Department of Veterans Affairs

Mental Health eScreening

Healthcare System Technical Administrator

Training Manual

August 2015

Software Version 1.0

Revision History

Date	Revision	Description	Author
August 2015	1.2	Added troubleshooting table	Information Innovators Inc.
June 2015	1.1	VA revisions	Information Innovators Inc.
February 2015	1.0	Initial document	Information Innovators Inc.

Contents

1. Introduction to Mental Health eScreening

Mental Health eScreening (MHE) is a software application that automates the manual, paper-based, process used for screening Veterans in VA healthcare settings for mental health issues. MHE was created to accelerate and improve Veterans' access to VA mental health services. It accelerates the Veteran enrollment process by allowing clinicians to perform patient-directed screening with real-time scoring and chart note generation.

The application exchanges data directly with VistA, by pulling open clinical reminders, pulling Veteran identification and demographic data, inserting Veteran assessment data in the form of notes, and closing clinical reminders based on completion of assessments. Additionally, it creates new clinical reminders and inserts health factors based on the eScreening results.

After completing an eScreening assessment, a Veteran receives an immediate summary report with individualized feedback and reminders of upcoming appointments.

A data export feature allows clinicians to export selected assessments in either an Excel, PDF, or CSV format to other applications. The data can be exported in identifiable or de-identified format.

1.1. Purpose

The purpose of this document is to provide Healthcare System Technical Administrators with the information they need to use MHE for fulfilling their role tasks. It provides information about basic procedures such as logging in and other fundamentals, as well as more complex tasks such as creating assessments and using the forms editors.

1.2. The Healthcare System Technical Administrator role

The Healthcare System Technical Administrator (HSTA, also known as Tech Admin) plays a critical role in the smooth functioning of MHE. This user is like a junior system administrator, and performs these tasks:

- Edits & assigns clinical users for initial assignments and name changes;
- Manages system level settings;
- Creates and edits templates when clinicians cannot;
- Manages assessments that are in an error state, or Battery errors.
- Performs some initial troubleshooting tasks as defined in the Troubleshooting section in this document.

The HSTA is also able to create, edit, delete, and upload assessments, and edit forms and templates.

The shaded area in this table shows where the HSTA fits in the overall picture.

User role	Task	Permissions
Veteran	The patient	Receives access only through the tablet user interface, and is limited to completing a planned assessment (eScreening Battery)
Clinician	Patient Care	• Assessment management (creates, edits, deletes, and uploads assessments) • Monitors Assessment Dashboard including real-time alerts • Utilizes the health data collected through the MHE application • Exports data to and from CPRS/VistA
Assistant	Administrative Support	• Creates Batteries for Veterans to complete in the waiting room • Can access the dashboard and finalize assessments
Healthcare System Technical Administrator	**Technical Support**	• User management (edits & assigns users; changes passwords; activates or inactivates personnel) • Manages system level settings, such as customizing templates, and the system's interactions with VistA, including minor troubleshooting • Assessment management (creates, edits, deletes, & uploads assessments if needed; also can manage Battery errors) • Edits forms and templates as needed
Consultation & Program Evaluation Administrator (CESAMH)	Reporting & Metrics	Extracts clinical Battery data from the MHE database for all sites, to: • Identify trends and compare them for program and progress evaluation, and • Provide feedback for improvement

1.3. The eScreening Application

eScreening runs using a web browser on a computer or mobile device and supports three general levels of access. Healthcare System Technical Administrators manage user accounts and edit templates and system interactions with VistA. General users (clinicians and assistants) have access to search for Veteran records and assessments, create and administer assessments, and create reports. Veterans can log into a limited area from a tablet and take an assessment.

The application requires VistA in to function. The application uses VistA for security, general patient data, clinical reminders, health factors, and clinical notes.

1.4. About the eScreening System

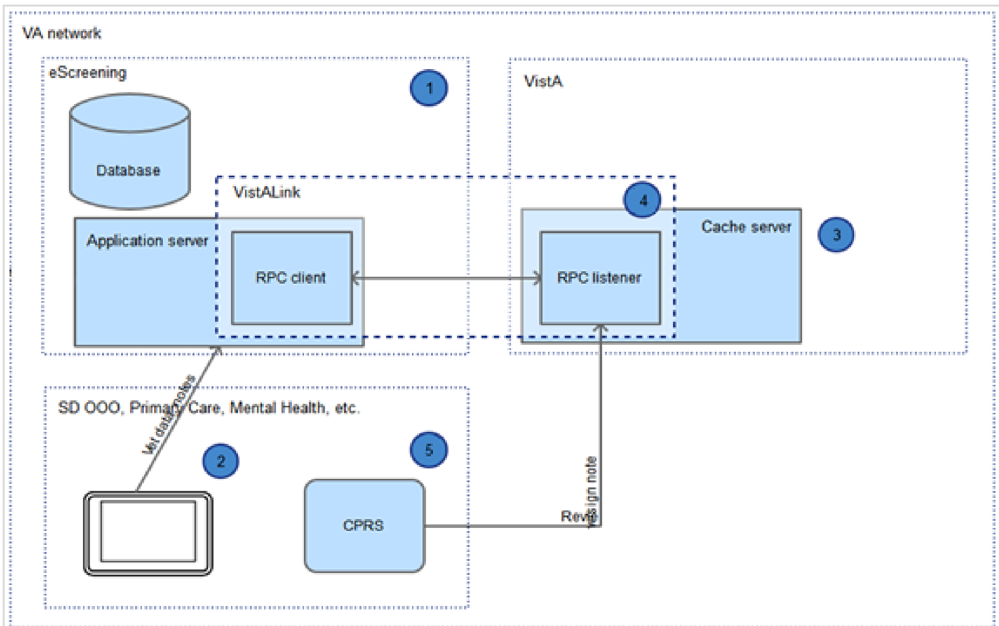
The eScreening system consists of three principal components, all based on open-source web technology:

- A forms editor for designing assessments and note templates,
- A Veteran assessment portal that works for Firefox on Samsung and Apple tablets, and
- A web-based administrative dashboard (staff portal) that allows clinicians to monitor assessment progress, view assessment alerts, review completed assessments, and publish generated reports to VistA/CPRS. The dashboard also handles exporting of assessment data for data analysis purposes.

Both the dashboard and the forms editor are under the same staff portal, but technical administrators are the only ones who have access to the forms editor. The staff portal runs inside of the VA on a tablet or laptop computer web browser.

The Veteran assessment portal is web-based and requires wireless access for tablets. All communications between the Veteran assessment portal and the eScreening server are securely encrypted, and no Veteran data is stored on the tablet running the assessment.

The eScreening server will run from the San Diego data center and will be protected by VA security and firewalls. All listed components are behind the VA firewall. Outreach can only take place through a secure VA VPN connection.



Mental Health eScreening Architecture

Legend:

❶ The eScreening system resides in the San Diego VA Medical Center and consists of a web application, web services, and a database.

❷ Clinicians and Veterans access authorized portions of the web application from San Diego VA facilities.

❸ eScreening reads limited Veteran identification and demographics data from VistA, and writes assessment results to VistA.

❹ eScreening integrates with VistA via VistALink entirely on the VA network.

❺ Staff use CPRS to view and sign assessment notes, and maintain Veteran records.

1.5. Security

Several security related features have been included in the software and hardware:

- Tablets will not function outside of the hospital grounds.
- Tablets have built-in tracking capability.
- The system records the name and address of the last Veteran who used a tablet.

IMPORTANT! Staff will *not be held responsible* for tablets that are stolen or broken by a Veteran.

2. Managing your account

2.1. Logging in

1. Type the web address http://vaww.escreening.va.gov/sd into your browser URL field.

   Note: In the future, the URL will be in the Shared Drive.

   The Welcome screen opens.

2. Click **Staff Login**.
   The Staff Access | Please Login page opens.

3. In the Staff Access login page, type your user name and password, then click **Login**.
   Your Home page opens.

This is where you will select tabs to perform your job functions.

2.2. Logging out

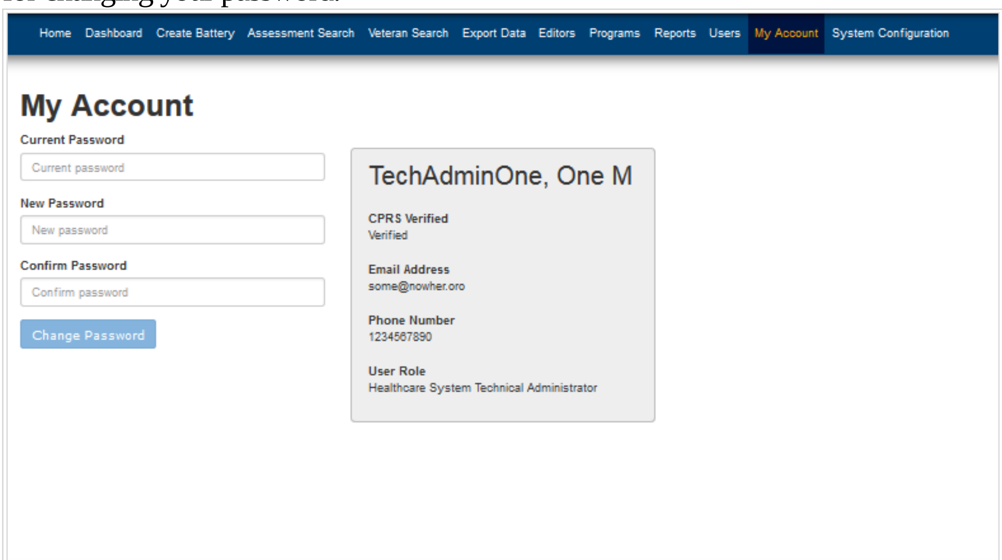
- Click **Logout** in the upper right corner of any MHE page (shown above).
  The system logs you out.

Note: If you remain inactive for 20 minutes, the system will give you a 20-second warning before automatically logging you out. You must interact with the program if you want to keep your session open. If you are logged out but want to keep working, log in again.

2.3. Changing your password

1. From the Home page, click **My Account**.

   The My Account page opens, showing your basic contact and role information, and options for changing your password.

2. Type your current password in the **Current Password** field.
3. Type your new password in the **New Password** and **Confirm Password** fields.

   Your password must:
   - Contain at least one lower-case letter
   - Contain at least one number
   - Be at least 8 characters long
   - Contain at least one upper-case letter
   - Contain at least one of these special characters: ! @ # $ % & .
4. Click **Change Password**.
   MHE confirms that your password change was successful.

2.4. Verifying your CPRS account

This is a one-time task performed from your My Account tab.

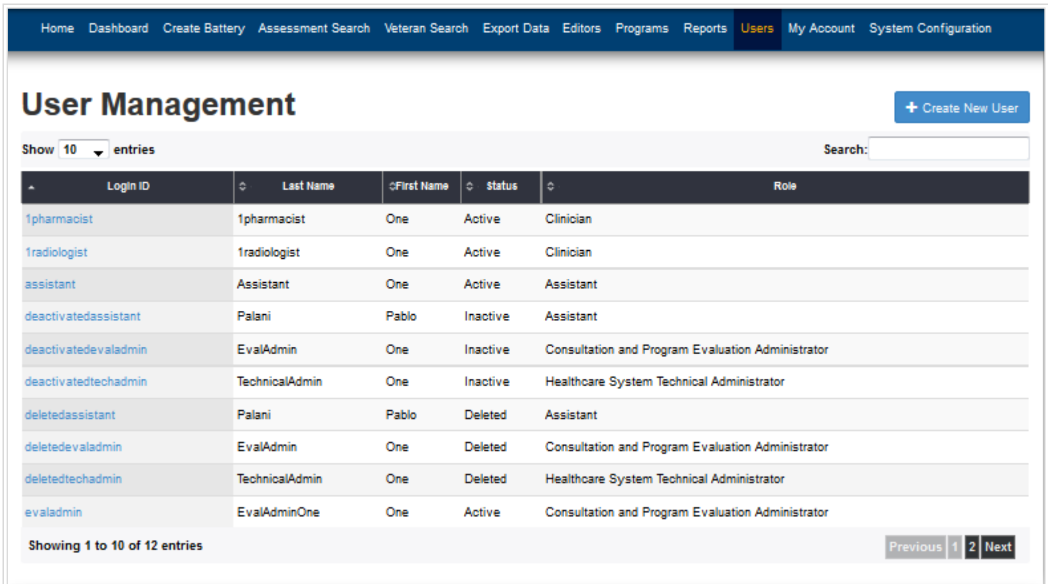
1. Click **Click here to verify your account**.
   The Verify VistA Account window opens.

2. Type your access and verify codes in the fields, then click **Verify Now**.
   The system internally verifies your account.
3. Log out, then log in.

3. Managing staff access and permissions

After you receive access to MHE, begin by creating all of the staff users.

User management functions are accessed from the User Management page that opens when you click **Users** on the main menu bar.



Login ID	Last Name	First Name	Status	Role
1pharmacist	1pharmacist	One	Active	Clinician
1radiologist	1radiologist	One	Active	Clinician
assistant	Assistant	One	Active	Assistant
deactivatedassistant	Palani	Pablo	Inactive	Assistant
deactivatedevaladmin	EvalAdmin	One	Inactive	Consultation and Program Evaluation Administrator
deactivatedtechadmin	TechnicalAdmin	One	Inactive	Healthcare System Technical Administrator
deletedassistant	Palani	Pablo	Deleted	Assistant
deletedevaladmin	EvalAdmin	One	Deleted	Consultation and Program Evaluation Administrator
deletedtechadmin	TechnicalAdmin	One	Deleted	Healthcare System Technical Administrator
evaladmin	EvalAdminOne	One	Active	Consultation and Program Evaluation Administrator

Before you begin the process, you must have a list of these required elements:

- Staff names (first and last)
- Login ID for each user (can be created in-process)
- Telephone numbers
- Email addresses
- The role each user will play in the system. Staff must be one of these:
    - Assistant
    - Clinician
    - Healthcare System Technical Administrator
    - Consultation & Program Evaluation Administrator
- The program each user is associated with
- Password for each user, meeting these restrictions:
    - Contains at least one lower-case letter
    - Contains at least one number
    - Is at least 8 characters long
    - Contains at least one upper-case letter
    - Contains at least one of these special characters: ! @ # $ % & .

The HSTA can create users, assign their access (add them to program locations), modify their details, and deactivate them. Manage the users by clicking their name links on the User Management page.

- **Adding** a user consists of using the Create User page to enter the new user's name, phone number, email address, and other attributes.
- **Modifying** a user consists of using the Edit User page to modify values.
- **Deactivating** consists of changing the user's status on the Edit User page to *inactive*.

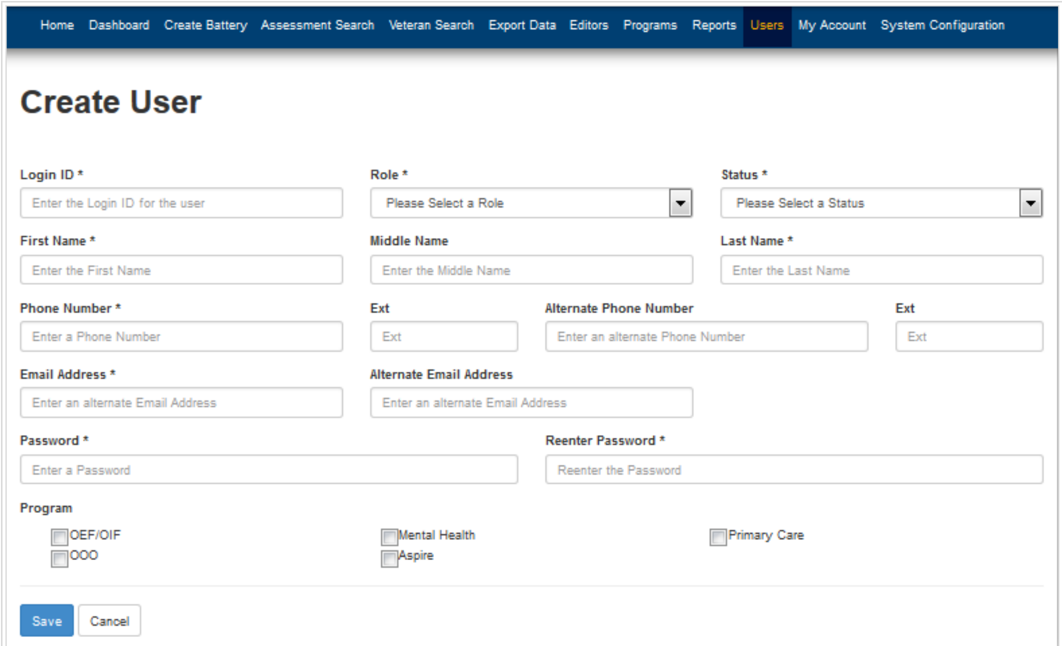
Note: Users are not deleted in MHE; they are deactivated. The user data remains in the MHE database and can be reactivated in the future, if needed, by changing the status back to active.

This table shows some basic system permissions for your users. (The Consultation and Program Evaluation Administrator will not typically be under the HSTA's control.) The table does not include all possible tasks, but provides the basics for understanding the roles if you are not already familiar with them.

