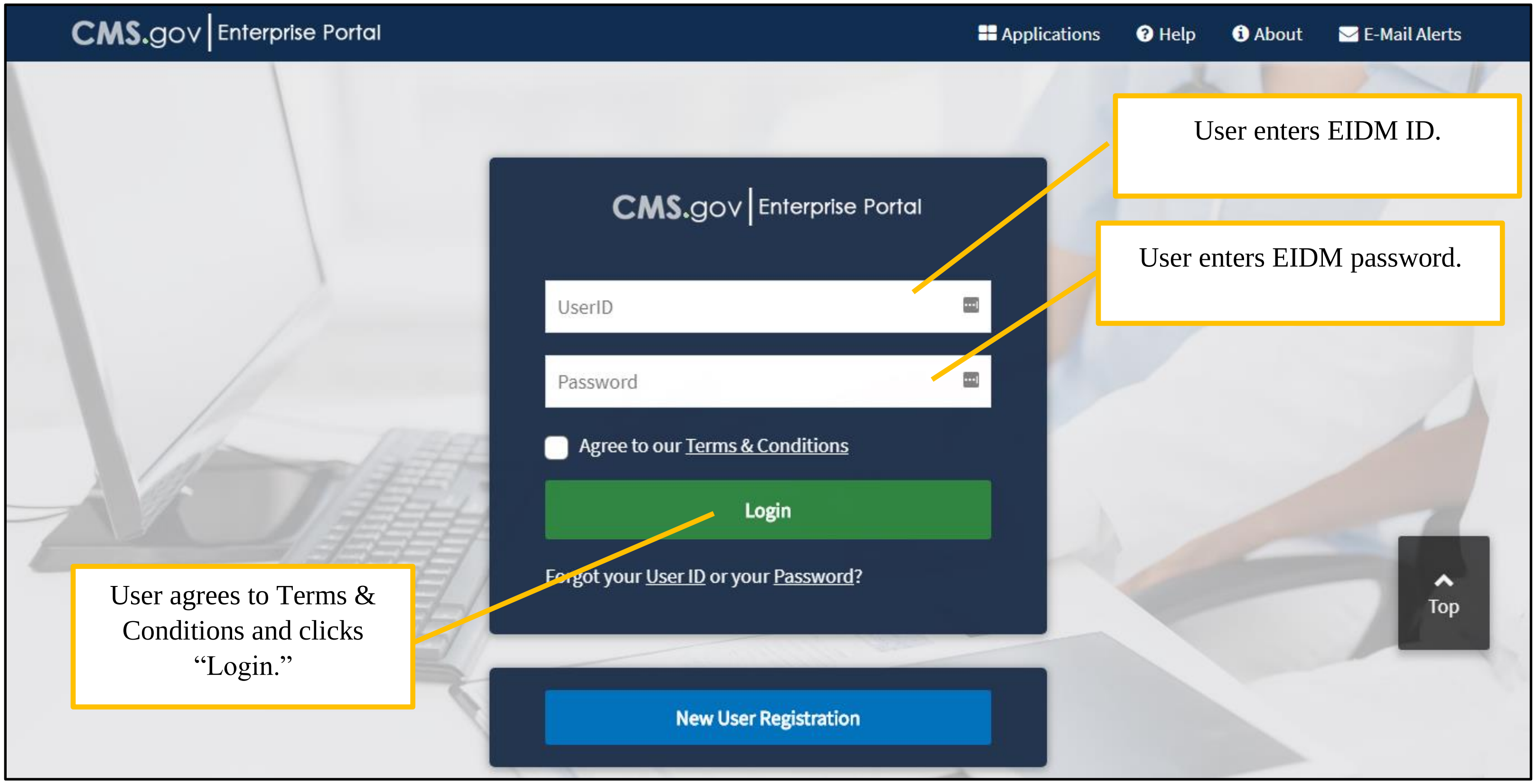


Request Access to the Innovation Center

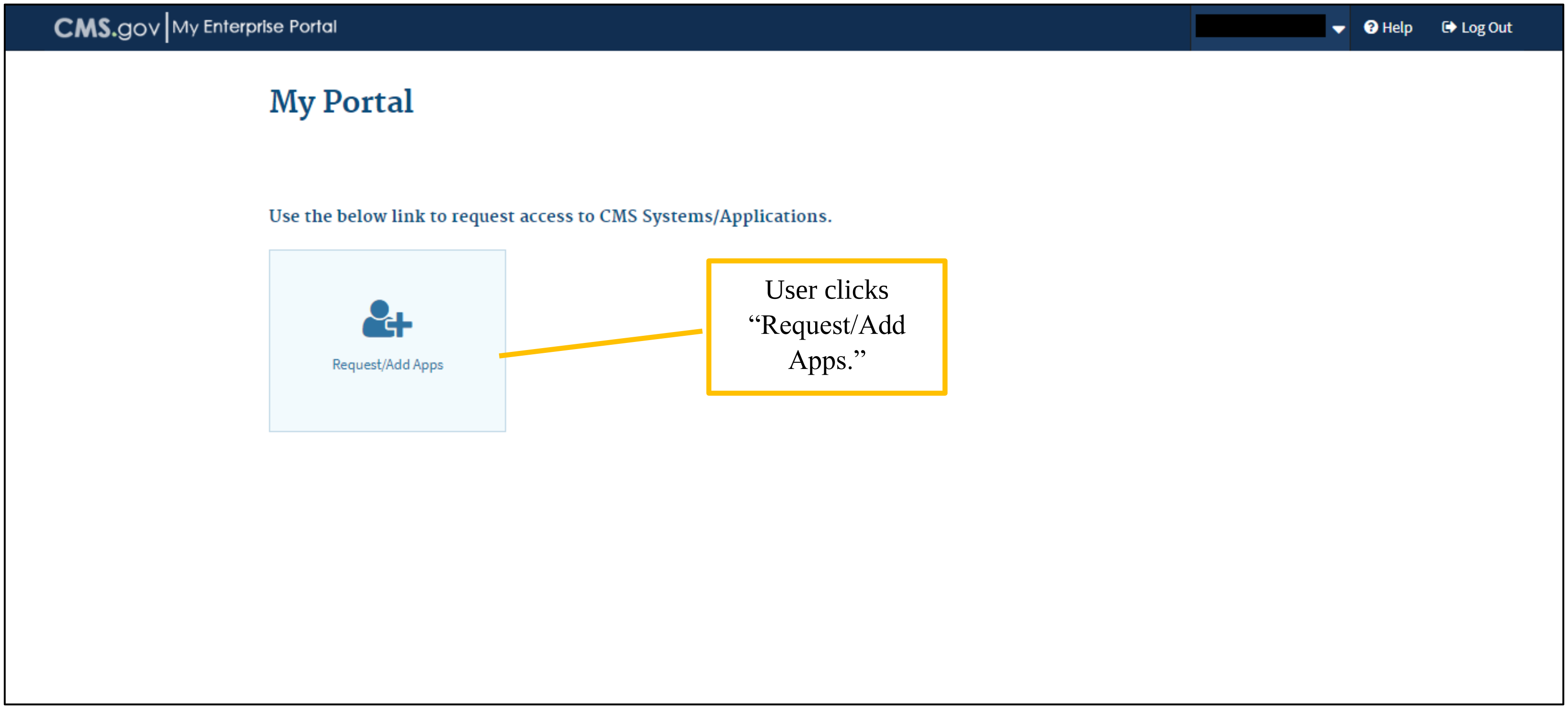
Once you establish user credentials with EIDM, you will need to login to your EIDM account through the Enterprise Portal and request access to IC using the directions below. If you already have access to IC, see the section titled Request Access to DMARS that follows.

Follow these steps to request access to IC:

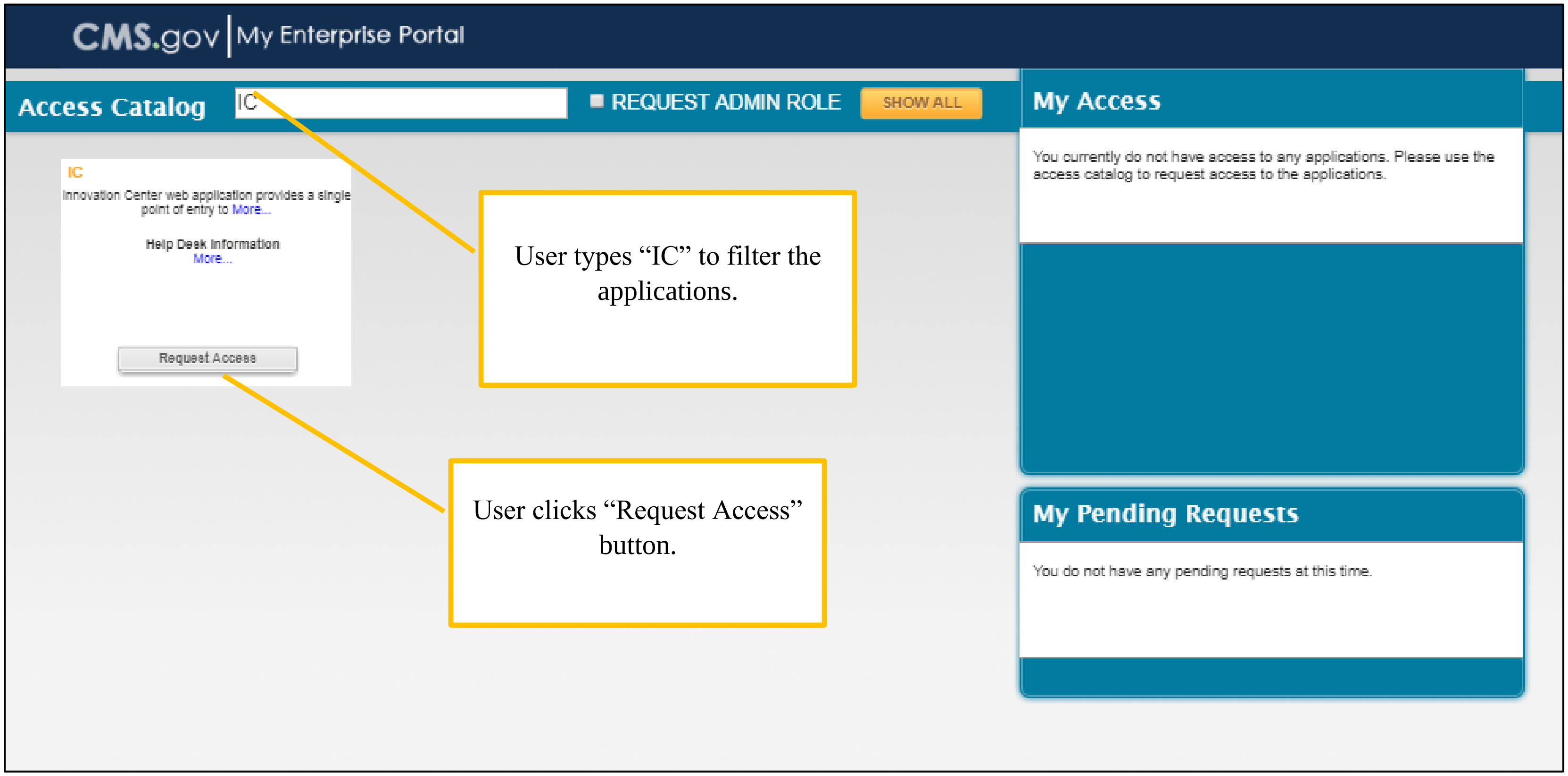
1. ***Navigate*** to https://portal.cms.gov.
2. ***Login*** with your EIDM user ID and password after agreeing to the Terms & Conditions.



3. ***Click*** the “Request/Add Apps” button.

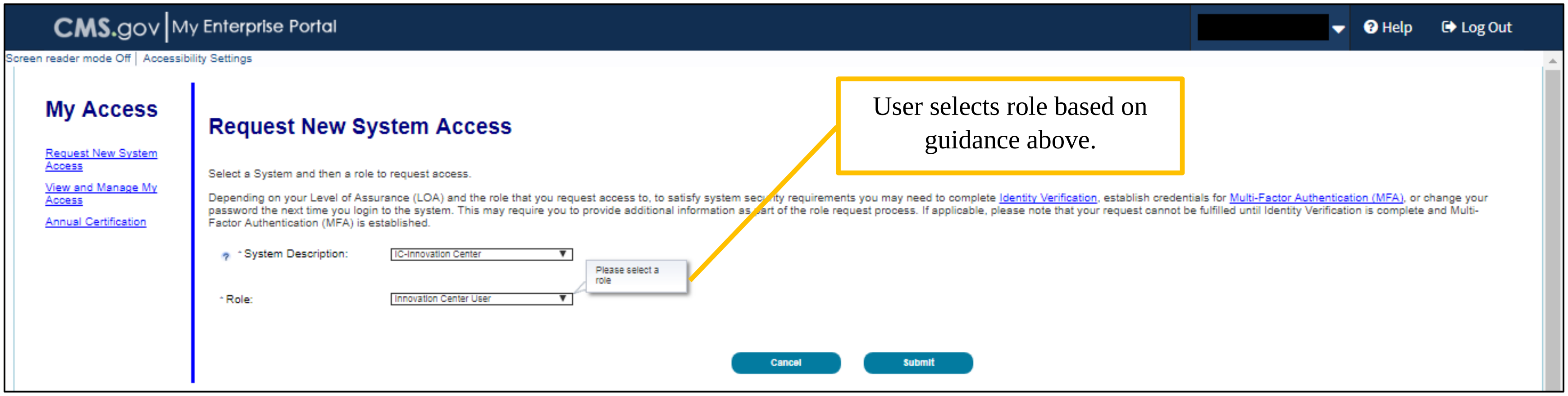


4. ***Type*** "IC" in the Access Catalog search bar to filter the list of available applications and ***click*** the corresponding "Request Access" button.



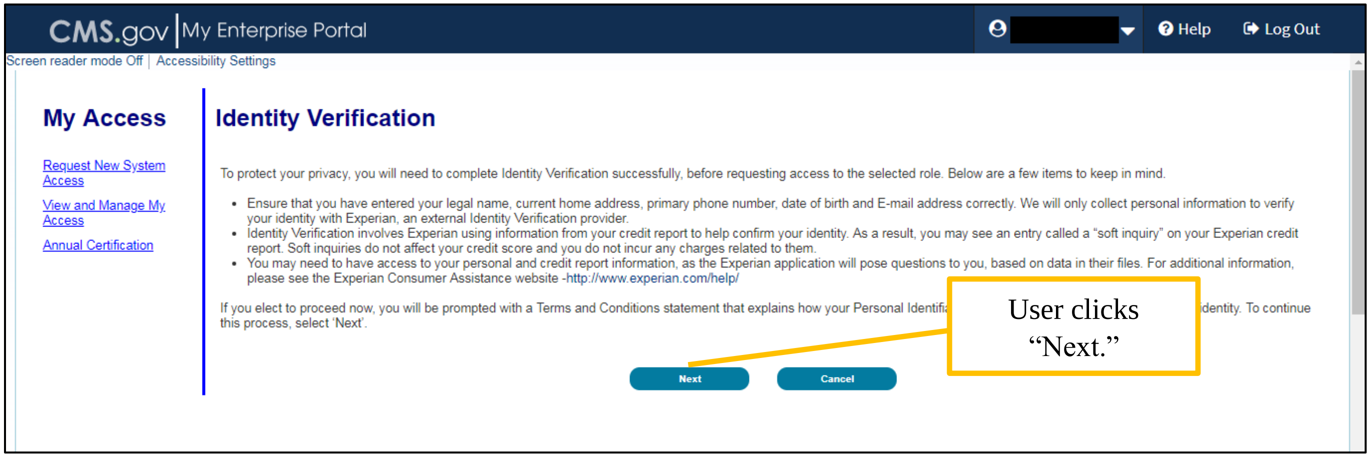
5. ***Click*** the "Role" drop-down menu to select a role.
    a. If you are requesting Edit/View or Admin-View access to DMARS (see Table 1. Permissions Matrix) ***select*** "Innovation Center User" as your role.
    b. If you are requesting Admin or Super-Admin access, ***select*** "Innovation Center Privileged User" as your role.

   Then, ***click*** the "Submit" button to submit your request.

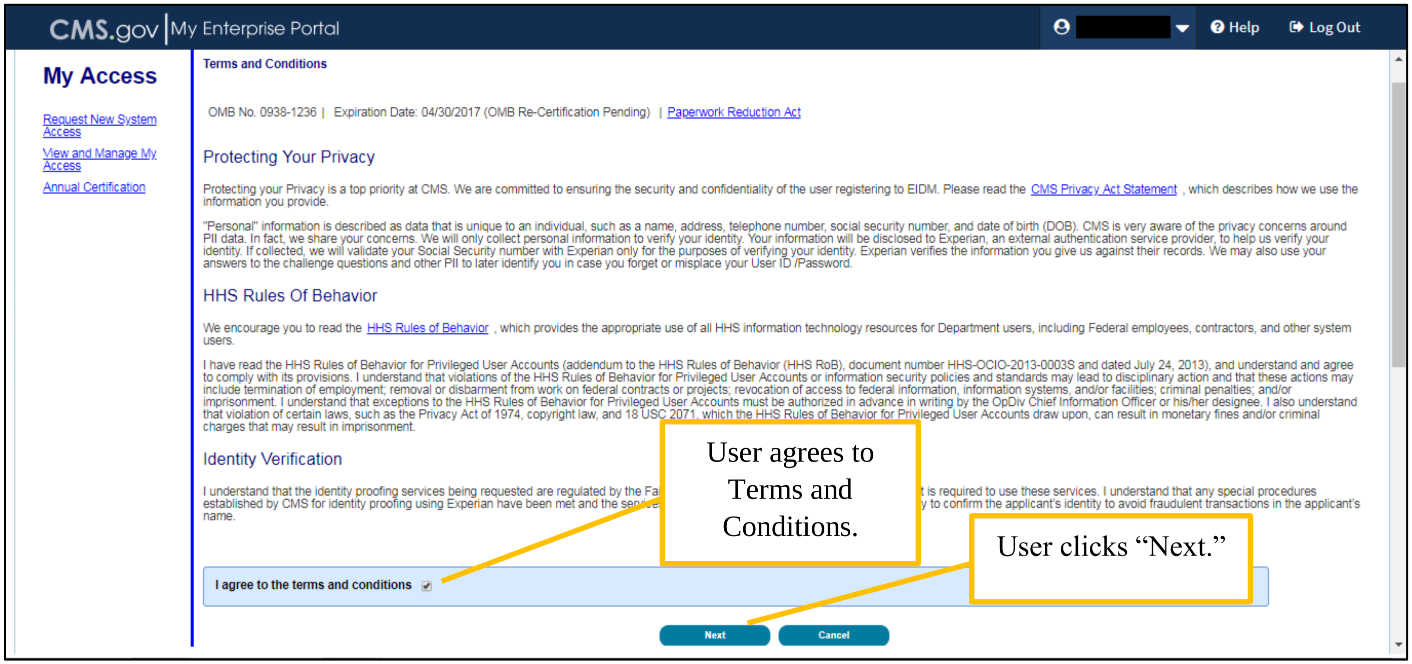


> **Note:** Users should select the "Innovation Center User" role in almost all cases. Contact the CMS LSDM Helpdesk before requesting the "Innovation Center Privileged User" role.

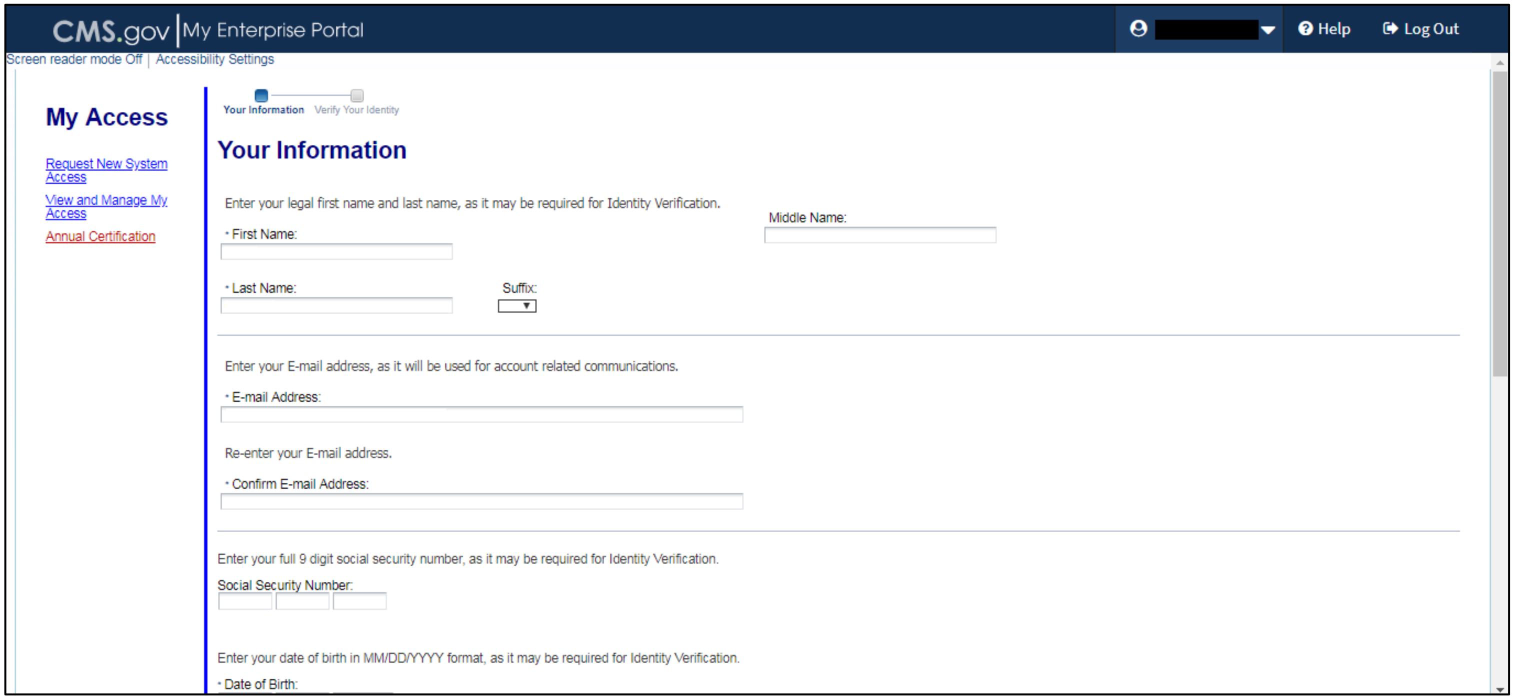
6. A screen will appear informing you that you need to perform additional steps related to identity verification. ***Click*** "Next" to proceed with next steps for identity verification.



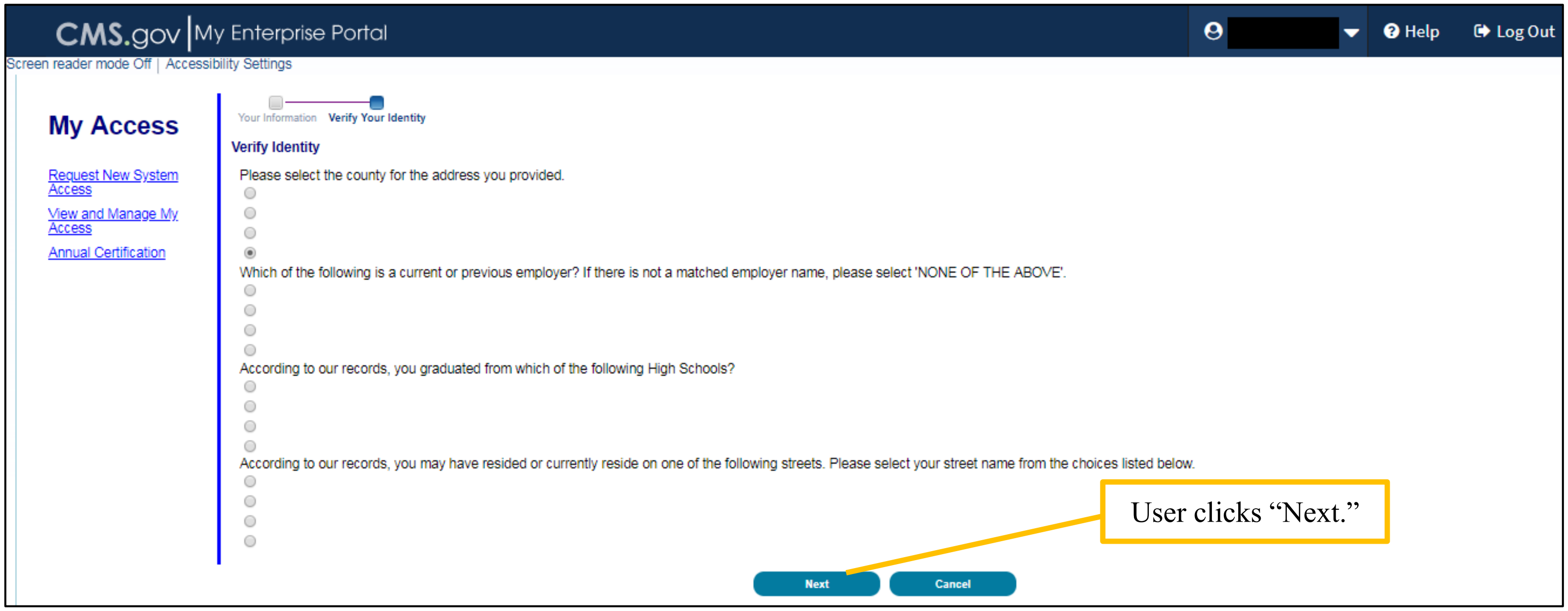
7. ***Accept*** the Terms and Conditions after reviewing them and ***click*** "Next."



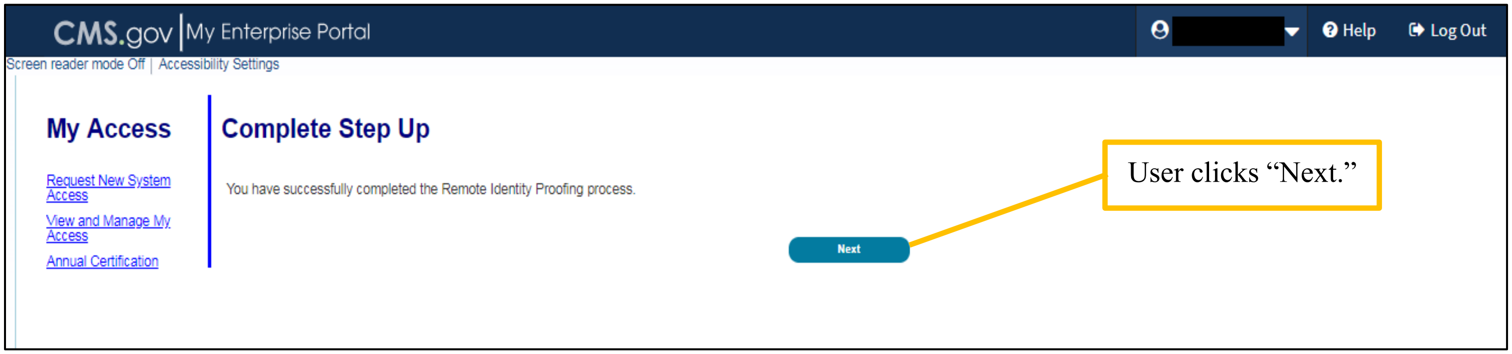
8. ***Enter*** the requested information and ***click*** the “Next” button at the bottom of the screen.



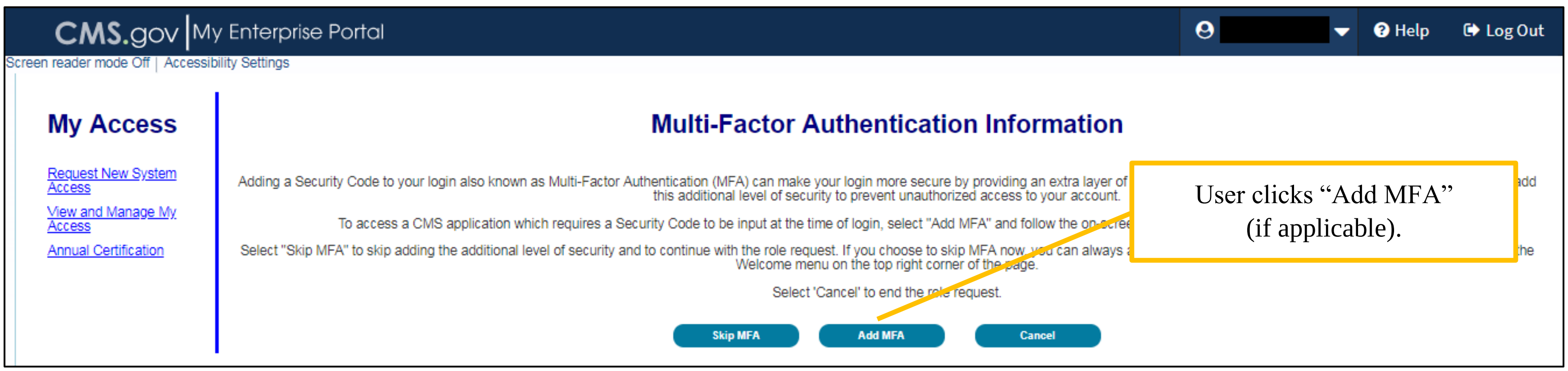
9. ***Verify*** the additional information requested and ***click*** "Next" at the bottom of the screen.



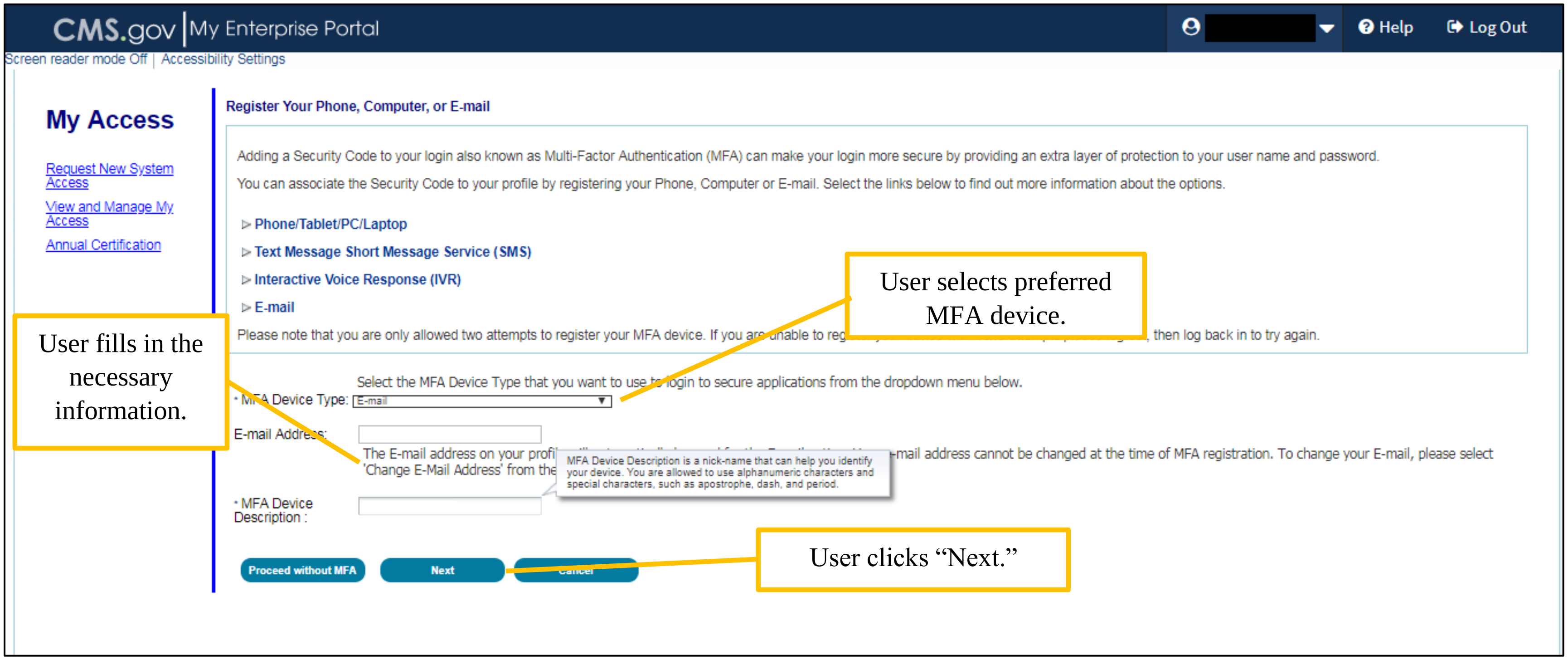
10. ***Click*** “Next” on the confirmation page that appears, informing you that the identity verification was sucessful.



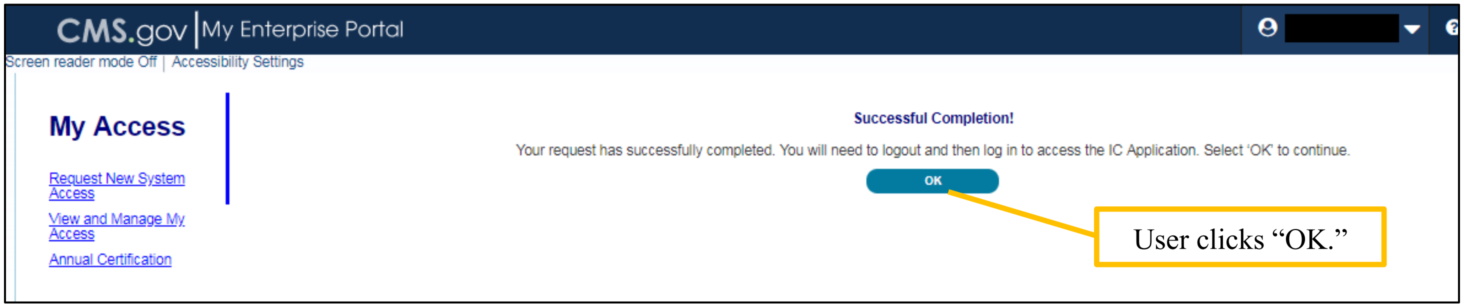
11. A page will appear prompting you to set up Multi-Factor Authentication (MFA). Although all users are encouraged to set up MFA, it is only required for IC Privileged Users. Those requesting Edit/View or Admin-View access to DMARS can select “Skip MFA.” If you are requesting Admin or Super-Admin access to DMARS, ***click*** “Add MFA” to set up the authentication.



12. ***Select*** your preferred MFA type (Mobile phone is recommended), ***fill in*** the necessary information, and ***click*** "Next."



13. A confirmation page will appear informing you that your access request for the IC application has been successfully completed. ***Click*** "OK" to go back to the login page. Please note that there is one additional step that must be completed to obtain access to DMARS (see the next section, Request Access to DMARS).