<table>
<tr><th colspan="5">User Role Permissions</th></tr>
<tr><th rowspan="2">Tasks</th><th colspan="4">Roles</th></tr>
<tr><th>Healthcare System Technical Admin.</th><th>Clinician</th><th>Assistant</th><th>Veteran</th></tr>
<tr><td>Log in</td><td>Y</td><td>Y</td><td>Y</td><td>Y</td></tr>
<tr><td>Create an assessment</td><td>Y</td><td>Y</td><td>Y</td><td>Y</td></tr>
<tr><td>Edit an assessment</td><td>Y</td><td>Y</td><td>Y</td><td>Y</td></tr>
<tr><td>Delete an assessment</td><td>Y</td><td>Y</td><td>Y</td><td rowspan="10">N</td></tr>
<tr><td>Save to VistA</td><td>Y</td><td>Y</td><td>Y</td></tr>
<tr><td>Dynamic selection of clinician for individual assessments</td><td>Y</td><td>Y</td><td>Y</td></tr>
<tr><td>Change an assessment in an error state</td><td>Y</td><td colspan="2"></td></tr>
<tr><td>Delete an error assessment</td><td>Y</td><td>Y</td><td>Y</td></tr>
<tr><td>Print or email the Veteran Summary (to a secure portal)</td><td>Y</td><td>Y</td><td>Y</td></tr>
<tr><td>View Dashboard of active assessments with alerts</td><td>Y</td><td>Y</td><td>Y</td></tr>
<tr><td>Edit user details and permissions</td><td>Y</td><td colspan="2" rowspan="2"></td></tr>
<tr><td>Manipulate and edit templates, and the system's interactions with VistA</td><td>Y</td></tr>
<tr><td>Export data for Program Management</td><td>Y</td><td>Y</td><td>Y</td></tr>
</table>

3.1. Creating a new staff account

1. From the User Management page on the User tab, click **Create New User**.
   The Create User page opens.



2. Type the user's data in the appropriate fields.

   IMPORTANT! Be sure to select the check box for the program.

3. Click **Save**.
   You are returned to the User Management page, and the new user is listed there.

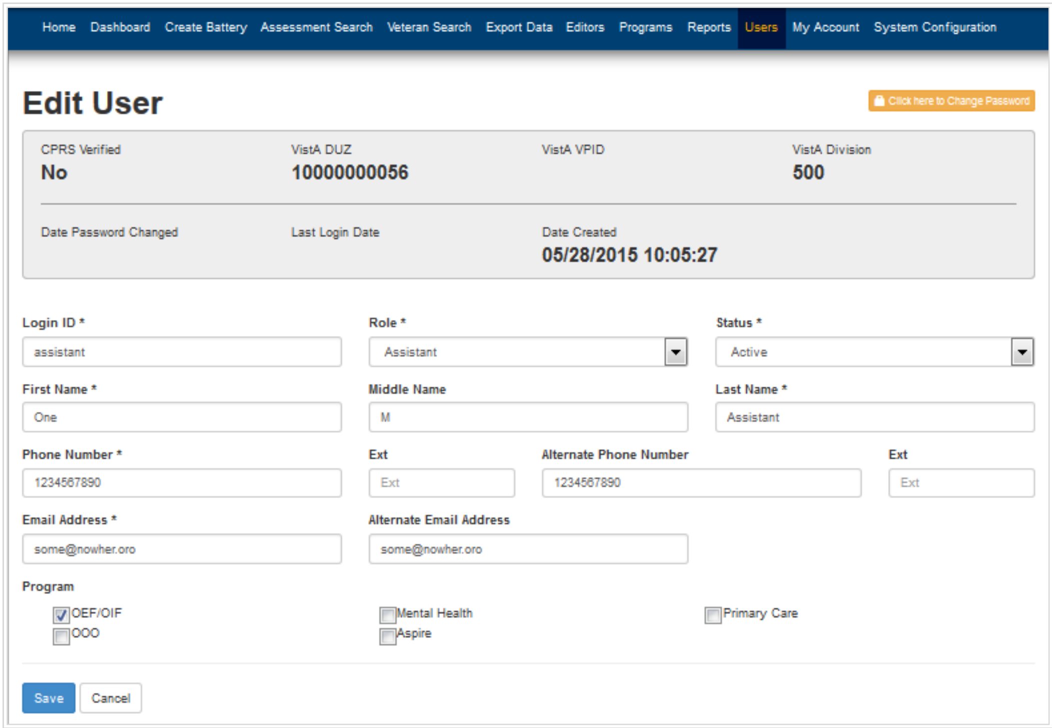
3.2. Viewing or changing user information

1. On the main menu bar, click **Users**.
   The User Management page opens.

2. Click the user ID in the list.

   Note: If necessary, use the Search field to locate the user.

   The Edit User page opens displaying the user's information.



3. If you want to edit the information, make the changes on the page, then click **Save**. You are returned to the User Management page.
4. If you want to change the user's password, click **Click here to Change Password**, type and re-type the new password in the pop-up window that opens, then click **Save**.

   A banner tells you the password was updated.

4. Administering and customizing eScreening for your clinic

4.1. About customization

Mental Health eScreening (MHE) takes the standardized paper forms that your clinic uses to screen and assess Veterans for services and support related to mental health issues, and translates them into an online system which partially automates the process.

Because clinics vary in the paper packet forms that they use, MHE was designed to allow customization of the software right down to the questions used in the assessments, the note titles, and much more.

When your clinic converts to using MHE, you will be provided with the latest software release. It will contain pre-grouped:

- batteries
- modules
- rules

- formulas
- sections

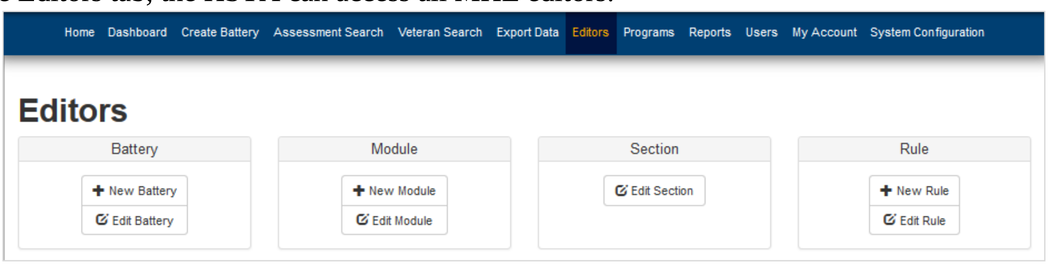
It may not be necessary to make changes to these components. In case changes are necessary, full details for customization are provided below.

4.2. About the forms editors

The forms editors consist of several editors used to customize MHE to a given clinical workflow. The editors at your disposal are: battery editor, module editor, section editor, rules editor, formula editor, and template editor. Each of these provide the flexibility to tailor MHE to your clinic's needs. Use of these editors will be described in the following sections.

MHE will adapt to the ever-changing needs of the mental health community or VA clinicians when, for example, it is decided that a new question needs to be added to a questionnaire. This scenario does not require assistance from the VA IT staff; any HSTA can access the list of defined modules (sets of questions), select a module for editing, and add the new question. If necessary, the HSTA can also update any components or business rules to reflect the addition of the question. For instance, a business rule can be created or updated if the response to the added question affects which question or questions the Veteran sees next.

From the Editors tab, the HSTA can access all MHE editors:

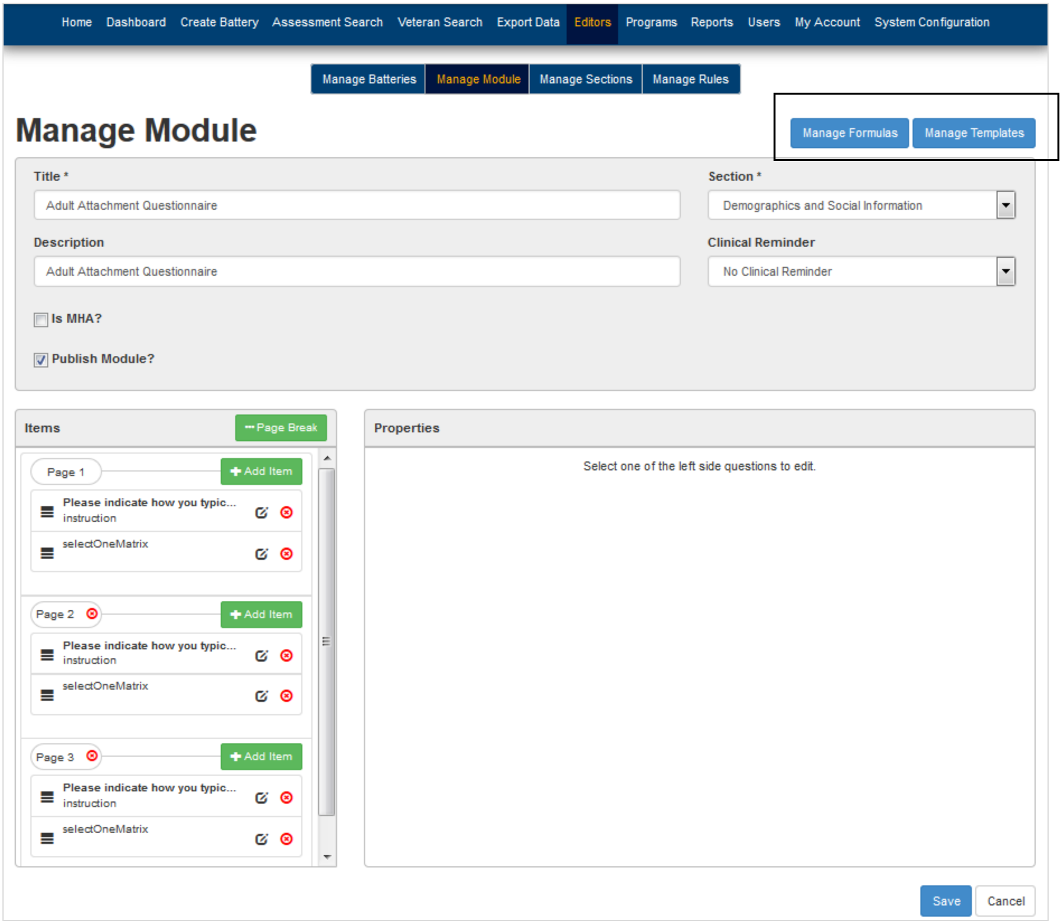


MHE's versatility is based on several system components (technically speaking, “system objects”) which will be described in the following sections along with a summary of the associated editors.

4.3. About modules

A module is a customized container of questions. Modules correspond to groups of paper packet questions. Most modules are self-evident, such as the Presenting Problems Module and the Basic Demographics Module. Some modules are in the form of clinical reminders, such as the Homelessness Clinical Reminder Module.

On the Editors tab, a new module can be created, or a list of existing modules can be viewed by clicking the Edit Module button. When a module is selected, the module editor is shown on the Manage Module page (below). From the module editor, questions can be created, updated, re-ordered, or deleted. Additionally, the module editor allows the HSTA to navigate to the formula editor and the template editor, shown in the black box below.



4.4. About batteries and assessments

A battery is a customized collection of modules. The words “battery” and “assessment” are used somewhat interchangeably. Generally, a battery is called an “assessment” from the clinical side, but presented to the Veteran as a “battery”.

When assigning a new assessment to a Veteran, a clinician or assistant must choose one battery which will pre-select a collection of modules. At this point, staff can select extra modules if needed (or deselect modules which are unnecessary), and then save the assessment. This final collection of modules is the assessment that will be given to the Veteran.
The battery editor allows the HSTA to create new batteries or edit existing ones. Each battery can have its collection of modules updated. In other words, if a battery contains a module, the module can be selected and removed from the battery. If the battery does not contain a module, a module can be selected and added to the battery.

The phrase, “creating a battery”, is used to represent two different procedures. Most commonly, it refers to the clinician or assistant action of customizing a prepared battery for a specific Veteran or group of Veterans. The prepared batteries are loaded along with the system. The HSTA has permission to do this from the Create Battery tab of the Home page.

The HSTA also can create an initial battery from scratch, from the Editors tab, if the site’s clinical workflow dictates. Both procedures are detailed in this user guide.

4.5. About sections

Sections contain groups of similar modules. The purpose of a section is to group and order modules. The order in which sections are placed is the order in which the sections of modules will be administered to the Veteran. For example, if section A comes before section B, then any modules that are found in section A will be shown to the Veteran first, followed by the modules in section B.

The order of modules within a section is also significant. If module 1 comes before module 2 in a section, the veteran will be shown module 1 first, followed by module 2.

The number of modules in a section vary. For example, the section called *Identification* contains only the Identification module. However, the *Demographics and Social Information* section contains nine modules:

- Presenting Problems
- Basic Demographics
- Education, Employment & Income
- Social Environment
- PROMIS Emotional Support
- Homelessness Clinical Reminder
- Pragmatic Concerns
- Advance Directive
- Spiritual Health

As you can see, all of the modules contain questions that relate to demographics and social information.

The section editor allows the HSTA to manage the sections and the modules that each contains. Every module must be assigned to a section at all times. In the section editor, new sections can be created, and if a section is empty, it can be deleted. Modules in a section can be reordered; also, modules in a section can be dragged and dropped into another section.

4.6. About rules

Rules allow certain events to be carried out when the rule's expression is found to be true. A rule consists of a logical (Boolean) expression which uses system variables to evaluate the system's state. Each rule can be associated with a set of events. Events can:

- set a dashboard alert for an assessment,
- show follow-up questions to a veteran,
- add health factors to an assessment, or
- add consults to an assessment.

The rule editor provides a way of setting a rule's expression and associating a set of events. In the expression section, the HSTA can choose from the variables defined in the system. Variables are: questions, formulas, and custom system variables. Depending on the type of variable, a logical expression can be built by choosing the operator and right operand (if applicable).
Below the expression section is the set of events to be carried out by this rule, separated by type. For each time, there are predefined events. The HSTA can delete previously added events from the rule, or add a predefined event to the rule by typing the name of an event.

4.7. About clinical reminders

MHE displays the IEN number at the end of clinical reminder names, so that they can be differentiated if VA Informatics changes the details, such as the name or IEN, without choosing a new print name.

4.8. About formulas

Formulas are a type of system variable which consist of a mathematical expression which contains other system variables. For example, if we want a formula to calculate the Body Mass Index of each Veteran who takes an assessment, we can create one which contains a question variable about the Veteran's weight in pounds, and another question variable which captures height. After this formula has been created, it can be used in several other places in the system, such as in a rule, in a template, in reports, or in data export.

The formula editor allows the HSTA to create and edit formulas. After selecting from a list of formulas, or clicking Create Formula, the HSTA is shown the formula editor. The formula editor allows variables, functions, and operators, to be chosen and added to the formula. There is a Ready to Test button which allows the formula to be evaluated with some test variable values. After each variable value has been provided, the Run Test button can be clicked to evaluate the expression. After the formula is verified as correct, it can be saved.

4.9. About templates

Templates are used in several places throughout the system. Templates provide a way of customizing:

- text that is presented to the Veteran before and after an assessment.
- reports that are given to the Veteran after an assessment.
- a progress note submitted to VistA.
- a clinician's assessment summary.

Templates are made up of blocks. When a template is rendered, these blocks are used to produce the final text output of the template (for example, a progress note). Blocks can be of type: condition, text, or table. The blocks contained in a template are organized as a hierarchy. This means that a block can have zero or more child blocks associated with it.

- **Text** blocks contain formatted text which can contain variables. These variables are considered blanks which will be filled in by values derived using each Veteran's assessment responses. As described previously, variables can be based on: questions, formulas, and custom system calculated values.
- **Condition** blocks provide a way of only including some number of blocks based on variable values. Conditions consist of a logical (Boolean) expression which contains variables. Variable values are tested using operators and a right operand (if applicable). If a condition's expression evaluates to True, then any of its child blocks will be included in the rendered template.
- **Table** blocks are blocks which represent a table question. Since a table question can contain any number of entries from a Veteran, a specialized block is available to allow the HSTA to iterate these entries and render values for each one.

The template editor allows the HSTA to create and delete templates. There is an entry point for the template editor from both the Battery editor and the Module editor. From the battery editor, click the Manage Templates button to view a list of battery-type templates. From the module editor, click the Manage Templates button to view a list of module-type templates.

After a template is selected or created, blocks can be added, removed, or reordered.

4.9.1. Template types

The type of template dictates where the template is rendered. Also, some types are associated with a battery, and others with a module. Here are the types, locations, and their associations:

Name	Location Displayed	Description	Association
Assessment Conclusion Text	Shown to the Veteran when an assessment has been completed.	Generates the conclusion text shown to Veterans at the end of an assessment.	Battery
Assessment Table of Scores	A summary of scores which is only included in the assessment summary (not in the CPRS Note sent to CPRS). It occurs directly after all CPRS Note entries.	Generates a table of scores for an assessment.	Battery
Assessment Welcome	Shown to a Veteran at the start of an assessment.	Generates the welcome message shown to Veterans when starting an assessment.	Battery
CPRS Note Entry	Included in the CPRS Note directly after the Note header template (in the Assessment Summary page and in the Note sent to CPRS).	Generates the body elements of a CPRS Note.	Module
CPRS Note Footer	At the bottom of a CPRS Note (in the Assessment Summary page and in the Note sent to CPRS).	Generates the footer of a CPRS Note.	Battery
CPRS Note Header	At the top of a CPRS Note (in the Assessment Summary page and in the Note sent to CPRS).	Generates the header of a CPRS Note.	Battery
CPRS Veteran Progress History	Included in a CPRS Note (both in the Assessment Summary page and in the Note sent to CPRS). It occurs after the Assessment Table of Scores and before the VistA Questions and Answers.	Displays a Veteran's longitudinal progress over time.	Module
Veteran Summary Printout Entry	This is the text of the Veteran Summary, between the header and footer	Generates the body element of a Veteran Summary Printout.	Module
Veteran Summary Printout Footer	At the bottom of the Veteran Summary.	Generates the footer element of a Veteran Summary Printout.	Battery
Veteran	At the top of the Veteran	Generates the header element of a Veteran	Battery

Summary Printout Header	Summary.	Summary Printout.	
VistA Questions and Answers	Only added to the CPRS Note that is sent to VistA. It occurs last, above the CPRS footer.	Generates the VistA question and answer text which is included in the CPRS Note.	Module

5. Managing modules and questions

Editing questions is managed in the Module editor. These actions are available on a given module:

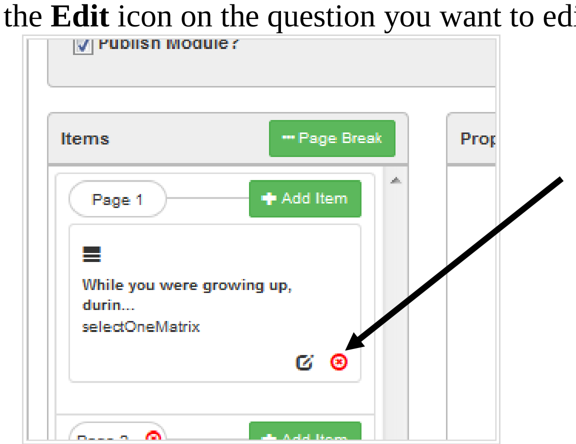
- Add a question to a page by clicking the **Add Item** button on the page.
- Edit a question by clicking the **Edit** icon for the question.
- Delete a question from a page by clicking the **X** button for the question.
- Change the order of a question by dragging and dropping it around in the same page.
- Change the page a question is located in, by dragging and dropping the question from its current position to a position on another page.

5.1. Choosing a question type

Different kinds of questions require different formatting. For example, you may want to structure a birth date question to only accept numeric input. For another question, you may want to provide a scale the Veteran can select from, such as a pain scale. See Appendix B – Choosing a Question Type, for comprehensive guidance in choosing a question type that will format both questions and answers the way you want them.

5.2. Editing a question

1. On the Editors page, click **Edit Module**.
   The Module Selection page opens.
2. Click the Edit icon on the module you want to change questions for.
   The Manage Module page opens for that module.
3. Click the **Edit** icon on the question you want to edit. Example:



   The Properties panel updates with the current settings for the question.

4. Edit the settings for the question.
    - Each question can have its question text updated.
    - Most questions have a Variable Name field which must be set and is the name used throughout the system for this question and additionally, in the case of Select Multi questions, answers.
    - Questions have a Required check box. Select (check) the check box if you want to force the Veteran to answer the question before proceeding.
    - Questions have a PPI check box. Select (check) the check box if the question contains Protected Personal Information (PPI).
    - If the module is a Mental Health Assistant (MHA, a VistA application) module and the question being edited is a Select One or Select One Matrix question, then the question can be set as Is MHA? by selecting the Is MHA? check box.

    Important! If setting a question to **Is MHA?**, contact a Clinical Applications Coordinator in the VA's Informatics Department and request an "MHA definition file" from which you can obtain the correct MHA values.

    Warning: If a question is set as Is MHA?, each of its answers can have an MHA value set for it. Obtain and use these values, as incorrect values can cause unspecified potential data loss.
5. After making your question edits for the module, click **Save**.
   A banner tells you the module saved successfully.

5.3. Adding a question to a module

1. Click **+Add Item**.
   The Properties section displays question types.
2. Select a question type from the Properties section, then click **Next**.
3. Enter the question text, then select the options and fill in the text as appropriate, depending on the type of question chosen.
4. Click **Save**.
   A banner confirms the module has been saved.

5.4. Editing a module question

1. Click the **Edit** icon for the question you want to modify.
2. Make your changes in the **Properties** section.
3. Click **Save**.
   A banner confirms the module has been saved.

5.5. Deleting a question from a module

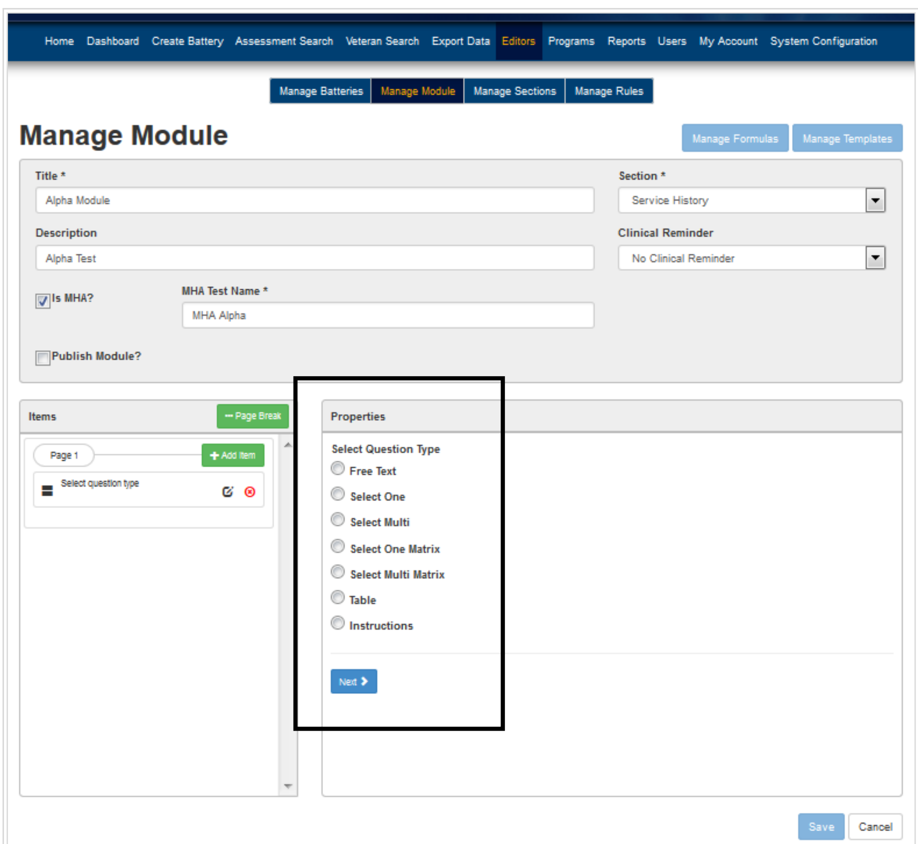
1. Click the **Delete** icon for the question you want to remove.
   A pop-up confirmation window opens.
2. Click **OK**.
   A banner confirms the module has been saved.

5.6. Creating a new module

1. From the Home page, click **Editors**, then click **New Module** in the Module section.
   The Manage Module page opens.
2. Type the module title and description in the **Title** and **Description** fields, then select a section from the **Section** drop-down list to assign this module to.
3. If the module is a Clinical Reminder, select the correct one from the **Clinical Reminder** list.
4. If necessary, click to select the **Is MHA?** check box, then type the name of the MHA test in the **MHA Test Name** field that opens.
   Options to set MHA values are added to the relevant questions and answers.

   Note: The Publish Module? check box is defaulted to clear (not checked). It is best to keep a module unpublished until it is complete. After the module is complete, checking the Publish Module? check box will make it available to VA staff.
5. In the Items section, click **Page Break**.
   The new page appears in the Items section.
6. Click **Add Item** next to the page number.
   A section opens in the Properties pane for choosing your question type (shown below).

   Note: For guidance choosing the question type, see *Appendix B – Choosing a Question Type.*

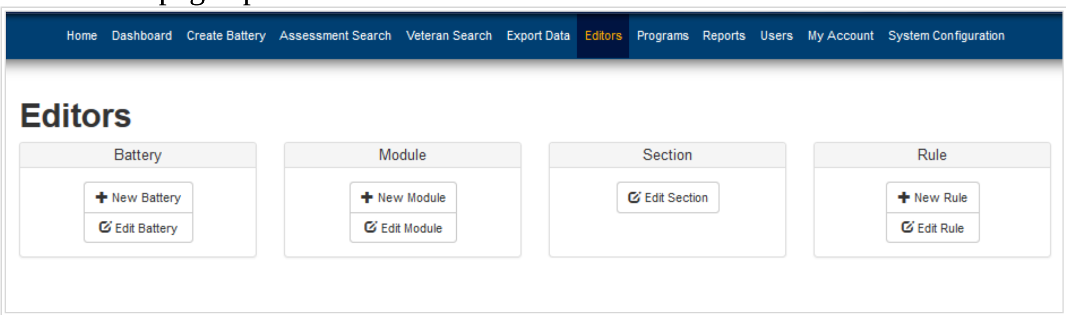


7. Click the question type you want for the item, then click **Next**.
   The Properties area displays options for the question you chose.
8. In the Properties section, type the question in the Question Text field. If applicable, enter the variable name for the question, then complete the options for the question.
9. If you want to add additional questions to the page, **GO TO STEP 5**.
10. If you want to add additional pages, **GO TO STEP 4**.
11. When you are finished setting up the pages and question properties, click **Save**.
    A banner confirms the new module was saved.

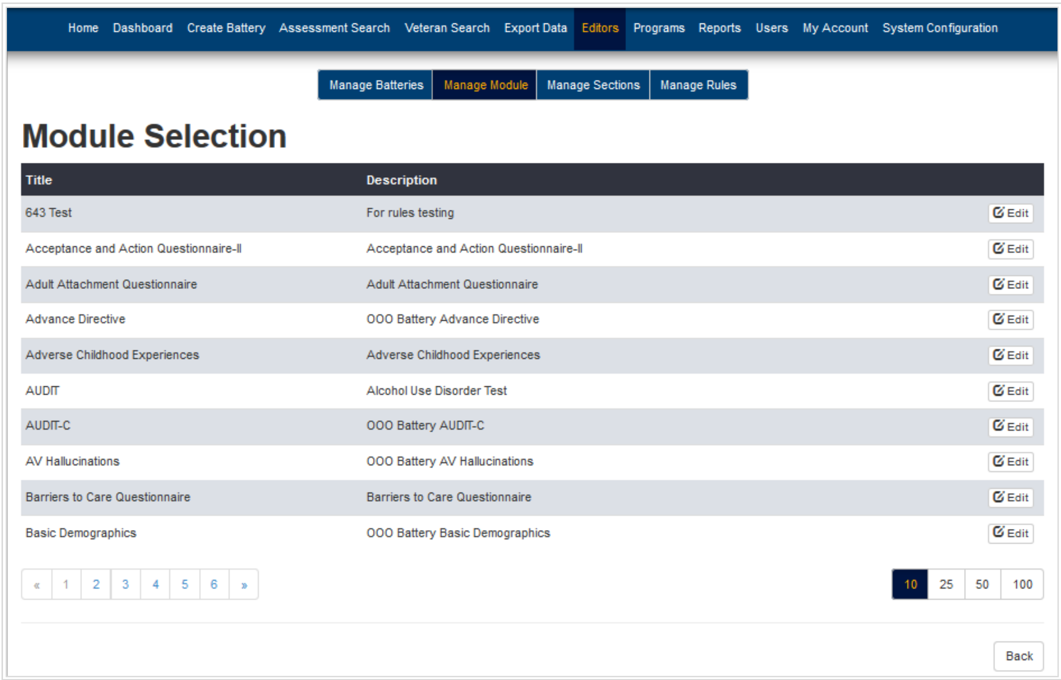
    Note: A page with no items will be automatically deleted when the module is saved.
12. Click **Manage Sections**, then update where the module is placed within its section, so that the module appears in the correct order.
13. Click **Save**.
    A banner tells you the sections were saved.

5.7. Editing a module

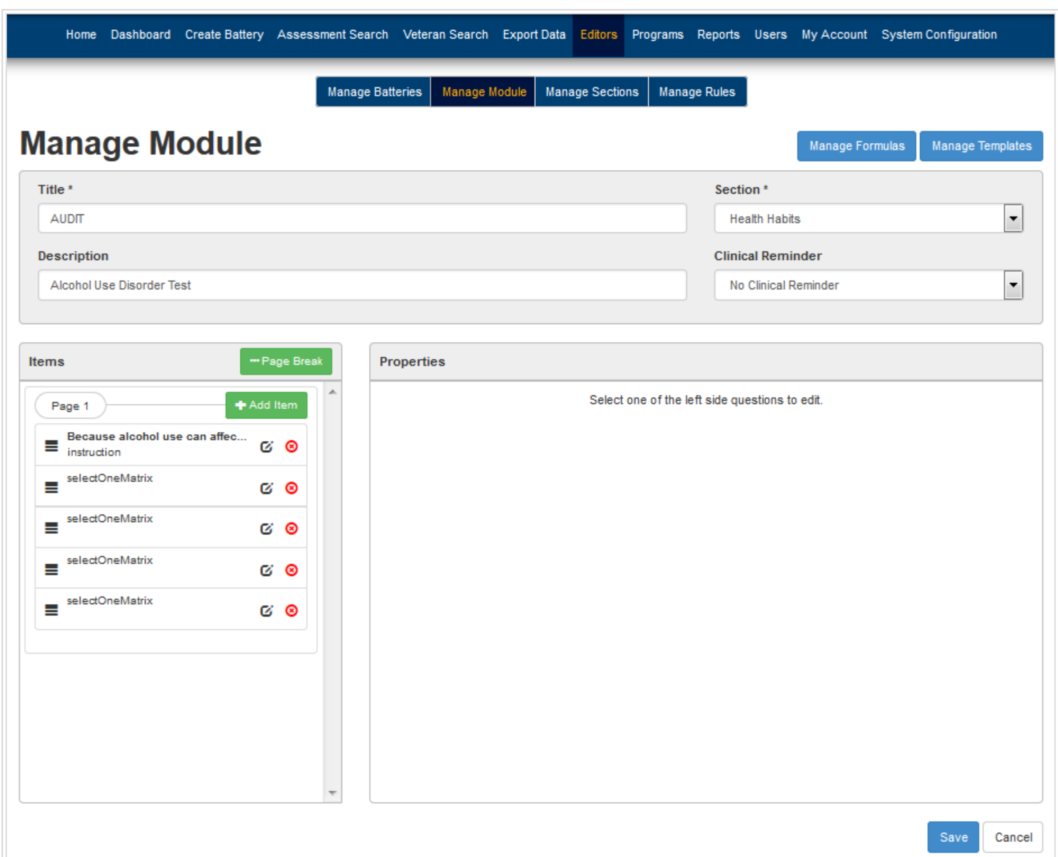
1. On the main menu bar, click **Editors**.
   The Editors page opens.



2. In the Module section, click **Edit Module**.
   The Module Selection page opens.



3. Click **Edit** next to the module in the list that you want to edit.
   The Manage Module page opens for that module.

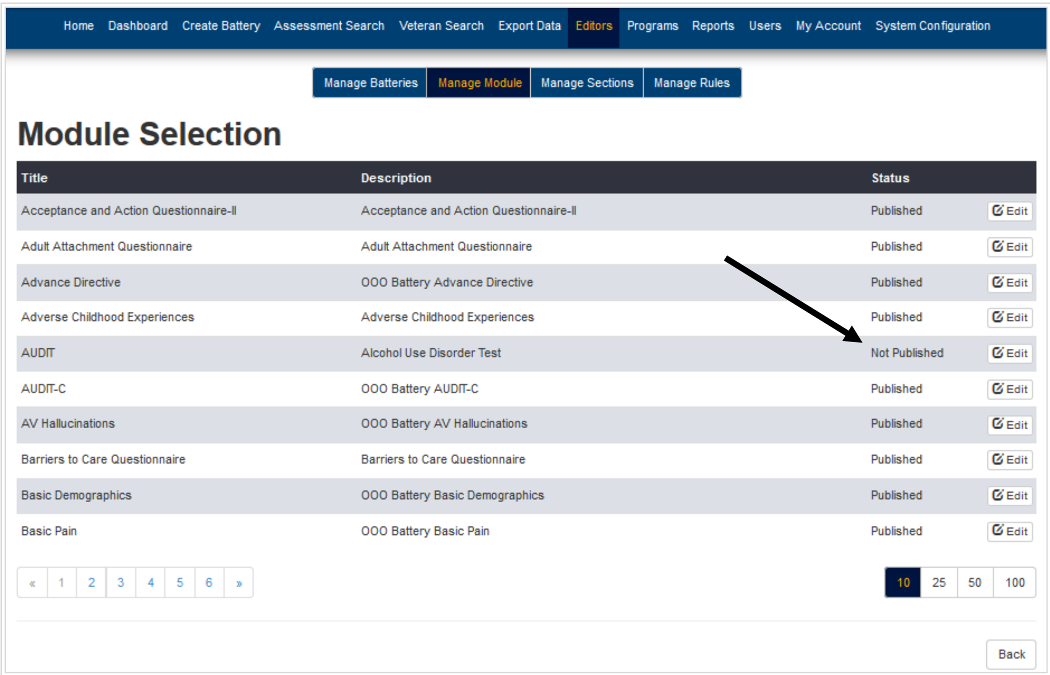


4. Change or add the information for the module, then click **Save**.
   The system tells you the module has been saved successfully.

5.8. Unpublishing a module

As such, a module cannot be deleted, because its components may be needed in other places. However, if you need to remove a module, you can unpublish it. This will keep it from appearing in the module list that clinicians and assistants see when they log in and click the Create Battery tab.

1. On the Editors page, click **Edit Module**.
   The Module Selection page opens listing the modules.
2. Click **Edit** next to the module you want to unpublish.
   The Manage Module page opens, showing a Publish Module? check box.
3. Clear the **Publish Module?** check box, then click **Save**.
   The module displays as Not Published in the Module Selection page for the HSTA:

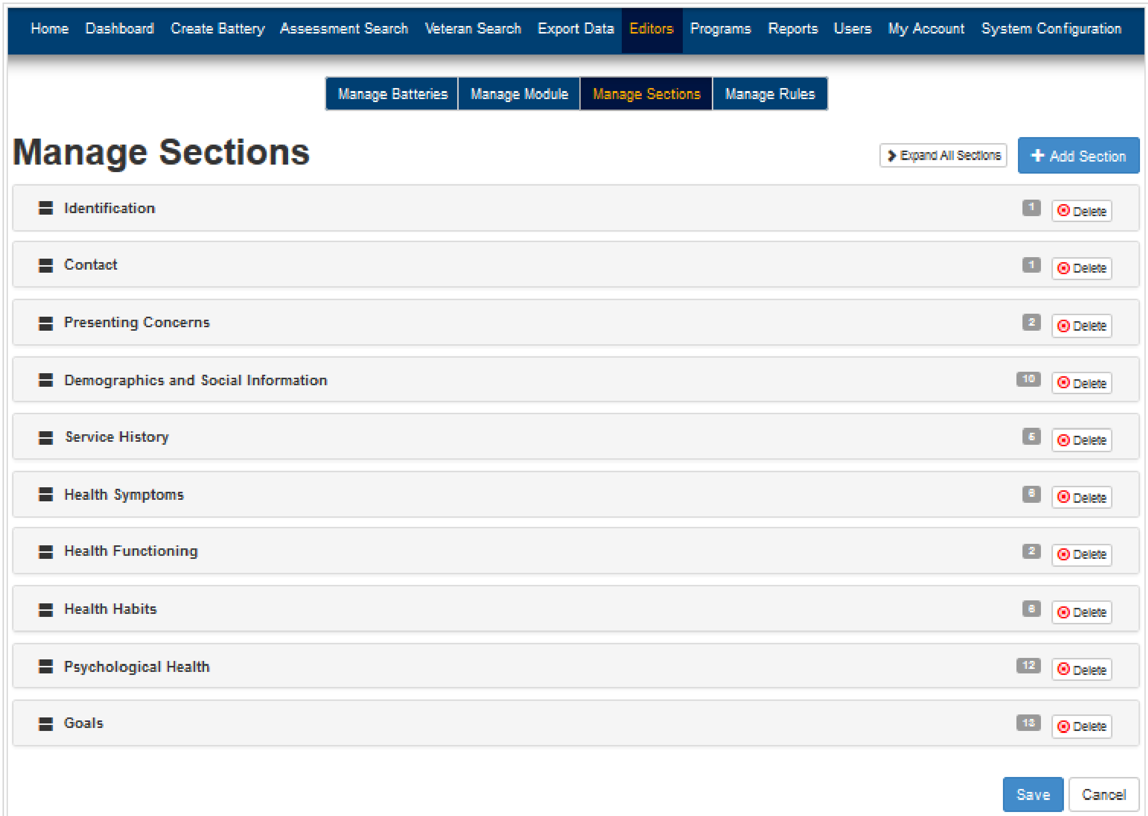


The unpublished module does not display for the clinician or assistant roles.