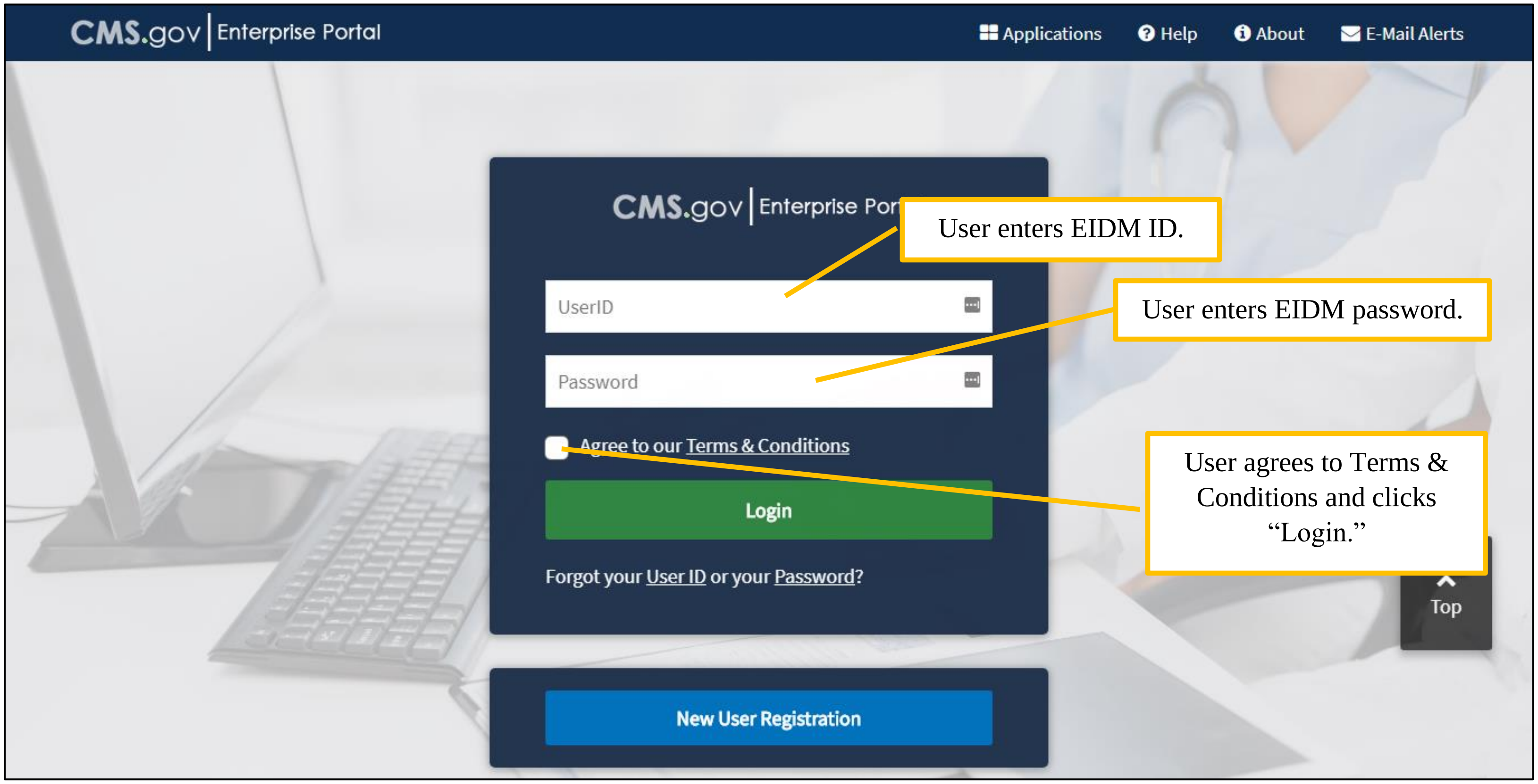


Request Access to DMARS

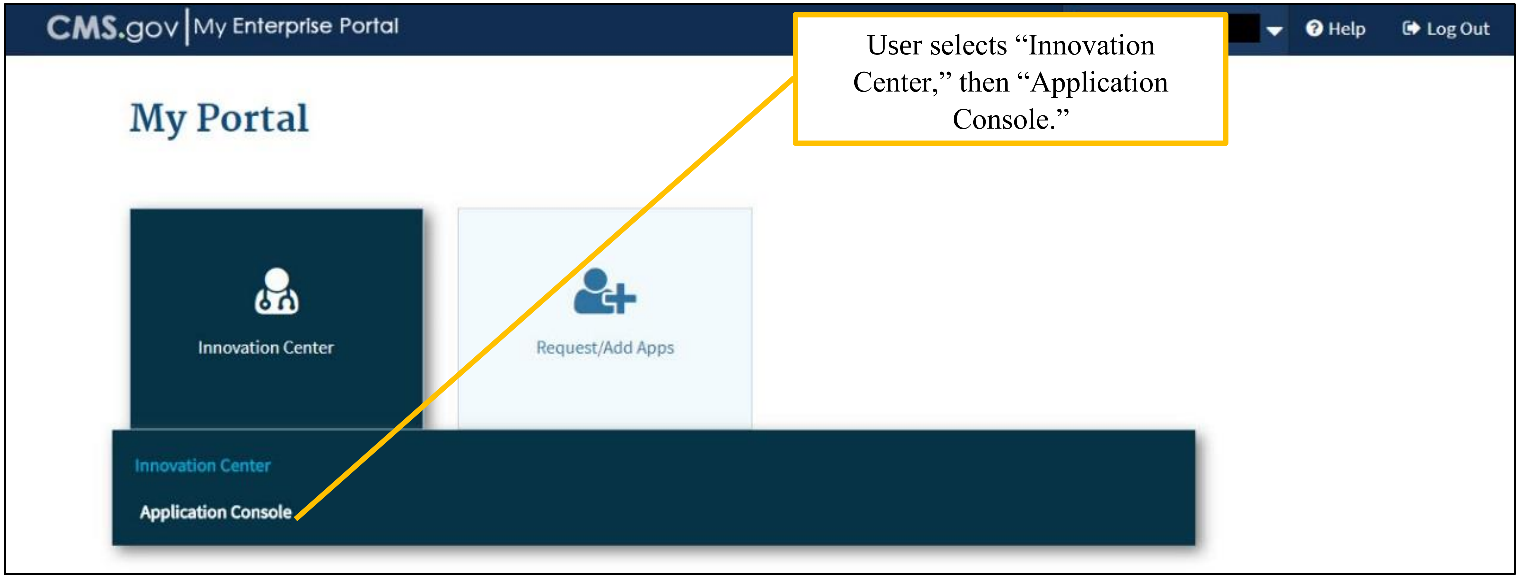
Once your request to access IC has been approved, you will need to login to your EIDM account through the Enterprise Portal, navigate to the IC application, and request access to DMARS using the instructions below.

Follow these steps to request access to DMARS:

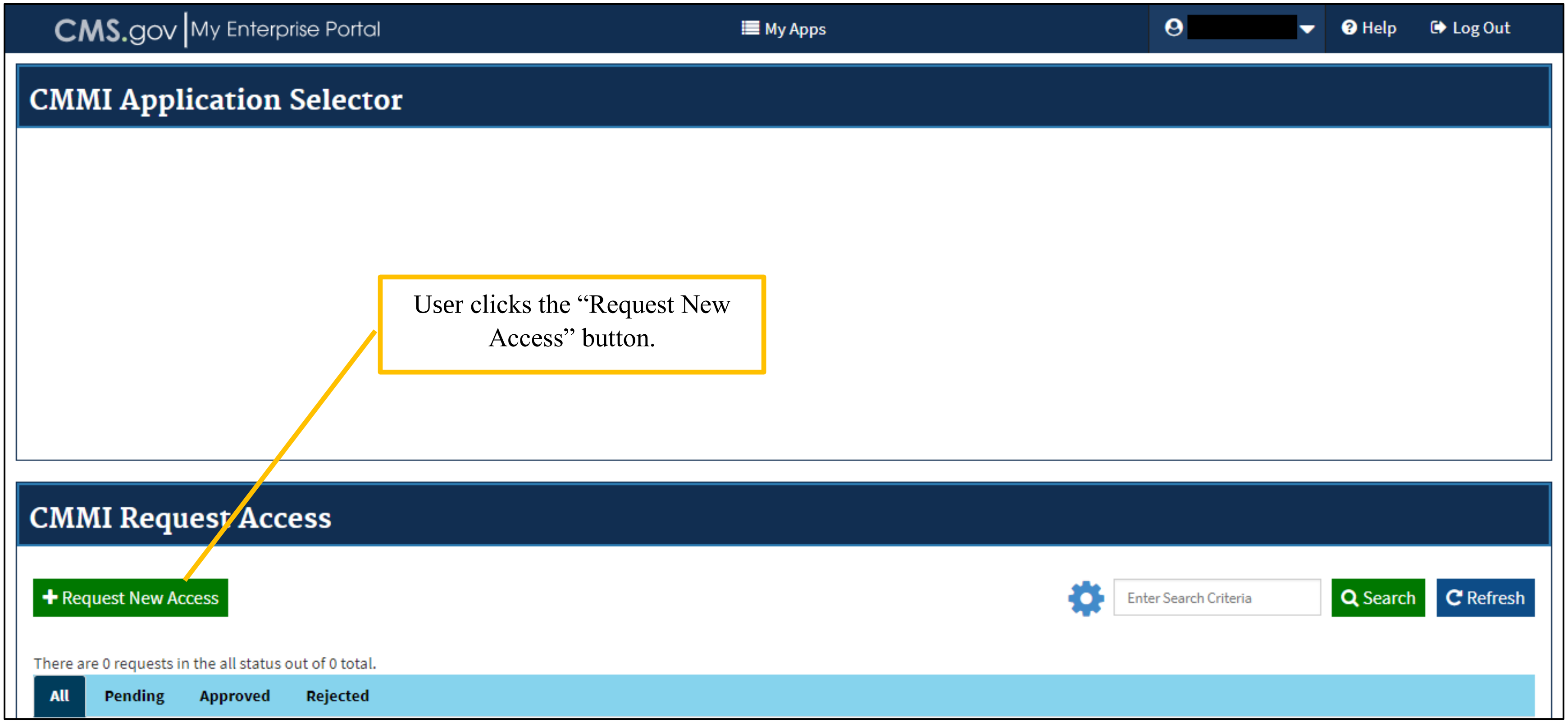
1. ***Navigate*** to https://portal.cms.gov.
2. ***Login*** with your EIDM user ID and password.



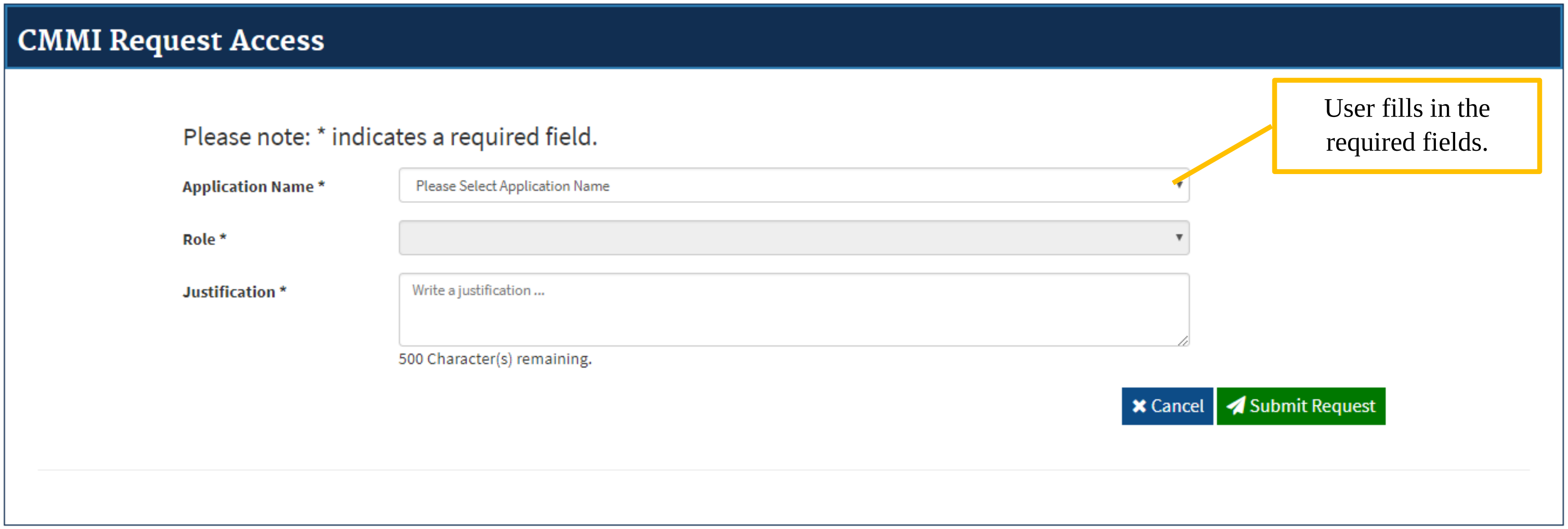
3. ***Click*** the box labeled “Innovation Center” and ***select*** “Application Console” in the drop-down menu that appears.



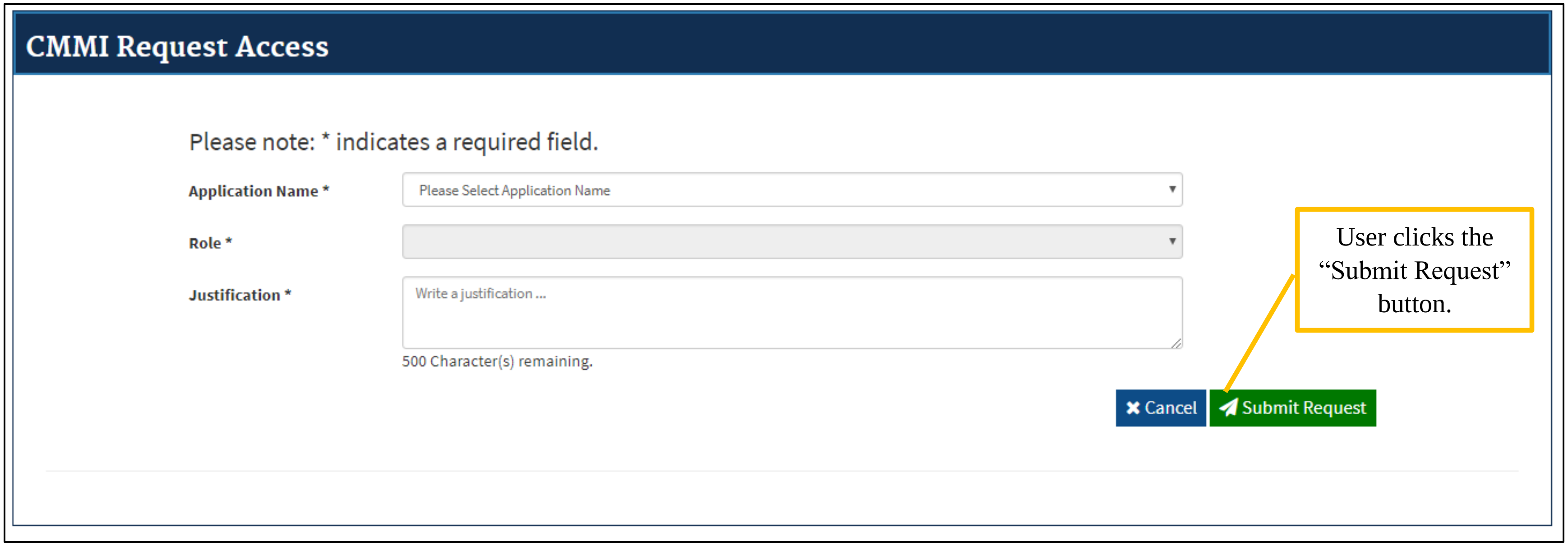
4. ***Click*** the green "Request New Access" button under the "CMMI Request Access" pane.



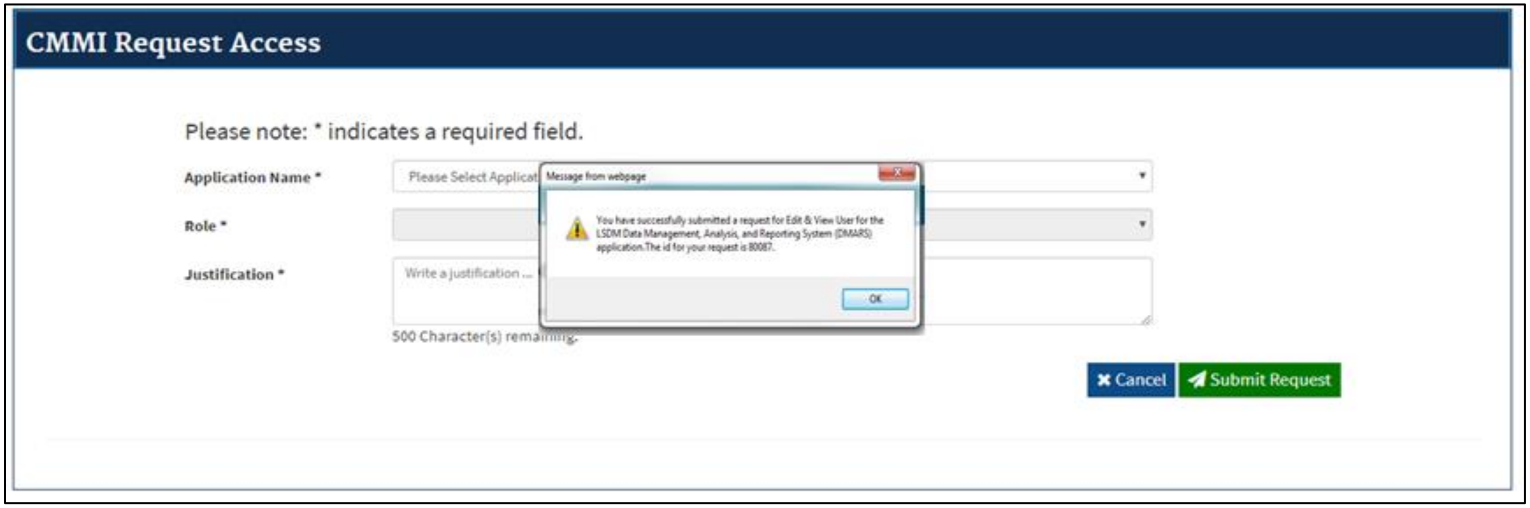
5. ***Populate*** the required fields that appear as follows:
    a. **Application Name**: LSDM Data Management, Analysis, and Reporting System
    b. **Role:** Reference Table 1. Permissions Matrix for the appropriate role to select. Note that most users should request “Edit/View User” as their role.
    c. **Justification:** I am affiliated with the <insert learning system name> learning system and require access to DMARS for LSDM reporting.
        i. Note: If you are requesting Admin or Super-Admin access, describe your specific role in the LSDM effort.



6. ***Click*** the green "Submit Request" button.

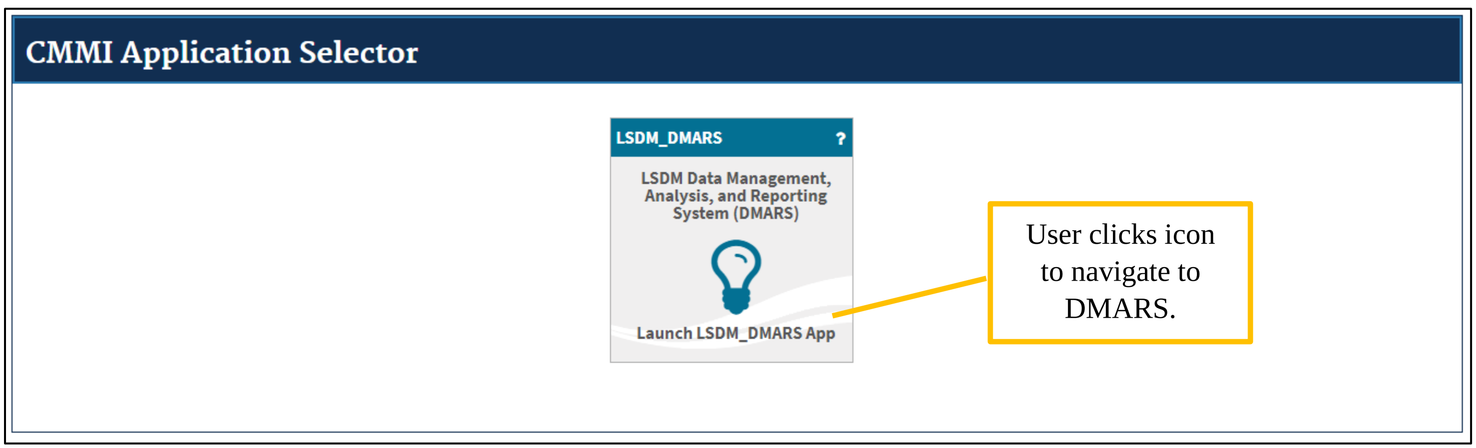


7. A confirmation message will appear that includes your request ID number.



Upon receipt of your request, the LSDM Support Team will review the information provided and verify that you are a valid user prior to approving the request. Please contact the CMS LSDM Helpdesk if your request is not approved within 24 hours.

You will receive an e-mail notification once your DMARS access request is approved. At that time, the DMARS icon will appear on the IC landing page under the “CMMI Application Selector” pane.

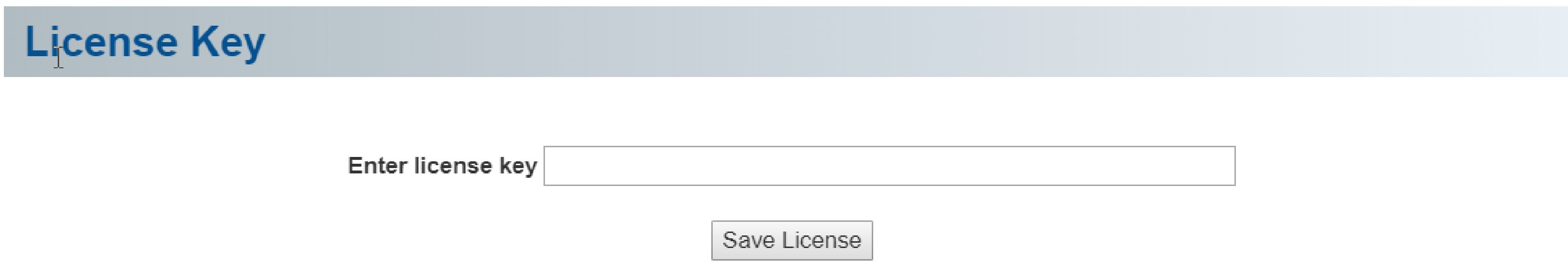


Licensing for DMARS

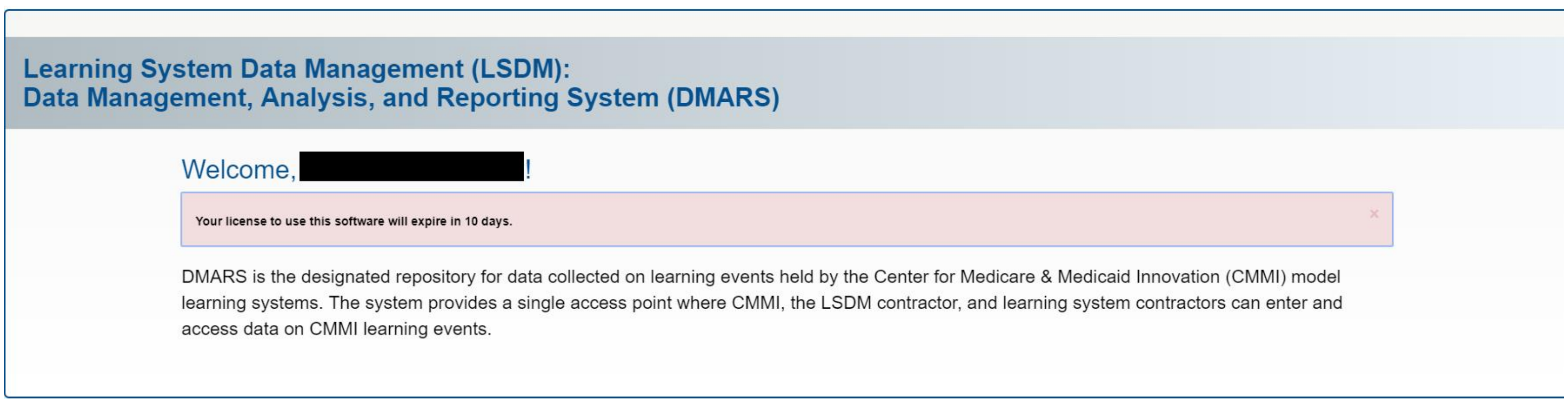
If you are using an unlicensed version of DMARS, you are required to enter a valid license key for DMARS on first login. Once you enter a valid key, you will be redirected to home page of DMARS application.

Follow these steps to enter license key for DMARS:

1. ***Enter*** the license key provided by Optimal Solutions Group in the text box.
2. ***Click*** on 'Save License' button.



If the license expiry date is within 30 days, you will be notified via a message on the home page.



If the current license expires, you will not be able to access DMARS further. Please contact Optimal at 301-306-1170 to renew the license.

Software License Has Expired

Your license to use this software expired on 7/21/2019

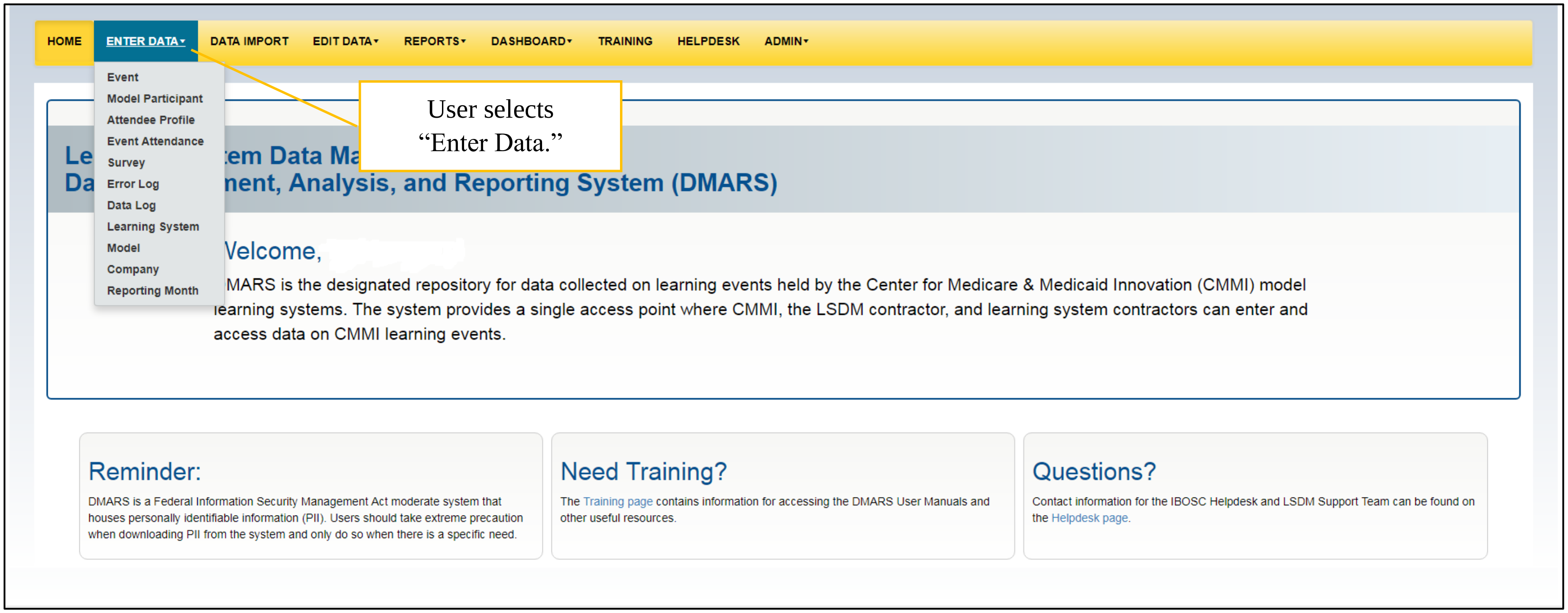
Call (301)306-1170 to renew.

3. Enter Data

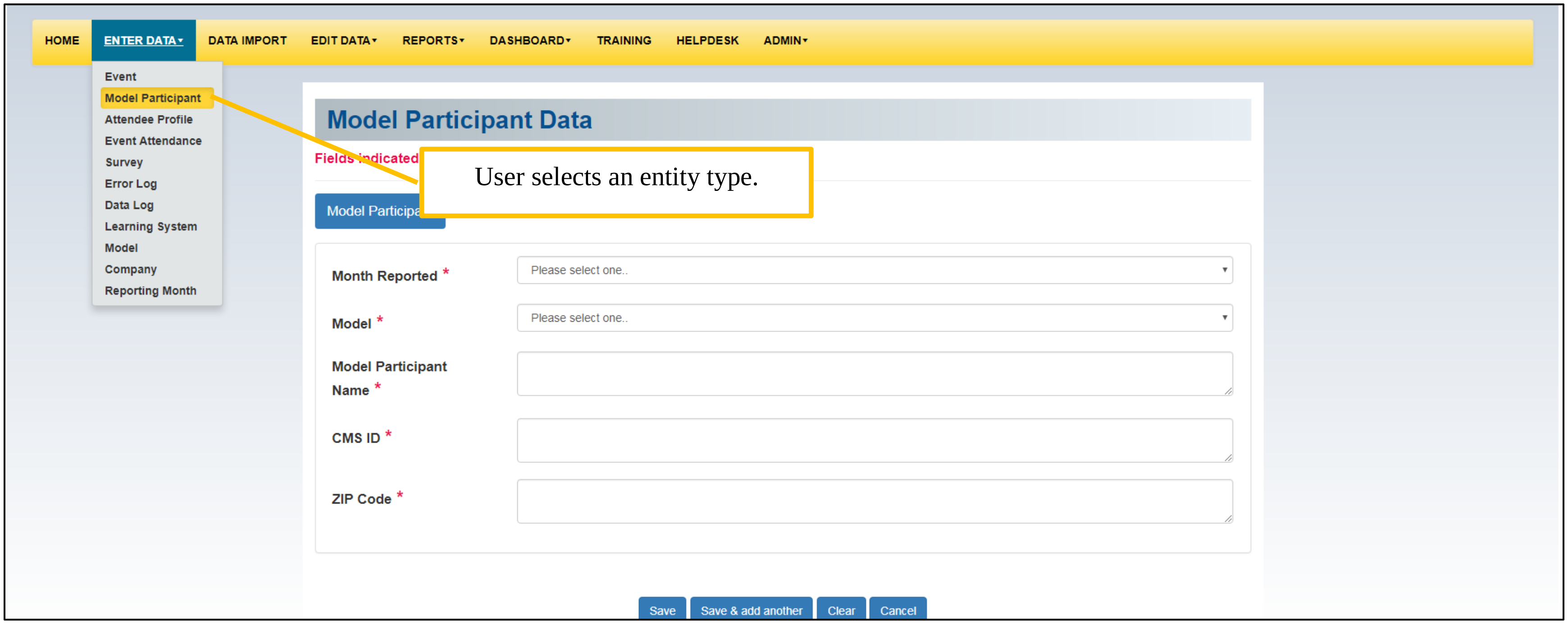
Selecting “Enter Data” is one of two ways to enter data into the system (selecting “Data Import” being the second). When using “Enter Data,” users enter and save data through data entry forms that enforce data validation rules that ensure data accuracy and consistency. Only one entity can be entered at a time when using this feature.

Follow these steps to enter data using the data entry forms:

1. ***Click*** “Enter Data” in the yellow toolbar.

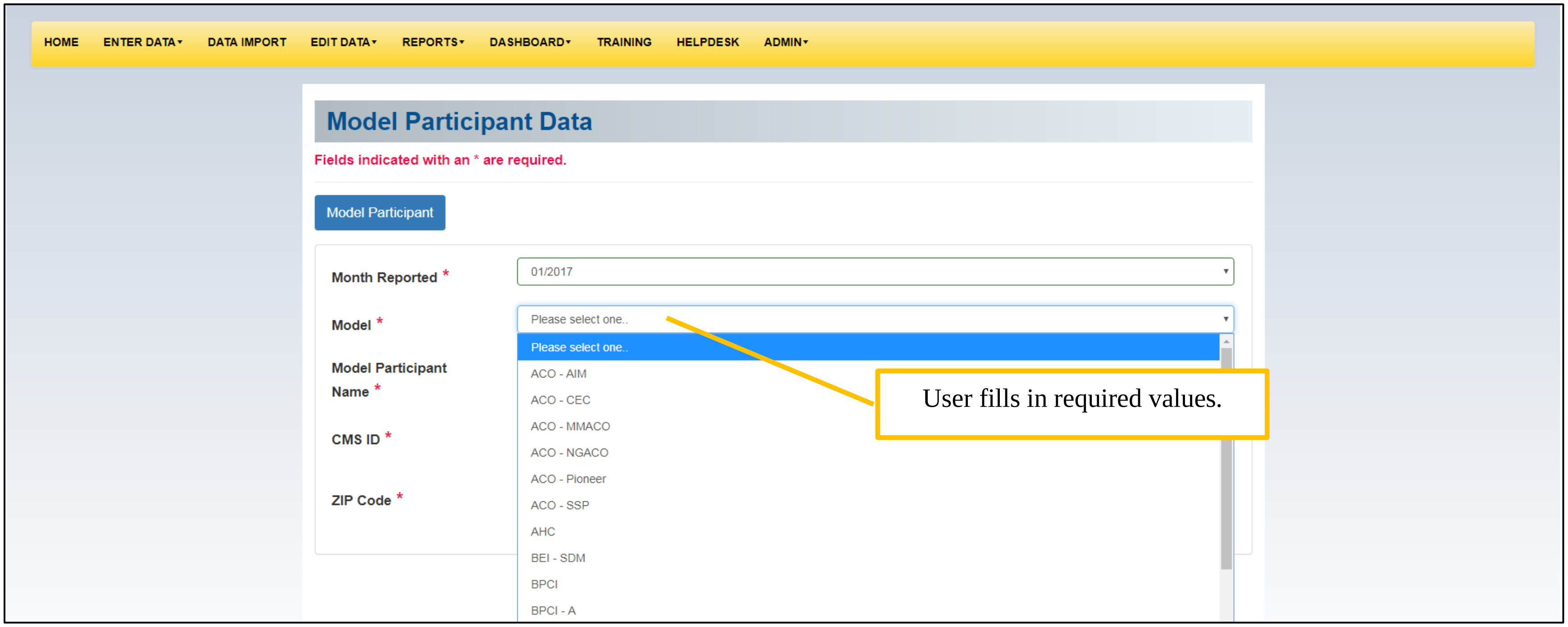


2. ***Select*** the entity type for which you would like to enter data in the drop-down menu that appears.

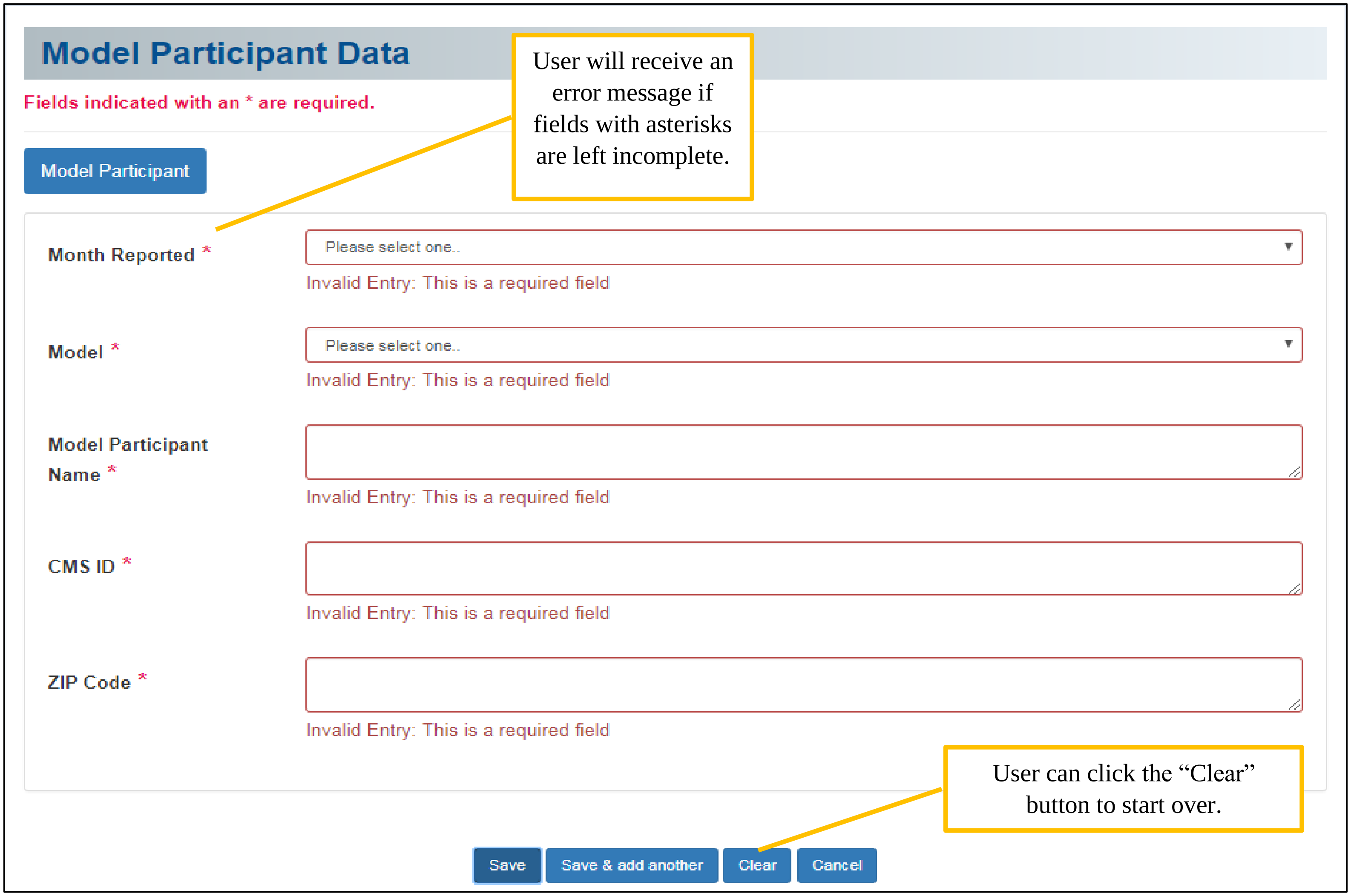


3. ***Use*** the drop-down menus, text boxes, and other question types to ***enter*** the appropriate values for the entity you are entering.