6. Managing sections

6.1. Adding a section

1. On the Editors page, click **Edit Section**.
   The Manage Sections page opens.



2. Click **+Add Section**.
   A new section appears, named Enter New Section.
3. Type a name and description for the new section, then drag in the modules you want from other sections.
   The dragged modules appear in your new section.
4. If you want them in a different order, drag to rearrange.
5. Click **Save**.
   A banner tells you the sections saved successfully.

6.2. Editing a section

1. On the Editors page, click **Edit Section**.
   The Manage Sections page opens.
2. Click the section name, then make your changes in the section's Name and-or Description fields that open.
3. Click to open the module's sections, then drag the modules you want to add or remove into or out of the **Collapse Module(s)** list.

   Note: You can view the details of all sections by clicking **Expand All Sections**.
4. Click **Save**.
   A banner tells you the sections saved successfully.

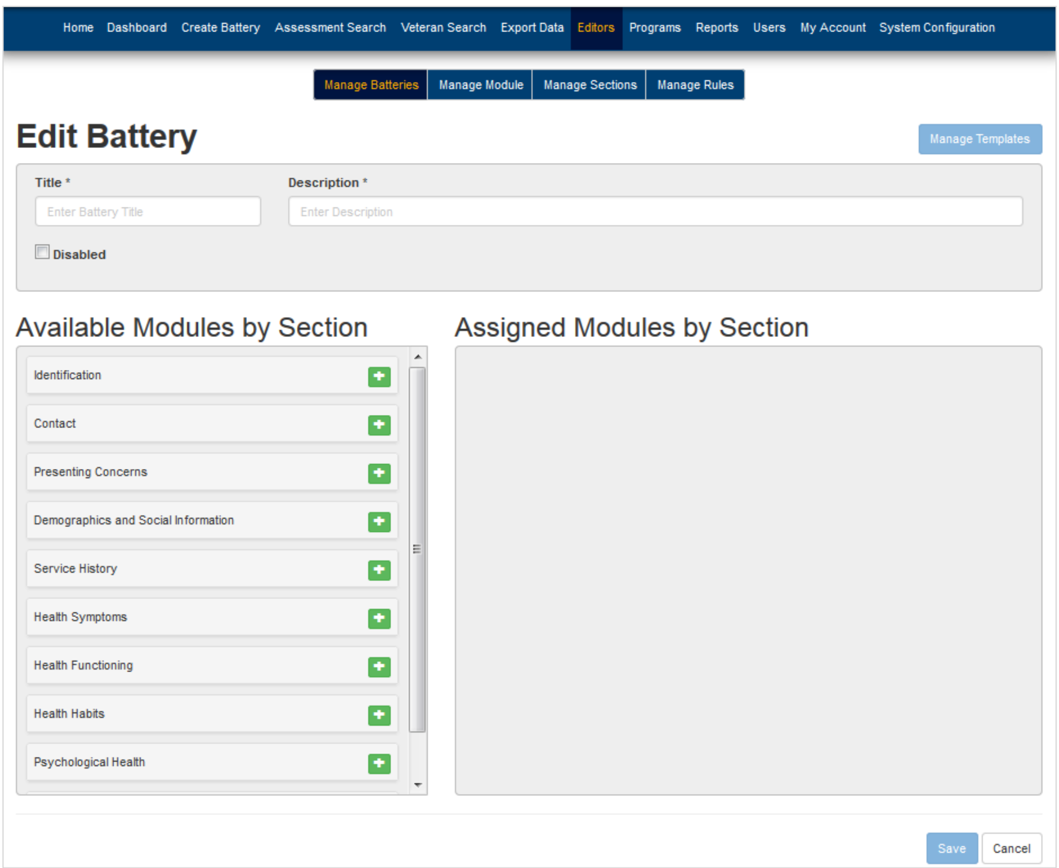
6.3. Deleting a section

1. Click the section name.
   The modules list opens showing the modules in the section.
2. Drag and drop the modules to other sections. The system requires you to remove modules before it will allow you to delete a section.
3. Click the **Delete** icon for the section.
   A banner confirms the section is marked for deletion.
4. Click **Save**.
   A banner confirms the deletion.

7. Managing batteries

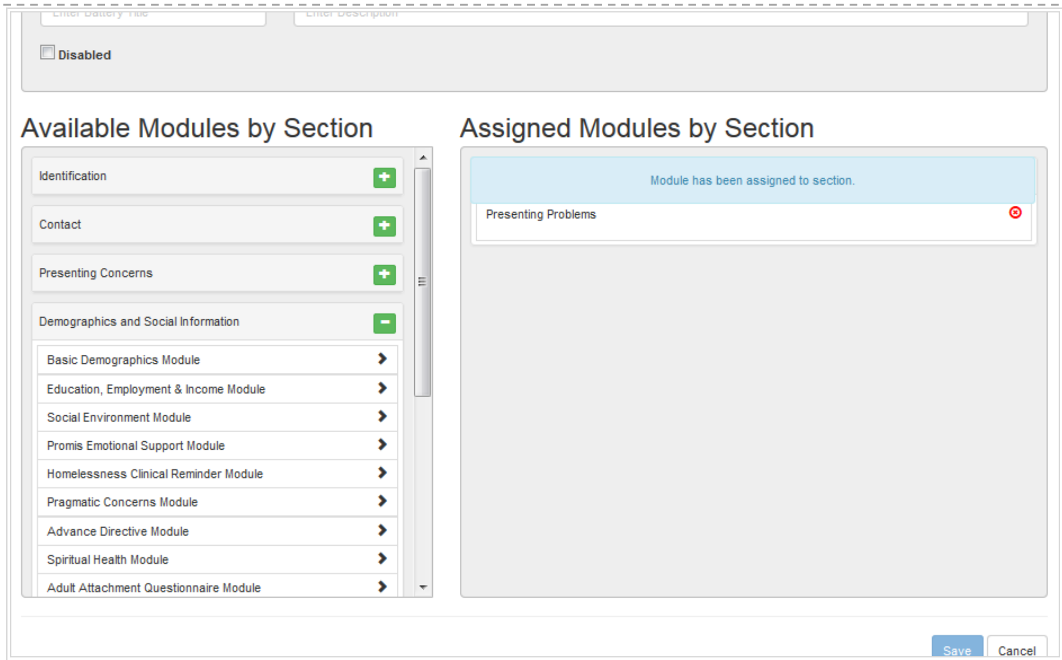
7.1. Creating a new battery from the Editors page

1. On the Editors page, click **New Battery** in the Battery section.
   The Edit Battery page opens.



2. Type a title and description, then click each section type's plus sign icon.
   The modules associated with that section open below the section type.
3. Click > for the module you want to assign to your new battery.
   The module moves into the Assigned Modules by Section area and a banner confirms

the assignment.

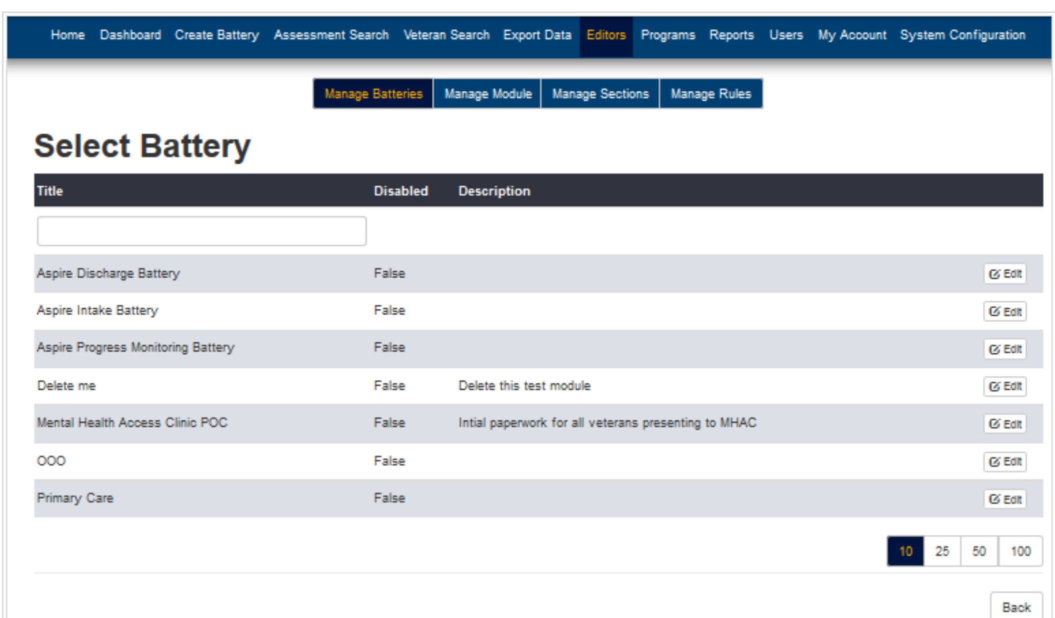


4. Click **Save**.
   The system returns you to the Select Battery page.

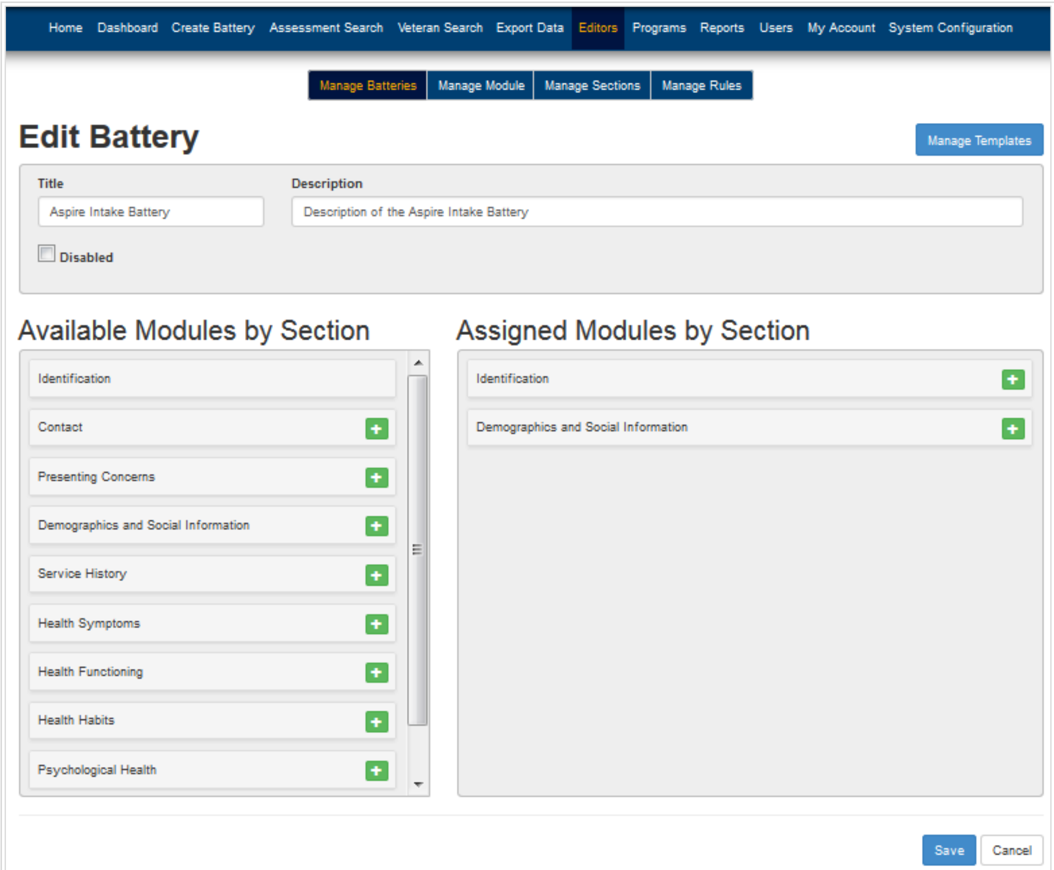
   Note: The battery you just created will not appear on the Select Battery page until that page is closed and reopened.

7.2. Editing a battery

1. On the Editors page, click **Edit Battery** in the Battery section.
   The Select Battery page opens.



2. Click the **Edit** icon next to the battery that you want to modify.
The Edit Battery page opens.



3. If you want to change the title or description of the battery, type the new information in the Title and Description fields.

4. If you want to add a section to the battery, click **+** for the section type, then click **>** for the modules you want to add.
Each module selected moves into the Assigned Modules by Section area.

5. If you want to remove a module assigned to a section, in the Assigned Modules by Section area, click **+** for the section type containing the module you want to remove, then click the **Delete icon** for that module.
The module is removed, and returns to the Available Modules by Section area.

6. Click **Save**.
The system returns you to the Select Battery page.

Note: The edits you just made will not appear on the Select Battery page until the page is closed and reopened.

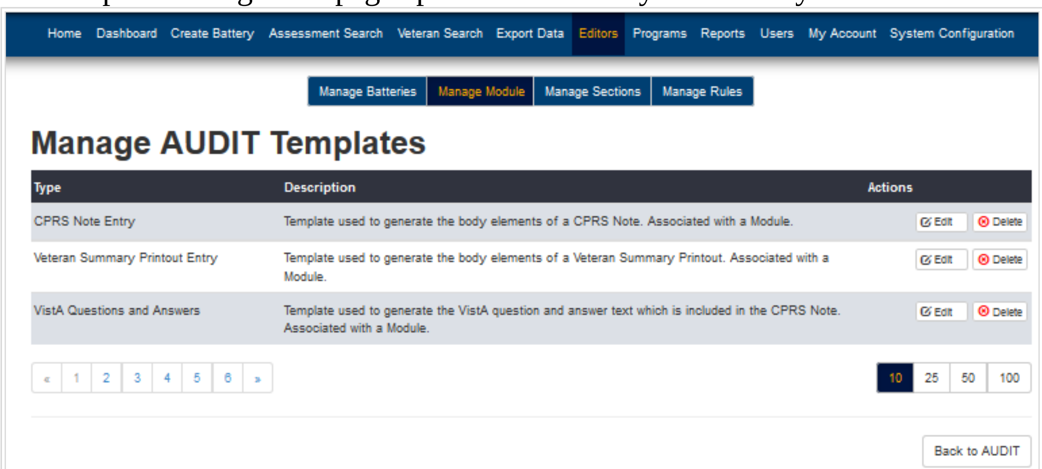
8. Managing templates

8.1. Modifying a template

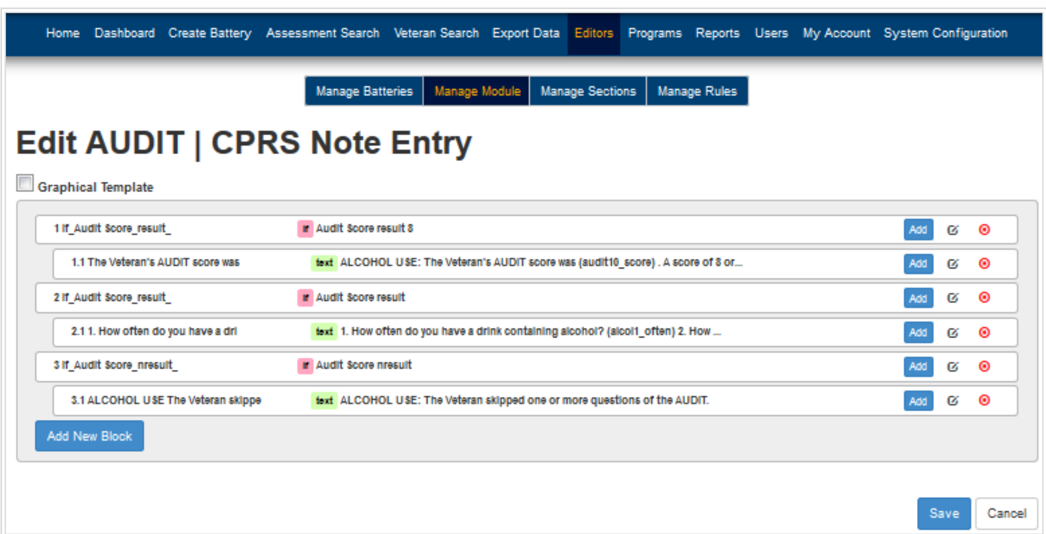
Template management functions can be accessed from by clicking the Edit Battery or Edit Module icons on the Editors page, or by clicking Manage Batteries or Manage Module on the Module Selection or Select Battery pages.

Note: CPRS strips HTML tags out of the template, so HTML formatting will be removed. When creating templates, use standard Word formatting functions, not HTML tags.