> **Note:** Some entity types (e.g., Event) are organized by different sections, in which questions are grouped together by content. These sections appear as different tabs within the form.



As indicated at the top of each form, questions with an asterisk (*) indicate that an answer choice is required for the entity to be saved. If at any time you wish to start over and clear all values, ***click*** the “Clear” button at the bottom of the form.

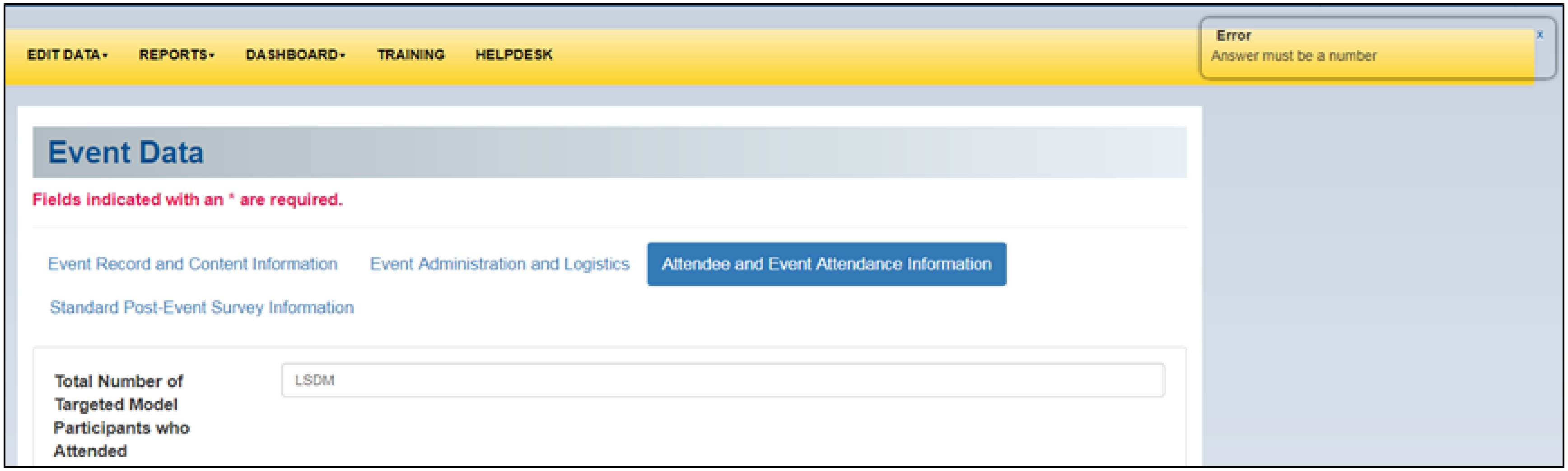


DMARS data entry forms contain the following question types. The LSDM Data Dictionary hosted in the LSDM Connect Site Library includes field-specific guidance regarding which values can be selected or entered.

- **Single-select** – Only one value can be selected for this question. This is indicated by the phrase “Please select one…”
- **Multi-select** – One or more values can be selected for this question. This is indicated by the phrase “Nothing selected.”

Note: Single-select and multi-select questions can be linked to other entity types. When a question is linked to an entity type, all saved entities for that entity type appear in the drop-down menu for the linked question (e.g., when a user populates a data entry form for “Survey,” the answer choices for “Event” are a list of event entities that have been entered previously.)

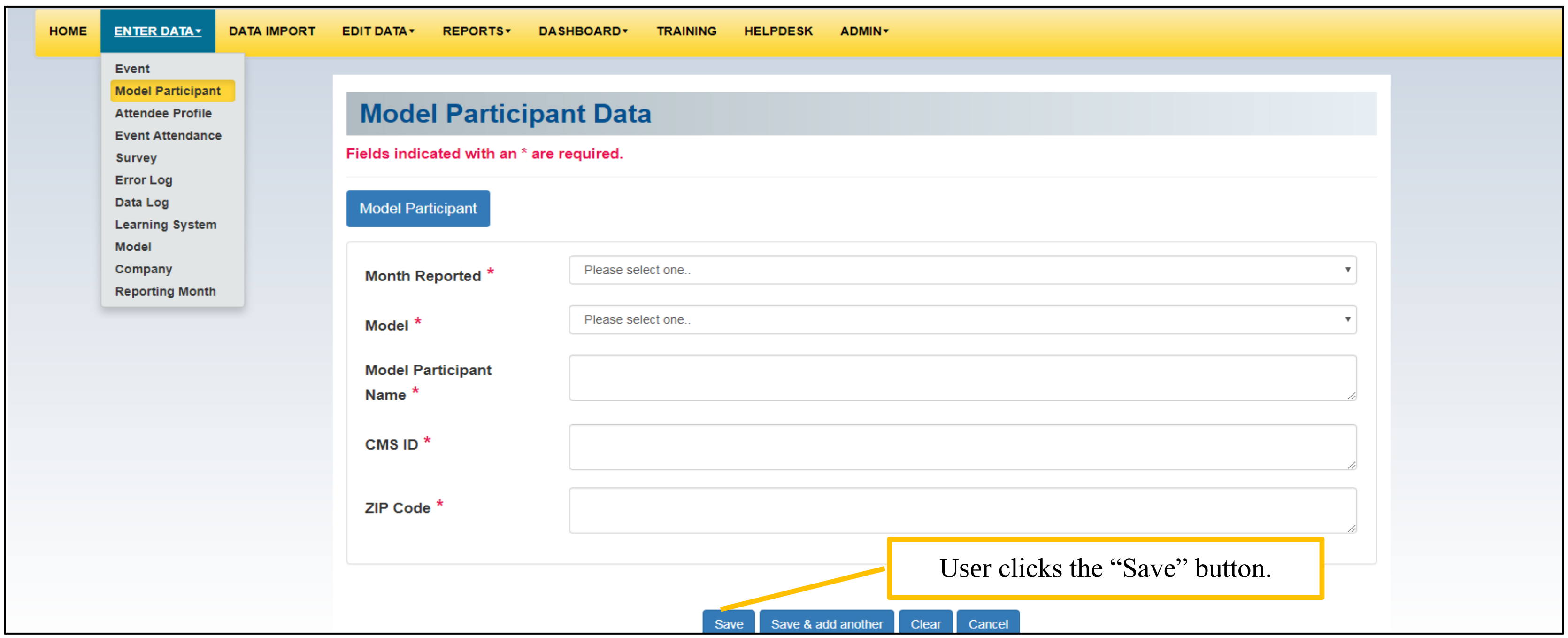
- **Text** – Any alphanumeric value can be selected in this field.
- **Number** – Only numeric characters can be entered in this field. A pop-up message will appear in the upper right-hand corner of the screen if any alpha characters or symbols are entered.



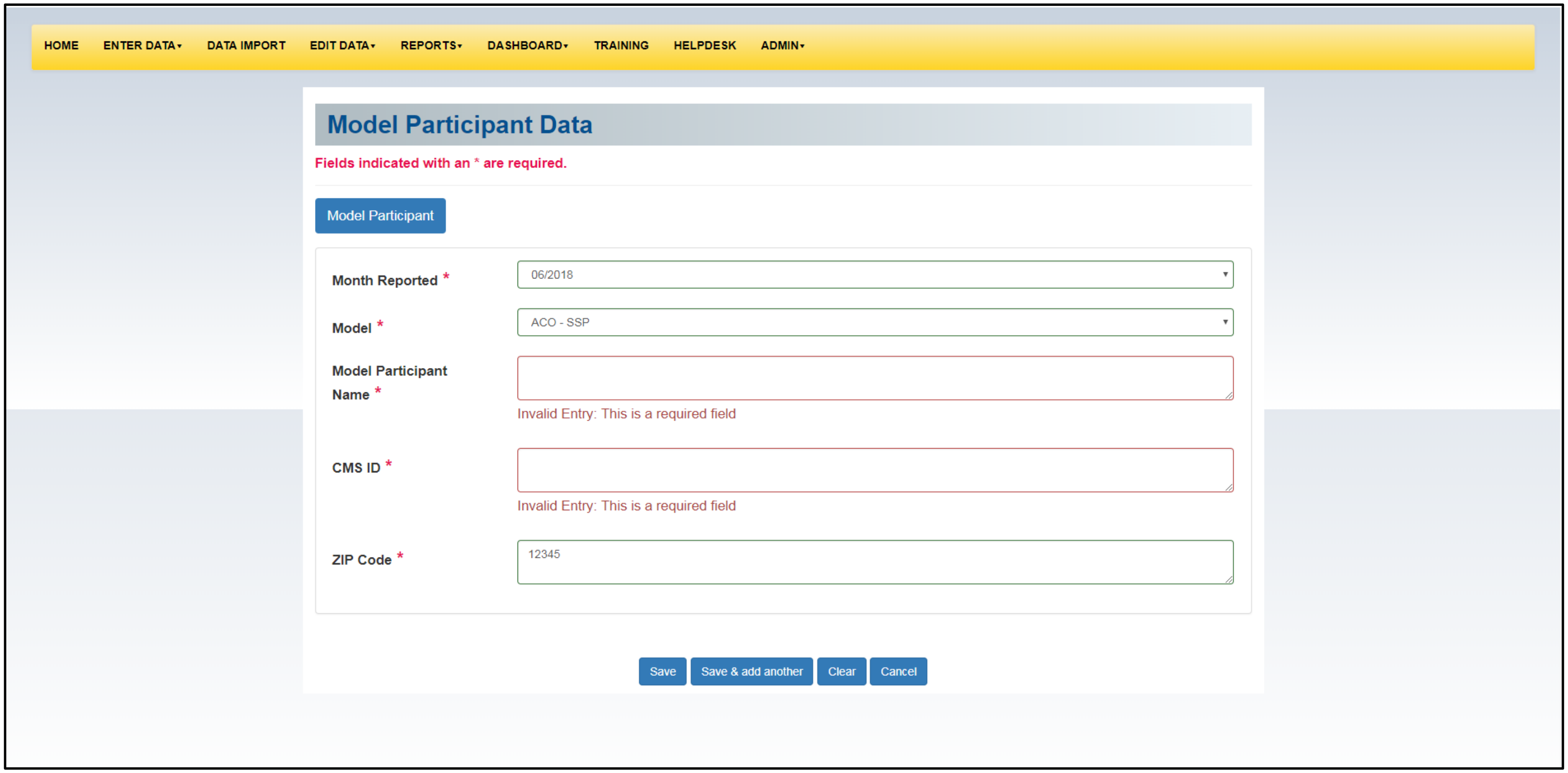
- **Short Date** – A date can be selected using the calendar tool that appears when you click on the answer box or entered into the field in the following format: MM/YYYY. A pop-up message will appear in the upper right-hand corner of the screen if the date is entered incorrectly.

- **Long Date** – A date can be selected using the calendar tool that appears when you click on the answer box or entered into the field in the following format: MM/DD/YYYY. A pop-up message will appear in the upper right-hand corner of the screen if the date is entered incorrectly.
- **E-mail** – The value entered must adhere to the following format: <text>@<text>. <text>. A pop-up message will appear in the upper right-hand corner of the screen if the value entered does not match this format.

4. ***Click*** the "Save" button located at the bottom of the screen to save the entity. You will then be redirected to the DMARS home page.
    a. If you would like to enter an additional entity for the same entity type, ***click*** the "Save & add another" button. Your work will be saved, and you will be directed to enter data into a new entity within the same entity type.
    b. If you would like to erase all values you have already entered in the entity, ***click*** the "Clear" button. Your work will be erased, but you will stay on the page.
    c. If you do not wish to save the entity, ***click*** the "Cancel" button. You will be redirected to the DMARS home page.



If any required questions are missing answers or contain invalid answer choices, you will not be permitted to save the data. These errors will be communicated in red text under the applicable question(s) and must be addressed prior to saving the data.



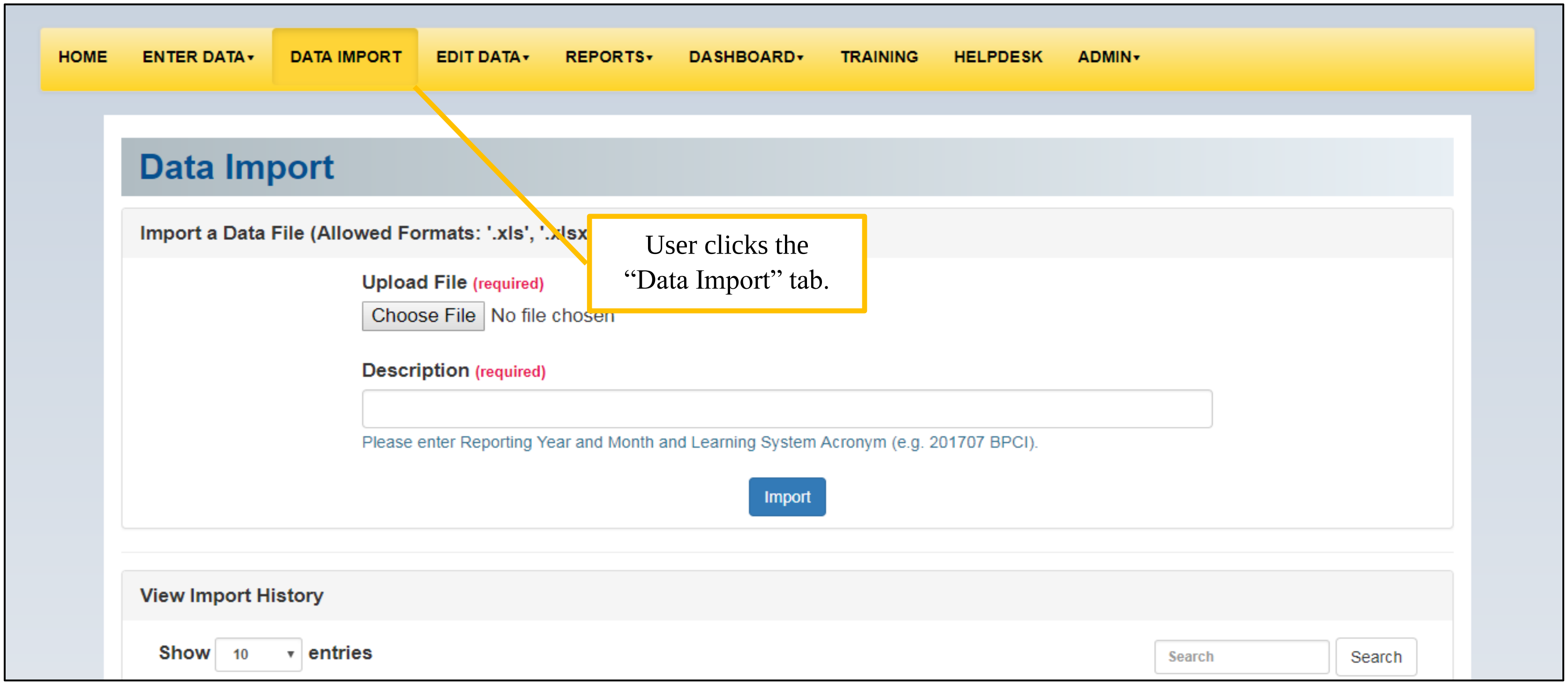
4. Data Import

The Data Import feature allows users to enter multiple entities at once using the Data Collection Template, which is configured for import to DMARS. <u>A typical data submission (fully populated Data Collection Template) can take between 15 minutes and 12 hours to process completely depending on the size and complexity of the data being imported.</u> Imported files are placed into a queue, allowing users to sign off or perform other tasks as the data are being processed. When a file is imported, DMARS standardizes the character case for single-select and multi-select data and performs several data validation checks, flagging errors as needed.

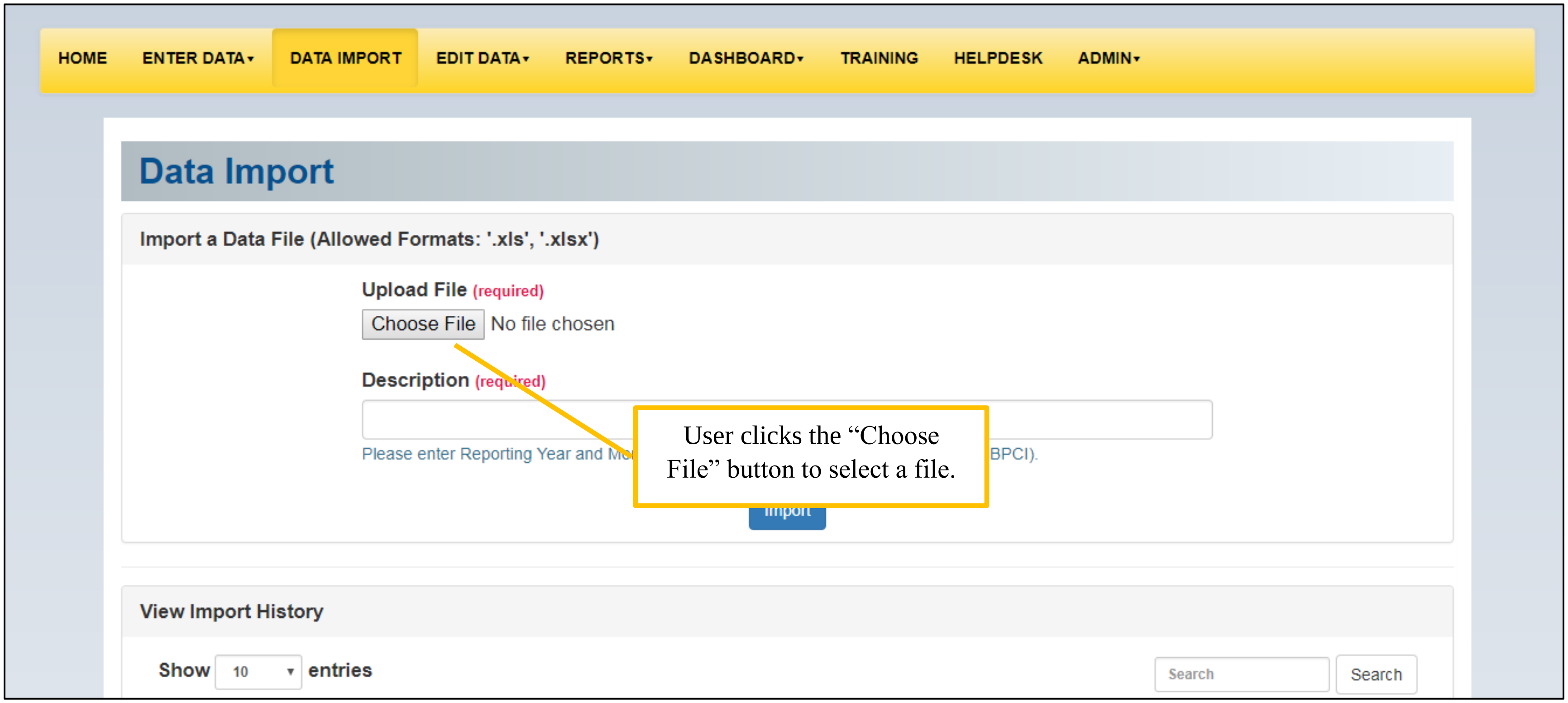
Import a Data File

Follow these steps to submit data using the Data Import function:

1. ***Click*** "Data Import" in the yellow toolbar.



2. ***Click*** the “Choose File” button.

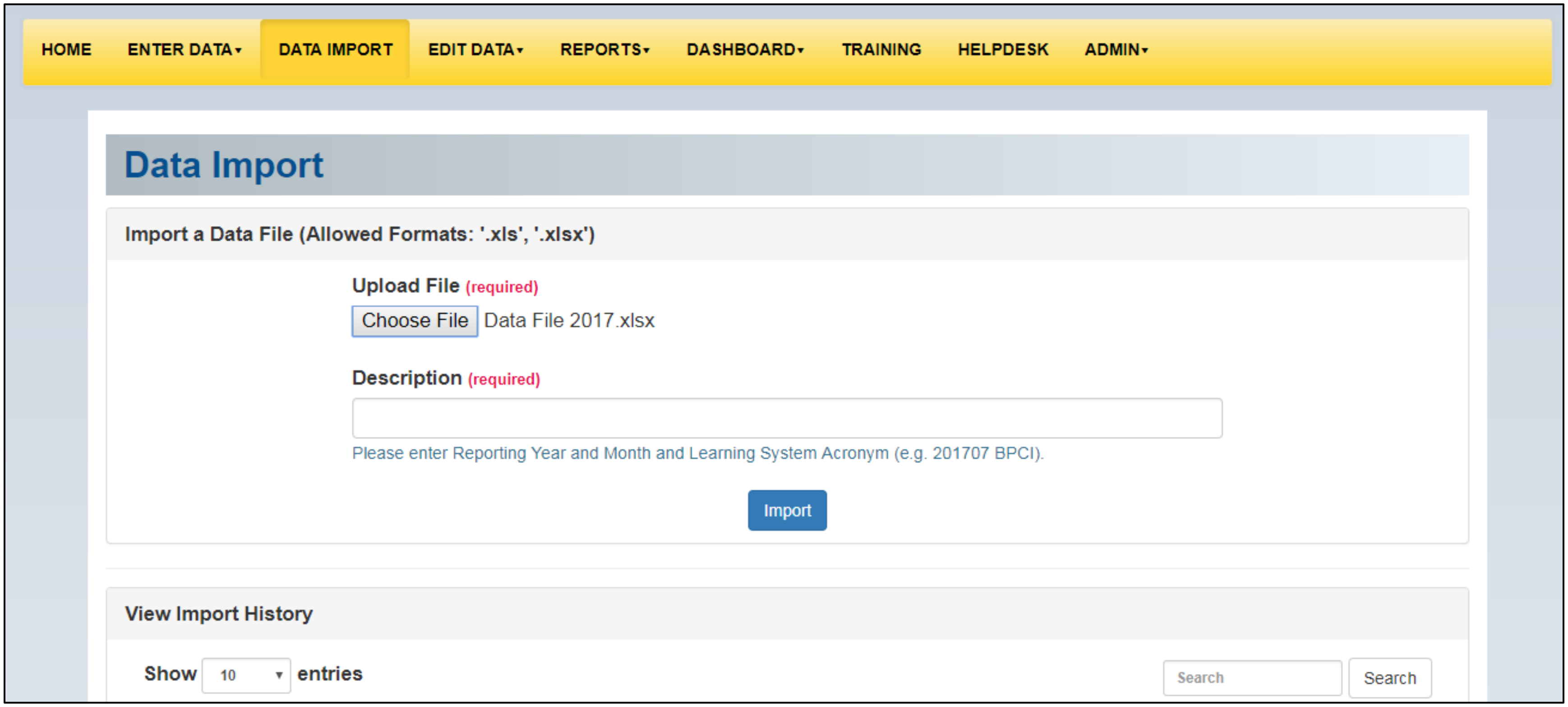


3. ***Select*** the file you would like to upload using the pop-up browser that appears and ***click*** "Open."

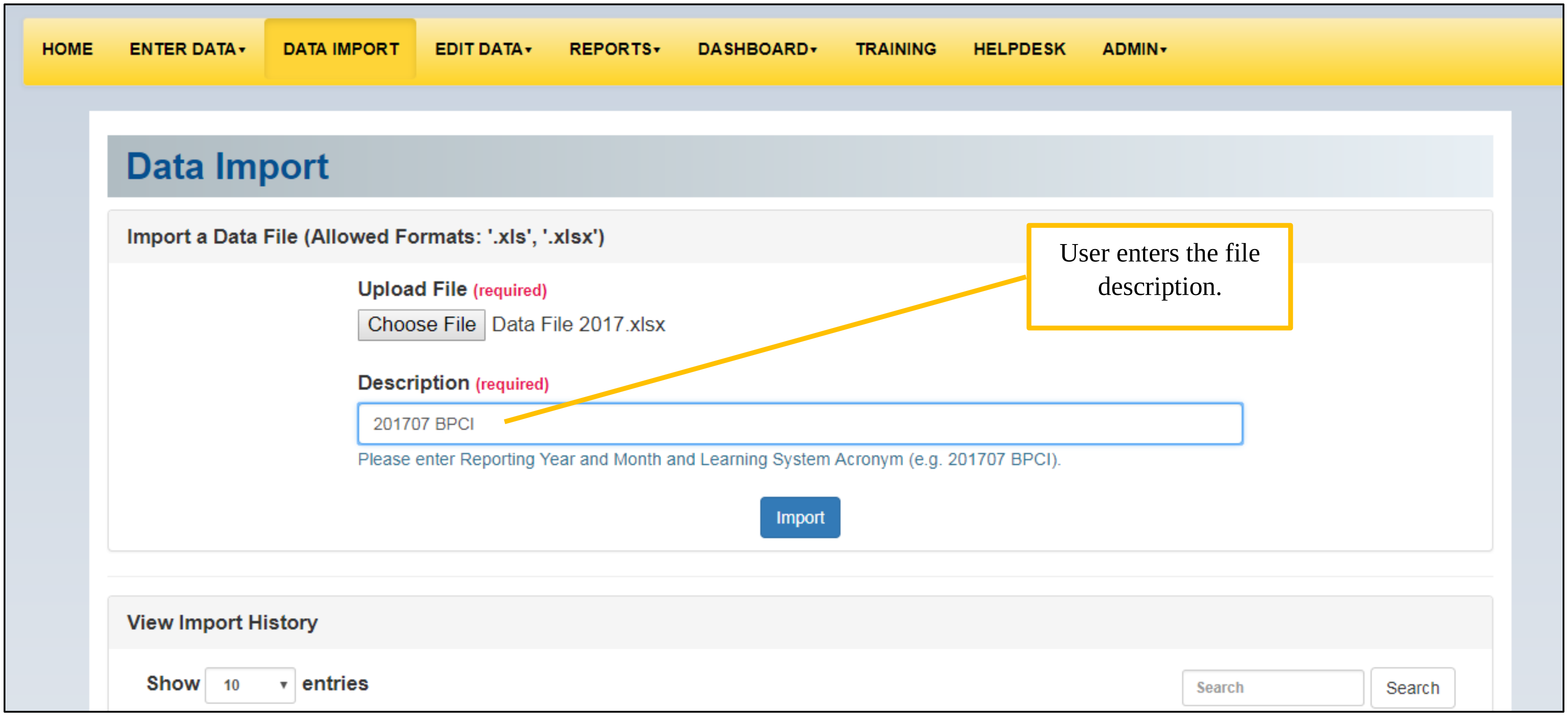
Note: All files imported to DMARS must adhere to the following guidance. DMARS will reject data files that do not meet these criteria.

- Use the latest version of the LSDM Data Collection Template.
- Always click the "DMARS Data Import Prep" button (to run the included macro) in the "Instructions" tab of the Data Collection Template before importing the populated Data Collection Template. This will ensure that the file is saved as one of the accepted file types (.XLS, .XLSX) and that the data file's formatting does not interfere with processing.
- Remove any encryption or password protection prior to importing the file.
- Ensure that the file name does not include symbols of any kind. If a file contains symbols in its name, DMARS will reject the file due to security restrictions.

The file name will appear next to the "Choose File" button.

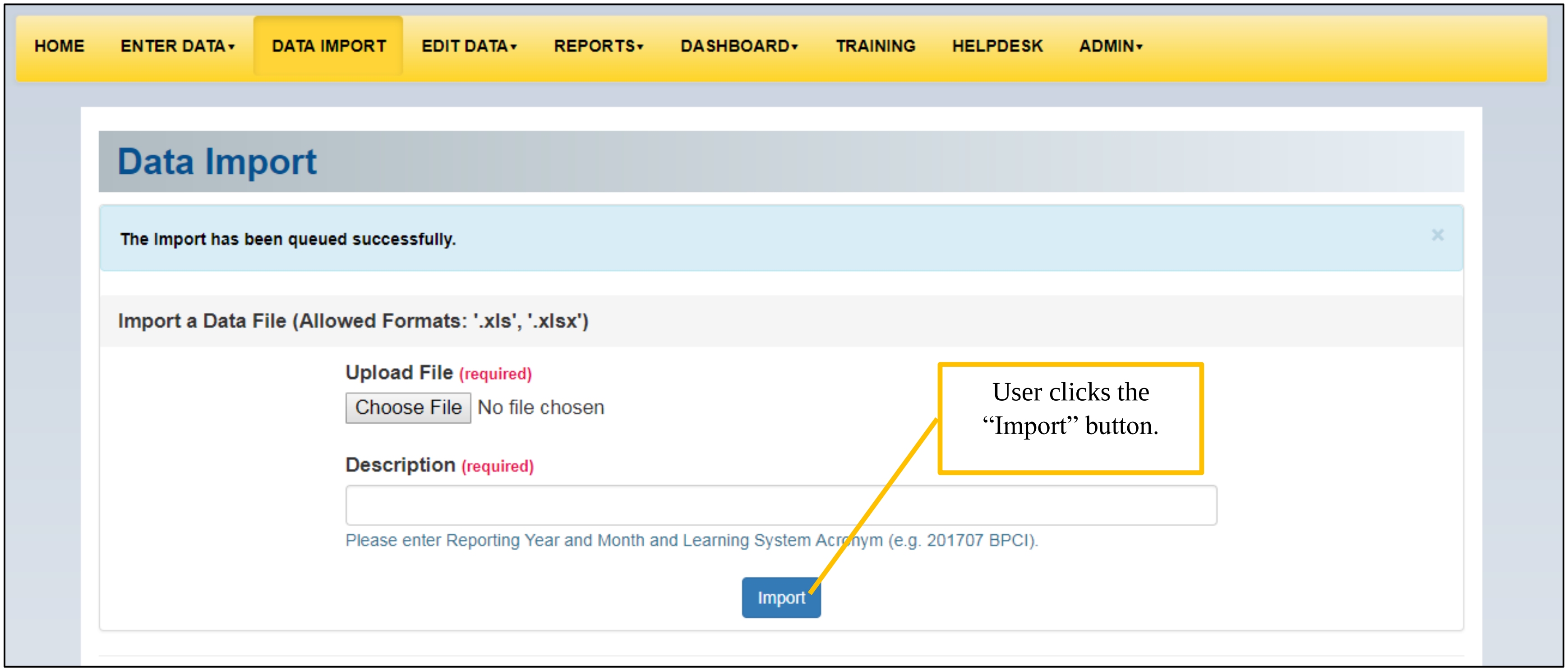


4. ***Enter*** the reporting year and month (YYYYMM) and the learning system for which you are importing data in the "Description" text box.



Note: LSDM requests but does not require that file names contain the same information as the Data Import Description field (e.g. Reporting Year and Month and Learning System Acronym).

5. ***Click*** the “Import” button.



If the file is successfully uploaded to the application, you will receive the following message: “The import has been queued successfully.” Again, a typical data submission (fully populated Data Collection Template) can take between 15 minutes and 12 hours to process completely depending on the size and complexity of the data being imported. You may logout or perform other tasks during this time; however, it is essential that you complete the steps in the following section (see the next section, Check the Status of a File in the Data Import History Table) to ensure your data are saved successfully in DMARS. The LSDM Support Team will notify you once the file has been processed through an e-mail with the subject “**LSDM DMARS Data Submission**”; however, users can also monitor the status of their files via the Data Import History table.

Note: Data import notifications are only sent during business hours, which are Monday through Friday between 9:00 a.m. and 5:00 p.m. Therefore, if a file finishes processing at 6:00 p.m. on a Tuesday, the user will not receive an e-mail notification until 9:00 a.m. on Wednesday.

If the file is not uploaded successfully, you will receive one of the Enterprise Portal's EFT[1] error messages. Reference Appendix B: EFT-Generated Data Import Error Messages for guidance on resolving the error message received.

Check the Status of a File in the Data Import History Table

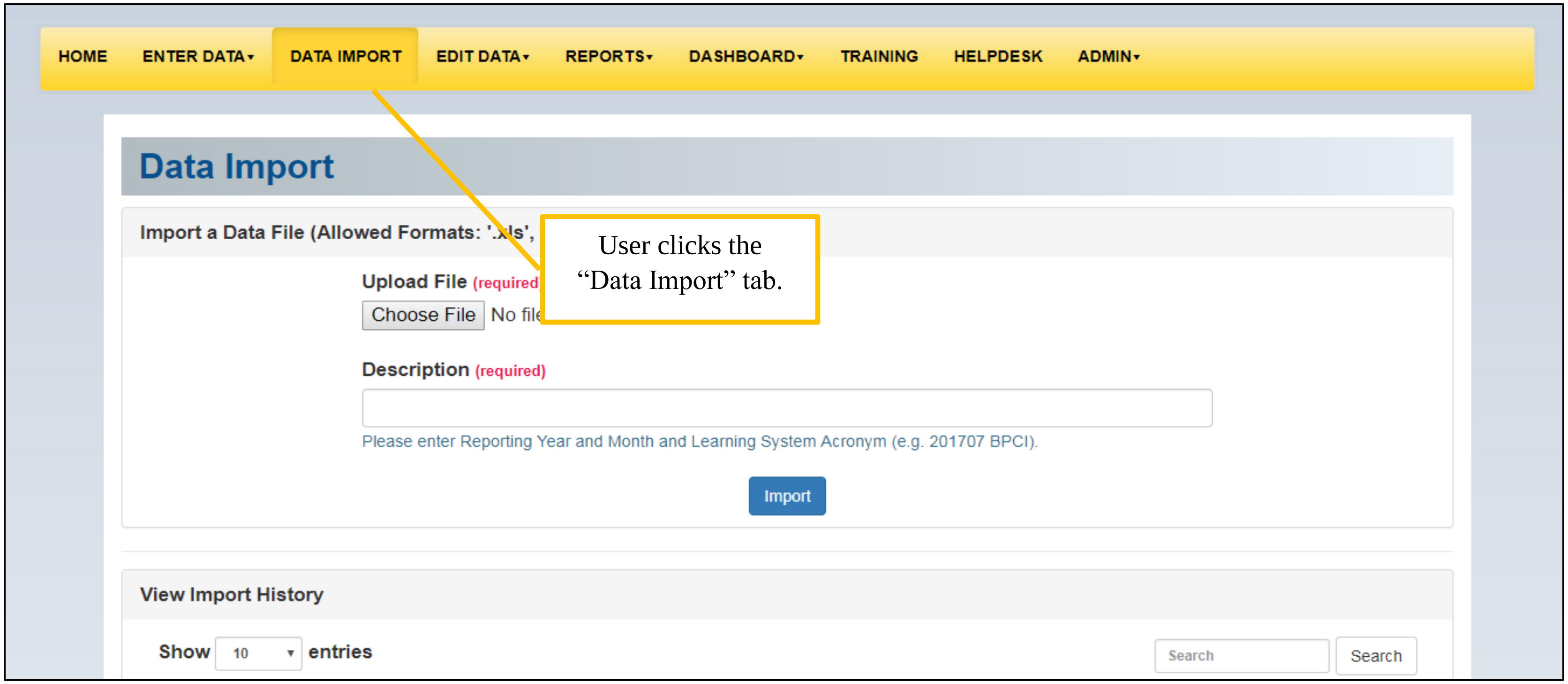
Although the LSDM Support Team will send e-mail notifications to users to notify them once their files have finished processing, DMARS users are encouraged to check the Data Import History table at any time to view updates on the status of their files or files imported by other users within their user group (e.g., a Bundled Payments for Care Improvement (BPCI)user can check the status of a file imported by another BPCI user). Note that you must refresh the page to see an updated status for your file (or for the file to appear in the Data Import History table if you just received the confirmation message that your file has been queued successfully).