1. Open the Battery or modules list by clicking the **Edit Battery** or the **Edit Module** icon on the Editors page.
2. Click **Edit** next to the battery or module whose template you want to modify.
3. Click **Manage Templates** on the edit page that opens.
   The template management page opens for the battery or module you selected to edit.



4. Click **Edit** for the template you want to modify.
   The options available to you depend on the type of template you're editing. Here is an example of a CPRS Note Entry:



If the template question and answers item has an edit icon next to it, clicking the icon opens a pop-up window in which you can change the block name, block type, and the Boolean expression associated with the question by clicking the options buttons, selecting from drop-down menus, and entering values, then clicking Insert.

If the template question and answers item has an Add button next to it, clicking Add opens a pop-up window in which you can add the block name, block type, and the Boolean expression associated with the question by clicking the options buttons, selecting from drop-down menus, and entering values, then clicking Insert.

8.2. Creating a template for a module or a battery

Each module or battery can have a template associated with it.

IMPORTANT! A battery or module must have already been created before a template can be associated with it.

1. On the Editors page, click **Edit Battery** or **Edit Modul**e, as appropriate.
   The Select Battery or Module Selection page opens.
2. Click **Edit** next to the battery or module that you want to associate a template with.
   The Edit Battery or Manage Module page opens.
3. Click **Manage Templates**.
   The page lists the template forms available for the battery or module you chose. A maximum of one template can be defined for each type. Templates that have already been created appear on the template management pages with **Edit** buttons. Templates that have not been created appear with **Create** buttons.
4. Click **Create** in the row you want.
   A page opens from which you can add a new block to that template type.
5. Click **Add New Block**.
   The block editor displays.
6. Select the block type you want. The options are dynamically selected depending on where the block is being added. All possible options are:
   - **If** – this is the beginning of a series of condition blocks. This block consists of a Boolean expression which is edited by the condition editor.
   - **If else** – this must be a child of an If condition and it will be evaluated only if the parental If (or Ifs) above it are false.
   - **Else** – this block's children will be included if all If blocks are false. It is the default case.
   - **Text** – this block allows for a body of text to be emitted during the template rendering process. So anything in a text block will be included. A text block can contain formatting and variables.
   - **Table** – this block is associated with a Table question and allows for operations across all entries of a table question.
7. Add the block name, then set the desired settings based on block type, then click **Insert**.
   The new block is inserted at the top level of the hierarchy.
8. If you want to add additional blocks, **GO TO STEP 5**.

9. If you want to add a block as the child of another block, click the **Add** button for the block you'd like to add a child to, then **GO TO STEP 6**.
10. When you are finished setting up the template, click **Save**.

8.3. Using the template editor

The template editor consists of:

- a check box called "Graphical Template" which allows the template to include data visualization of a system variable. For details, see the section Creating a graphical template.
- an area which shows the current template blocks contained in the template
- an Add New Block button

Actions available in the template editor are:

- Mark the template as graphical by selecting the **Graphical Template** check box.
- Add a new block to the bottom of the list of all blocks by clicking the **Add New Block** button.
- Add a new block as a child of another block by clicking the **Add** button located on the right of each block.
- Edit a block by clicking the **Edit** icon located on the right of each block between the Add and Delete buttons.
- Delete a block by clicking the **Delete** button located on the far right of each block. (Deleting a block will delete all of its child blocks as well.)
- Drag-and-Drop a block to another location.

8.4. To add a new block to the bottom of the list of template blocks

1. Click **Add New Block**.
   The Block Editor dialog appears.

   Note: The Block Name field is optional and will be auto-generated if nothing is entered.
2. Select the type of block to be created. Possible block types are: text, condition, and table.
3. Follow the corresponding block type-related step, then click **Insert** to add the block to the bottom of the template.

8.5. To add a new child block

The results of a child block depend on the type of parent being added to, and the type of child block being added. For example, if the parent block is an IF block and the child block is a Text block, then that child text block will only be included in the rendered text if the IF block's condition is true.

1. Click the **Add** button for a given block.
   The Block Editor dialog appears.

   Note: The Block Name field is optional and will be auto-generated if nothing is entered.
2. Select the type of block to be created. Possible block types are: text, condition, and table.
3. Follow the corresponding block type editing steps (below).

4. Click **Insert** to add the block to the bottom of the template.

8.6. To edit a block

1. Click the block's **Edit** icon.
   The Block Editor dialog is shown. (The *type* of block is not editable.)
2. Depending on the block type, follow the corresponding steps: text, condition, and table.
3. Click **Insert**.
   The Block Editor dialog is hidden and the template is shown.

8.7. To delete a block

1. If you want to keep any of the block's child blocks, move them to another location. (See *To move a block*, below.)
2. Click the **Delete** icon on the right of the block.
   The block is removed along with any child blocks.

   Note: If a block is deleted in error, clicking the Cancel template editor button will undo all changes to the template, including the deletion of the block.

8.8. To move a block

1. Click and hold the mouse button down on the block.
2. Drag the block to the desired destination and release. Possible destinations include somewhere in the top of the list of blocks, or as a child of another block.

8.9. Creating a graphical template

Any template can be turned into a graphical template. A graphical template will be shown with the current assessment score, a graphical visualization of the Veteran's derived value for a given variable, and some template text. The graphical visualization is driven by a selected variable which is used to pull historical Veteran values for that variable.

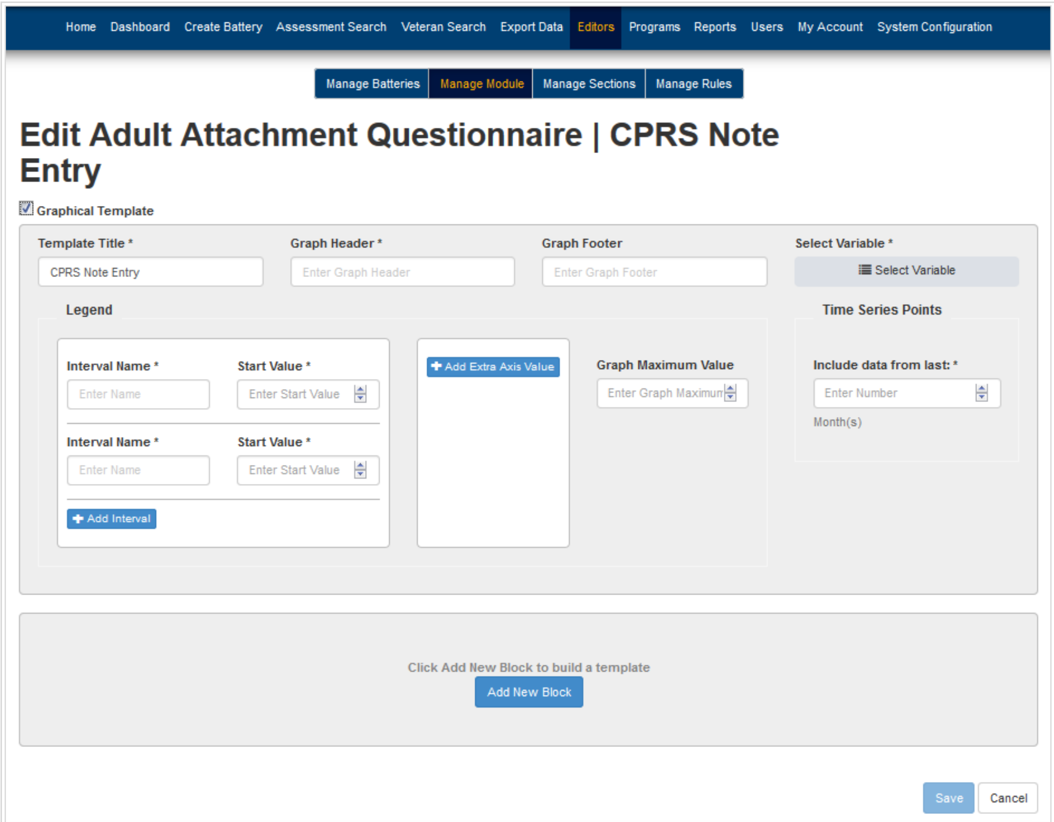
Any module or battery can have a template associated with it.

IMPORTANT! A battery or module must have already been created before a template can be associated with it.

1. On the Editors page, click **Edit Battery** or **Edit Modul**e, as appropriate.
   The Select Battery or Module Selection page opens.
2. Click **Edit** next to the battery or module that you want to associate a template with.
   The Edit Battery or Manage Module page opens.
3. Click **Manage Templates**.
   The page lists the template forms available for the battery or module you chose. Only one template can be defined for each type.
   - Templates that have already been created appear with **Edit** buttons.
   - Templates that have not been created appear with **Create** buttons.
4. Click **Create** in the row you want.

A page opens from which you can add a new block to that template type.

5. Select the **Graphical Template** check box.
Graphical template options appear. Example:



6. Fill in the **Template Title***. This will be the text used above the current assessment's value of the variable.
7. Fill in the **Graph Header*** field. This will show directly above the data visualization.
8. If you want a graph footer to show below the data visualization, fill in the **Graph Footer** field.
9. Select the variable to be used to drive the data visualization.
10. Fill in details for at least two intervals. Intervals break up the possible range of values in the data visualization. The interval name is shown in a legend. The Start Value is the initial value for an interval's range. An interval's range ends at any value less than the next interval's Start Value. A maximum of 6 intervals are possible.
11. If you want extra tick marks on the axis responsible for the variable's value, click **Add Extra Axis Value**.
12. If you want to make the last interval start at the interval's Start Value and end at the Graph Maximum Value, place a value in the **Graph Maximum Value** field. Otherwise (if the Graph Maximum Value is left blank), the last interval will consist of a single tick mark at the last interval's Start Value.
13. Click to select a number for the **Include data from last*** field. This sets the number of past months the system will pull from the Veteran's assessment history to provide previous values for the variable.

14. If you want to add additional blocks, click **Add New Block**.
15. Click **Save**.
    You are returned to the Manage Templates page for the battery or module you chose and a banner confirms that your changes were saved. The template you created appears in the list with an Edit and a Delete button.

9. Managing formulas

MHE is designed so that you can add or edit formulas for a module, so that defined formulas can be used in templates and rules. A formula is a mathematical relationship or a set of rules expressed in symbols. Formulas consist of variables (operands) and operators.

For example:
x = a + b where a, x, and b are the operands and the + sign is the operator. This is an attempt to establish a fact that the variable x is equal to the sum of the variables a and b.

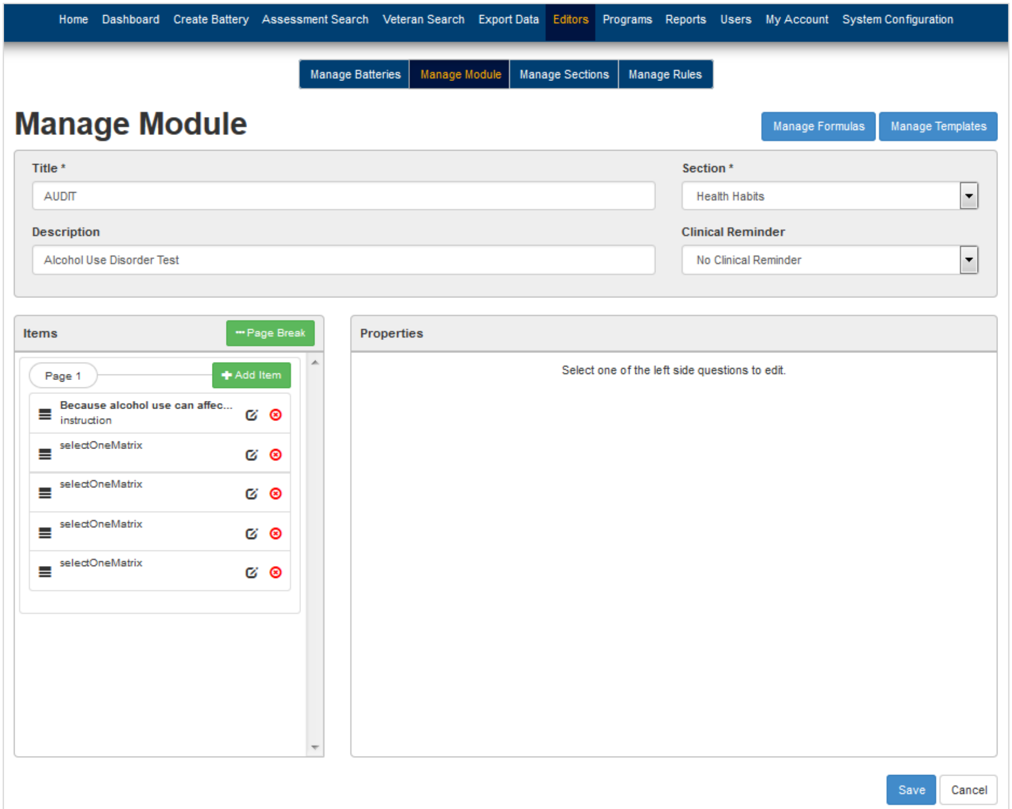
Note: Data should be exported by variable name, so that new variables create new columns.

You can:

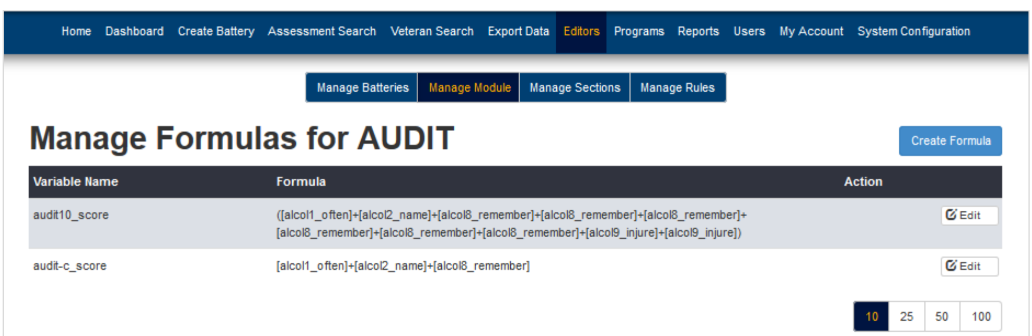
- Create and edit formulas based on variables and operators
- Edit a formula's name and description. The formula name is very important as it will be used in the system within templates, and rules will also use these to trigger some actions. The name of a formula should be brief and should semantically represent the purpose of the formula. It is a best practice to create the name by prefixing it with the module name, an underscore, and then a noun to represent the purpose of the formula.
  For example, some good names are:
  demo_totalheightin, demo_BMI, es_score_promis, health_score_hearing
  health_score_weight DAST_score health_score_phq15 alc_score_audit dep_score_phq9
- Select variables from listings filtered by type. The list can include questions, answers, formula, and custom variables
- Use mathematical operators: + – * / %
- Group parts of the formula using parentheses

9.1. Creating a formula

1. From the Editors' page, click **Edit Module**.
   The Module Selection page opens.
2. Click **Edit** by the module you want to edit.
   The Manage Module page opens for the module you selected.

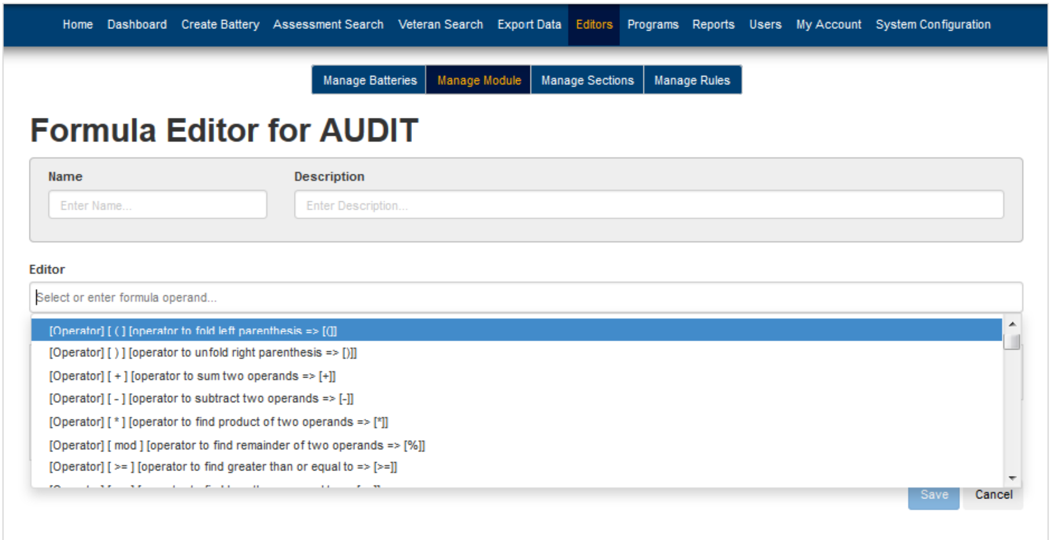


3. Click **Manage Formulas**.
   The Manage Formulas page opens for the module you selected.



4. Click **Create Formula**.
   The Formula Editor opens for the module you selected.
5. Type in a name and description of the formula, if desired.
6. In the **Editor** box, select an operator from the drop-down list or type an operator (plus, minus, division, multi, >=, >, or any math function name like pow, round, or so forth), or an operand (variable name), then wait for the drop-down list to locate one.

   If your operator or word is available as a name or description, select it from the list.



Note: If you type a function that is not available, the parser will use the information you typed (only for an operator or a constant) as a user-defined operator or constant.

- For variables or constants, type the start of the variable or constant name, then select the specific item from the drop down list.
- If the item is not available, click **ENTER** and continue.

7. Click **Ready to Test**.
   A banner confirms the formula is verified
   --OR--
   The formula is not verified and you must re-enter it.
8. Click **Run Test**.
   The system evaluates the formula and replaces each variable with the corresponding value provided. The formula's evaluation is shown in the Result area.
9. If the Save button is enabled, **GO TO STEP 12**.
   If there is a syntactic error in the formula or the values given for variables are invalid, an error message will appear at the top of the page.
10. If the formula requires re-editing, click **Ready to Test**.
    The Editor box becomes active again.
11. Repeat steps as necessary.
    After a successful formula test, the Save button enables.
12. Click **Save**.
    The system verifies that the formula is successful.