Super-Admin and Admin users can access information on files across all users groups within the Data Import History Table. These users can also requeue and delete files as needed (for troubleshooting purposes) through the Data Import History Table's administrative functionality.

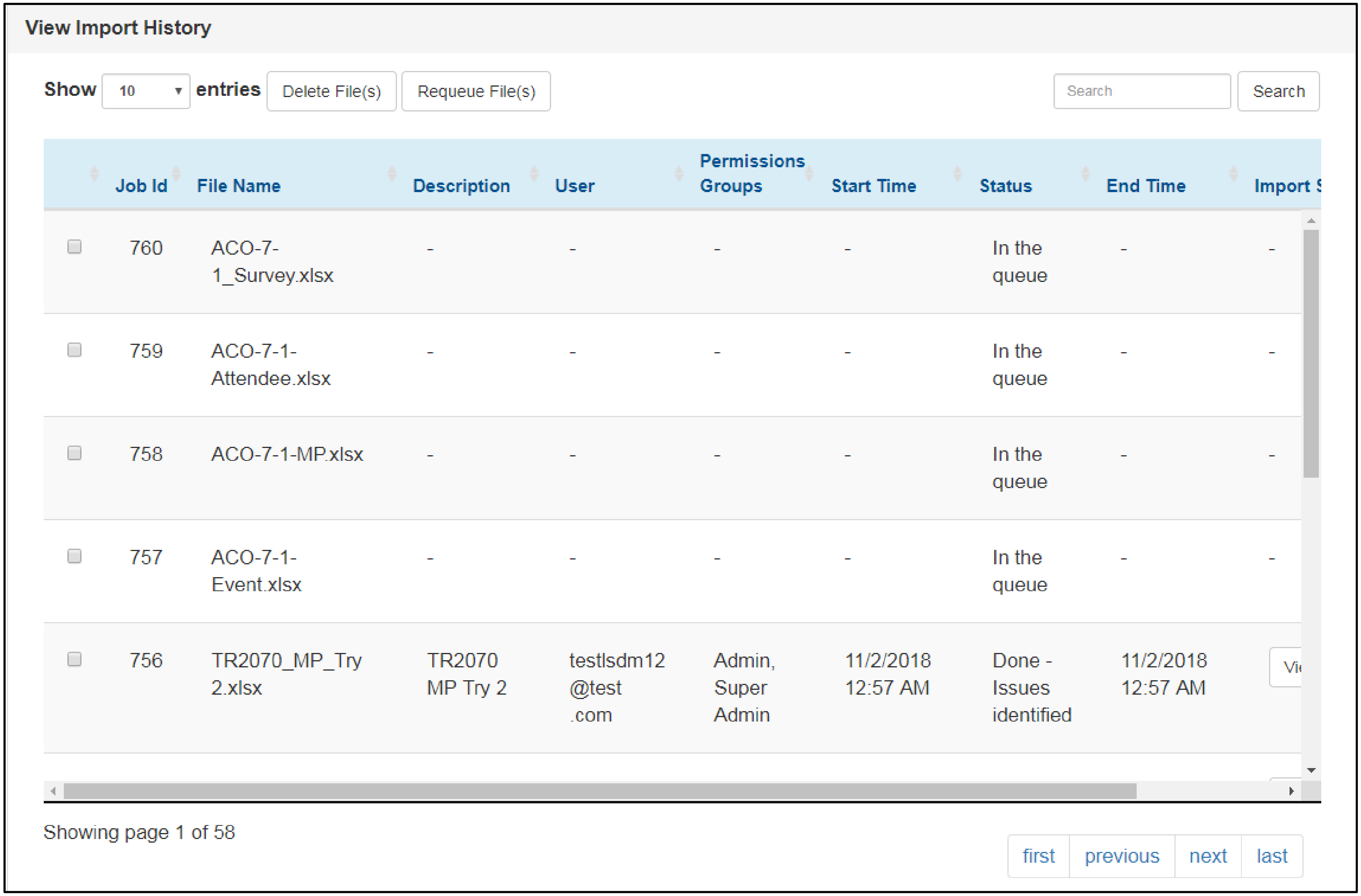
[1] The Enterprise Portal's EFT functionality is leveraged for virus scanning. All files are processed in the portal for 5 to 10 minutes before they are sent back to DMARS for processing.

Follow these steps to check the status of an imported file:

1. ***Click*** "Data Import" on the yellow toolbar.



2. S*croll* down to "View Import History." Note that you may see other files with a status of "In the queue" that were imported by other users/permissions groups. This provides users with more information regarding when they should expect their file to finish processing.



View Import History

Show 10 entries Delete File(s) Requeue File(s) Search

	Job Id	File Name	Description	User	Permissions Groups	Start Time	Status	End Time	Import S
☐	760	ACO-7-1_Survey.xlsx	-	-	-	-	In the queue	-	-
☐	759	ACO-7-1-Attendee.xlsx	-	-	-	-	In the queue	-	-
☐	758	ACO-7-1-MP.xlsx	-	-	-	-	In the queue	-	-
☐	757	ACO-7-1-Event.xlsx	-	-	-	-	In the queue	-	-
☐	756	TR2070_MP_Try 2.xlsx	TR2070 MP Try 2	testlsdm12@test.com	Admin, Super Admin	11/2/2018 12:57 AM	Done - Issues identified	11/2/2018 12:57 AM	Vi

Showing page 1 of 58

first previous next last

Files in the Data Import History Table appear in the order in which they were imported. The following information is captured for each file.

- **Job ID** – Auto-generated ID number for each file.
- **File Name** – The name of the file that was imported.
- **Description** – User-entered description of the file that was imported.
- **User** – The e-mail address of the user who imported the file.
- **Permissions Groups** – The permissions group(s) to which the user who imported the file belongs.
- **Start Time** – The timestamp of when the file was retrieved back from the Enterprise Portal's EFT service (virus scanning) and began processing in DMARS. Note that this is not capturing the time that the user initiated the import.
- **Status** – The current status of the file. Note that the page must be refreshed for users to see an updated status. Status values include:
  - ***In the queue*** – The file is either undergoing virus scanning in the portal or was imported after another file that is currently being processed.
  - ***Processing*** – The file is currently being processed; no data have been saved.
  - ***Done - Issues identified*** – The file finished processing but may not have been saved due to issues identified in the file. It is essential that you review the Data Import Summary closely to determine which data were saved, if any (see the Entities Summary Panel section below). Issues can include the following:
    - *Errors* – Issues with the data file that prevented the data from being saved (e.g., missing answers to required questions, unrecognized values). Learning system contractors must address these errors and reimport their data in order for the data to be saved successfully.
    - *Warnings* – Issues with the data file that did not prevent the data from being saved, as they are reflective of relatively minor skip pattern issues. Although warning messages do not prevent data from being saved to DMARS, learning system contractors must address the issues either via "Data Import" or "Edit Data" before the data will be considered final during the submission period.
  - ***Done - No issues identified*** – The file finished processing and all data in the file were saved successfully.
  - ***Failed*** – The file could not be processed.
  - ***Deleted*** – A Super-Admin deleted the file when it was in the queue to prevent it from being processed.
- **End Time** – The time that the file finished processing.

Review the Data Import Summary

Users should always review their file's Data Import Summary regardless of whether any issues are identified in the data, as the Data Import Summary is a useful tool for verifying that the data were saved to DMARS as expected. If issues are identified in the data, users must refer to the file's Data Import Summary to access a comprehensive list of issues that must be addressed before the file is re-imported.

Follow these steps to access a file's Data Import Summary:

1. ***Click*** "Data Import" in the yellow toolbar and s***croll*** down to "View Import History."
2. ***Identify*** the file you imported by referencing descriptive information in the table (e.g., File Name, User).
3. ***Scroll*** to the far right of the table (if needed) so that you can see the "Import Summary" column.
    - To view the Data Import Summary, click the "View" button to navigate to the Data Import Summary page.
    - To download the Data Import Summary directly to your system in comma separated values (CSV) format, click the "Download" button located directly next to the "View" button. Note that only the Messages panel of the Data Import summary will be downloaded.

    Note that these buttons only appear for files with an output status. Files that are either "In the queue" or "Processing" do not have import summaries.

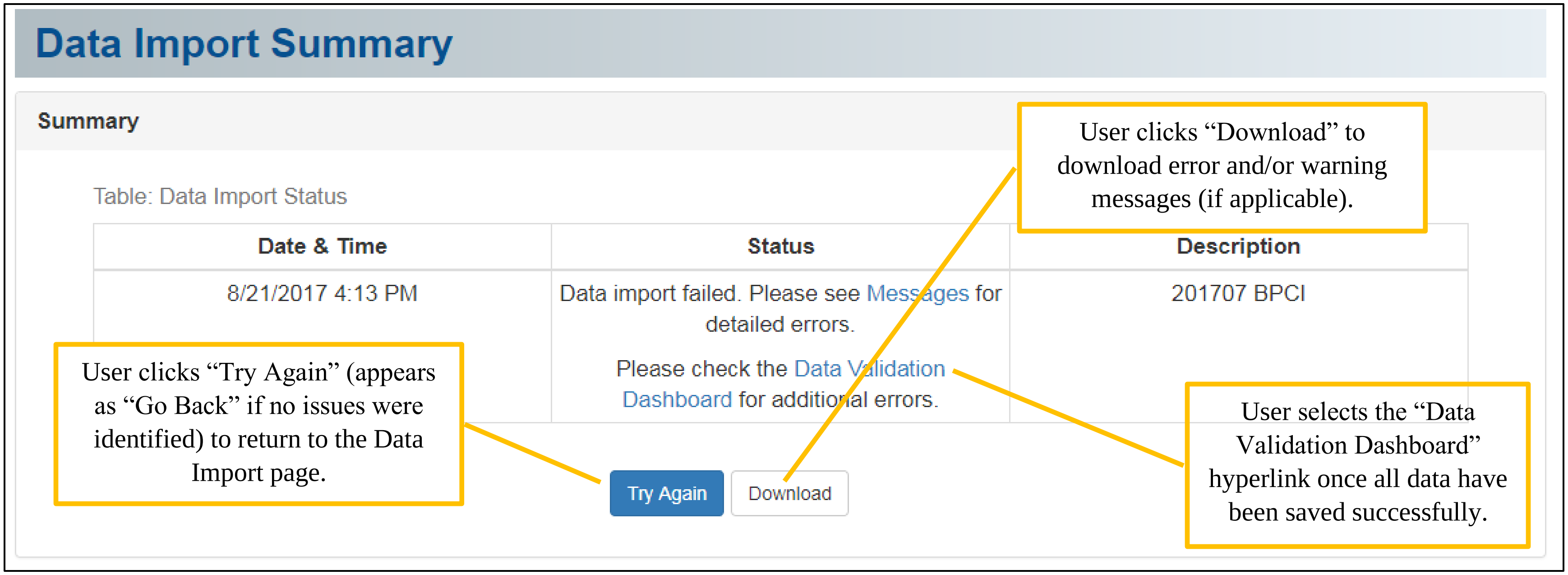
The Data Import Summary page is divided into three panels described below. If you chose to download the Data Import Summary, reference the Messages Panel section below.

Summary Panel

The Summary panel at the top of the Data Import Summary page captures the date and time that the file began processing in DMARS (corresponds to "Start Time" on the Data Import History tab), the status of the file (whether or not the data were saved), and the user-entered file description.

The Summary panel also contains a hyperlink to the Data Validation: Monthly Quality Control (QC) tool dashboard, prompting learning system contractors to complete the next step in the monthly data submission process (see the Data Collection Manual section).

Lastly, depending on whether any issues were identified in the data file, one or two buttons will appear in this pane, allowing users return to the previous Data Import page or download the information in the Messages panel.



Entities Summary Panel

The Entities Summary captures information regarding the number of entities imported and the entity types to which they correspond. Users are highly encouraged to review the Entities Summary table to verify that the expected number of entities were either saved as new entities or updated (if they were previously saved to the system). <u>The Entities Summary table is also particularly important for tracking which entity types saved successfully, as it is common for a subset of entity types to be saved.</u> For example, if no errors are present in the data for the Event or Model Participant entity types, these entities can be saved regardless of whether errors were identified in other entity types. However, if errors are found in both entity types, neither the Attendee data nor the Survey data can be saved, as they are linked to the erroneous entity types.

The Entities Summary Table captures the number of entities that fall into each of the following categories:

- **New** – The entities did not previously exist in the DMARS database but have since been added.
- **Updated** – The entities were already present in the DMARS database and have since been updated.
    - Entities are updated when the unique combination of an entity that is present in the data file directly matches the unique combination of an entity in the DMARS database and the values for other fields have changed in some manner.

- If you ever need to revise a value that is part of the unique combination for an entity type, you must use the "Edit Data" feature to prevent creating extraneous entities in the DMARS database.

- **Invalid** – Contact the Helpdesk if entities are ever categorized under this field.
- **Total** – The sum of entities across the New, Updated, and Invalid columns. Although this count may be equal to the total number of records present in the data file, this will not be the case if any of the records were previously added to DMARS and remain unchanged.

The Entities Summary table also captures when the settings for the imported file were set to ignore one or more entity type blocks. See the Data Collection Manual for more information on how to use the Data Collection Template's macro to import a subset of entity types.

Entities Summary

Entity Type	New	Updated	Invalid	Total
Company	Block was Ignored			
Model	0	0	0	0
Learning System	0	0		
Reporting Month	Block was Ignored			
Model Participant	Block was Ignored			
Sum	0	0		

User indicated that he or she was not submitting data for three entity types when employing the Data Collection Template's macro.

Messages Panel

The Messages Panel will only appear when issues or deviations from LSDM data validation rules (see Data Dictionary) were identified in a data file. There are two primary types of issues:

- **Error Messages –** Error messages prevent entities from being saved to the system, as they capture significant deviations from LSDM data validation rules. The following issues are captured in error messages:
  - Answer not provided for a required question
    - For example, user does not enter a value for Date of Event in the Event entity type, which is a required question.
  - Unrecognized values selected for a single-select or multi-select field
    - For example, user enters "Project Manager" instead of "Project Manager/Coordinator" for Attendee Primary Role in the

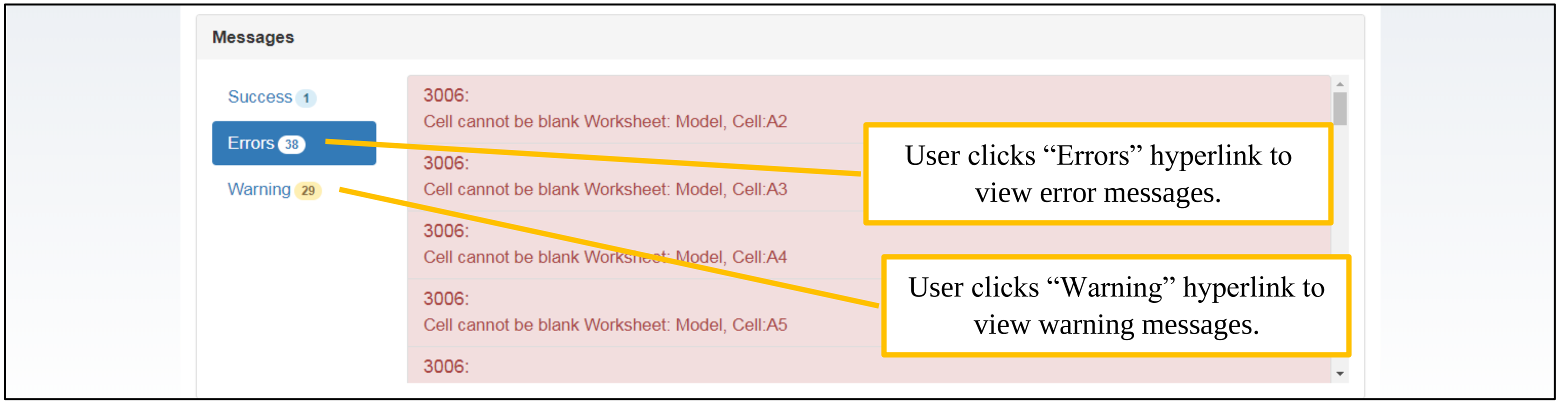
Attendee data.

- Entity types not linking as expected due to mismatching values in the entity types' unique combinations
    - For example, if a user enters an extra space in the Event Title for a Survey entity, it will not be properly linked to the Event entity it corresponds to.

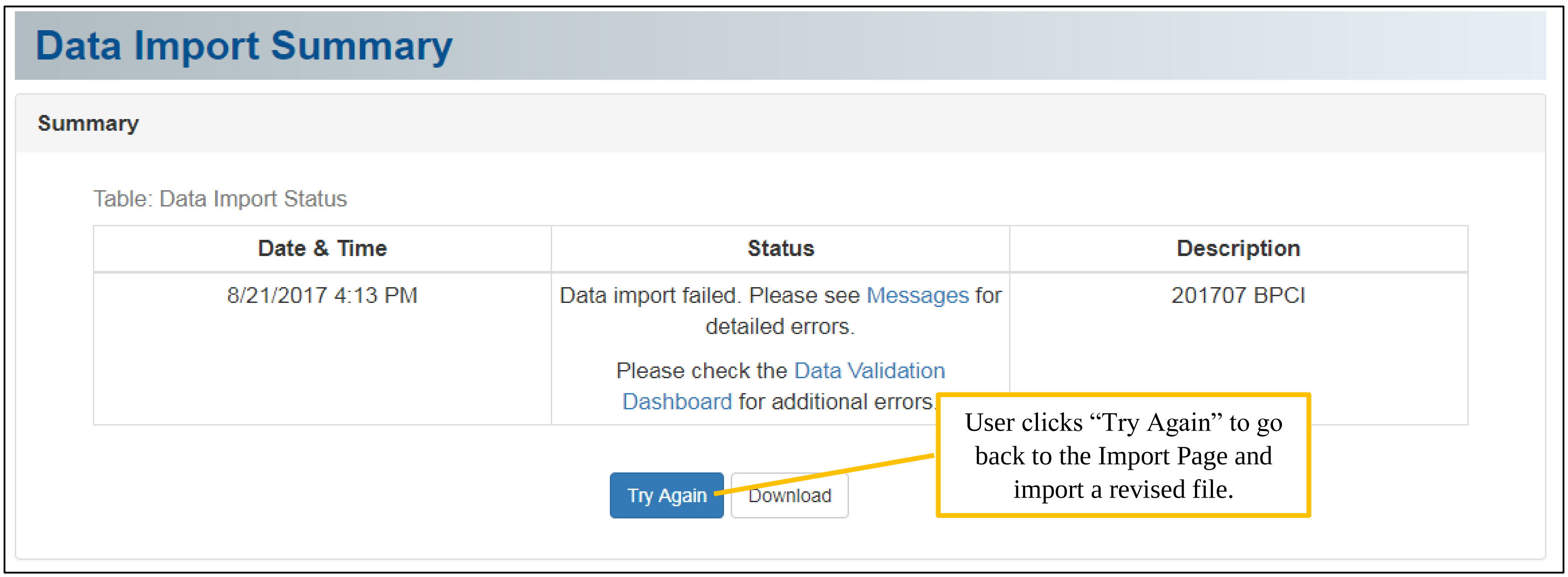
- **Warning Messages** – Warning messages do not prevent entities from being saved to the system; however, these types of issues must still be addressed per the Data Collection Manual. The following issues are captured in warning messages:
    - Answer not provided for a conditionally required question. Conditionally required questions are defined as questions that only need to be answered if a specific value was selected for a previous field.
        - For example, user selects "Other" for Attendee Primary Role but does not enter a value for Attendee Primary Role: Other, a field that is dependent on the answer for Attendee Primary Role.
    - Extraneous answer is provided for a conditionally required question, as the condition was not met.
        - For example, user selects "No" for CME Credit Offered but mistakenly enters a value for CME Credit Value, a field that is dependent on the answer for CMS Credit Offered.

See Appendix C: Data Import Error/Warning Messages for a full list of error and warning messages, as well as instructions for resolving these issues. When applicable, the message will include the exact location in the file that the issue appears by providing the tab and cell address (e.g., Worksheet: Model Participant, Cell: B2).

> **Note**: Users should never attempt to address any issues that are identified within the "Configuration" tab of the Data Collection Template. Instead, contact the CMS LSDM Helpdesk per the guidance in Appendix C: Data Import Error/Warning Messages.



Once all error and warning messages have been addressed, ***re-import*** the file as needed until all data in the file is saved successfully.



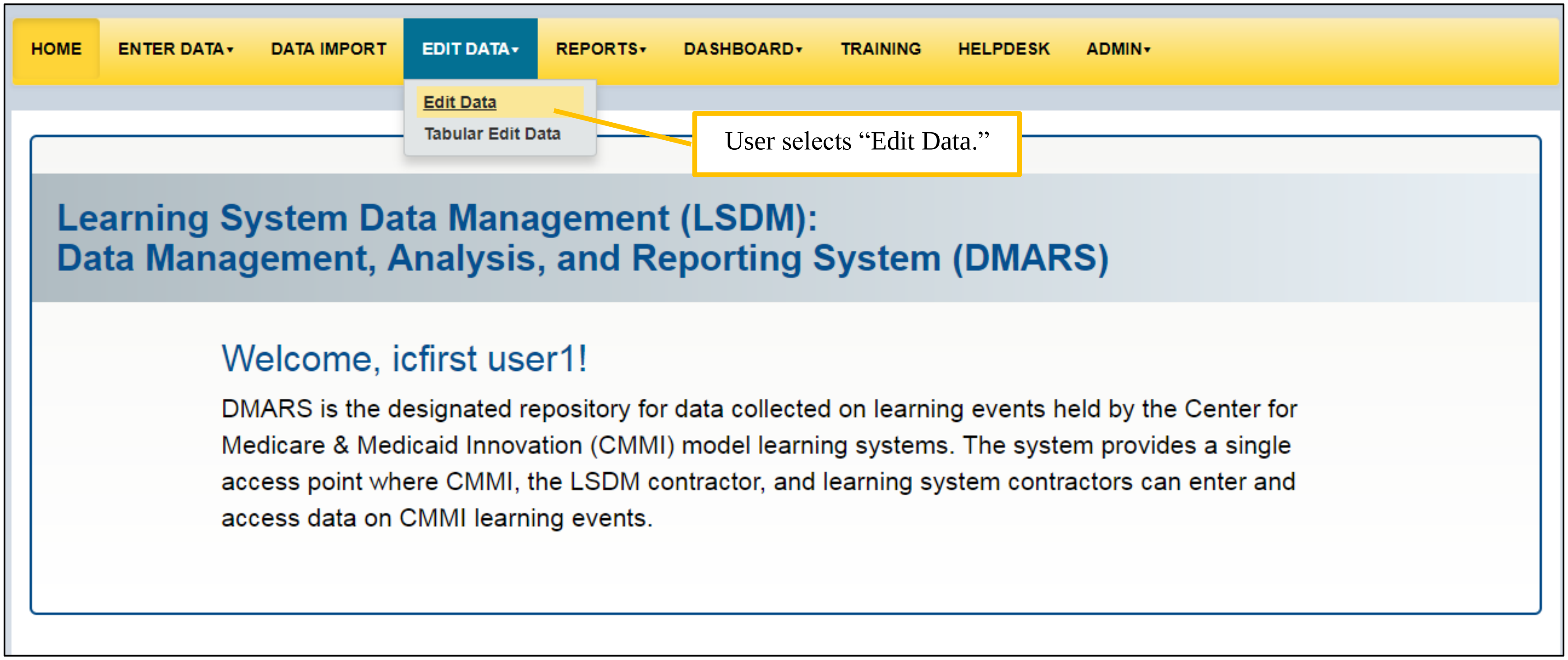
5. Edit Data

Edit Data allows users to access data within the system and edit each entity individually through data entry forms. Users can also delete entities through this interface.

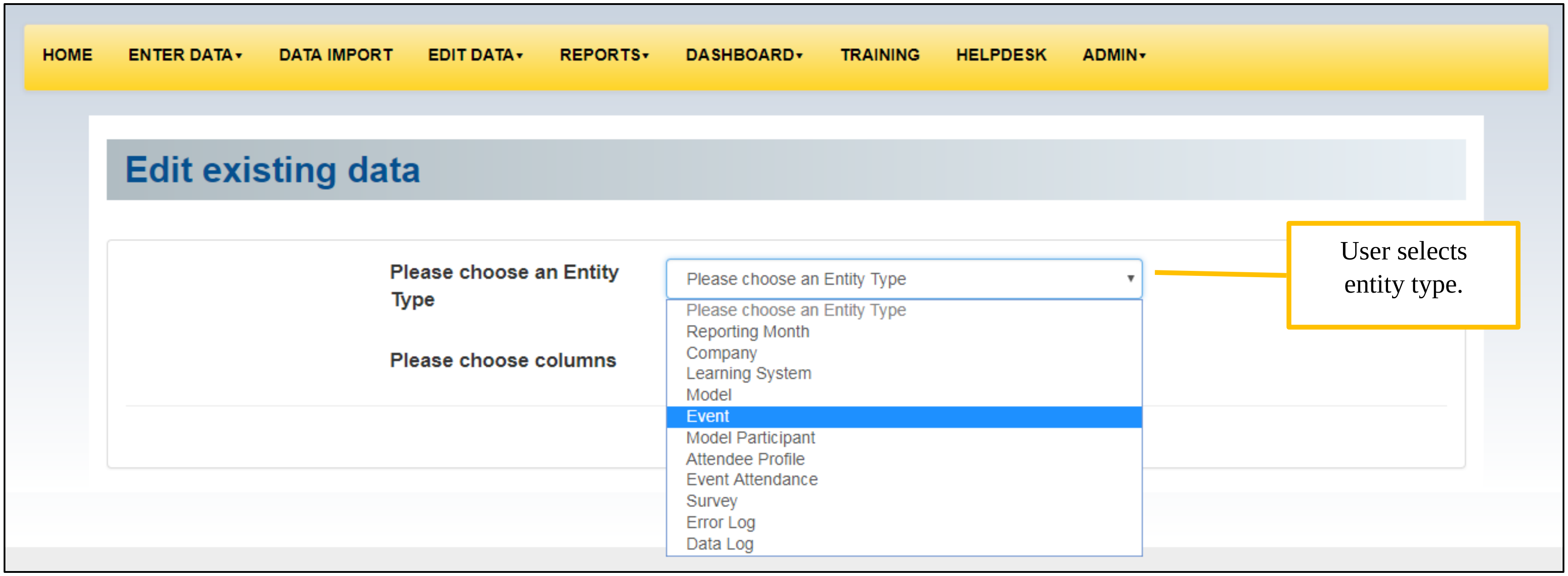
Edit an Entity

Follow these steps to edit an entity:

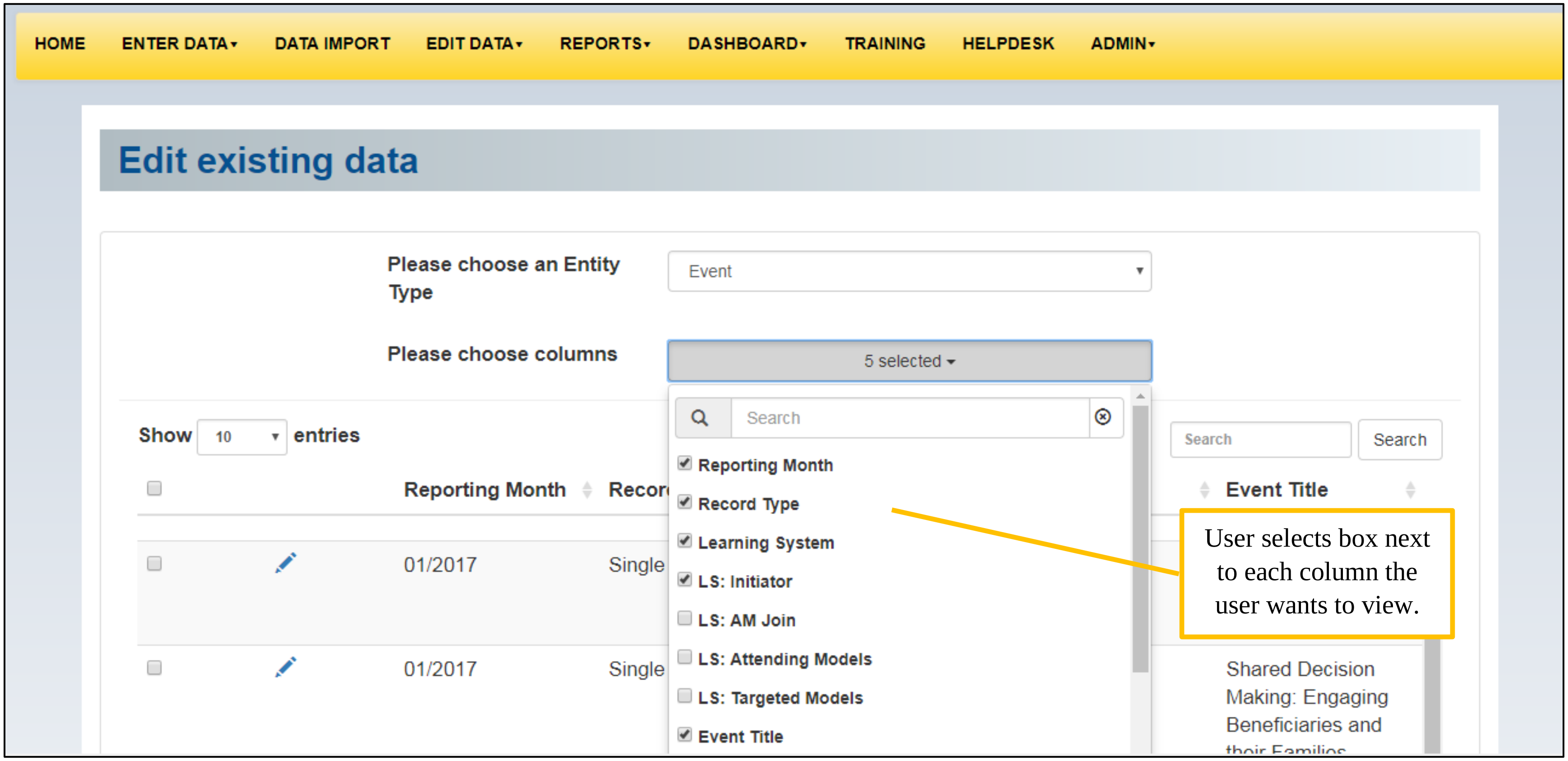
1. ***Click*** "Edit Data" in the yellow toolbar and ***select*** "Edit Data" in the drop-down menu that appears.
   a. Note that "Tabular Edit Data" is an administrative feature that is only available to Super-Admin users.



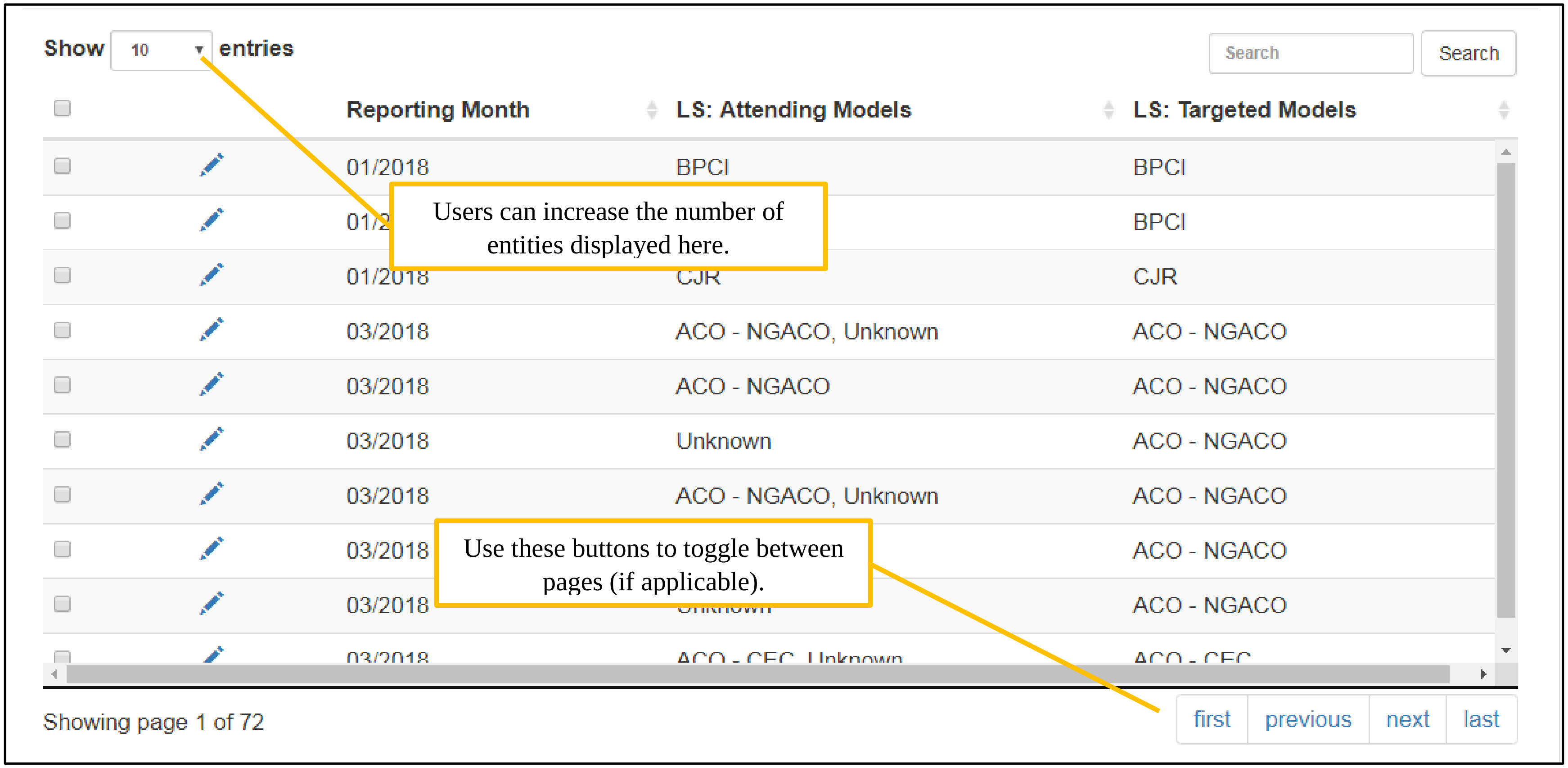
2. ***Click*** the drop-down menu labeled "Please choose an Entity Type" and ***select*** the entity type you would like to view.



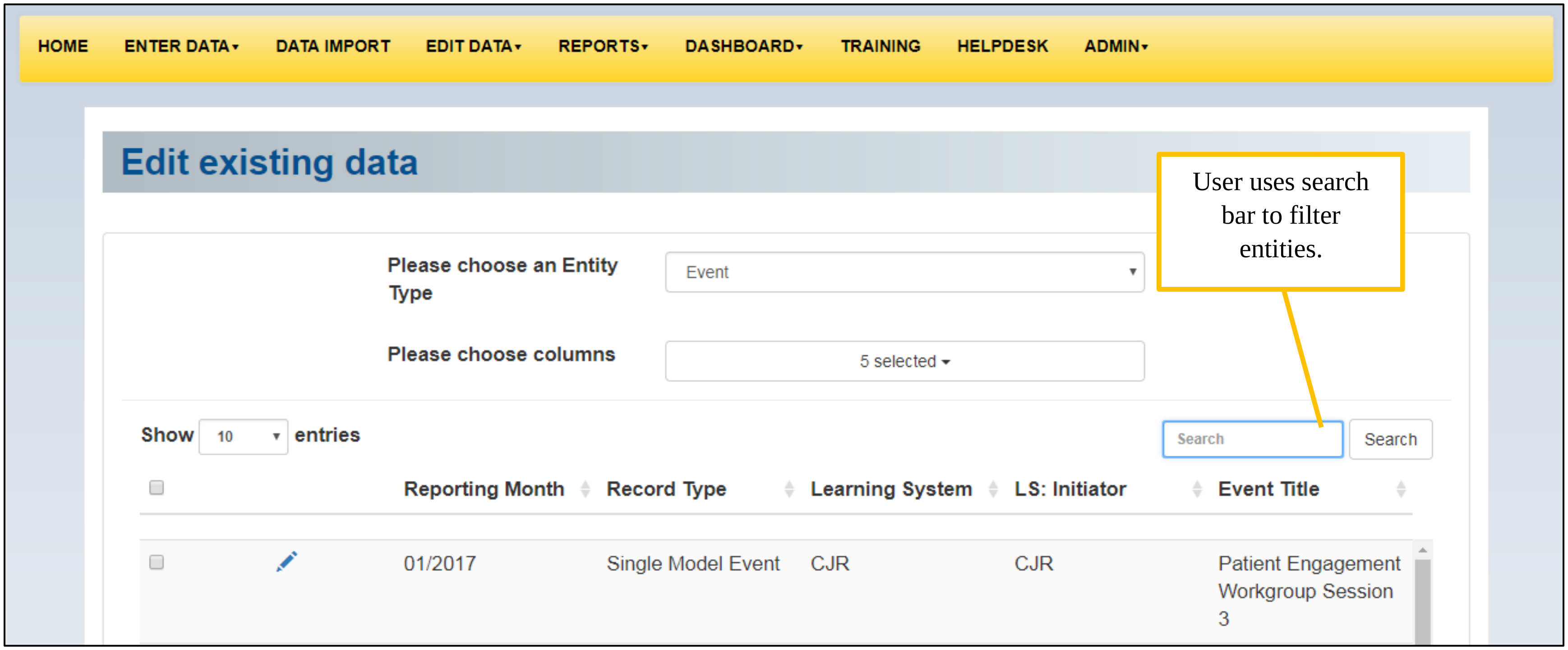
3. ***Click*** the drop-down menu labeled "Please choose columns" and ***check*** the box next to each column, or question, that you would like to view. As you select and deselect each column, the table below will update accordingly.



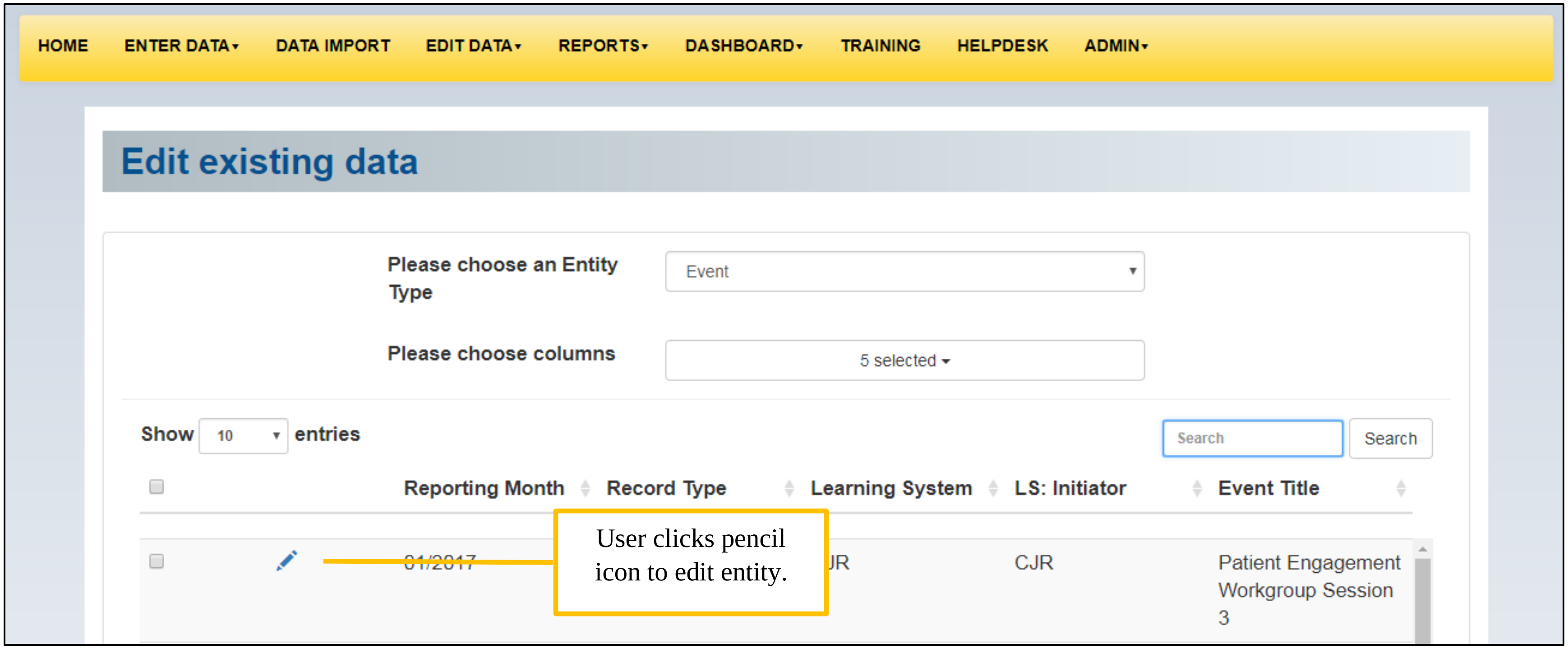
4. ***Use*** the scrollbars to navigate down and across the table to view additional entities and questions that are not in view. You can also increase the number of entities that appear on the page and use the buttons at the bottom of the table to toggle between pages.



5. To filter for a specific entity or answer choice, ***type*** the desired value into the text box labeled "Search," and ***click*** the "Search" button. Only entities that contain that value will appear in the table.
    a. To clear the filter, ***delete*** the text in the "Search" box and ***click*** the "Search" button.



6. ***Identify*** the entity that you would like to edit and ***click*** the pencil icon directly to the left of the entity.

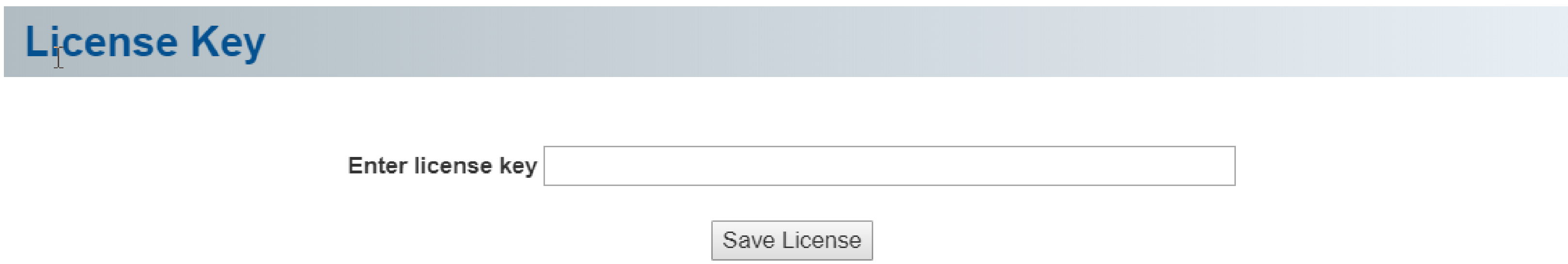


Use the drop-down menus, text boxes, and other fields to change any values in the selected entity (see the Licensing for DMARS

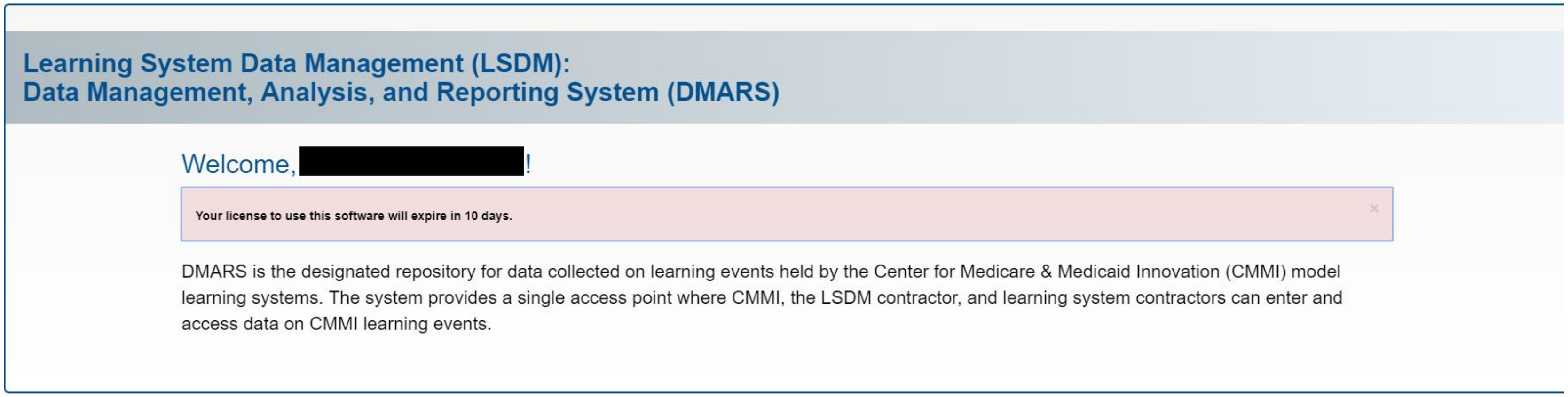
If you are using an unlicensed version of DMARS, you are required to enter a valid license key for DMARS on first login. Once you enter a valid key, you will be redirected to home page of DMARS application.

Follow these steps to enter license key for DMARS:

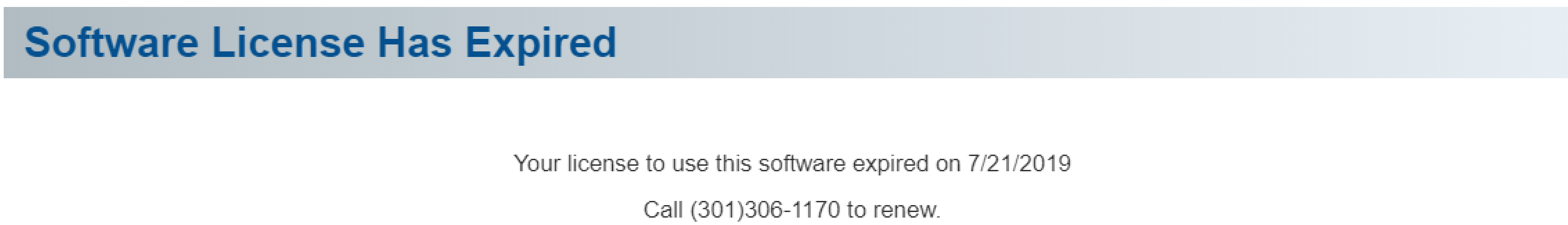
3. ***Enter*** the license key provided by Optimal Solutions Group in the text box.
4. ***Click*** on ‘Save License’ button.



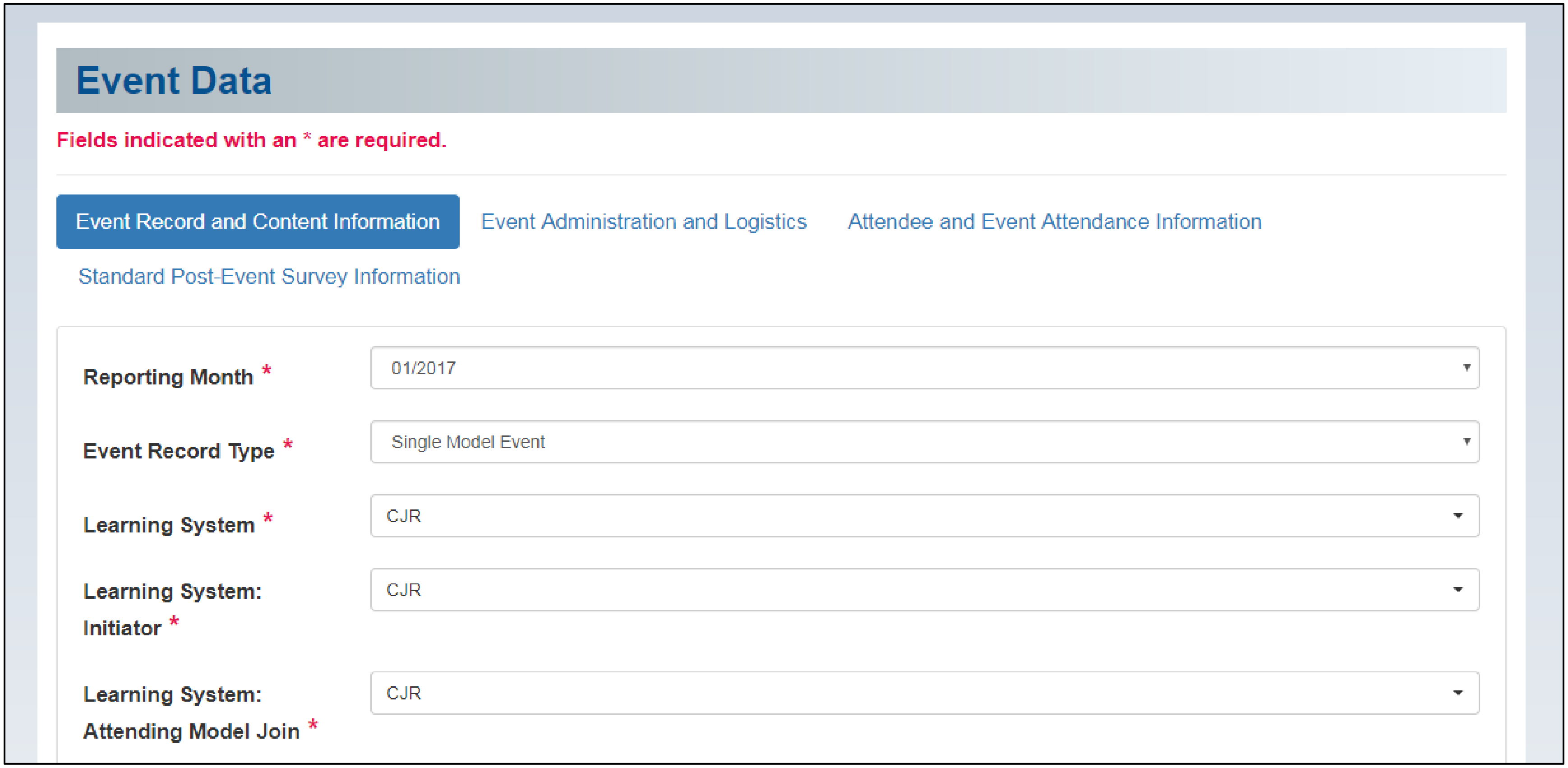
If the license expiry date is within 30 days, you will be notified via a message on the home page.



If the current license expires, you will not be able to access DMARS further. Please contact Optimal at 301-306-1170 to renew the license.

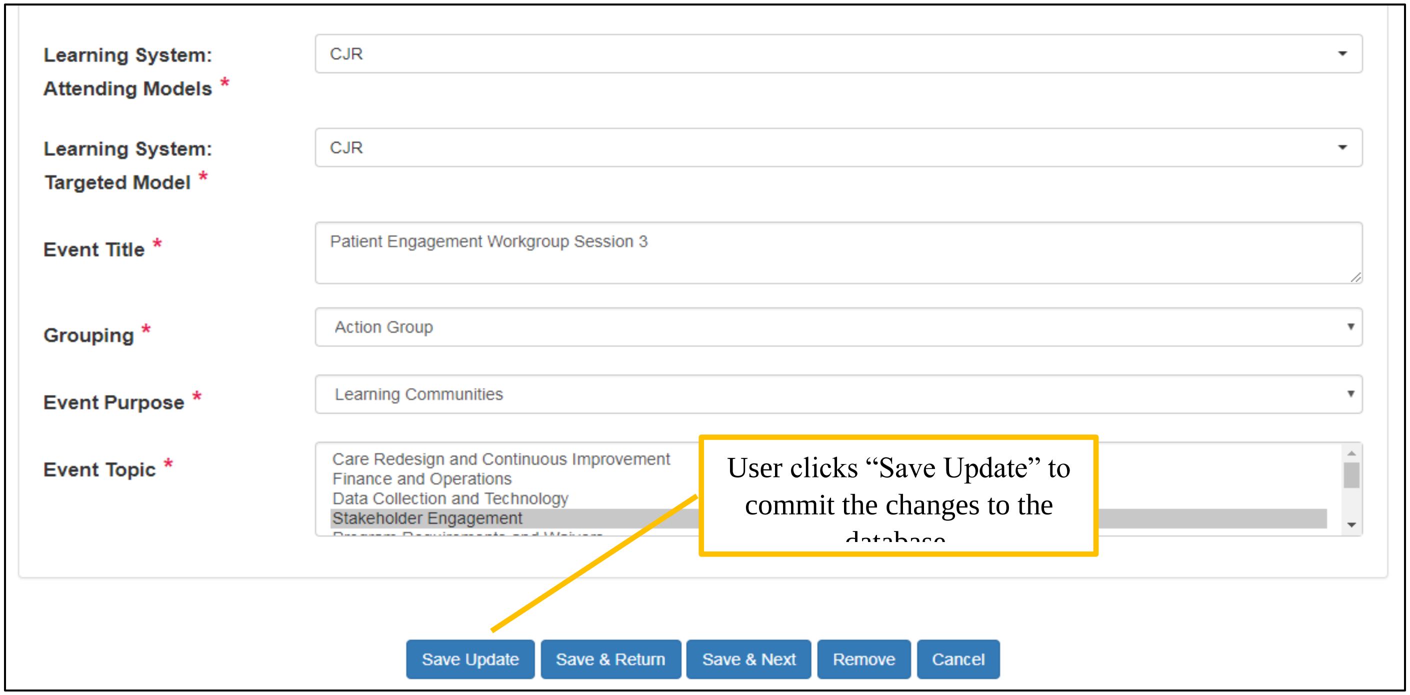


7. Enter Data section for more guidance on data entry). If at any time you wish to prevent any changes made from being saved to the system, ***click*** the "Cancel" button at the bottom of the screen.



8. ***Click*** the "Save Update" button located at the bottom of the screen to save any changes you made. Your revisions will be saved to the database and you will stay on the "Edit Data" page for the entity on which you were working.
   a. If you would like to return to your selections on the previous page, ***click*** the "Save & Return" button. You will then be redirected to the "Edit Data" page to choose a different entity or another entity type.
   b. If you would like to edit the next entity in the table, ***click*** the "Save & Next" button. You will then be directed to the next entity in your selection.
   c. If you would like to delete the entity, ***click*** the "Remove" button. A pop-up message will appear asking you to confirm that you want to delete the entity.
   d. ***Click*** the "Cancel" button to cancel and return to the "Edit Data" page.

Note: Prior to deleting any data in the system, always consult the LSDM Support Team by contacting the Helpdesk.

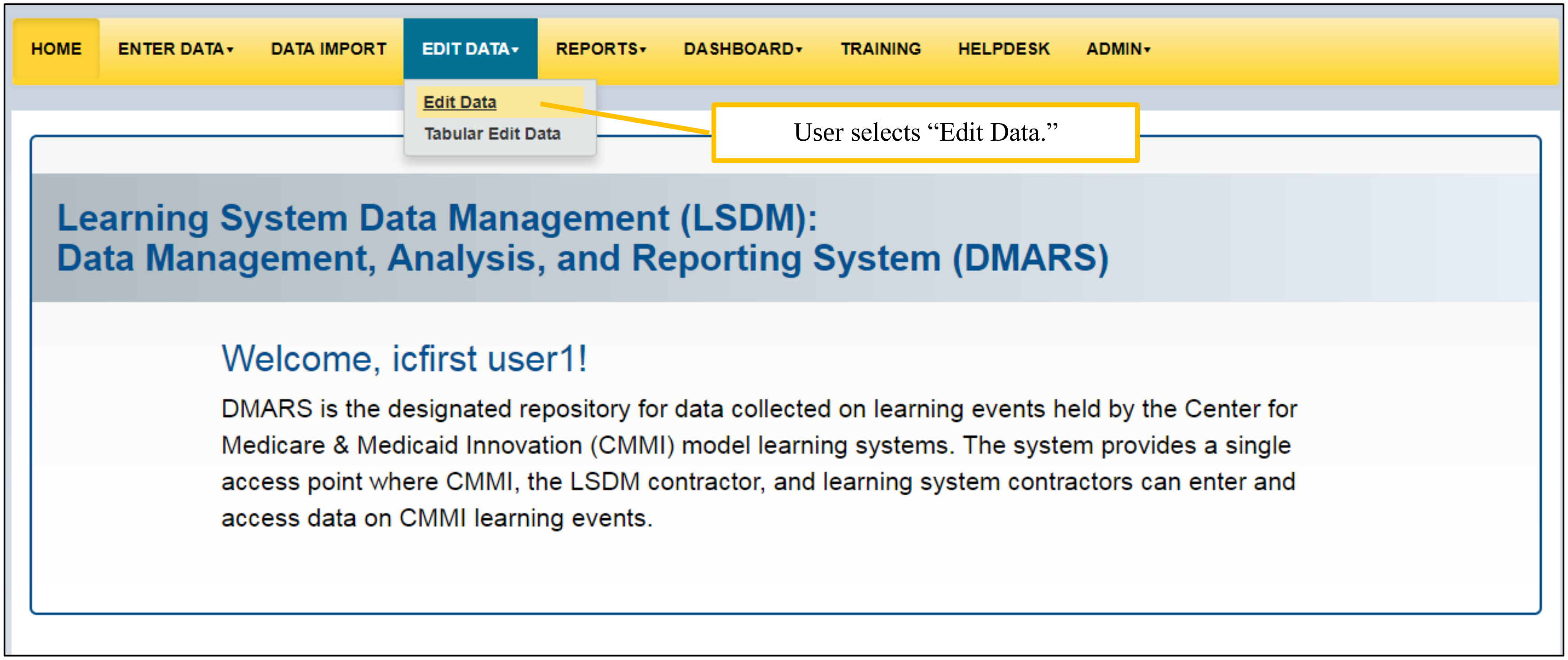


Delete an Entity

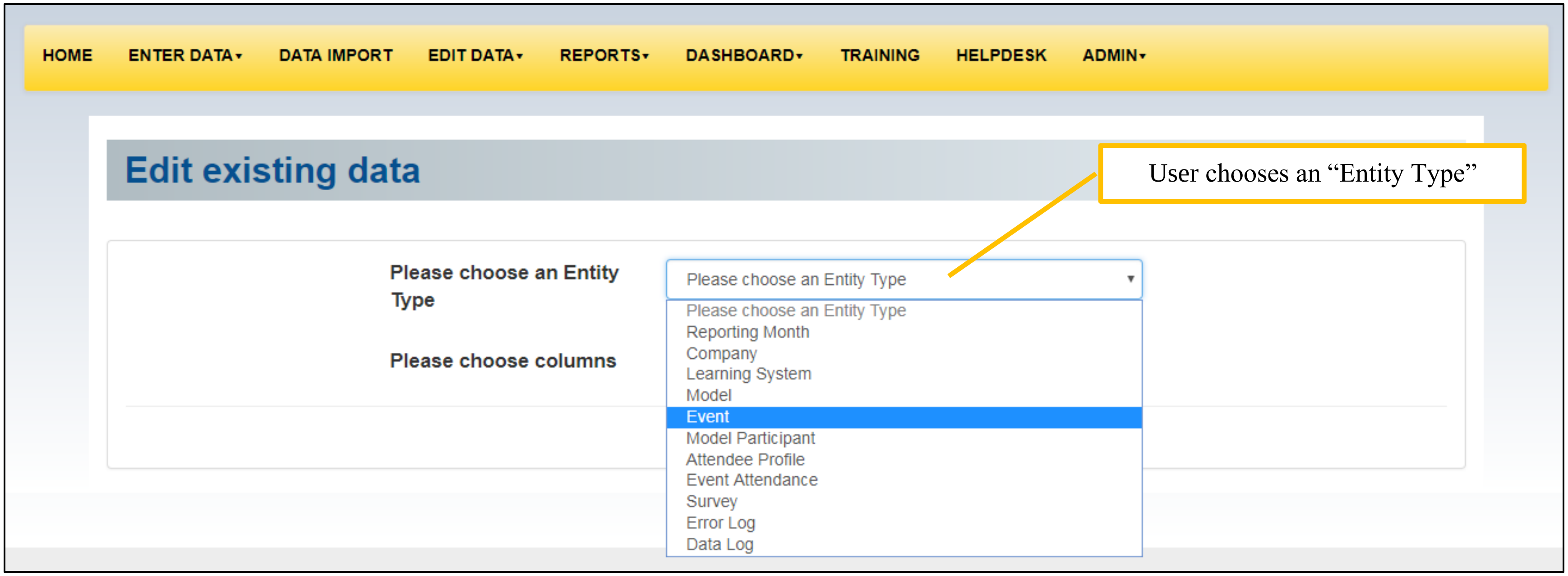
Users can delete one or more entities from DMARS through the “Edit Data” tab. Users should take extreme caution when deleting data from DMARS. Prior to deleting any data in the system, users should always consult the LSDM Support Team by contacting the Helpdesk. Data that includes linked entities cannot be deleted, as the existing link cannot be broken. Therefore, entities must be removed in a strategic and careful manner.

Follow these steps to delete an entity:

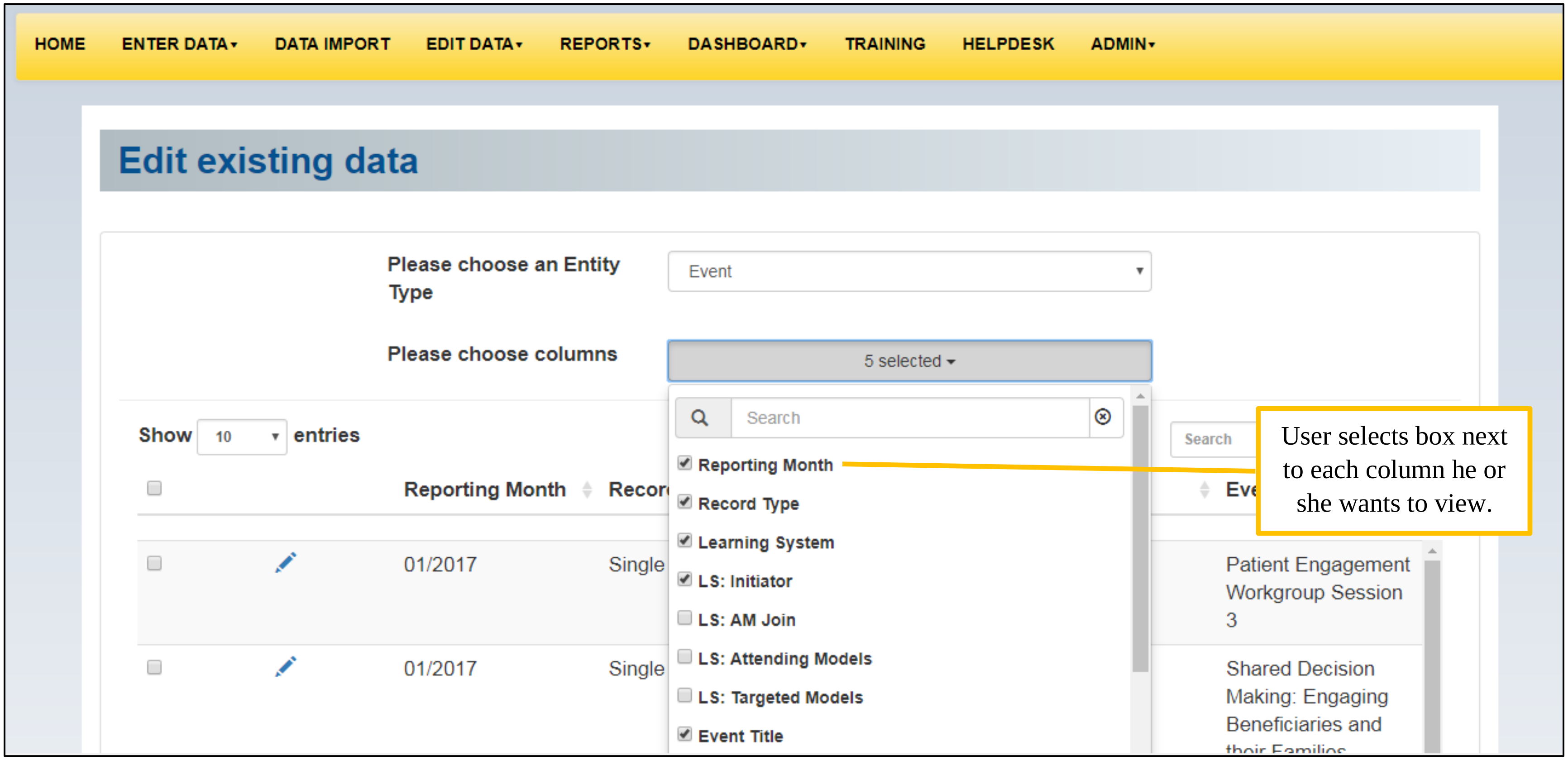
1. ***Click*** “Edit Data” in the yellow toolbar and ***select*** “Edit Data” in the drop-down menu that appears.



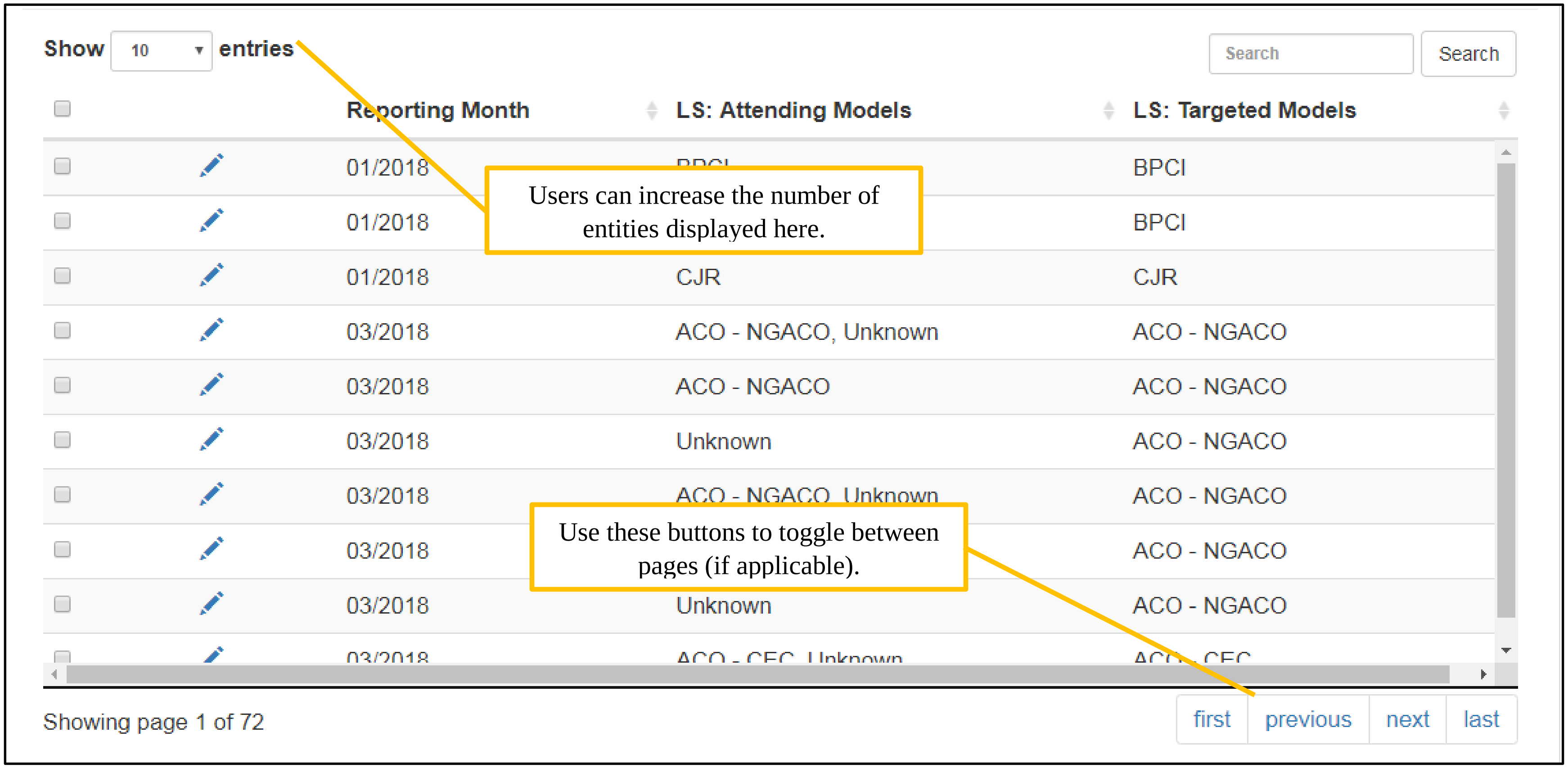
2. ***Click*** the drop-down menu labeled "Please choose an Entity Type" and ***select*** the entity type you would like to view.



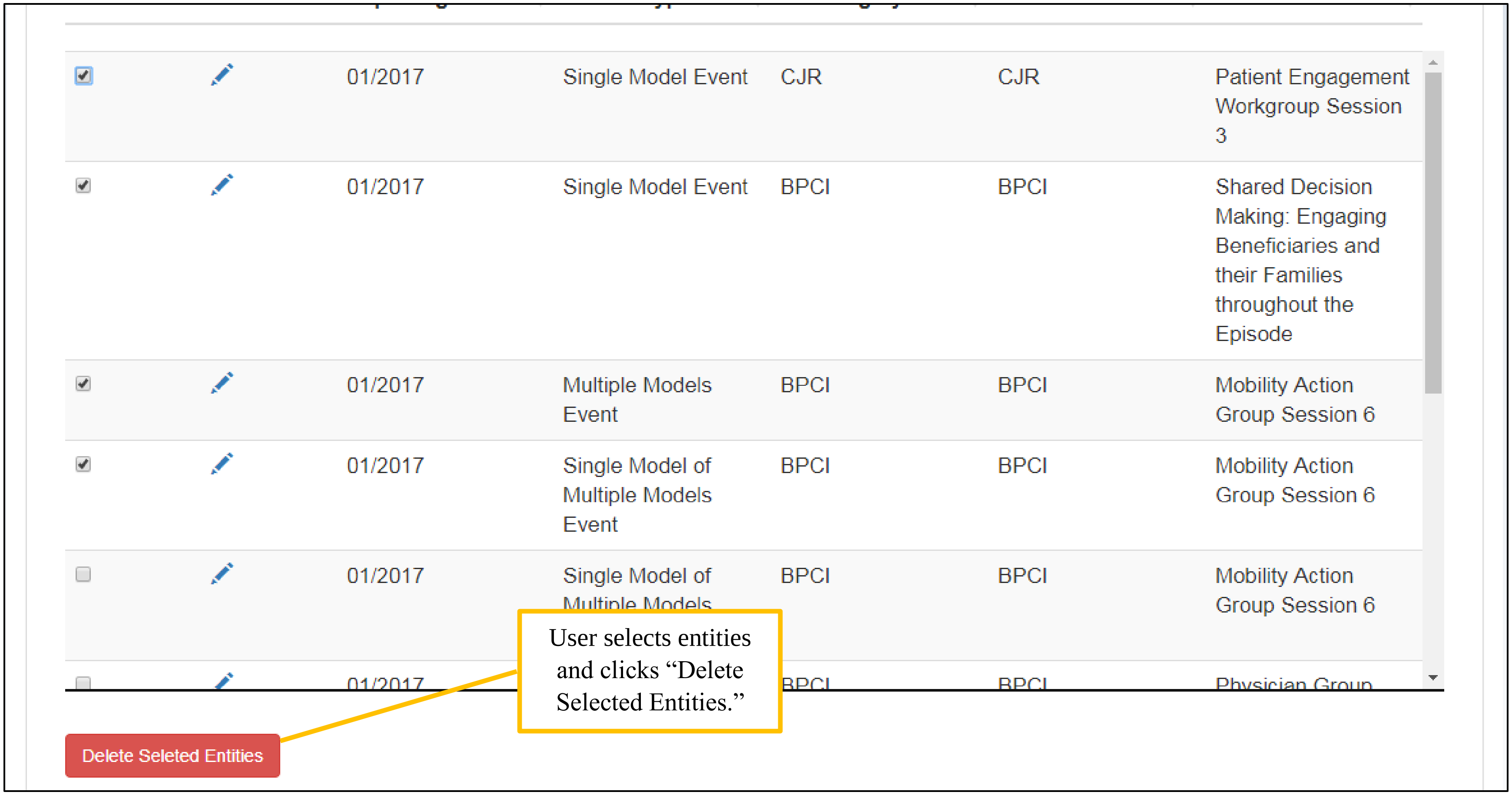
3. ***Click*** the drop-down menu labeled “Please choose columns” and ***check*** the box next to each column, or question, that you would like to view. As you select and deselect each column, the table below will update accordingly.