9.2. Additional information about formula structure

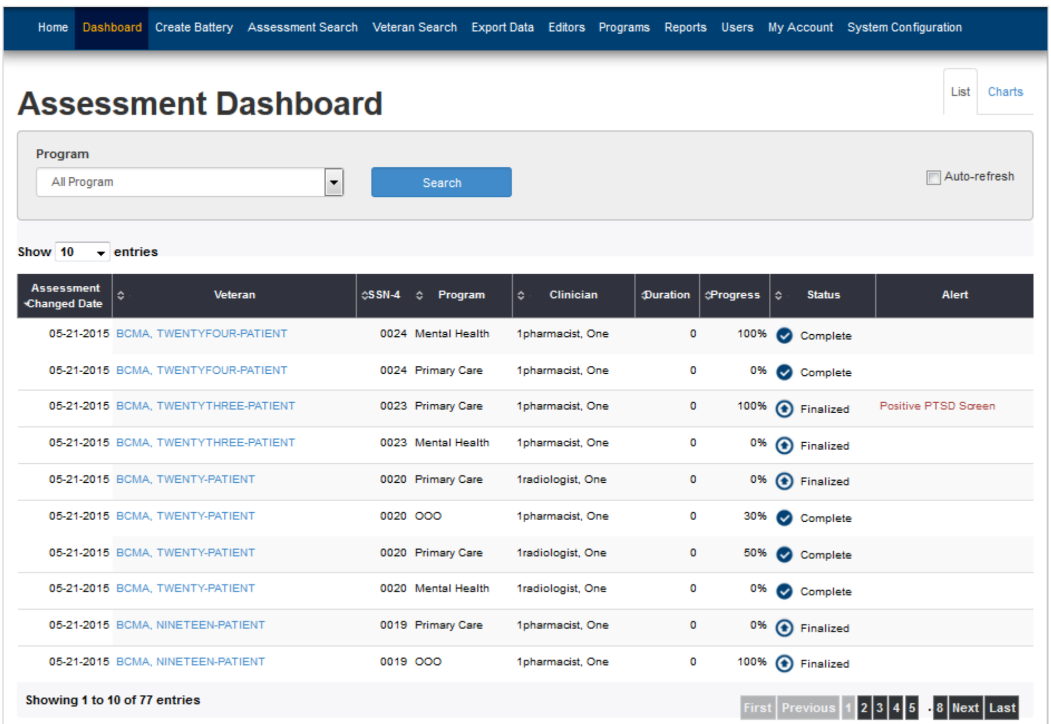
- Spring Expression Language – look for ternary operator, variables, and math functions only. http://docs.spring.io/spring/docs/current/spring-framework-reference/html/expressions.html

- Introduction to Ternary https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Operators/Conditional_Operator

10. Dashboard features

The dashboard allows staff to view the status of ongoing assessments, and upload the results of assessments to VistA.

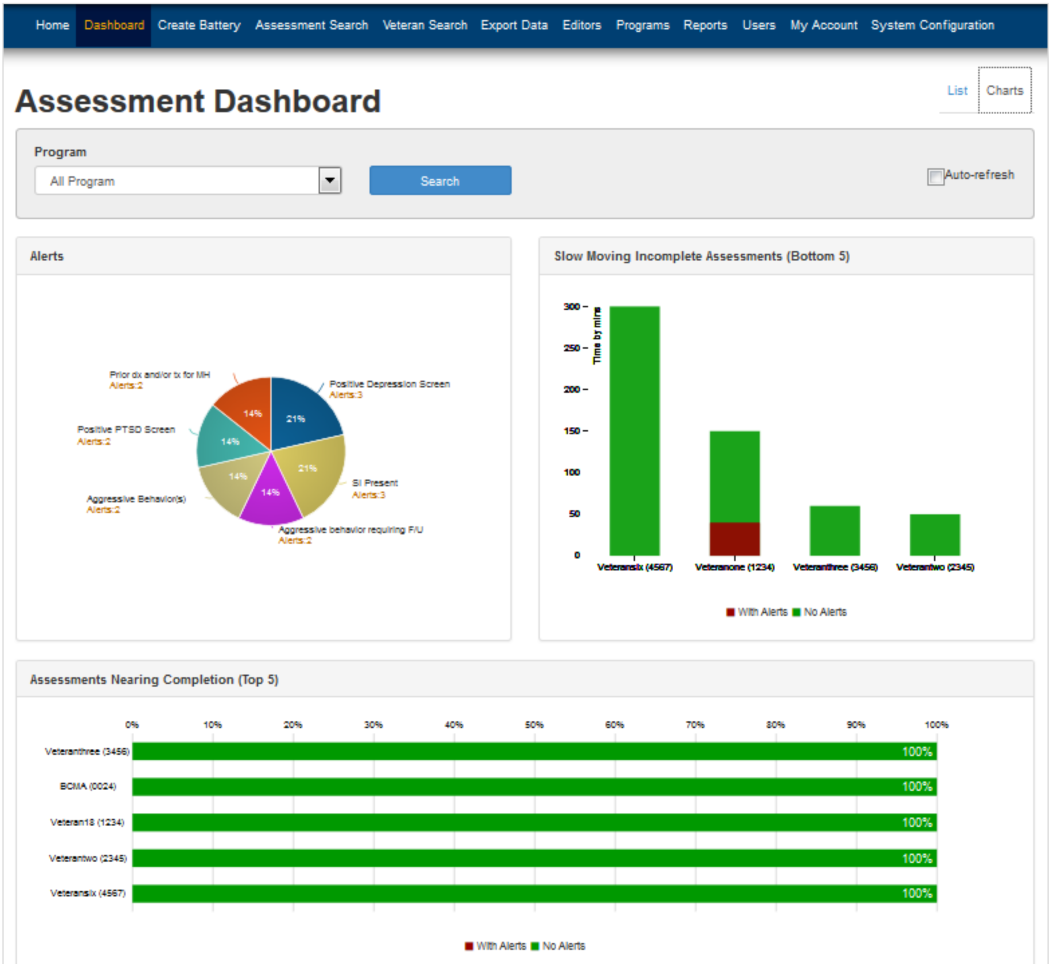
Clicking **Dashboard** on the main menu opens the Assessment Dashboard page in List view.



This page lists Veterans in the system and displays each Veteran's assessment status including progress and alerts. To open a Veteran's assessment summary page, click the Veteran's name.

Tabs are provided for switching between a list view and a chart view:

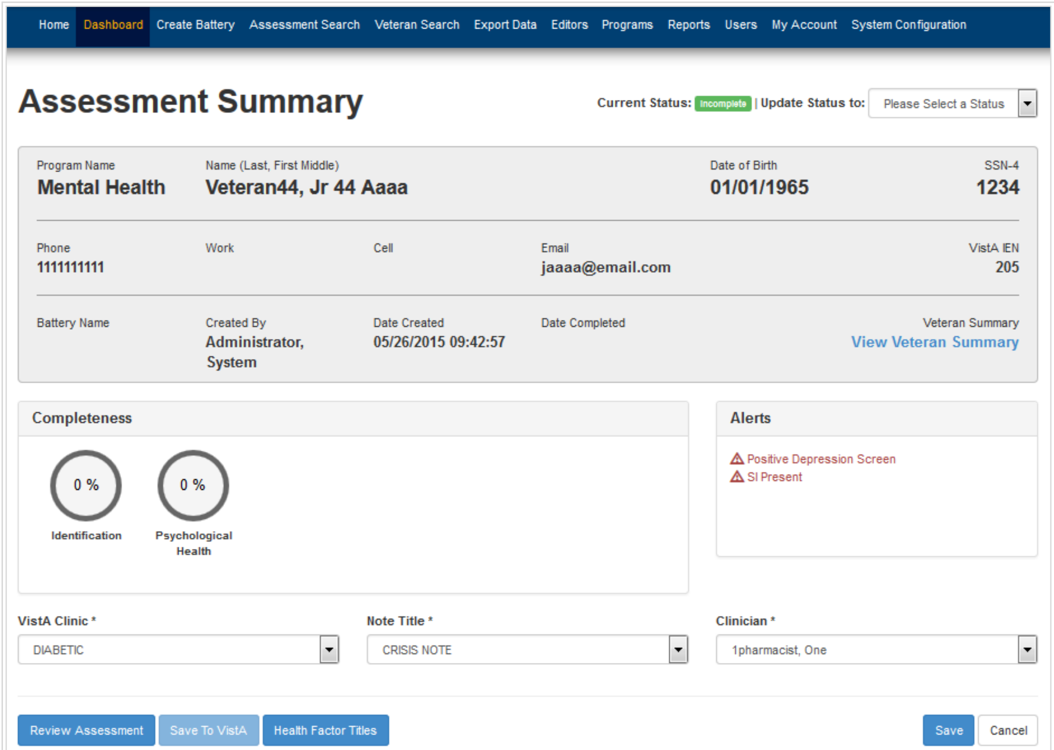
- The List tab displays information as a list of individual Veterans.
- The Charts tab summarizes the assessment program data in pie and bar charts.



When checked, the **Auto-refresh** check box in both views refreshes the page every minute.

10.1. Viewing assessments

1. Select the program from the Program drop-down list, then click **Search**.
   The list changes to show the Veterans associated with the program you chose.
2. Click a name on the list.
   The Assessment Summary page opens for the Veteran you chose.

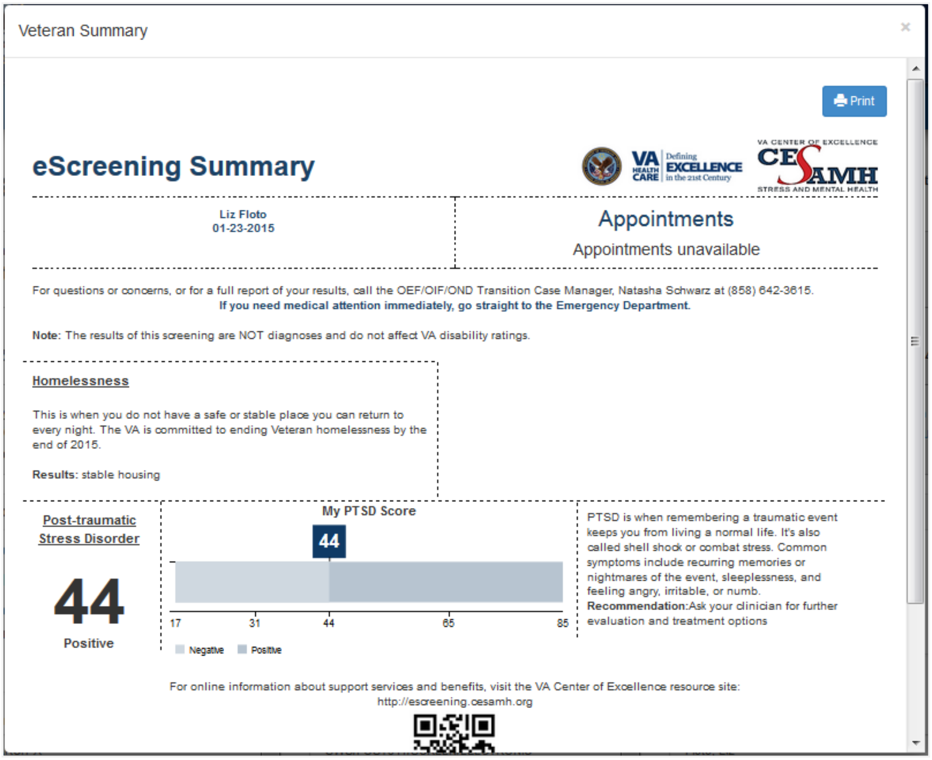


10.2. Updating the status of an assessment summary

1. Click a Veteran's name in the list view of the Assessment Dashboard page.
   The Assessment Summary page opens for the Veteran you chose.
2. Select the new status from the Update Status to: drop-down list, then click **Save**.
   The Current Status: field shows the new status.

10.3. Viewing and printing a Veteran Summary

1. Click a Veteran's name in the list view of the Assessment Dashboard page.
   The Assessment Summary page opens for the Veteran you chose.
2. Click **View Veteran Summary**.
   The eScreening Summary pop-up window opens.



3. If you want to print the summary, click **Print**.

10.4. Reviewing an assessment

1. Click the Veteran's name in the list view of the Assessment Dashboard page.
   The Assessment Summary page opens for the Veteran you chose.
2. Click **Review Assessment**.
   The Review Assessment Preview pop-up window opens showing the preview.

10.5. Viewing health factor titles

1. Click the Veteran's name in the list view of the Assessment Dashboard page.
   The Assessment Summary page opens for the Veteran you chose.
2. Click **Health Factor Titles**.
   The View Health Factors pop-up window displays any titles associated with the Veteran.

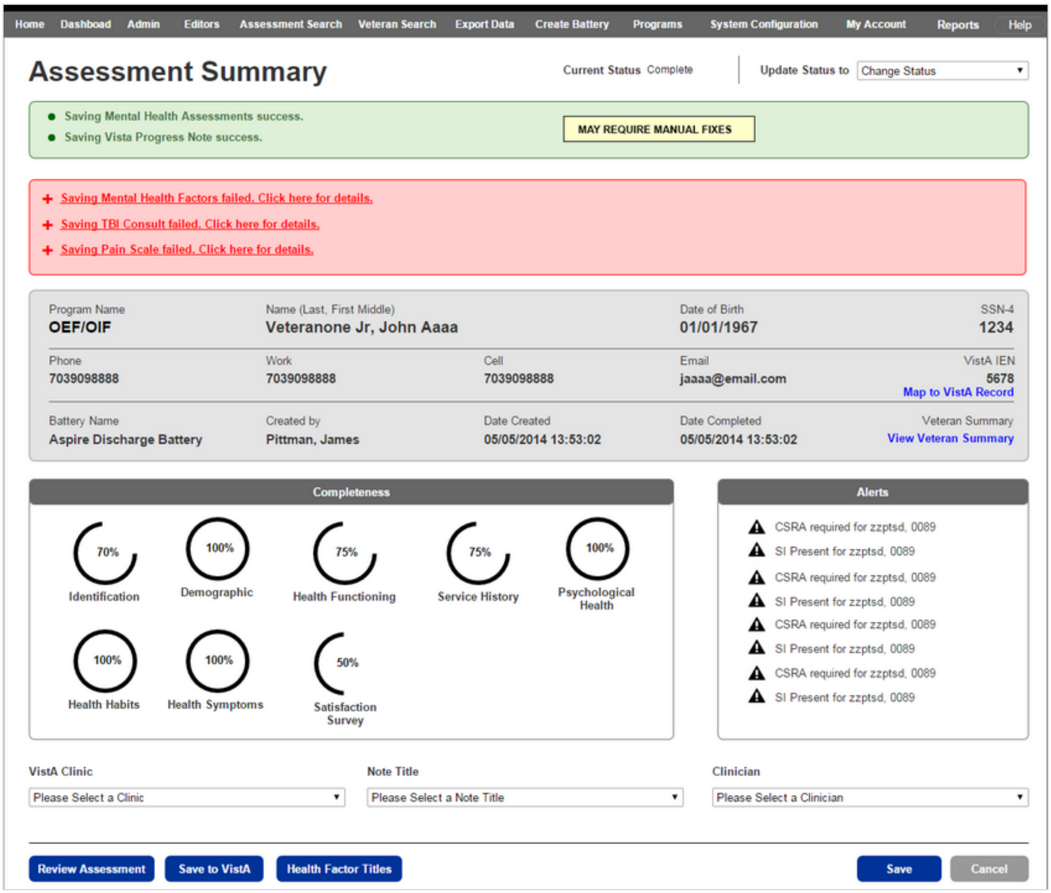
10.6. Changing the clinic, note title, or clinician

1. Click a Veteran's name in the list view of the Assessment Dashboard page.
   The Assessment Summary page opens for the Veteran you chose.
2. Make your selections from the **VistA Clinic**, **Note Title**, and-or **Clinician** drop-down lists, then click **Save**.

10.7. Correcting an error assessment

When an assessment is successfully saved to VistA, the assessment's state is set to Finalized. However, up to five potential errors of transmission can occur during the process. These errors can occur in any combination from one error to all 5. A detailed error message is generated and the assessment’s state is set to “Error”. Typically, saving an assessment to VistA is a clinician or assistant task, and if the process fails, the HSTA has the system permissions to correct the problem.

Here is an example where 2 potential errors did *not* occur and three did. The top (green) section shows the two successful transmissions; the second section (red) lists the 3 errors which occurred:



Correcting an error assessment consists of locating where the errors are and using the editors to fix them by trial and error. After locating the assessment and reading the error to identify from what module or template it originated, review assessments with that element (module or template) that are not broken for examples of what is working, and identify what is not. Next, edit the element that is not working (using the editors) and attempt to Save to VistA again.

Another strategy is to manually create a duplicate assessment with the same values, then modify the duplicate answers until the template will render. Next, change the element using the editor.