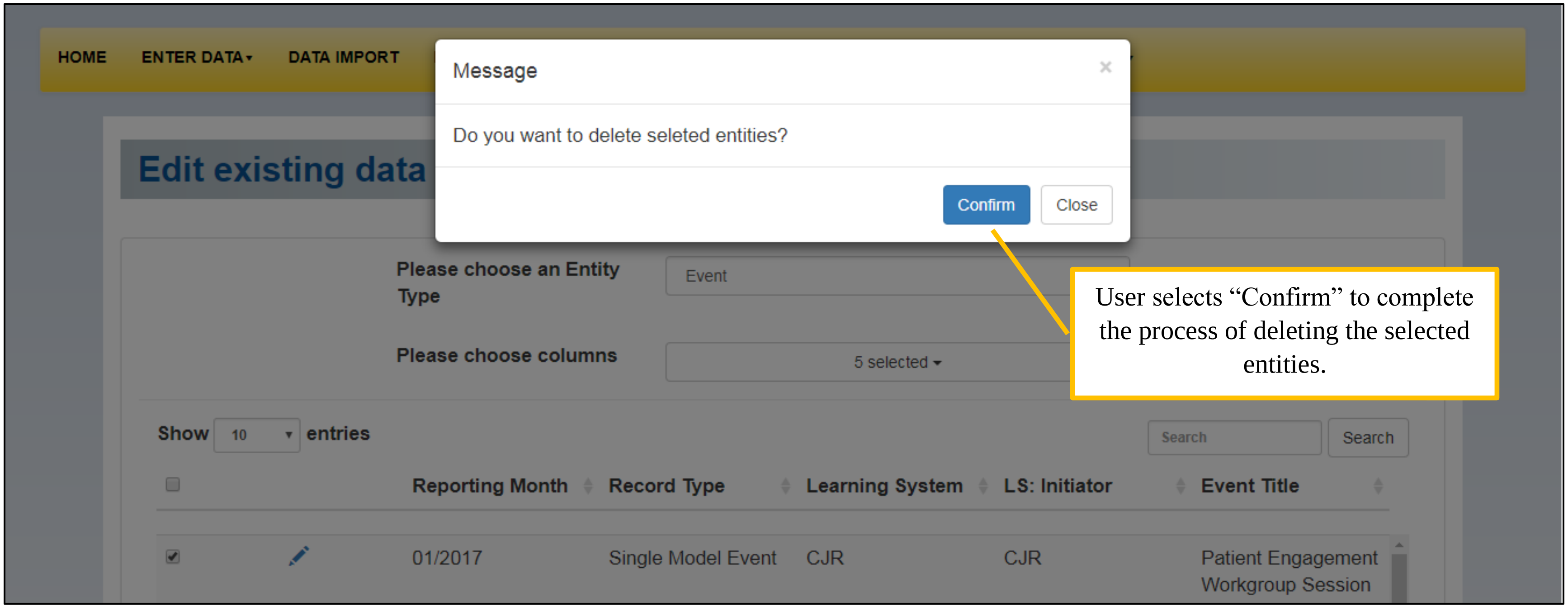
4. ***Use*** the scrollbars to navigate down and across the table to view additional entities and questions that are not in view. You can also increase the number of entities that appear on the page and use the buttons at the bottom of the table to toggle between pages.



5. ***Identify*** the entity/entities that you would like to delete and ***check*** the box directly to the left of the entity. A red button labeled “Delete Selected Entities” will appear directly below the table. If there are additional entities you wish to delete, ***check*** those prior to clicking the “Delete Selected Entities” button.



6. A pop-up message will appear asking you to confirm that you want to delete the selected entities. ***Click*** the "Confirm" button to permanently remove the entity or the "Close" button to cancel and return to the previous screen.



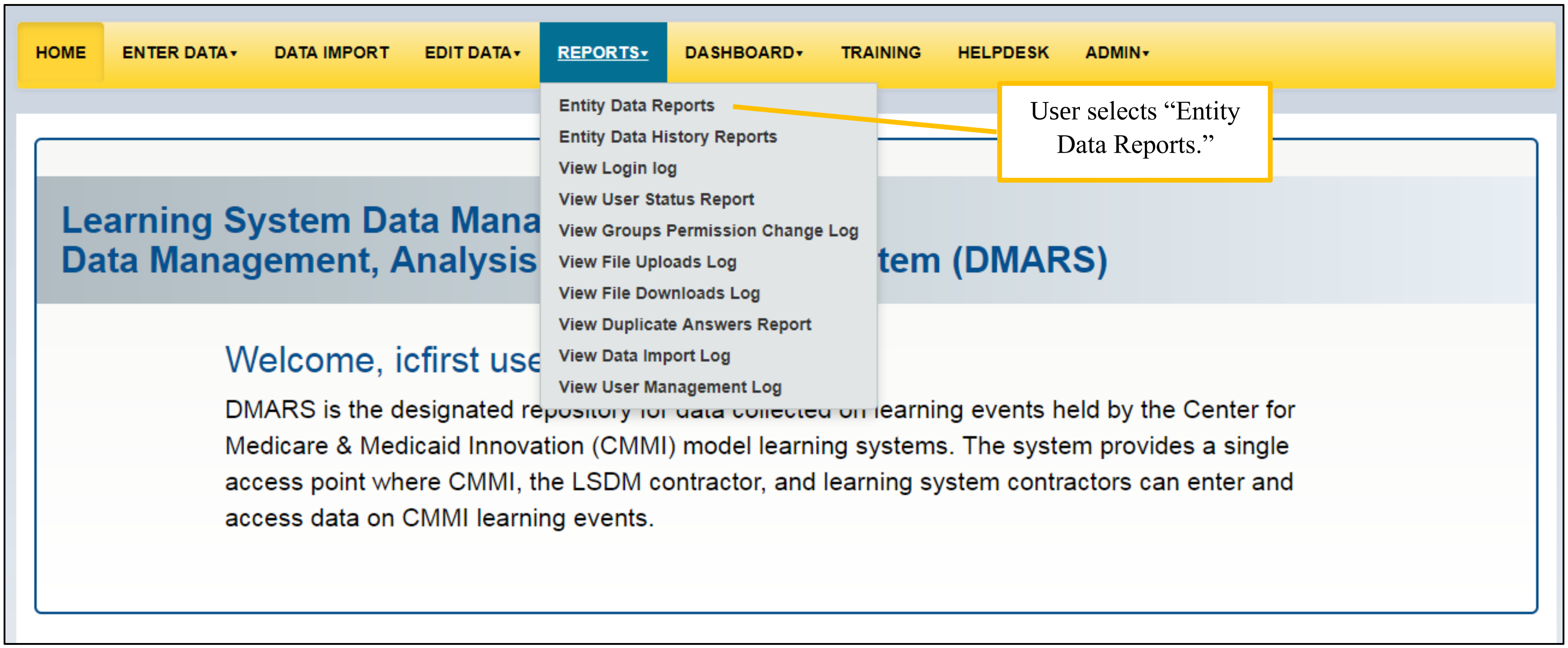
6. Entity Data Reports

Entity Data Reports allows users to generate customized reports on data within the system. These reports can be downloaded in either .CSV or .XLS format and saved for viewing later. Users can also share saved reports with users within their user group or with other user groups.

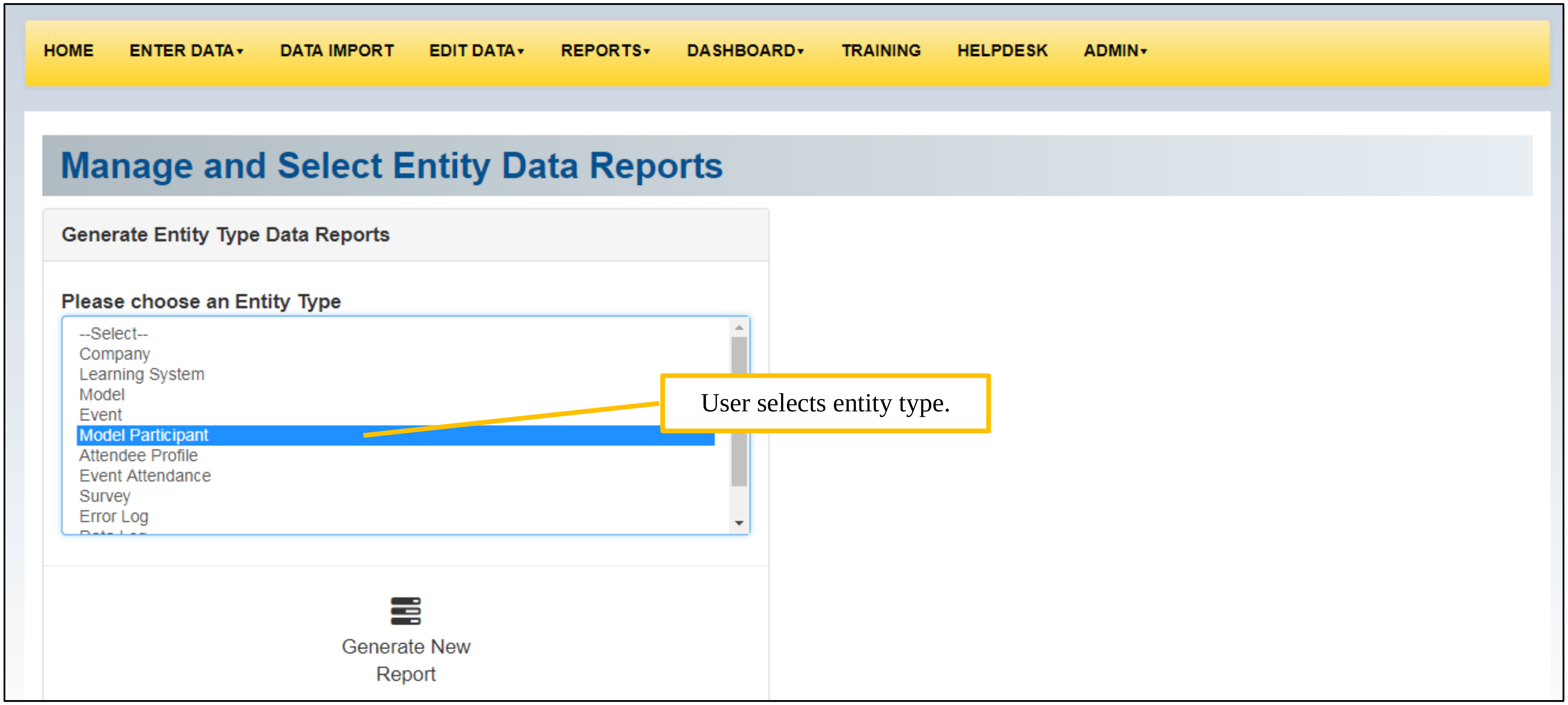
Generate a Report

Follow these steps to generate an entity data report:

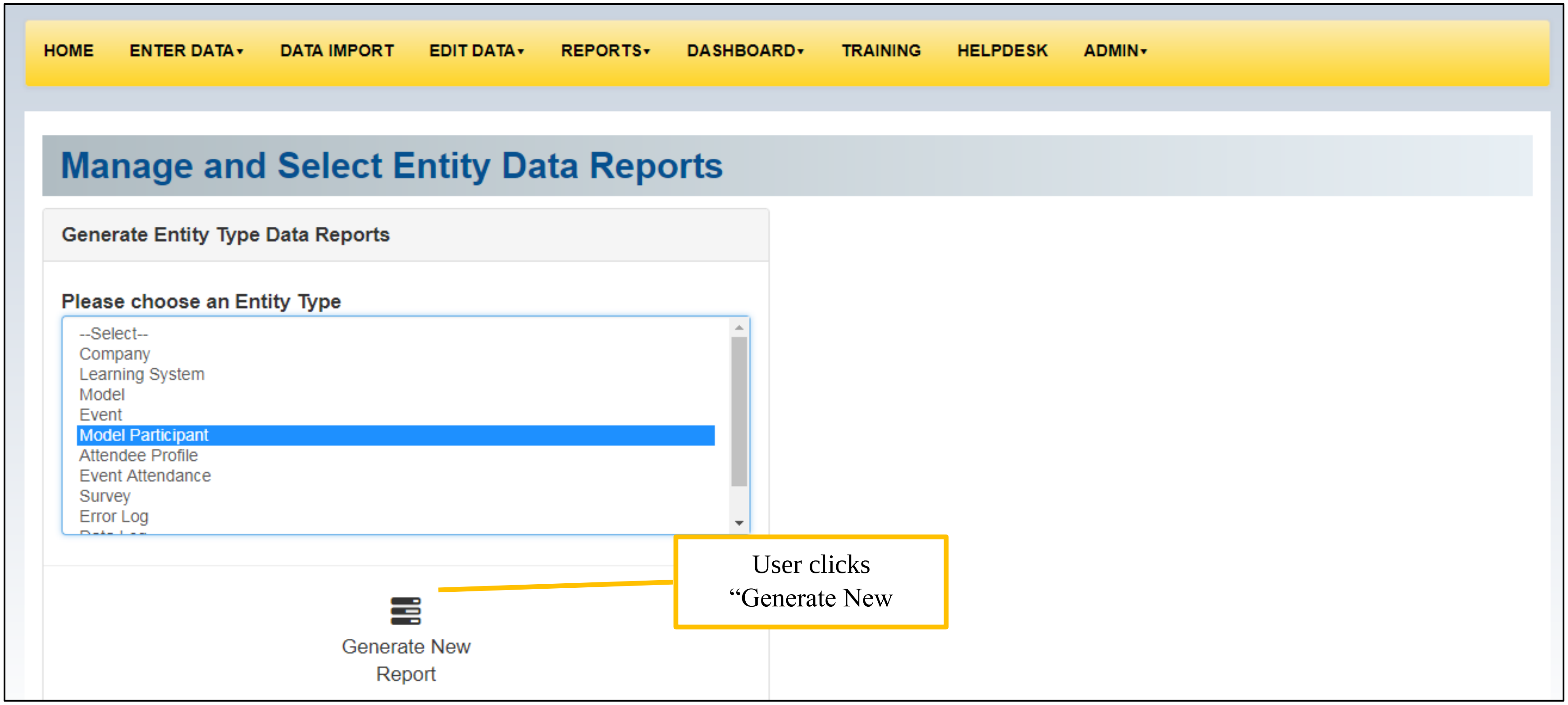
1. ***Click*** “Reports” on the yellow toolbar and ***select*** “Entity Data Reports” in the drop-down menu that appears.



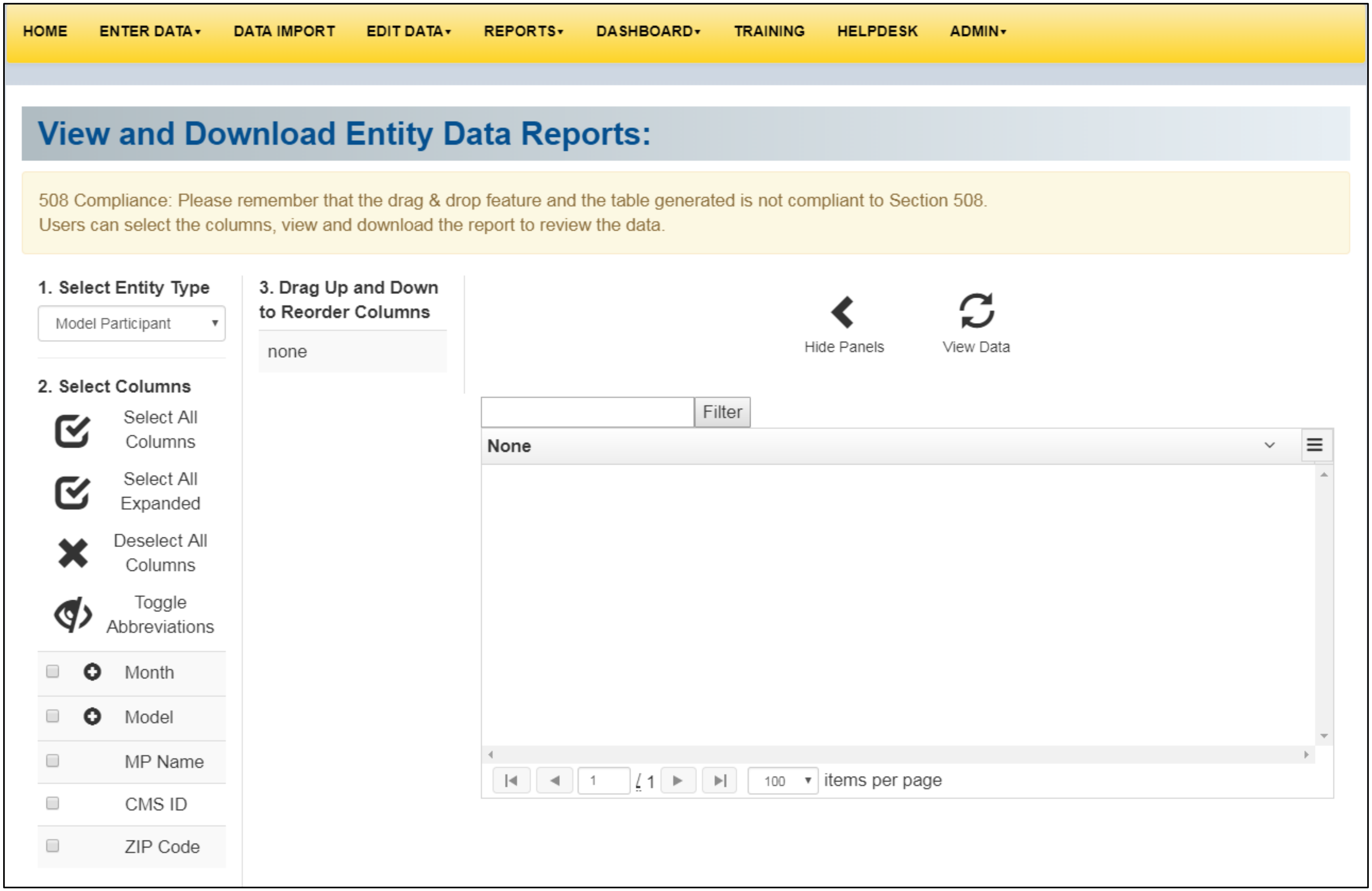
2. ***Select*** the entity type on which you would like to generate a report (For example, Model Participant) in the box labeled "Please choose an Entity Type."



3. ***Click*** the “Generate New Report” button that appears.

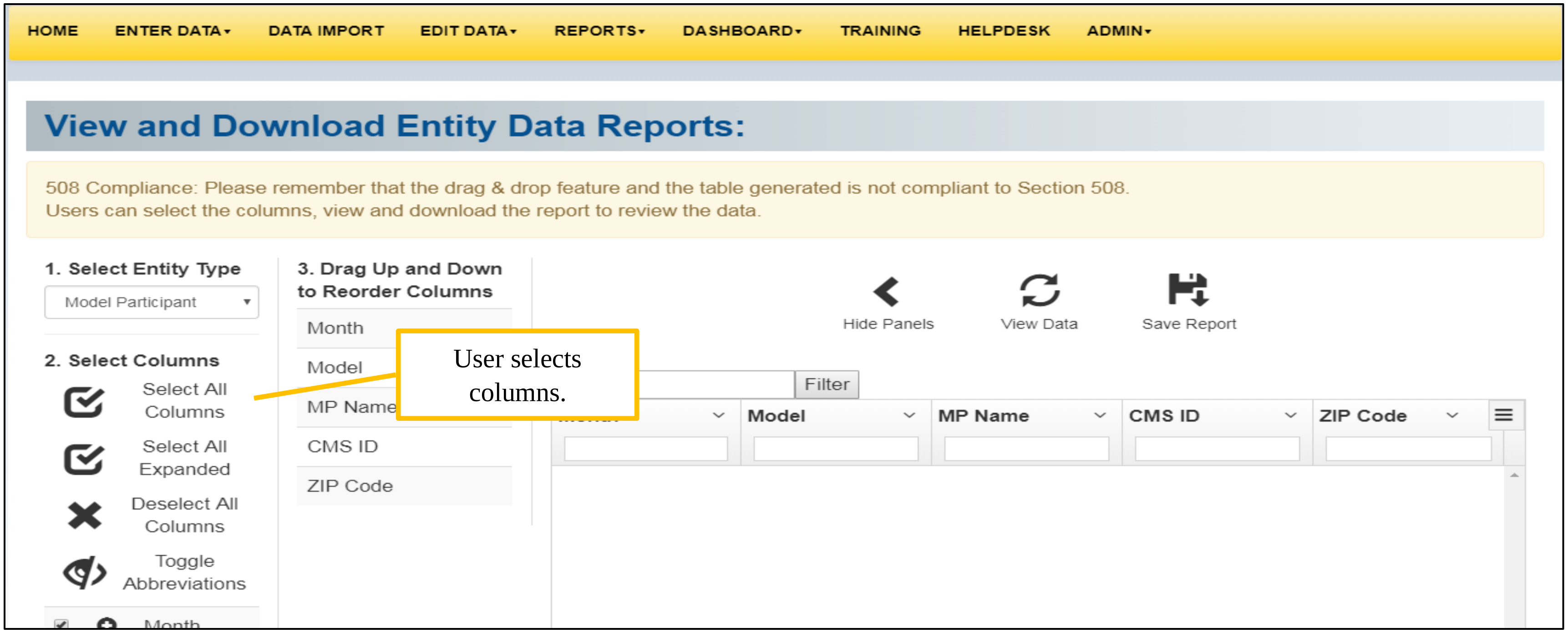


4. ***Do not revise*** the selection for "1. Select Entity Type" unless you would like to generate a report for a different entity type.

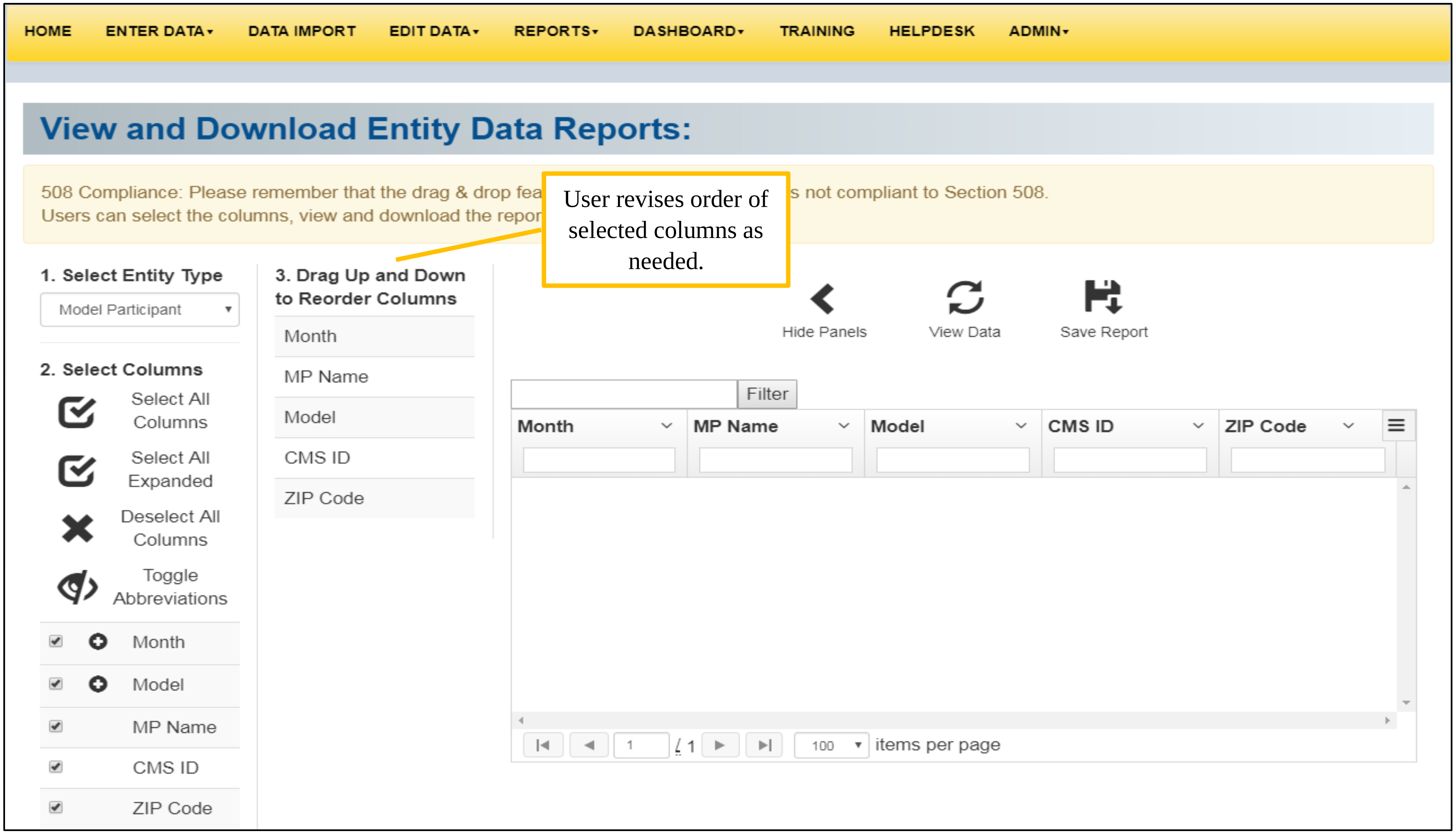


5. ***Select*** the columns you would like to include in your report under “2. Select Columns.” Note that each column has a full name and an abbreviated name. ***Click*** the “Full/Abbrev. Question Text” button to toggle between the different names.
    a. To select one column at a time, ***check*** the box next to each column.
    b. To select all columns within the entity type, ***click*** the “Select All Columns” button.
    c. To select all columns within the entity type *and* all columns for linked entity types, ***click*** the “Select All Expanded” button.
    d. To clear all selections, ***click*** the “Deselect All Columns” button.

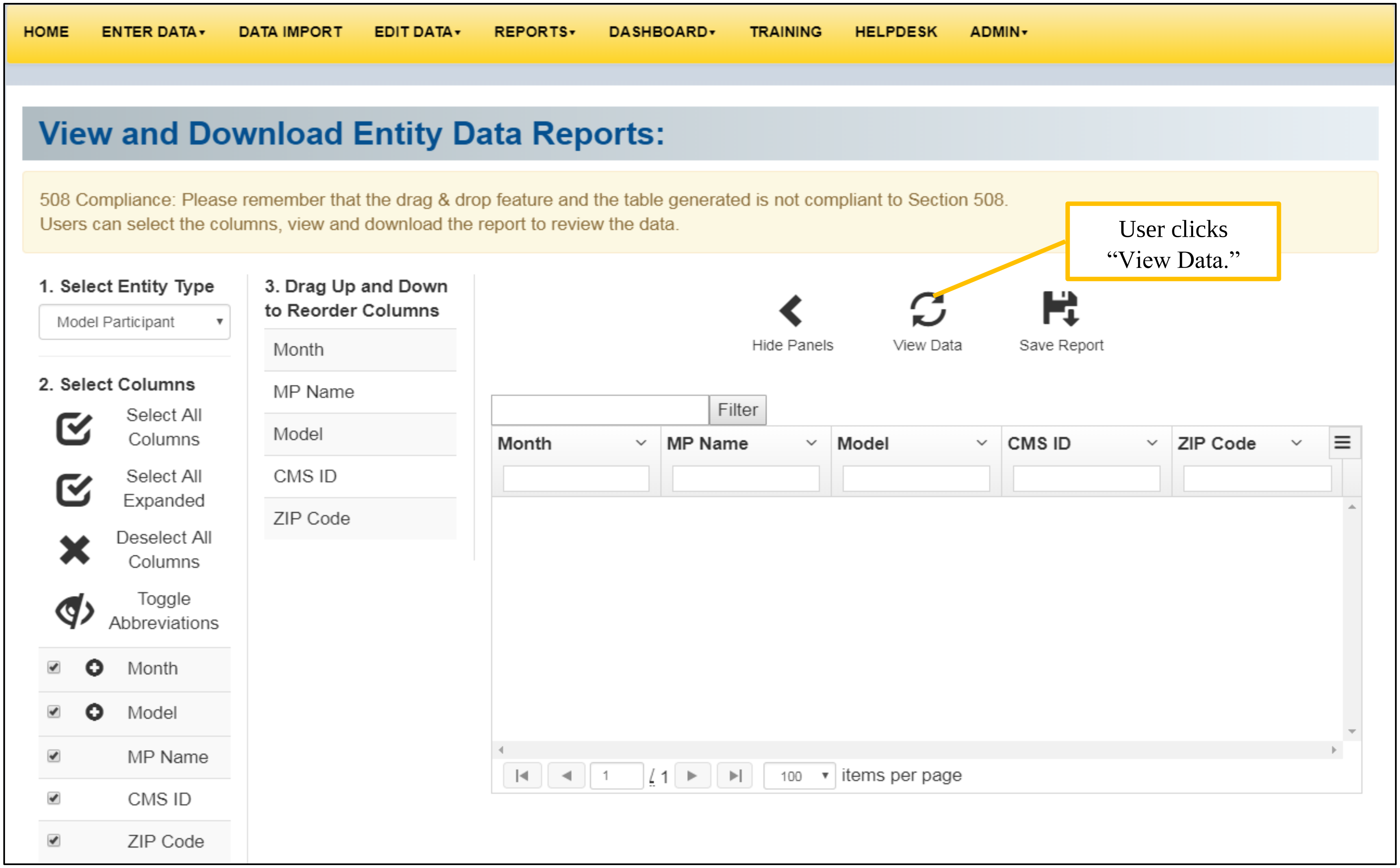
> **Note**: When a column, or question, is linked to another entity type, it is marked with a plus sign (+) icon. When you click the icon, the columns for the linked entity type appear and can be added into the report. This feature allows users to analyze data across entity types. For instance, one could see a list of model participants that attended a specific event, as well as metadata for each model participant.



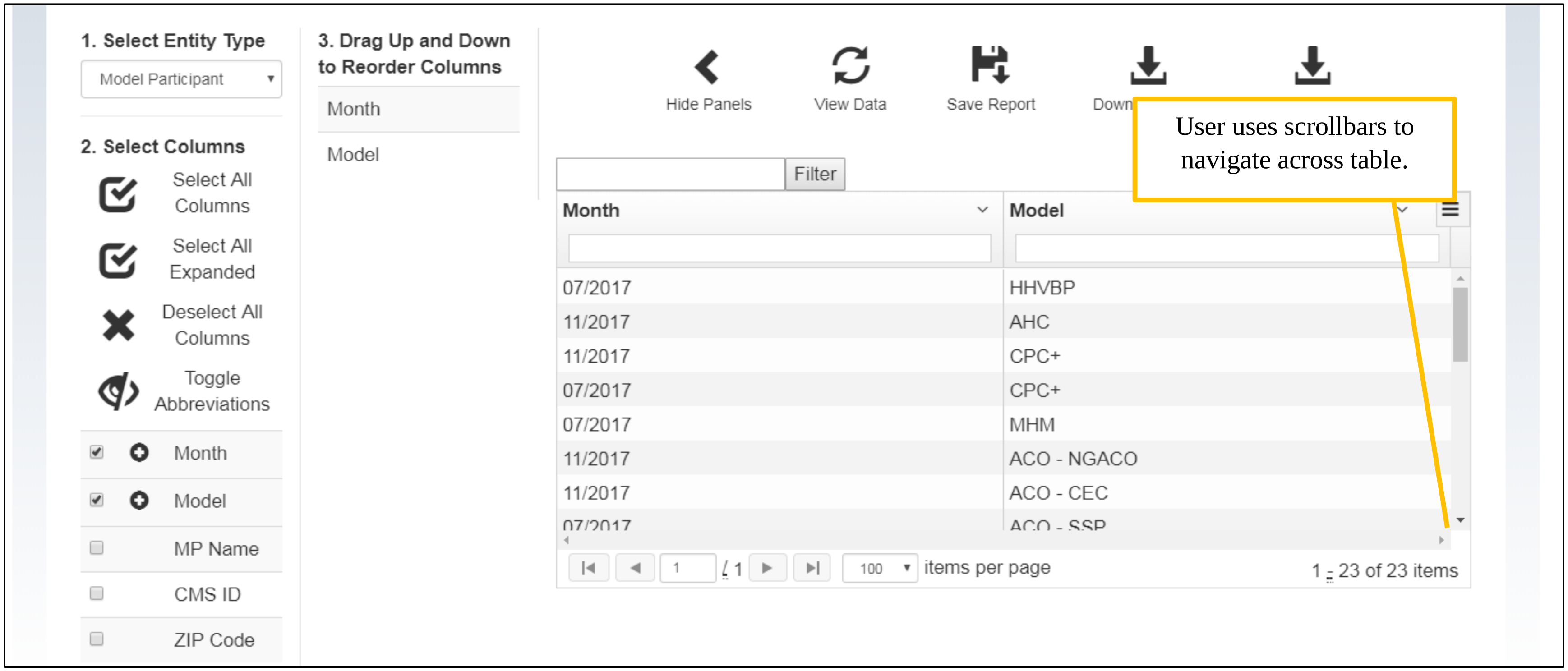
6. ***Drag and drop*** columns into the desired order in the section labeled "3. Drag Up and Down to Reorder Columns."



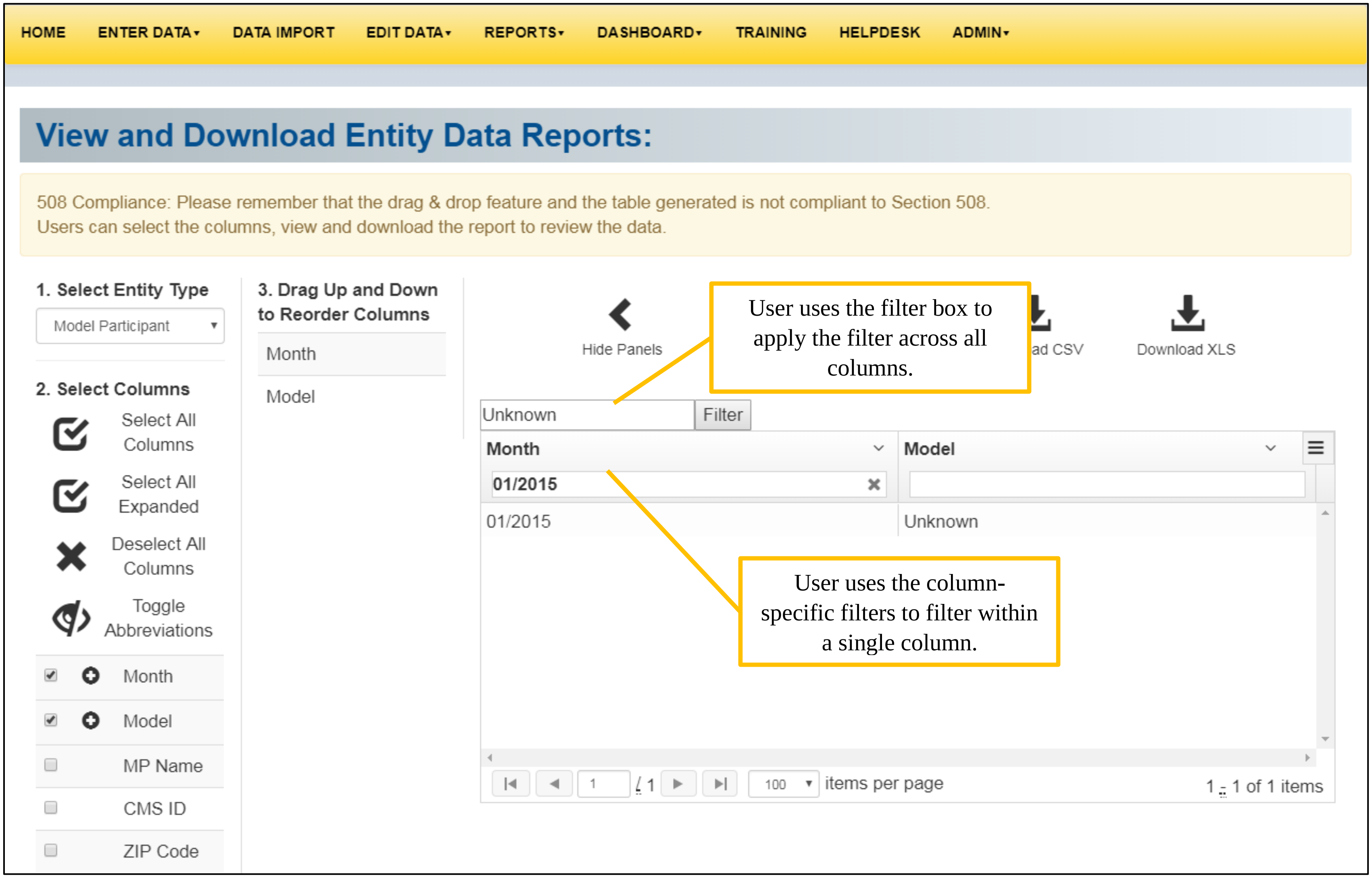
7. *Click* the “View Data” button to generate a table with the selected columns in the prescribed order. To expand the table area, *click* the “Hide Panels” button.



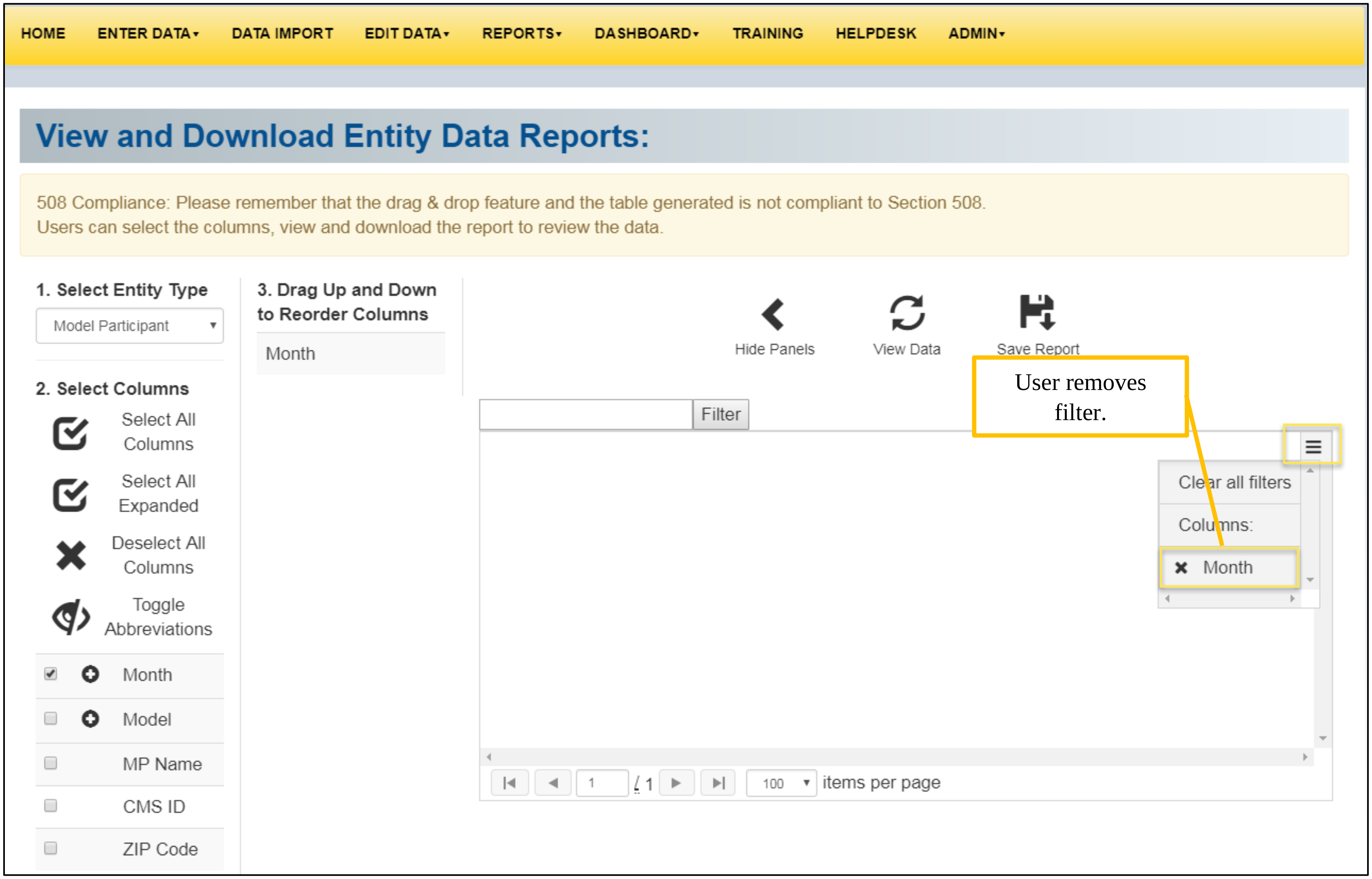
8. ***Use*** the scrollbars to navigate down and across the table to view additional entities and questions that are not in view. You can also use the buttons at the bottom of the table to toggle between pages if the number of entities exceeds 100.



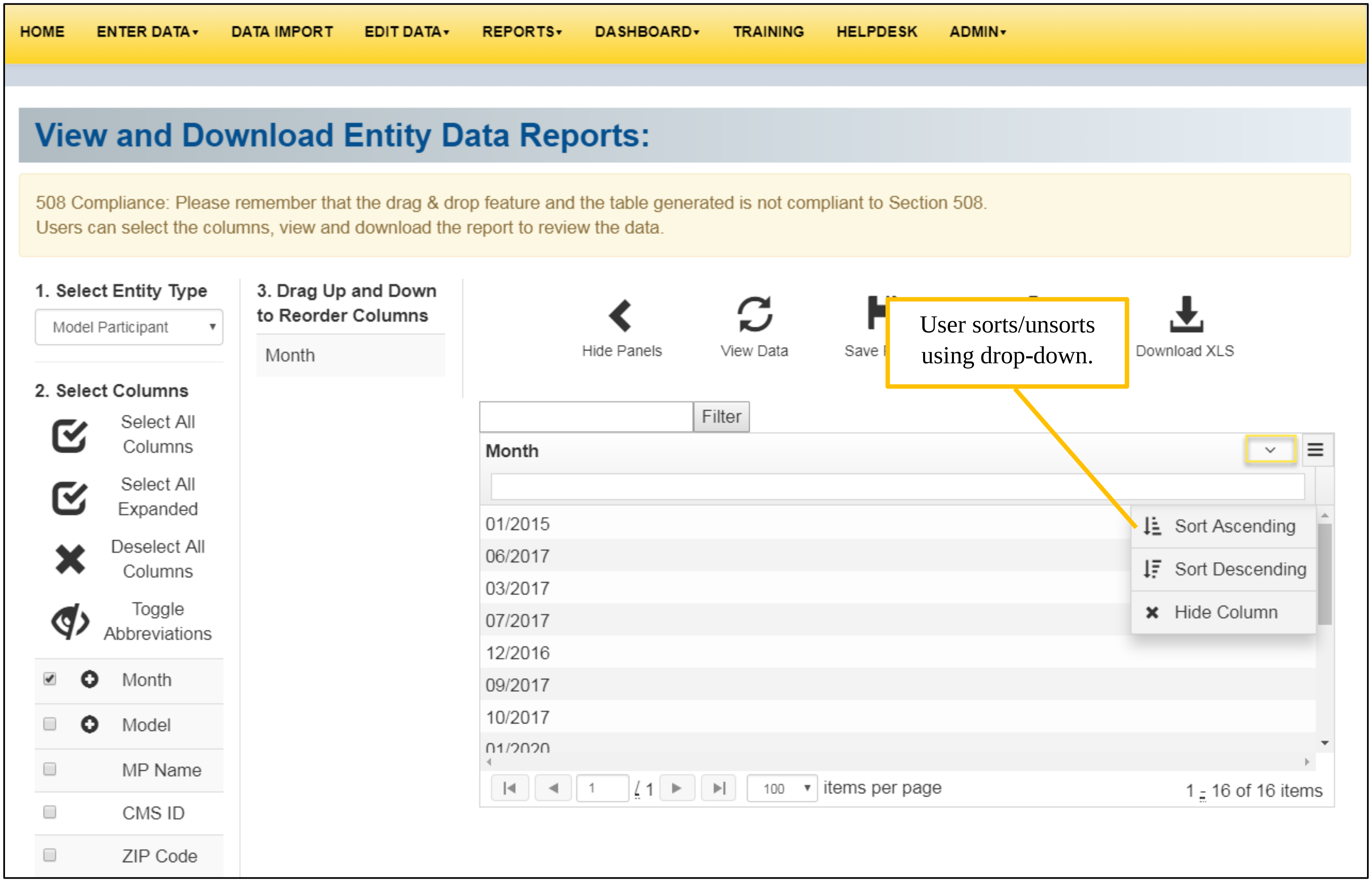
9. To filter the report, ***type*** the desired value in the text box next to the "Filter" button above the table and ***click*** the "Filter" button. To filter specific columns, ***type*** the desired values in the text box and ***press*** the "Enter" key on your keyboard.



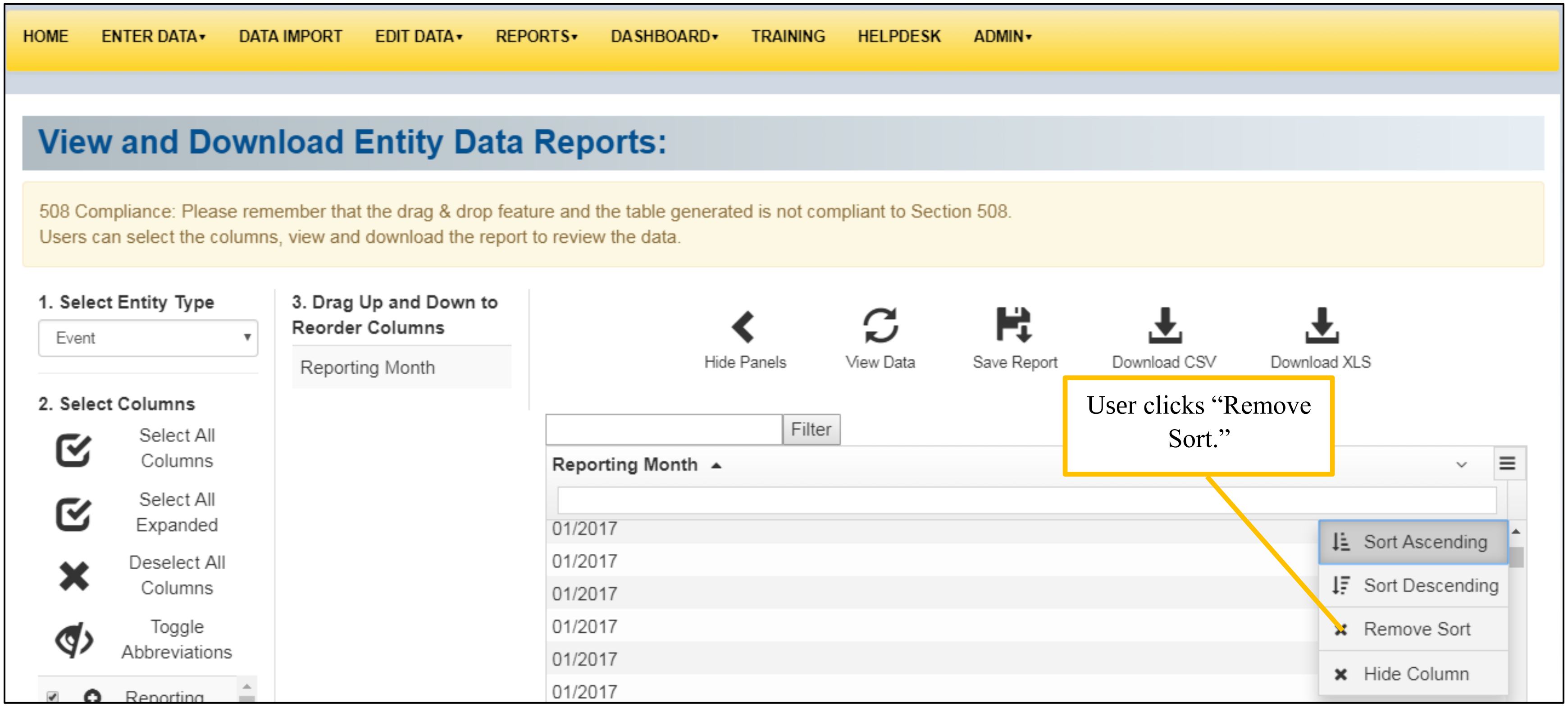
10. To remove the applied column filters, ***click*** on the "X" next to the specific filter and ***press*** the "Enter" key on your keyboard. Similarly, for the report-wide filter, remove the value and ***press*** the "Enter" key.



11. To sort data within a specific column, ***click*** on the column header and ***select*** either "Sort Ascending" or "Sort Descending" in the drop-down menu that appears.

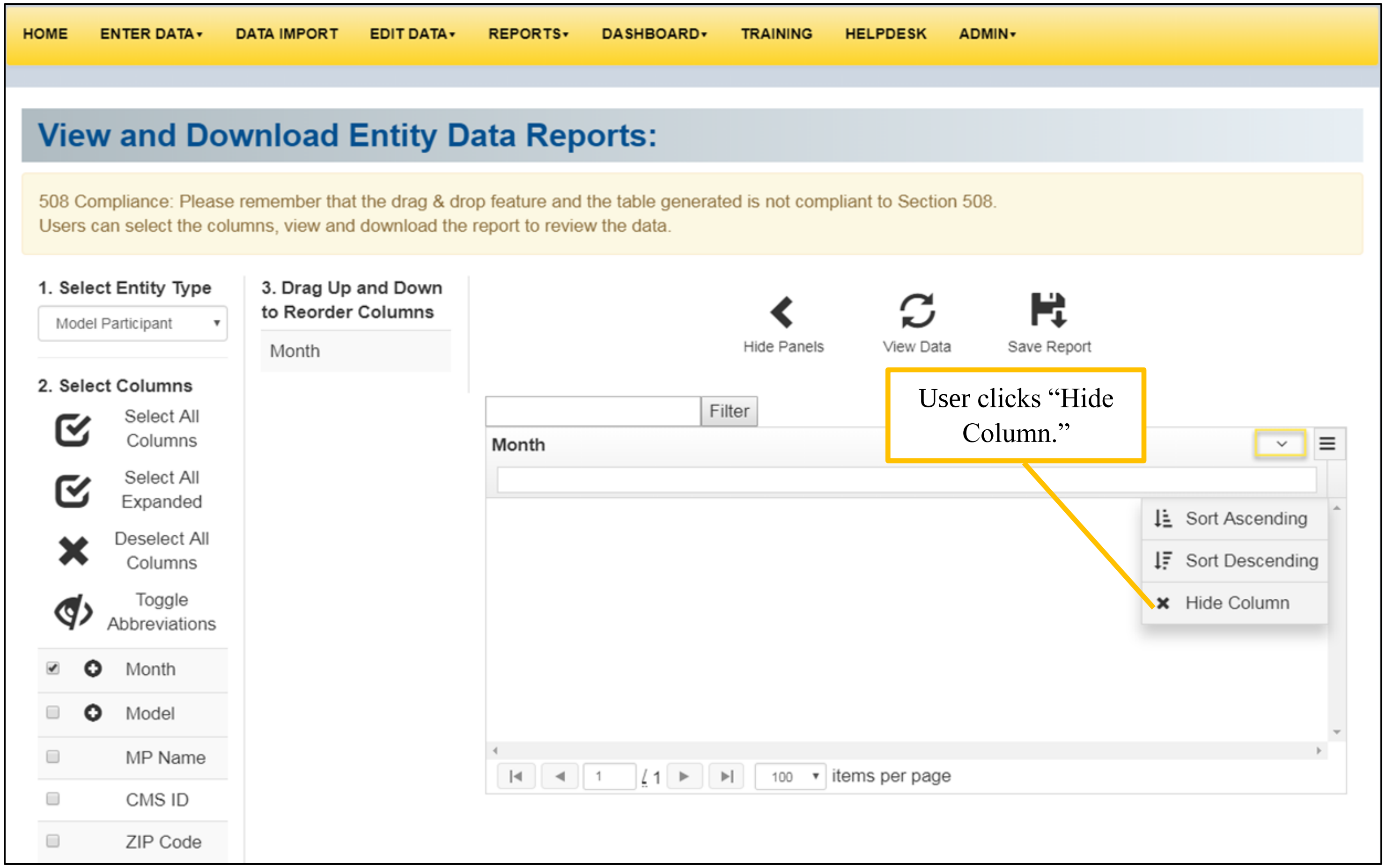


a. To unsort the data, ***click*** on the arrow next to the column header and ***click*** "Remove Sort."



12. If you wish to remove a column from the table, ***click*** on the column header and ***select*** “Hide Column” in the drop-down menu that appears.

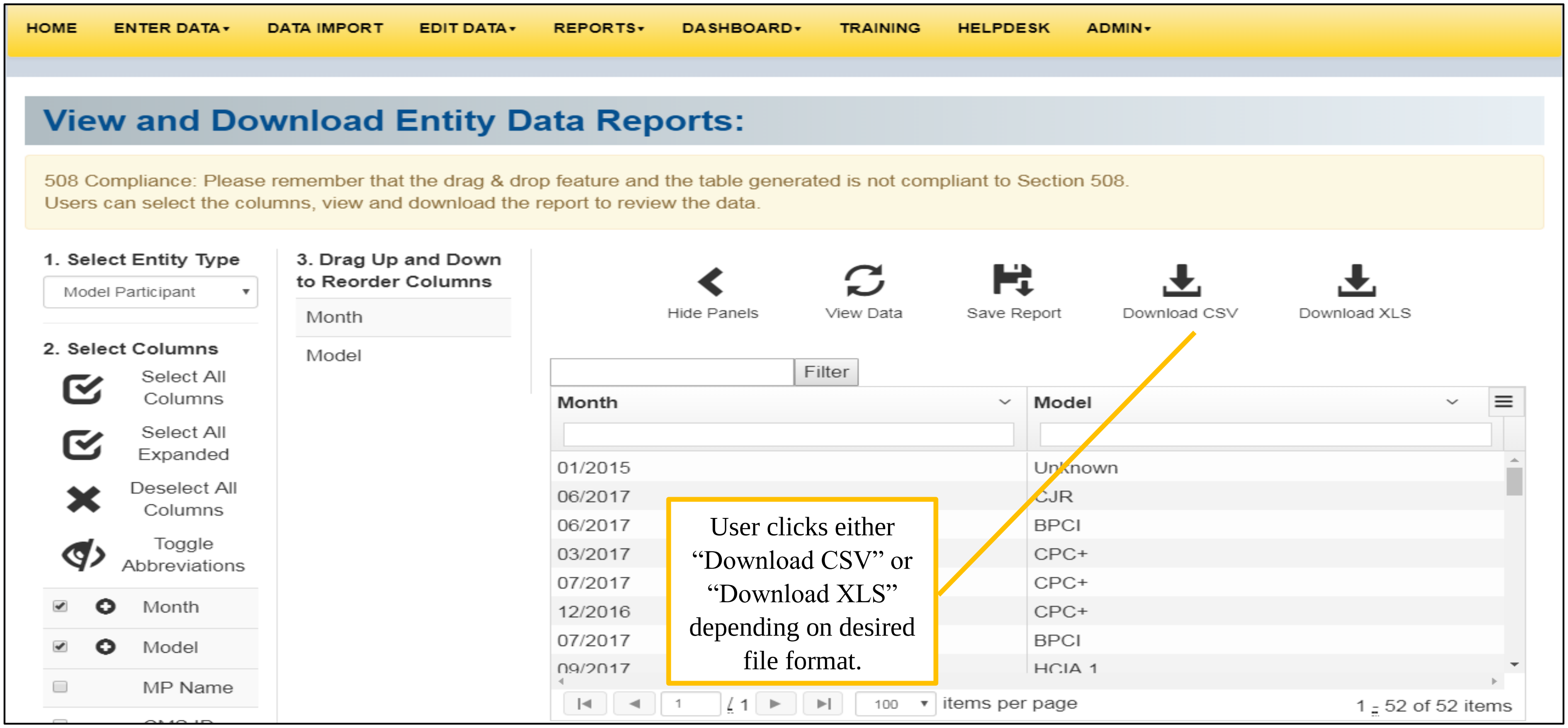
   a. To unhide the column, ***click*** on the icon at the top right-hand corner of the table. The list of columns within the table will appear, and the hidden column will have an “X” next to it. ***Click*** the hidden column, and the “X” will update to a check mark. The column is now unhidden.



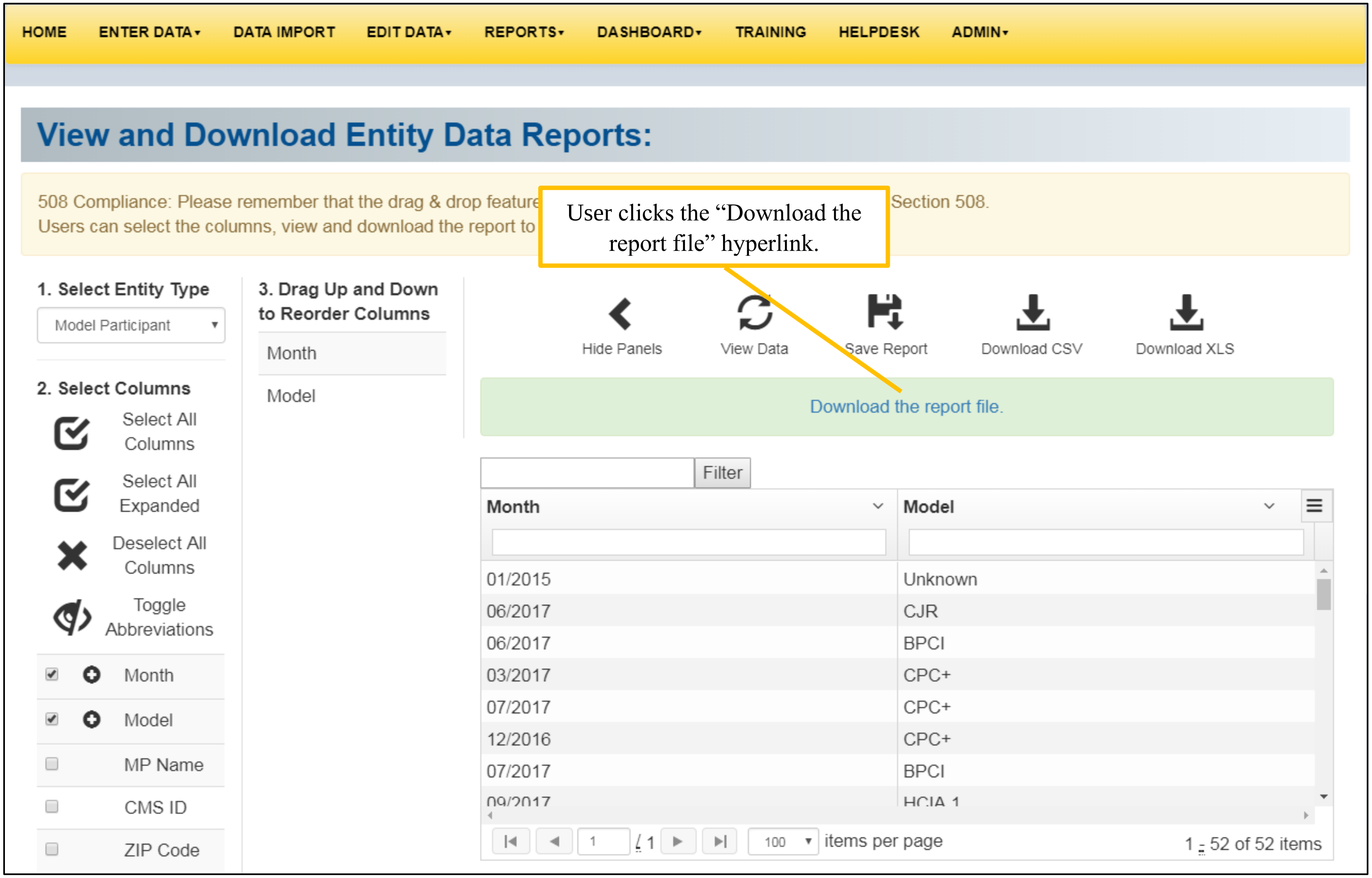
Download a Report

Follow these steps to download a report in either .CSV or .XLS format:

1. Either ***generate*** a report (see the Generate a Report section above) or ***navigate*** to the report you would like to download (see the View a Saved Report section below).
2. ***Click*** either the “Download CSV” button or the “Download XLS” button, depending on the format in which you would like the report to be downloaded.



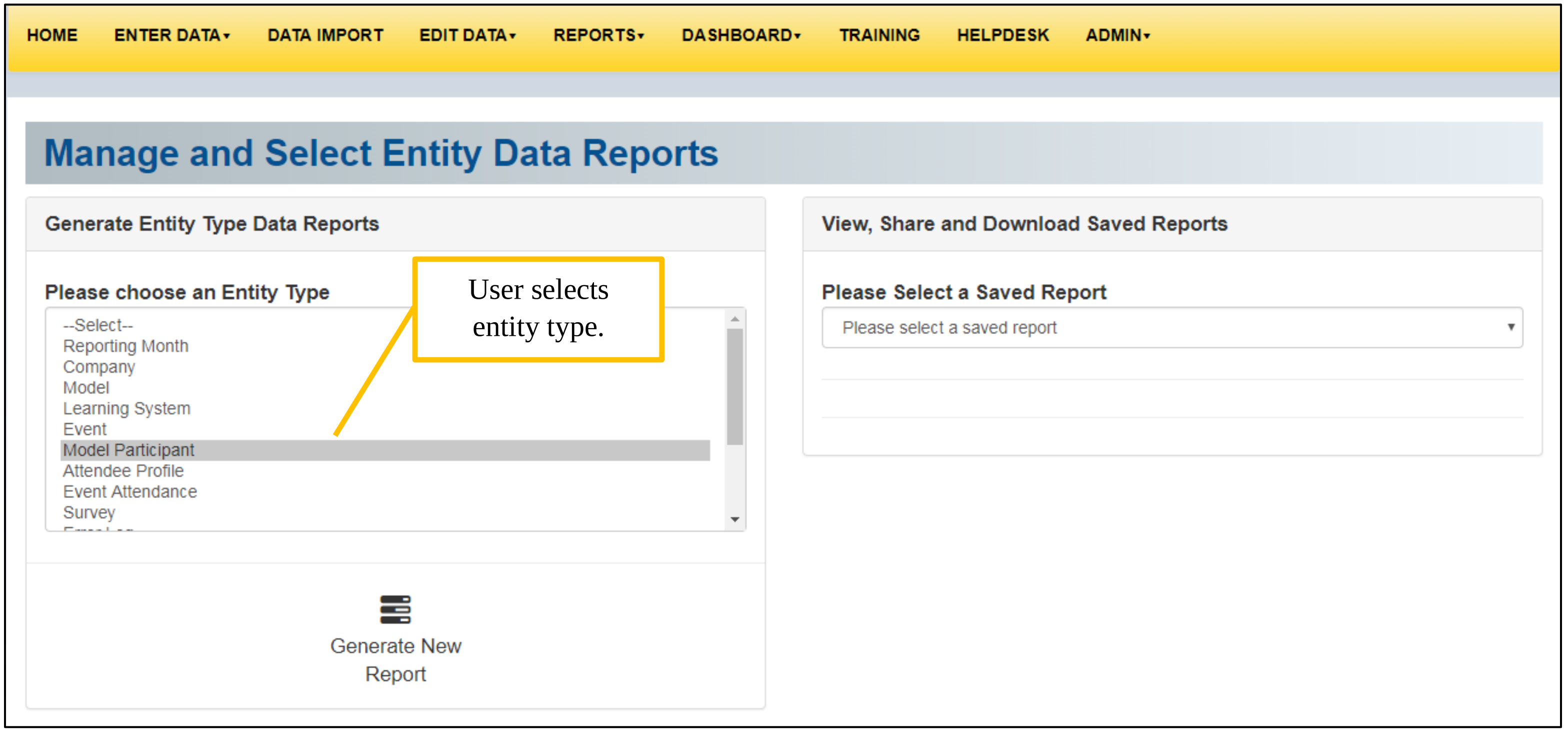
3. ***Click*** the “Download the report file” hyperlink that appears. This will download the file to your system.



View a Saved Report

Follow these steps to view a saved entity data report:

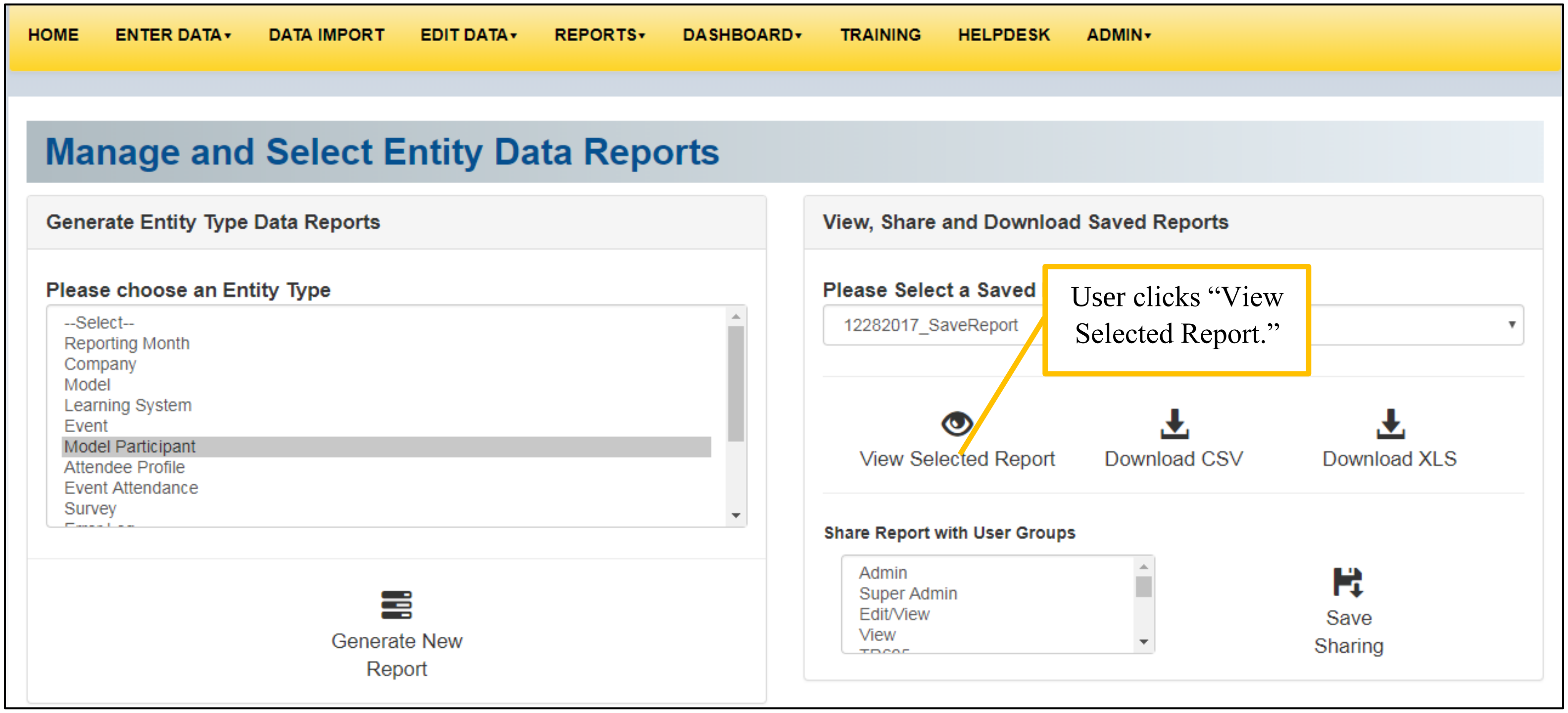
1. ***Click*** "Reports" on the yellow toolbar and ***select*** "Entity Data Reports" in the drop-down menu that appears.
2. ***Select*** the entity type the saved report was generated for in the box labeled "Please choose an Entity Type."



3. ***Select*** the saved report in the drop-down menu labeled "Please Select a Saved Report" in the pane on the right-hand side of the screen.

> **Note**: If no reports have been saved or shared with you under the selected entity type, the "View, Share and Download Saved Reports" pane will not appear.

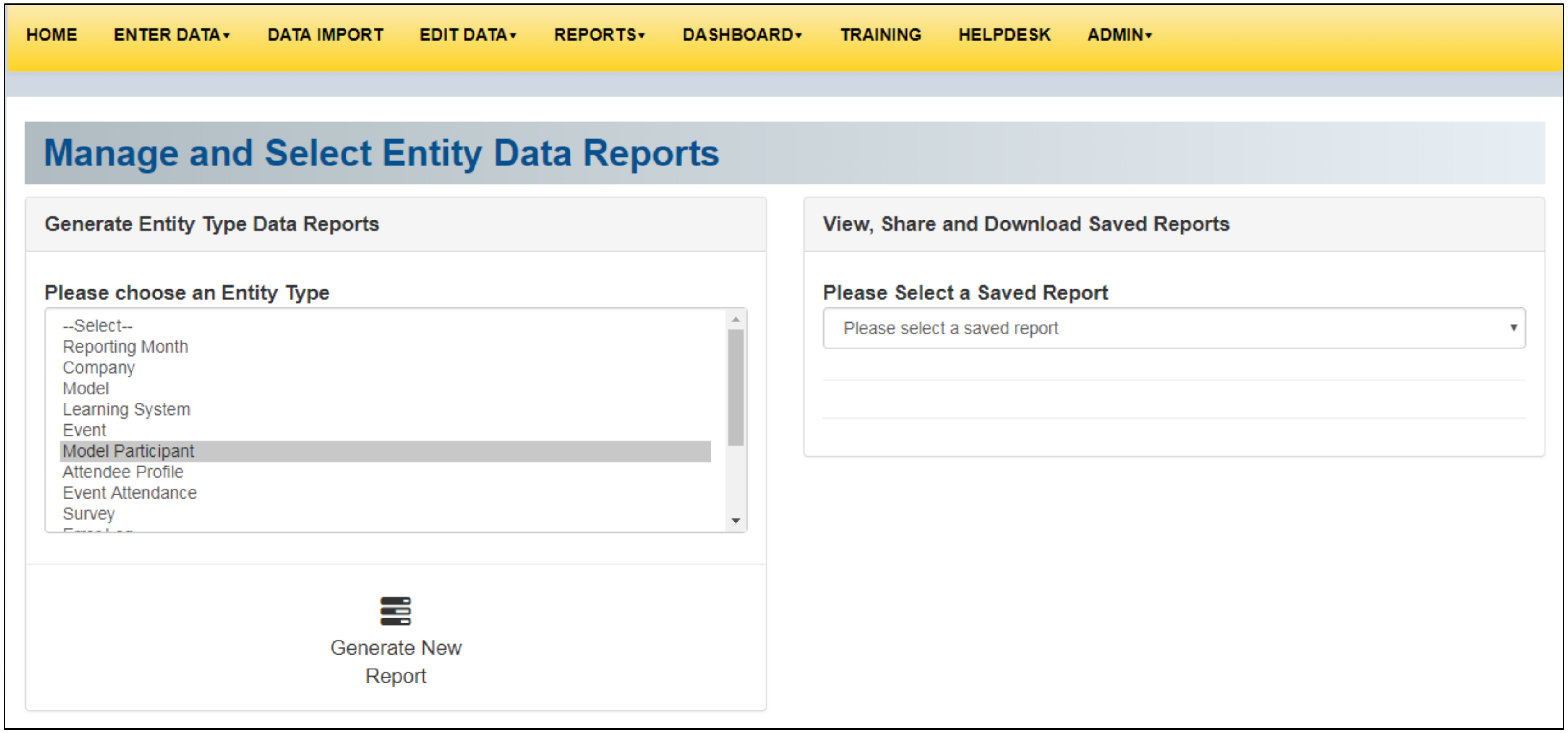
4. ***Click*** the "View Selected Report" button to view the report.
   a. If you wish to download the report, click either the "Download CSV" button or the "Download XLS" button.