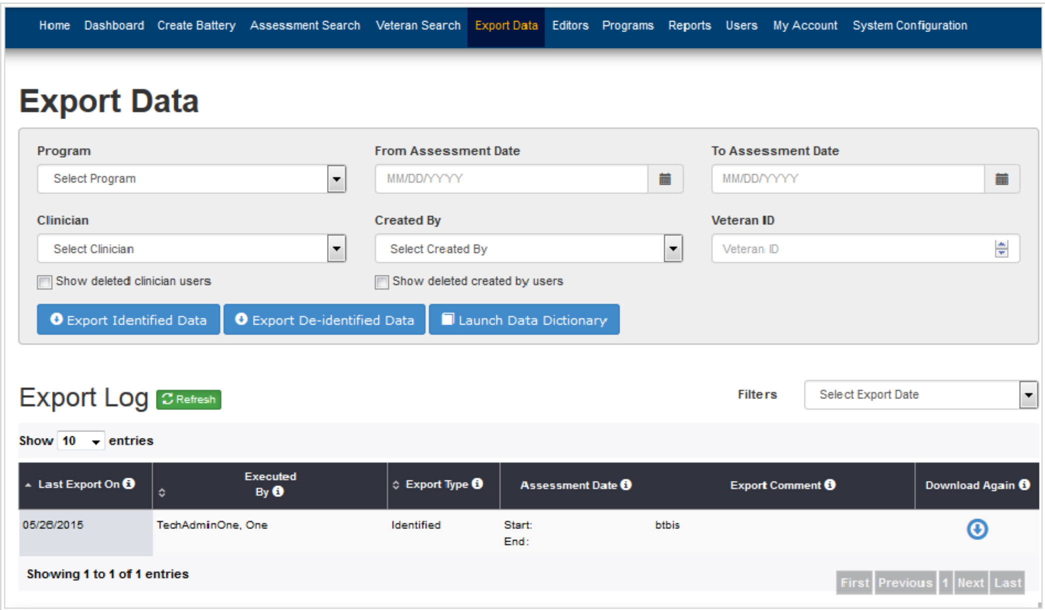
11. Exporting data

Note: The Export Data tab is intended for the CESAMH Consultation & Program Evaluation Administrator (CPEA) role. You will not use it except under certain circumstances, such as when you are working with the CPEA, or have been assigned the CPEA role.

You can either export a new set of data or re-download a previously created data set.

11.1. Exporting a new data set

1. From the Home page, click **Export Data**.
   The Export Data page opens.



2. Select or type the specifications for the data using the drop-down lists, check boxes, and Veteran ID text field.
3. Click either **Export Identified Data** or **Export De-identified Data**, as appropriate.
   A confirmation pop-up window opens.
4. Type a comment for the export.
5. Click **Confirm Export Data Now**.
   The system asks if you want to open or save the .CSV formatted data.
6. If you want to save the data, select your option from the **Save** drop-down list.

   - OR -

   If you want to open the data, click **Open**.
   The data opens in an Excel file.

11.2. Downloading a previously created data set

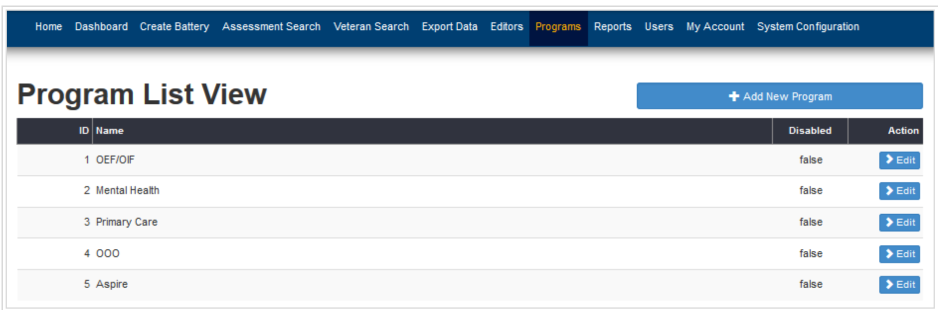
1. If you want to view the exports by date, select the date range from the **Filters** drop-down list.
2. Click the **Download Again** icon for the set you want to download.
   A confirmation pop-up window opens.
3. Type a comment for the export.
4. Click **Confirm Export Data Now**.
   The system asks if you want to open or save the .CSV formatted data.
5. If you want to save the data, select your option from the **Save** drop-down list.

   -OR -

   If you want to open the data, click **Open**.
   The data opens in an Excel file.

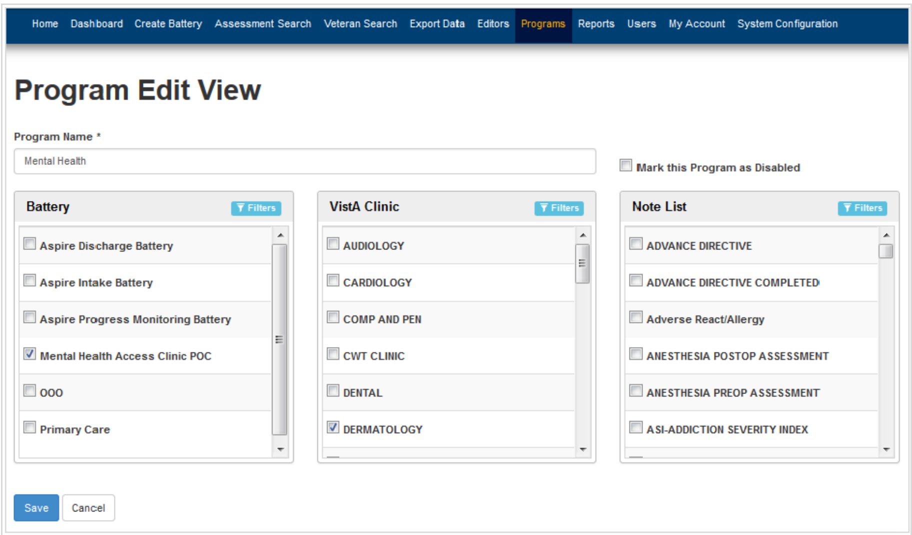
12. Programs

Clicking **Programs** on the main menu bar opens the Program List View page.



12.1. Adding a new program

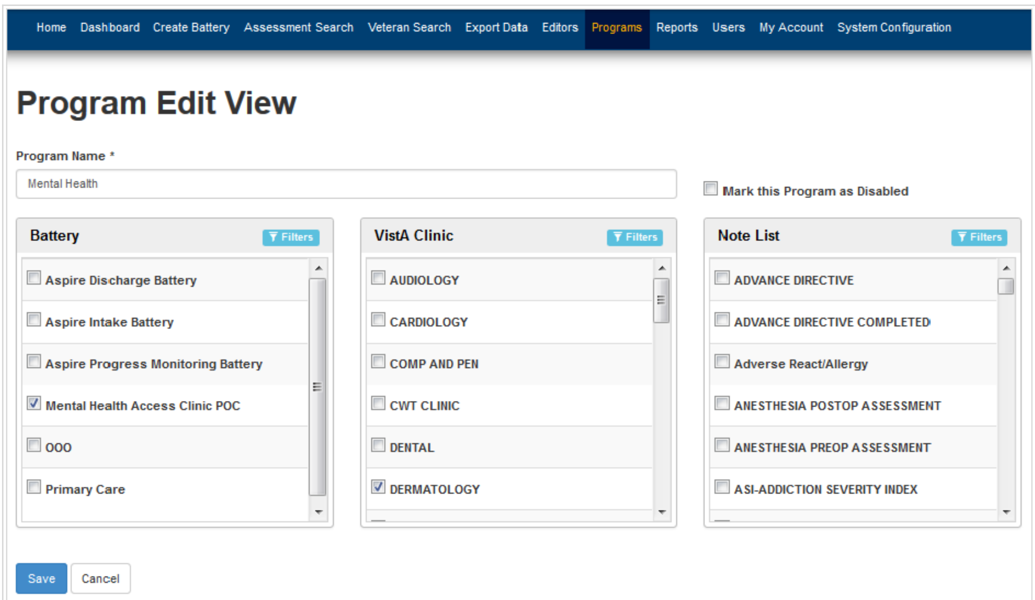
1. Click **+Add New Program**.
   The Program Edit View window opens.



2. Type a name in the Program Name field.
3. Click to select the appropriate check boxes in the **Battery**, **VistA Clinic**, and **Note List** sections.
4. If you want to disable the program, click to select the **Mark this Program as Disabled** check box.
5. Click **Save**.

12.2. Editing a program

1. Click **Edit** for the program you want to modify.
   The program's Program Edit View window opens.



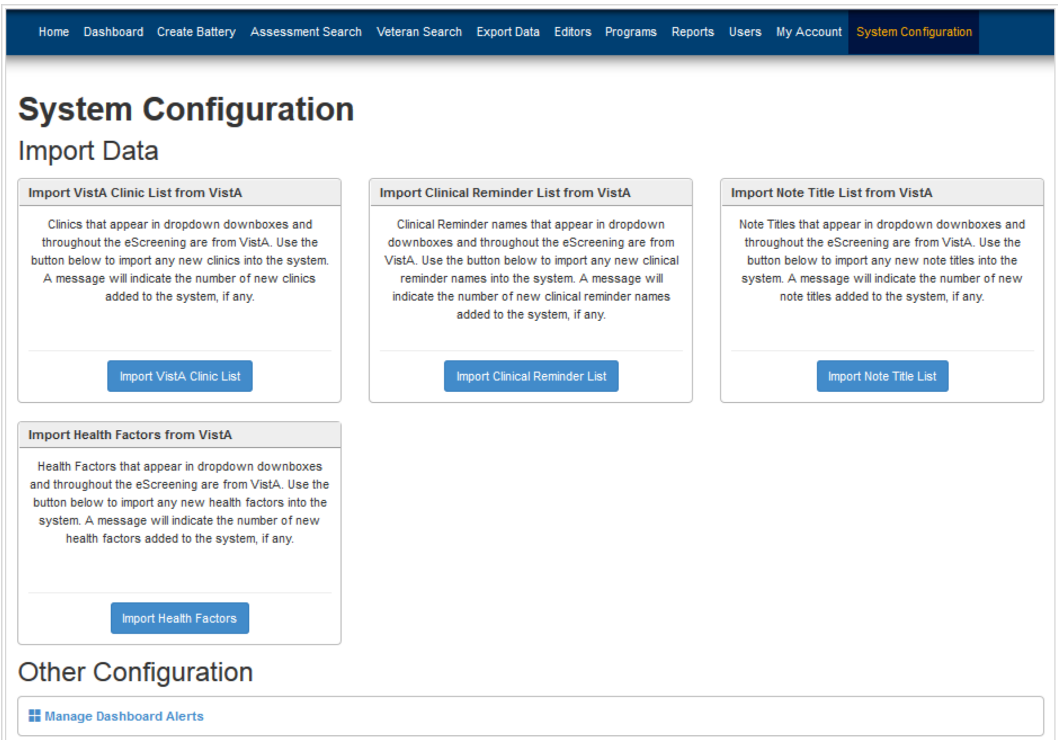
2. Click to select or clear the **Battery**, **VistA Clinic**, and **Note List** check boxes.
   Filters are available to assist in finding the items you want.
3. If you want to disable or enable the program, click to select or clear the **Mark this Program as Disabled** check box.
4. Click **Save**.

13. System configuration

13.1. Importing data

Your site will be given the latest version of the MHE software and data. However, if new clinics were created before the system was set up at your site, the data may incomplete. Updates should be made from the System Configuration Import Data page initially, and then as directed by VA Informatics personnel.

1. Click **System Configuration**.
   The System Configuration Import Data page opens.



2. Click the appropriate import button:
   - **Import VistA Clinic List**
   - **Import Clinical Reminder List**
   - **Import Note Title List**
   - **Import Health Factors**

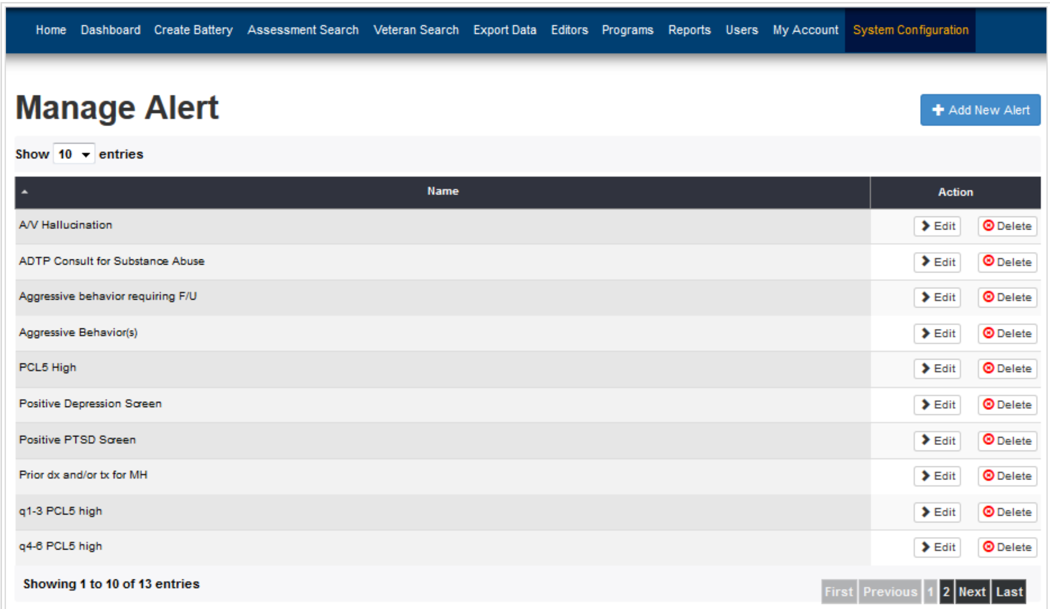
   MHE asks you to confirm the import.

3. Click **Yes**.
   The system imports the records, confirms the import, and tells you how many records were imported.

14. Managing Dashboard Alerts

MHE comes with a set of default alerts that appear to staff when conditions trigger them. The HSTA can modify the names of alerts, delete alerts, and add new ones.

Alerts are configured on the Manage Alert page.



Open the Manage Alert page by clicking **System Configuration**, then clicking **Manage Dashboard Alerts**.

14.1. Editing an alert name

1. From the Manage Alert page, click **Edit** next to the alert you want to modify.
   The Edit Alert page opens.
2. Change the name of the alert, then click **Save**.
   The modified name displays on the Manage Alert page.

14.2. Deleting an alert

1. From the Manage Alert page, click **Delete** next to the alert you want to remove.
   The system asks you to confirm.
2. Click **Delete**.
   The alert is deleted from the Manage Alert page.

14.3. Adding a new alert

1. From the Manage Alert page, click **Add New Alert**.
   The Add Alert page opens.
2. Type the name of the new alert, then click **Save**.
   The new alert appears on the Manage Alerts page.

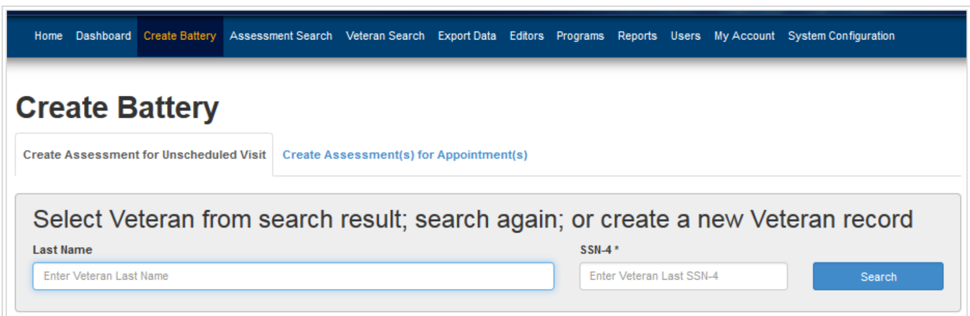
15. Using the Create Battery tab

Before a Veteran can begin eScreening, the HSTA, a clinician, or an assistant must create a battery (assessment) associated with the Veteran's name. This is not the same thing as creating a battery from scratch from the Editors tab, but rather selecting and grouping already-prepared modules available in the software and making them available upon the Veteran signing into a tablet.

Creating batteries this way is not a typical HSTA task. However, you have this permission, and may be called upon if needed. You can create a single battery for a particular Veteran, or create a batch for appointments.

15.1. Creating an assessment for an unscheduled visit

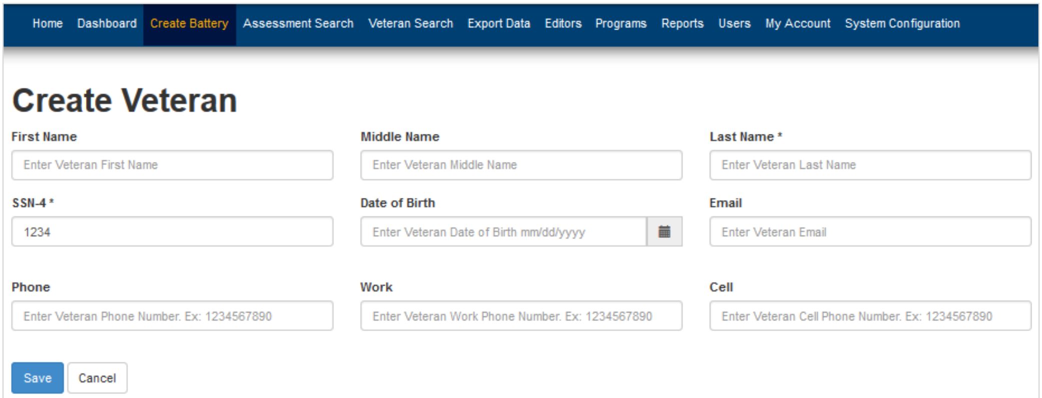
1. From the Home page, click **Create Battery**.
2. The Create Battery page opens.