Share a Saved Report

Follow these steps to share a saved entity data report:

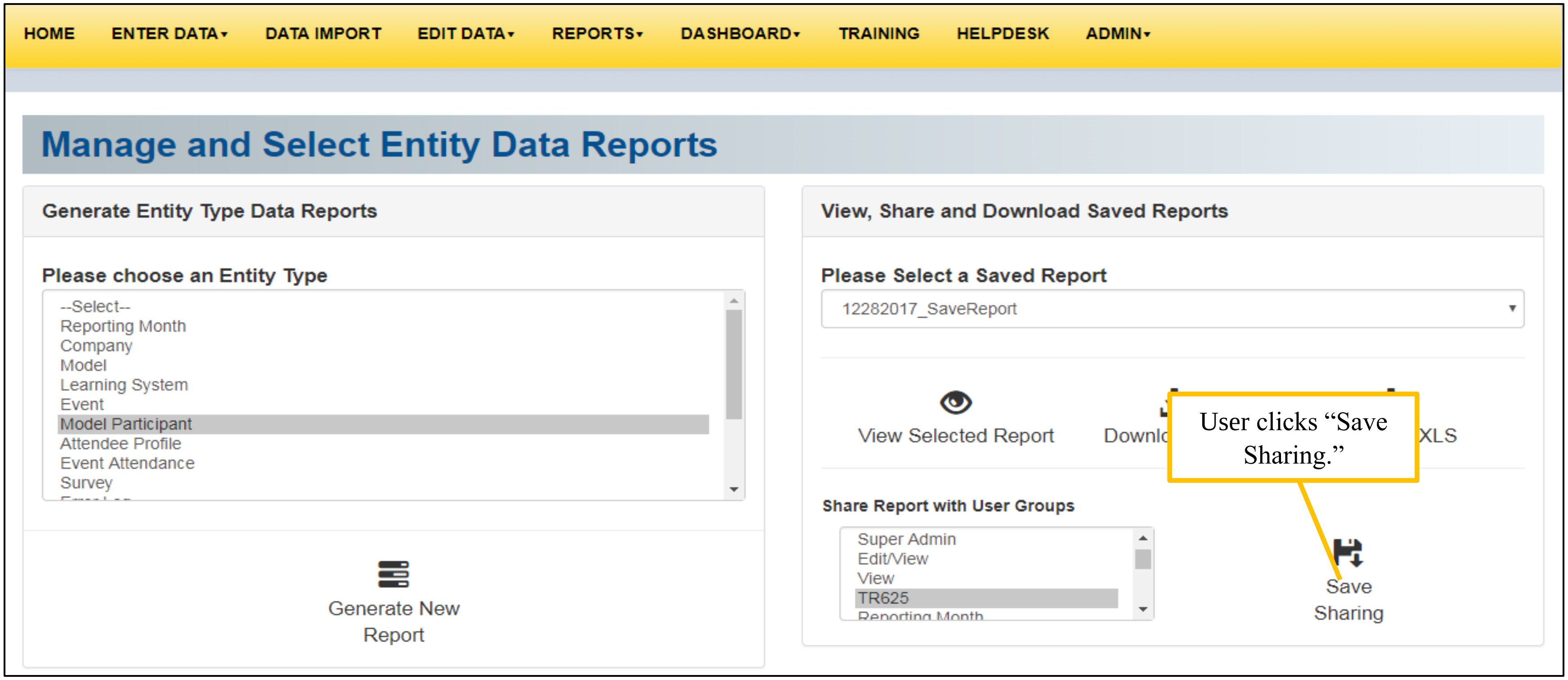
1. ***Click*** "Reports" on the yellow toolbar and ***select*** "Entity Data Reports" in the drop-down menu that appears.
2. ***Select*** the entity type the saved report was generated for in the box labeled "Please choose an Entity Type."



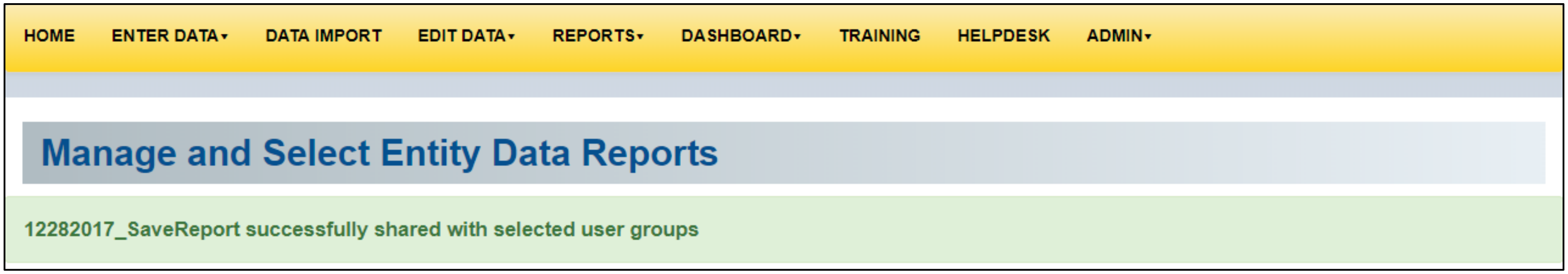
3. ***Select*** the saved report in the drop-down menu labeled "Please Select a Saved Report" in the pane on the right-hand side of the screen.

> **Note**: If no reports have been saved or shared with you under the selected entity type, the "View, Share and Download Saved Reports" pane will not appear.

4. ***Select*** the user group(s) you wish to share the report with in the box labeled "Share Report with User Groups" and ***click*** the "Save Sharing" button.



5. When the report is successfully shared with the selected user group, the following message will appear, and users belonging to the group will be able to access your report.



7. Dashboards

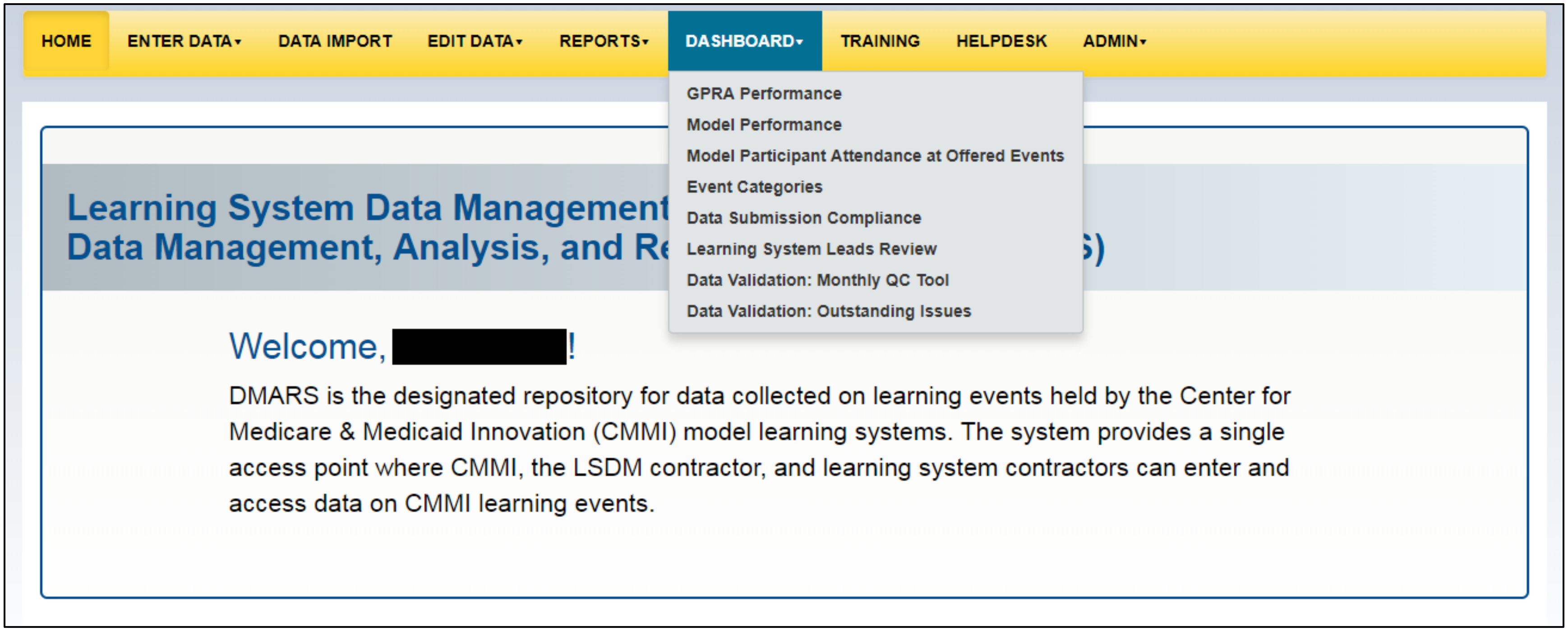
DMARS is equipped with dashboards customized for LSDM reporting needs. These dashboards allow users to view information regarding the following topics:

- **GPRA Performance –** Captures the percentage of targeted model participants attended across learning systems by month in comparison to the GPRA Target for each GPRA Reporting Period.
- **Model Performance –** Captures model participant and attendee participation in learning events.
- **Model Participant Attendance at Offered Events –** Captures the extent to which model participants, in general and individually, are attending learning events that have been offered to them.
- **Event Categories** – Captures events by the topics that were discussed, their intended purpose, and the group or sub-group for which the events were targeted.
- **Learning System Leads Review –** Captures model participant and attendee participation in learning events and is used by learning system leads to perform a qualitative review of monthly data submissions.
- **Data Submission Compliance –** Captures each learning system's compliance with monthly data submission due dates.
- **Data Validation: Monthly QC Tool –** Performs validation on the Attendee information reported in the Event Data type using data entered for the Model Participant and Attendee entity types.
- **Data Validation: Outstanding Issues** – Captures aggregate data-quality trends using data from the Error Log entity type.

View and Filter Dashboards

Follow these steps to view a dashboard and filter the data portrayed within the dashboard:

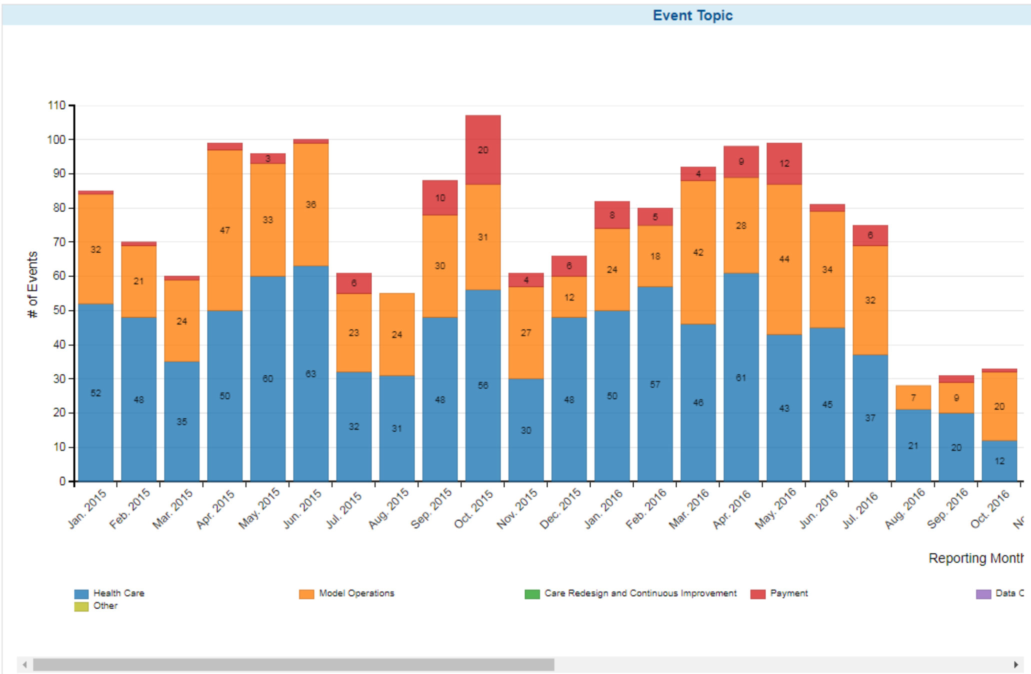
1. ***Click*** "Dashboard" on the yellow toolbar and ***select*** the dashboard you would like to view in the drop-down menu that appears.



2. ***Utilize*** the following filter features located to the right of the dashboard to filter the data portrayed in the dashboard.
    a. To apply the desired filters, ***check*** and ***uncheck*** the boxes next to each filter. The data portrayed in the dashboard will update accordingly as you edit the filter settings.
    b. To expand date filters to more granular options, ***click*** the plus sign (+) next to the reporting period displayed.
    c. When filters do not apply to the data being viewed, they are grayed out.
    d. Filters are applied in the order they are changed and do not revert until the dashboard is refreshed.

Event Categories

Note that data for each month is not finalized until the 28th of the following month.



User selects and unselects filters as needed.

Care Redesign and Continuous Improvement	209
Data Collection and Technology	60
Finance and Operations	49
Health Care	1,003
Model Operations	641
Other	10
Payment	116
Program Requirements and Waivers	44
Stakeholder Engagement	22
Grand Total	**2154**

Reporting Month

- **Deselect All**
- 2015
- 2016
- 2017
- 2018
- 2019
  - Q1
  - Q2
  - Q3
  - Q4

Model Portfolio

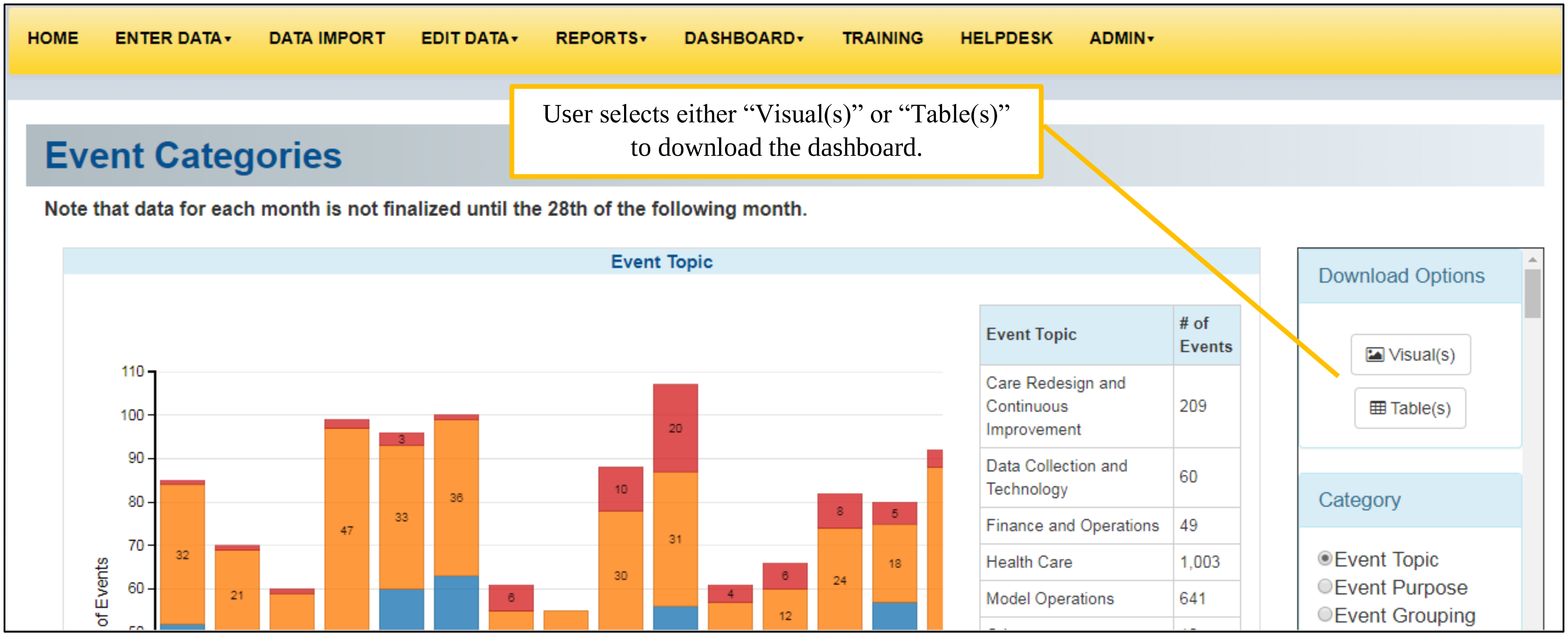
- **Deselect All**
- -
- ACO
- Bundles
- Other
- Population Health
- Primary Care

1. The values for Event Topic, Event Grouping, and Event Purpose were significantly revised in Mar. 2017, causing a clear break in the data.
2. Between Jan. 2015 and Feb. 2017, an event could have more than one Event Topic. If an event has more than one Event Topic, it is reflected more than once in the dashboard.

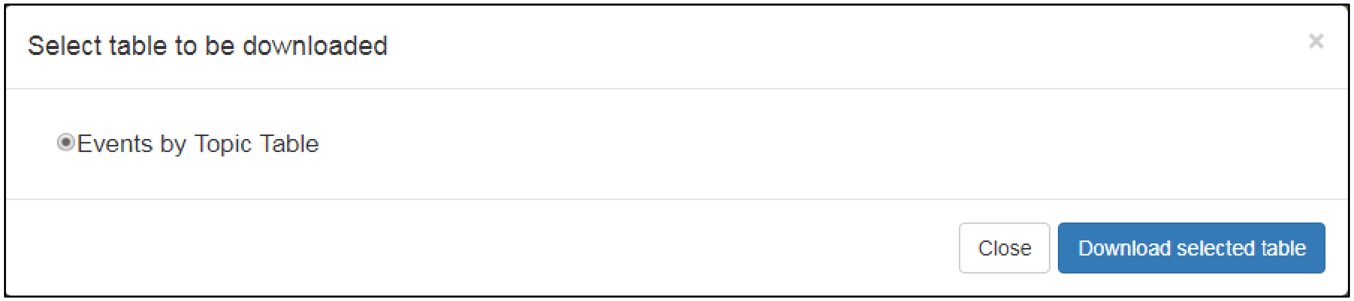
Download Dashboards

Follow these steps to download tables and/or visualizations portrayed in a dashboard:

1. ***Navigate*** to the dashboard you would like to download (see the View and Filter section above).
2. ***Click*** either the "Visual(s)" or "Table(s)" button under "Download Options" on the upper right-hand side of the screen based on the dashboard you wish to download.



3. ***Select*** the table or visualization you would like to download in the pop-up message that appears. This is designed for dashboards that have more than one downloadable table or visual. Note that you can only download one component of a dashboard at a time.
4. ***Click*** the “Download selected table/visual” button to download the dashboard component to your system.

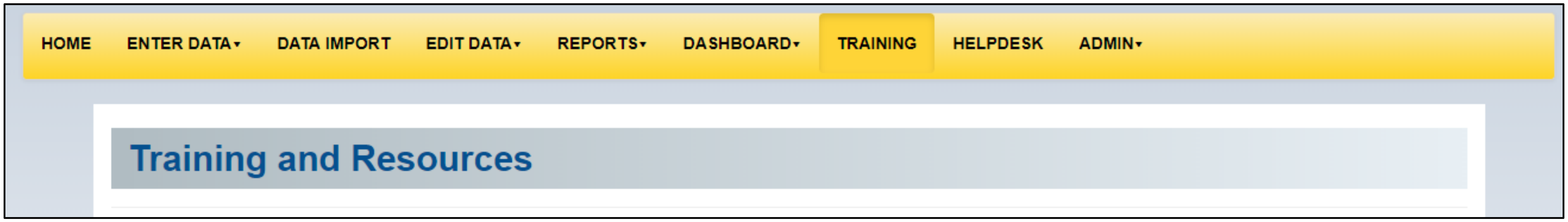


8. Training

The Training page contains information regarding training materials and other resources and includes a hyperlink to the LSDM Connect site where these materials can be accessed.

- **DMARS User Manual** – Contains information regarding key functionality and provides step-by-step guidance for navigating the system.
- **LSDM Data Dictionary** – The codebook for the LSDM dataset, which contains detailed information regarding each field, including validation rules.
- **Data Collection Manual** – Provides detailed guidance for collecting learning event data and populating the LSDM Data Collection Template.
- **LSDM Data Collection Template** – The standardized Excel-based template used by learning system contractors to report data on learning events.

To navigate to the Training page, ***click*** "Training" in the yellow toolbar.



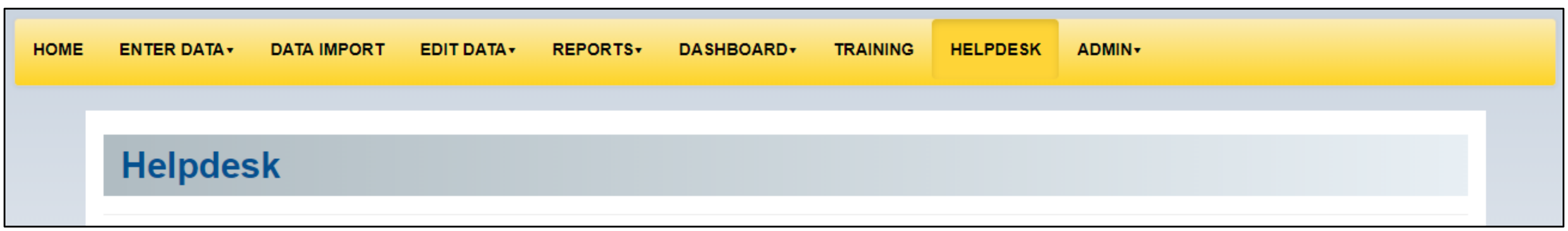
9. Helpdesk

Technical assistance is available for DMARS users who are experiencing technical difficulties or have general inquiries. For all inquiries, please contact the CMS LSDM Helpdesk. See the list below for common technical assistance inquires:

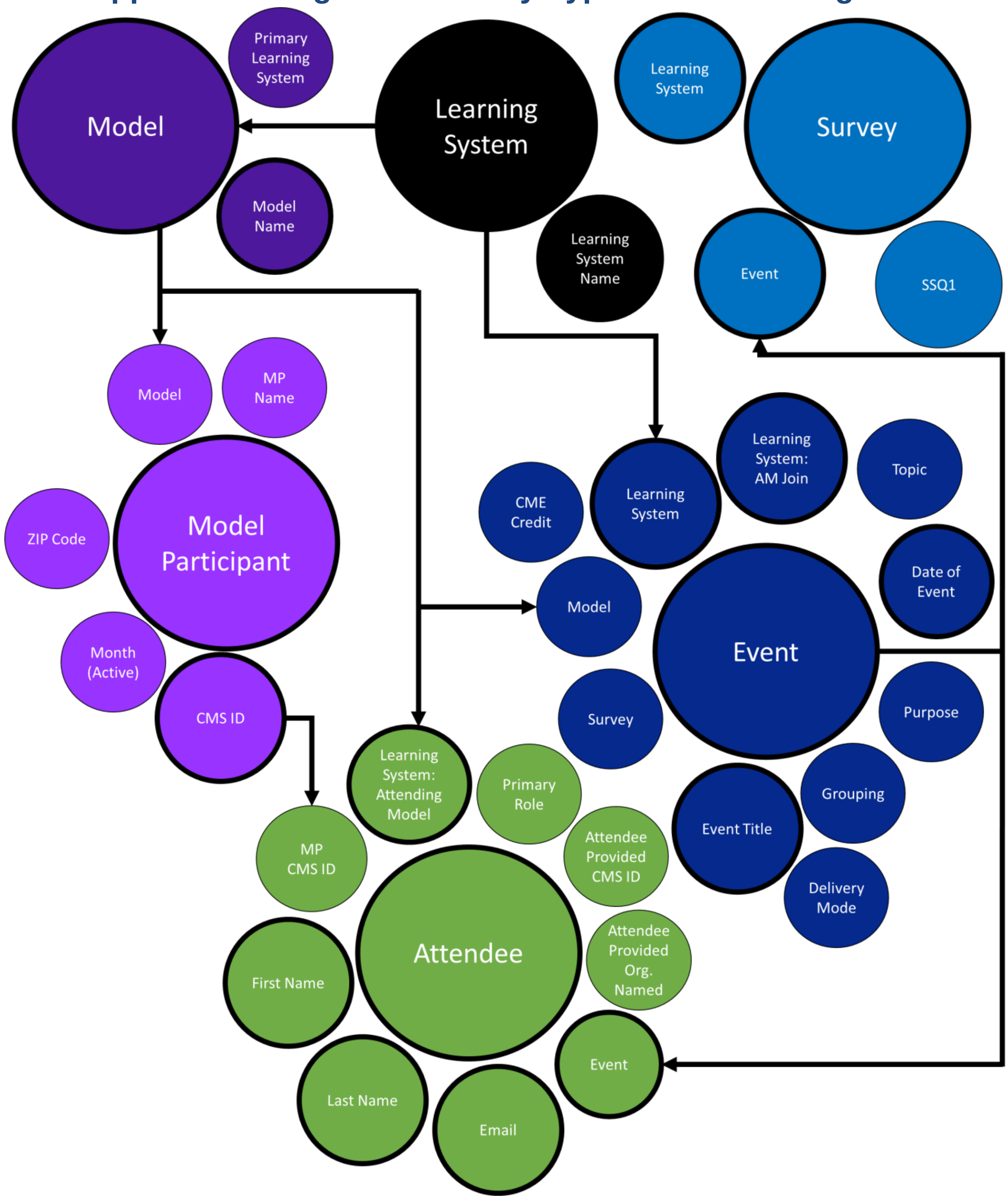
- Access to DMARS
- Functionality issues (e.g., page not loading, unexpected error message)
- Data import error messages
- Data entry in Data Collection Template
- Understanding data definitions
- Updating values for data elements
- Reporting requirements and data validation rules
- Reporting staffing/access changes

> The CMS LSDM Helpdesk is available Monday through Friday from 9:00 a.m. to 5:00 p.m. (Eastern Time) and can be reached via e-mail or phone.
>
> **E-mail**: LSDMHelpdesk@cms.hhs.gov
>
> **Phone**: 1-844-711-2664 – Option "8 – Other"

To navigate to the Helpdesk page, ***click*** "Helpdesk" in the yellow toolbar.



Appendix A: High-Level Entity Type Relational Diagram



Appendix B: EFT-Generated Data Import Error Messages

Error Message	Resolution
EPT1: File upload cannot be completed due to a Read Time Out Exception while scanning the file	The file was not uploaded because the file upload session timed out. Try to upload the file again.
EPT2: Size Limit Exceeded Exception – File upload cannot be completed because its size ($) exceeds the configured maximum ($)	The file could not be uploaded because it exceeds the maximum allowable size of 250MB. Contact the CMS LSDM Helpdesk and provide a screenshot of the error message received.
EPT3: File upload cannot be completed due to a File Upload Exception	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
EPT4: File upload cannot be completed due to an Exception	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
EPT5: File upload cannot be completed due to an Exception that occurred while sending the file request to McAfee Scanner	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
EPT6: File upload cannot be completed due to an Exception that occurred while closing the resource	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
EPT7: File upload cannot be completed due to a Servlet Exception	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
EPT8: File upload cannot be completed due to an Exception that occurred while calling URL	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
EPT9: File upload cannot be completed due to an Exception that occurred while generating the checksum due to no such Algorithm	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
EPT10: File upload cannot be completed due to an Exception that occurred while generating the checksum	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
EPT11: File upload cannot be completed due to a class cast exception	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
EPT12: File upload cannot be completed due to an Exception that occurred while sending JSON response after file upload	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
EPT13: File upload cannot be completed due to a Null Pointer Exception	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
EPT14: File upload cannot be completed due to an error that occurred during preparing file for EFT	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
EPT15: File upload cannot be completed due to an error that occurred during file cleanup	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.

Error Message	**Resolution**
EPT16: Security Validations failed	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
EPT17: Failure in retrieving VerticalContainerID from the request.	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
EPT18: Cannot close httpclient	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
EPT19: Multi-part validation failed	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
EPT20: Virus/Macro present in the uploaded file	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
EPT21: Audit Log failed	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
EPT22: Exception occurred while writing JSON response on to response object	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
EPT23: Exception occurred while saving the file on to the disk	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
EPT24: Error occurred while retrieving the file input stream from file	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
EPT25: Exception occurred while connecting ICAP server	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
EPT26: Exception occurred in converting file to bytes	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
EPT27: Exception occurred in receiving ICAP response	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk and provide a screenshot of the error message received.
EPT28: Exception occurred in parsing ICAP response	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk and provide a screenshot of the error message received.
EPT29: Exception occurred in accessing the resource	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk and provide a screenshot of the error message received.
EPT30: Exception occurred in sending preview	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk and provide a screenshot of the error message received.
EPT31: VerticalID length exceeds 18 characters	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk and provide a screenshot of the error message received.

Appendix C: Data Import Error/Warning Messages

Type	Message	Resolution
Error	**1001:** No configuration sheet found.	The file was not uploaded due to an issue with the Data Collection Template. Ensure that the most recent version of the template is being used and that no changes to the template structure were made. Contact the CMS LSDM Helpdesk.
Error	**1001:** Worksheet <*work sheet name*> does not exist.	The file was not uploaded due to an issue with the Data Collection Template. Ensure that the most recent version of the template is being used and that no changes to the template structure were made. Contact the CMS LSDM Helpdesk.
Error	**1001:** Data corrupted	The file was not uploaded due to password protection. Remove the password and try again. Contact the CMS LSDM Helpdesk.
Error	**1002:** Process block exception.	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
Error	**1004:** Unknown parsing error, Worksheet: *worksheet name*, Cell: *cell address.*	The file was not uploaded due to an issue with the Data Collection Template. Contact the CMS LSDM Helpdesk.
Error	**1005:** Parser exception.	The file was not uploaded due to a system error. Contact the CMS LSDM Helpdesk.
Error	**2001:** Unexpected end of row, Worksheet: *worksheet name*, Cell: *cell address.*	The file was not uploaded due to an issue with the Data Collection Template. Contact the CMS LSDM Helpdesk.
Error	**2003:** Expected block start.	The file was not uploaded due to an issue with the Data Collection Template. Contact the CMS LSDM Helpdesk.
Error	**2004:** Expected start of block, got <*current value*>, Worksheet: *worksheet name*, Cell: *cell address.*	The file was not uploaded due to an issue with the Data Collection Template. Contact the CMS LSDM Helpdesk.
Error	**2005:** Expected block attribute or column Header, Worksheet: *worksheet name*, Cell: *cell address.*	The file was not uploaded due to an issue with the Data Collection Template. Contact the CMS LSDM Helpdesk.
Error	**2006:** Expected attribute value for	The file was not uploaded due to an issue with the Data Collection Template. Contact the

Type	Message	Resolution
	<*attribute name*> but none was given, Worksheet: *worksheet name*, Cell: *cell address.*	CMS LSDM Helpdesk.
Error	**2007:** Expected column definition or block end, Worksheet: *worksheet name*, Cell: *cell address.*	The file was not uploaded due to an issue with the Data Collection Template. Contact the CMS LSDM Helpdesk.
Error	**2009:** Unexpected end of row, expected column number.	The file was not uploaded due to an issue with the Data Collection Template. Contact the CMS LSDM Helpdesk.
Error	**2013:** Unrecognized block attribute <*current attribute name*>, Worksheet: *worksheet name*, Cell: *cell address.*	The file was not uploaded due to an issue with the Data Collection Template. Contact the CMS LSDM Helpdesk.
Error	**2014:** Parser did not finish correctly.	The file was not uploaded due to an issue with the Data Collection Template. Contact the CMS LSDM Helpdesk.
Error	**2017:** Unrecognized OnEmptyCell value <*current value*>, Worksheet: *worksheet name*, Cell: *cell address.*	The file was not uploaded due to an issue with the Data Collection Template. Contact the CMS LSDM Helpdesk.
Error	**2018:** Unrecognized SelectMultiReplace value <*current value*>, Worksheet: *worksheet name*, Cell: *cell address.*	The file was not uploaded due to an issue with the Data Collection Template. Contact the CMS LSDM Helpdesk.
Error	**2019:** Unrecognized EntityAction value <*current value*>, Worksheet: *worksheet name*, Cell: *cell address.*	The file was not uploaded due to an issue with the Data Collection Template. Contact the CMS LSDM Helpdesk.
Error	**2020:** Invalid value <*current value*> for column <IgnoreBlock>, Worksheet: *worksheet name*, Cell: *cell address.*	The file was not uploaded due to an issue with the Data Collection Template. Contact the CMS LSDM Helpdesk.
Error	**2020:** Invalid value <*current value*> for column <IgnoreCase>, Worksheet: *worksheet name*, Cell: *cell address.*	The file was not uploaded due to an issue with the Data Collection Template. Contact the CMS LSDM Helpdesk.
Error	**3001:**	The file was not uploaded due to an issue with

Type	Message	Resolution
	No worksheet named <*worksheet name*>.	the Data Collection Template. Contact the CMS LSDM Helpdesk.
Error	**3002:** Column <*column name*> is out of range, Worksheet: *worksheet name*, Cell: *cell address.*	The file was not uploaded due to an issue with the Data Collection Template. Contact the CMS LSDM Helpdesk.
Error	**3002:** Invalid column index <*current value*>, Worksheet: *worksheet name*, Cell: *cell address.*	The file was not uploaded due to an issue with the Data Collection Template. Contact the CMS LSDM Helpdesk.
Error	**3004:** Undefined entity type <*current value*>, Worksheet: *worksheet name*, Cell: *cell address.*	The file was not uploaded due to an issue with the Data Collection Template. Contact the CMS LSDM Helpdesk.
Error	**3005:** Undefined question <*entity type: question text*>, Worksheet: *worksheet name*, Cell: *cell address.*	The file was not uploaded due to an issue with the Data Collection Template. Contact the CMS LSDM Helpdesk.
Error	**3005:** Question <*question ID*> is mandatory but is not listed in the configuration worksheet.	The file was not uploaded due to an issue with the Data Collection Template. Contact the CMS LSDM Helpdesk.
Error	**3006:** Cell cannot be blank, Worksheet: *worksheet name*, Cell: *cell address.*	An answer is missing for a required question. Enter an answer choice and reference the Data Dictionary for the appropriate null value if an answer is not available.
Error	**4005:** Answer <*current value*> to question <*question text*> does not match any available choice, Worksheet: *worksheet name*, Cell: *cell address.*	The answer(s) entered for the single-select or multi-select question do not match the available answer choices. Review the value against the Data Dictionary to identify and address any typos, or enter one of the available answer choices from the drop-down menu in the Data Collection Template.
Error	**4005:** Answer <*current value*> to question <*question text*> is obsolete and cannot be used. Message <choice.HiddenMessage>, Worksheet: *worksheet name*, Cell:	The answer(s) entered for the single-select or multi-select question do not match the available answer choices. Review the value against the Data Dictionary to identify and address any typos, or enter one of the available answer choices from the drop-down

Type	Message	Resolution
	cell address.	menu in the Data Collection Template.
Error	**4006:** Key data mismatch for question <*question text*>. Check that all unique combination columns have data.	A value is missing for the specified question, which is part of the entity type's unique combination. Enter an answer choice and reference the Data Dictionary for the appropriate null value if an answer is not available.
Error	**4008:** The question type for question <*entity type name: question text*> does not support a multi-select delimiter, Worksheet: *worksheet name*, Cell: *cell address.*	A delimiter was identified in the answer for a non–multi-select question. Replace the value with another character or delete it.
Error	**4009:** Question <*entity type name: question text*> is single select and so does not support answer merging, Worksheet: *worksheet name*, Cell: *cell address.*	The file was not uploaded due to an issue with the Data Collection Template. Contact the CMS LSDM Helpdesk.
Error	**Permissions Error:** You are not authorized to update the entity <Name | E-mail>	The file was not uploaded due to user account permission issues. Contact the CMS LSDM Helpdesk.
Warning	**Worksheet: *worksheet name*, Cell: *cell address*** **HAS answer for <*question*>** but is NOT ENABLED because DID NOT enter <*answer*> for Question <*question text*>.	The question should not have an answer, as the condition for warranting an answer was not met (e.g., did not enter "Other" for "Attendee Primary Role," thus, no answer should be in "Attendee Primary Role: Other"). Delete the inapplicable answer.
Warning	**Cell: <*cell address*>: Missing answer <answer>** Required because Entered <*choice*> for Question <*question*>	An answer is missing for the question, as the condition warranting an answer was met (e.g., entered "Yes" for "Post-Event Survey," thus, "Post-Event Survey: Attendee % Response Rate" should have an answer). Enter the missing value. If the answer is unavailable, reference the LSDM Data Dictionary for the appropriate null value.