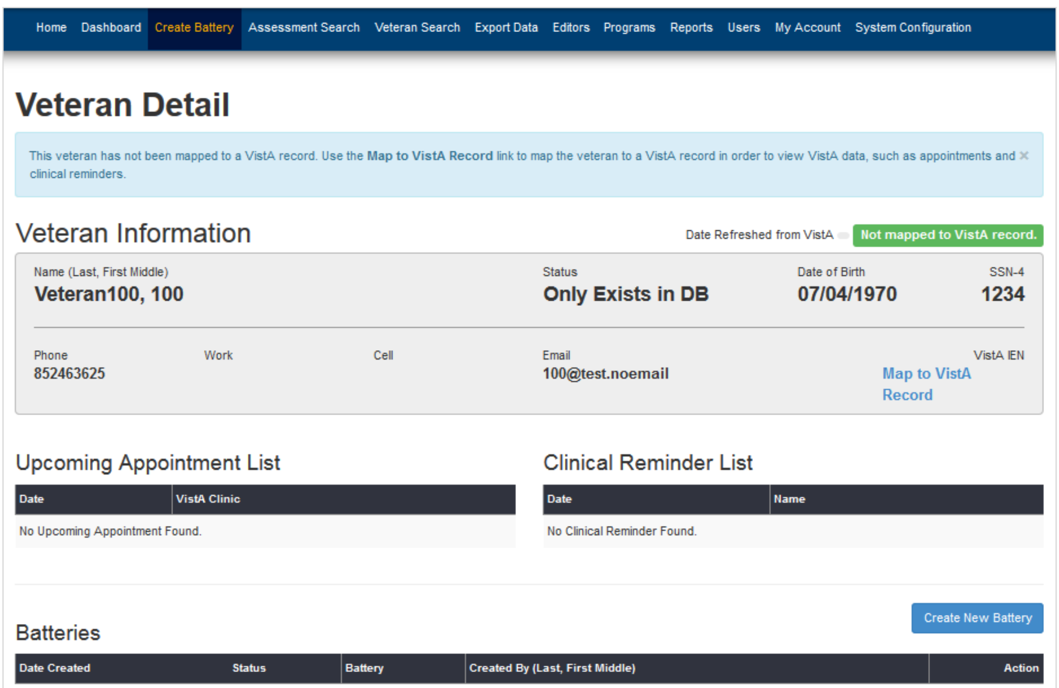
3. Enter the Veteran's **SSN-4**, then click **Search**.
   The system lists the Veterans that meet your search criteria.
4. If the Veteran is listed (is in the database), click **Select** for the Veteran, then **GO TO STEP 9**.

   - OR -

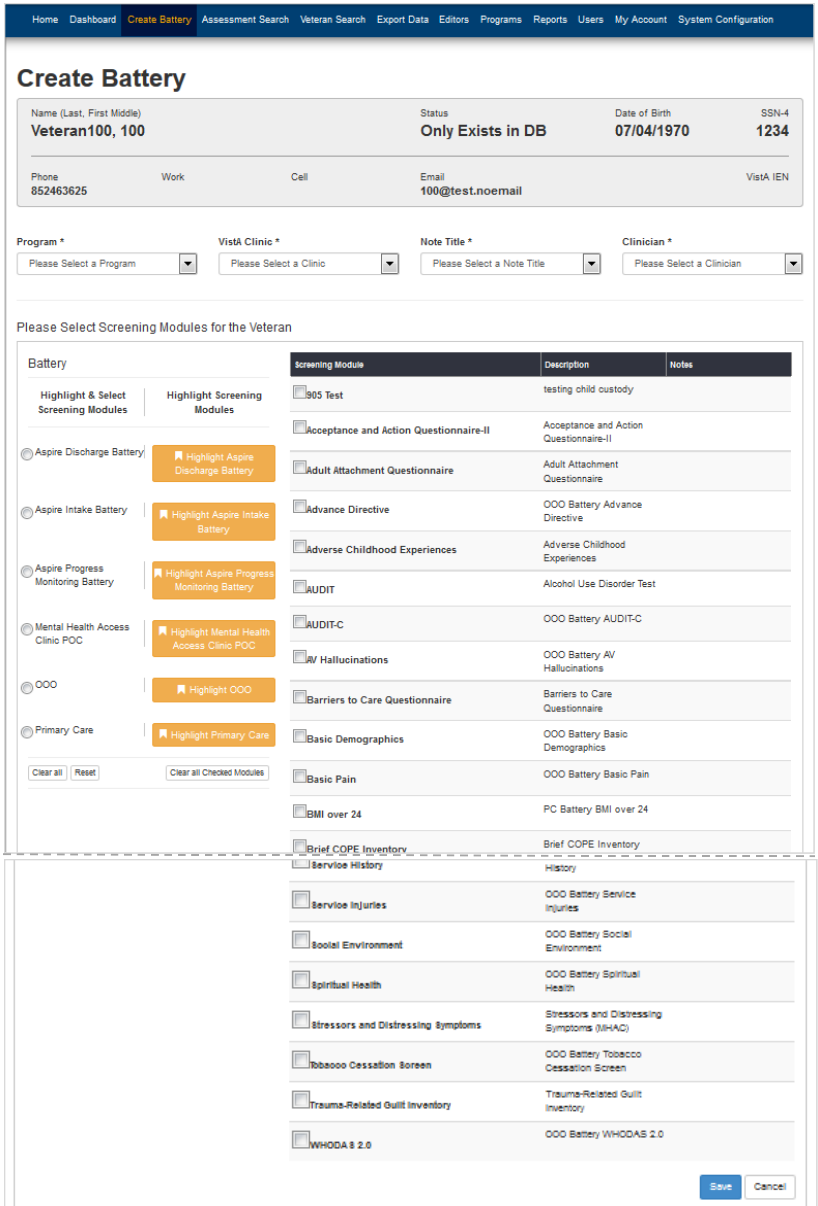
   If the Search Result section shows no record found if the Veteran is not in the database, **GO TO THE NEXT STEP**.
5. If you see a message that says that the Veteran only exists in VistA, import the Veteran's data by clicking **Import Veteran from VistA**, then **GO TO STEP 10**.
6. Click **Create Veteran Record in DB**.
   The Create Veteran page opens.



7. Enter the information for the Veteran, then click **Save**.
   The Veteran Detail page opens.



8. Click **Create New Battery**.
   The Create Battery page opens.

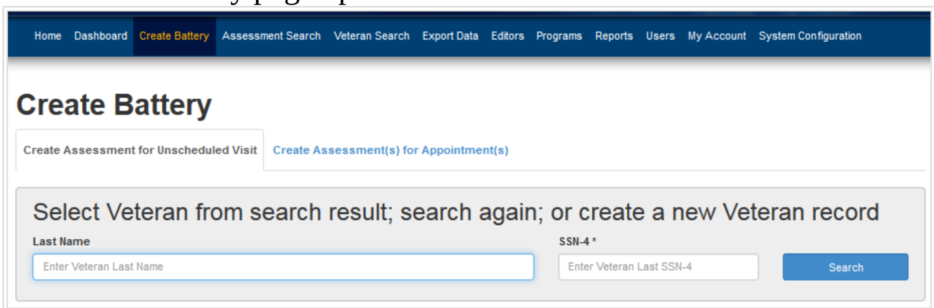


9. Create the battery by selecting from the drop-down lists. The program you select will dictate the option buttons that appear. Click the option button that you want; it highlights and selects the screening modules that apply to that battery.
   If you want to design additional modules into your new battery, or remove any, check or clear those check boxes accordingly.
   - The Clear all button clears option buttons, unchecks checkboxes, and removes highlighting.
   - The Reset button reverts all changes you have made.
   - The Clear all Checked Modules button unchecks checkboxes, and removes highlighting.

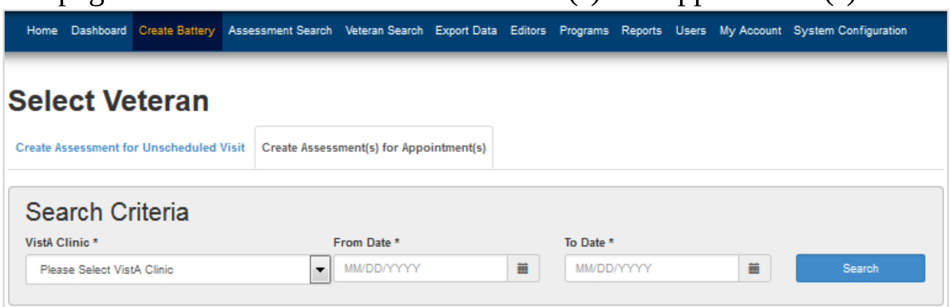
10. Click **Save**.
    The Batteries associated with the Veteran appear in the Batteries list. The system is ready to accept input from the Veteran’s tablet as soon as the Veteran logs in.

15.2. Creating assessments by the batch for appointments

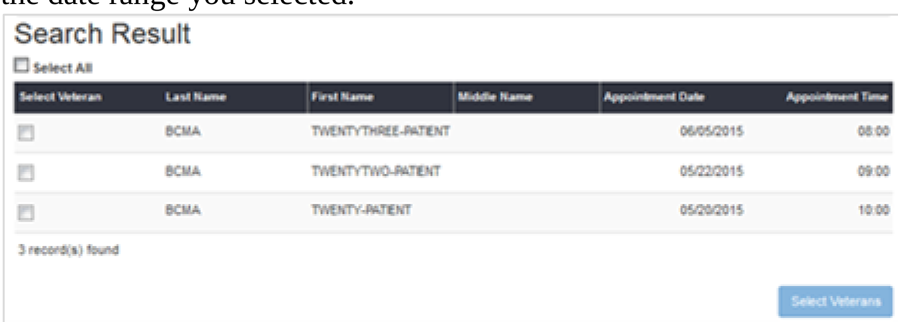
1. From the Home page, click **Create Battery**.
   The Create Battery page opens to the Create Assessment for Unscheduled Visit tab:



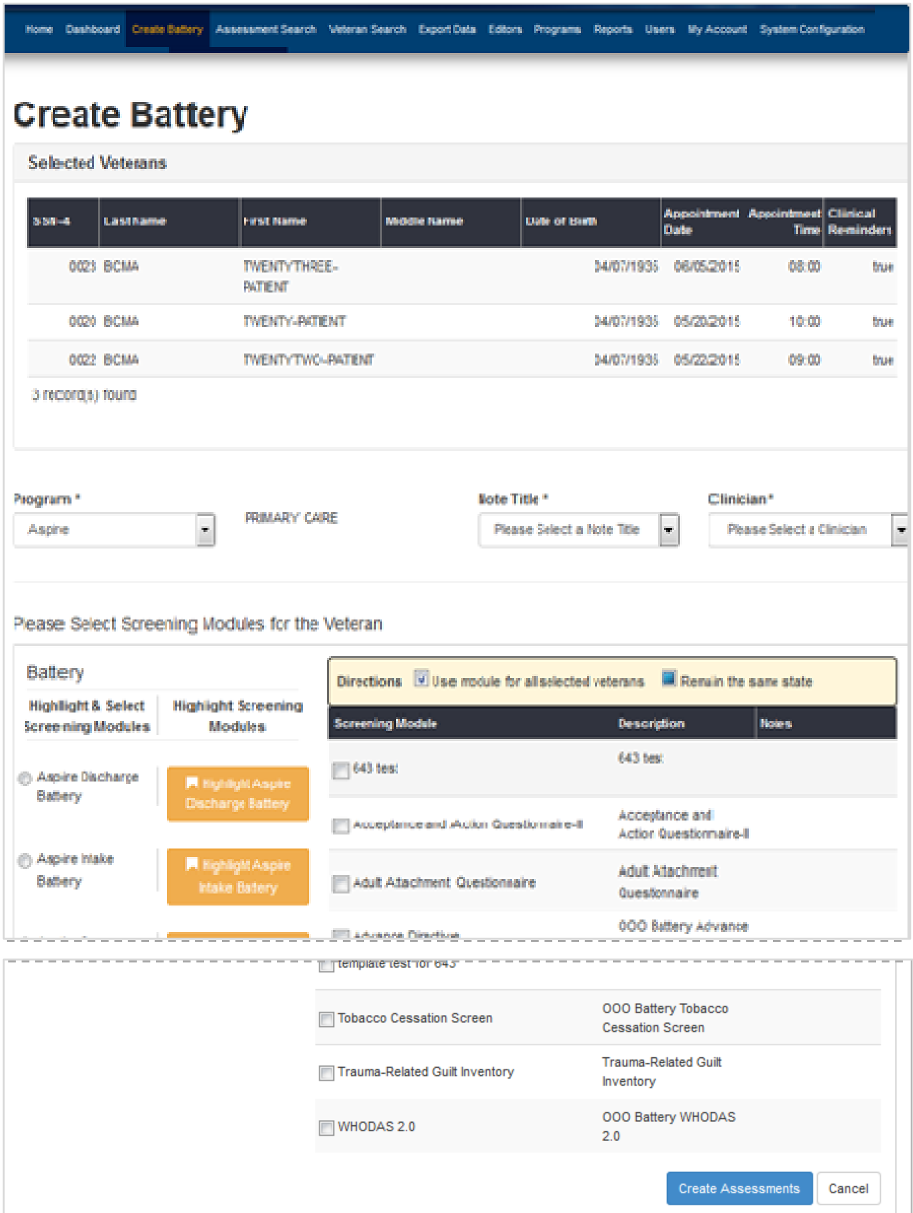
2. Click **Create Assessment(s) for Appointment(s)**.
   The page switches to the Create Assessment(s) for Appointment(s) tab:



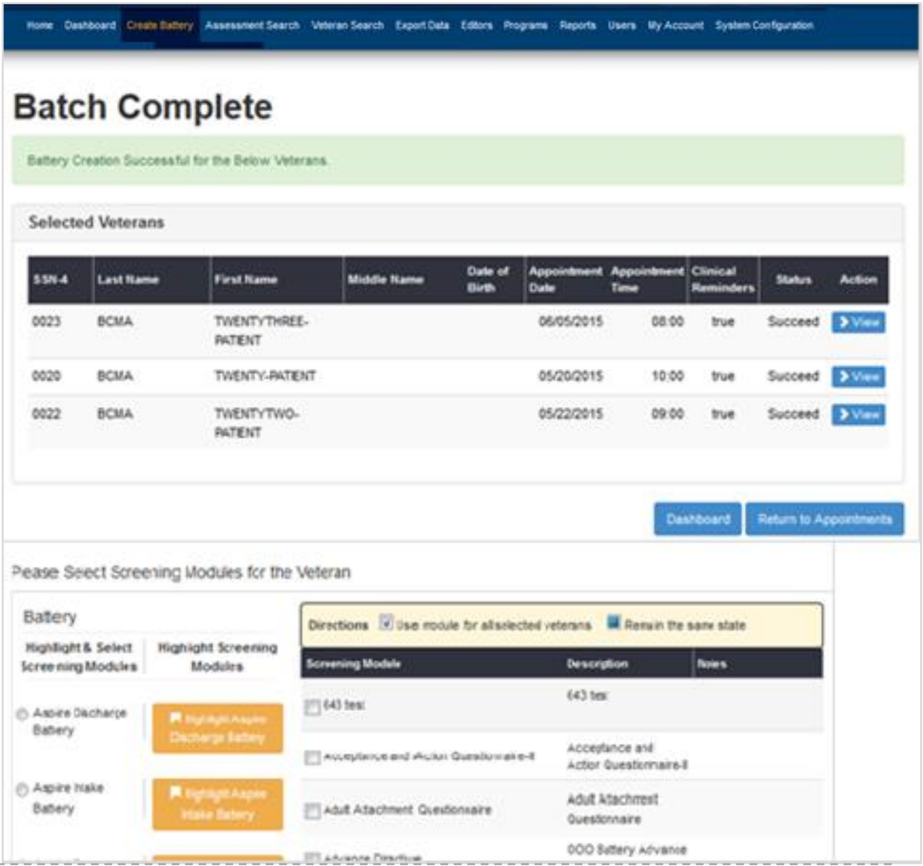
3. Click the list to select the VistA clinic, then click the **From Date*** and **To Date*** calendars and set a date range, then click **Search**.
   Search results display showing Veterans who have appointments at this clinic within the date range you selected.



4. Click the **Select All** check box or click individual Veterans, then click **Select Veterans**.
   The Create Battery page opens showing the selected Veterans at the top.



5. Select the screening modules you want, then click **Create Assessments**. A banner tells you that that the assessments were created successfully.



15.3. Creating multiple assessments for a Veteran on the same day

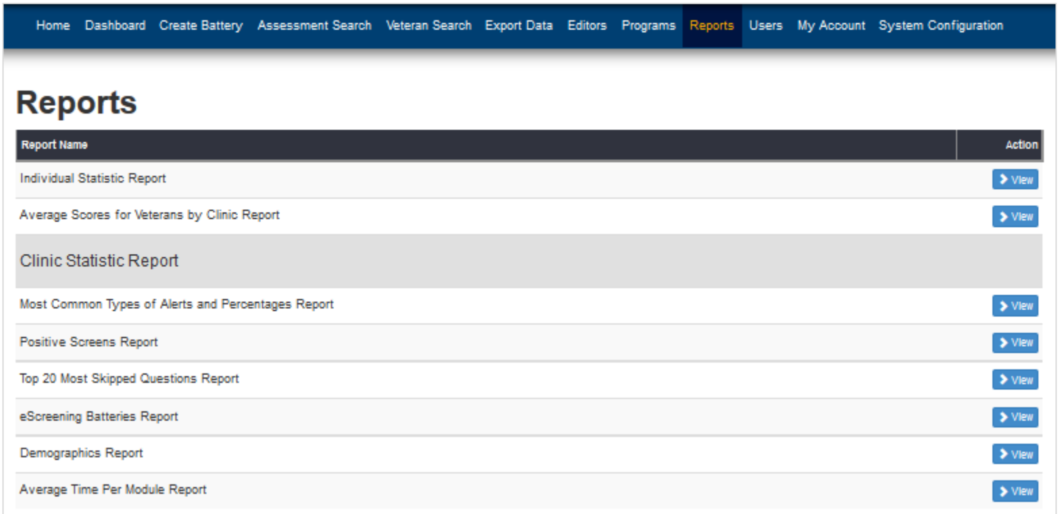
MHE supports one assessment in each clinic daily for a given Veteran. This allows a Veteran, for example, to have an appointment in a Mental Health clinic in the morning, and an afternoon appointment in Primary Care, and an assessment can be created for each appointment. If a question is answered from a shared module, it will be considered a duplicate and the Veteran will not have to answer it again during the second assessment of the day. This feature extends for a 48-hour period, so Veterans don't have to answer duplicate questions in assessments taken on a second day.

16. Reports

16.1. About reports

HSTAs can generate a variety of online reports that show the current status of records in the database. These reports are available in .PDF form and can be printed.

Reports are accessed from the Reports tab on the Home page.



<u>Veteran Statistic Reports available are</u>:

- Individual Statistic Reports
- Average Scores for Veterans by Clinic

<u>Clinic Statistic Reports available are</u>:

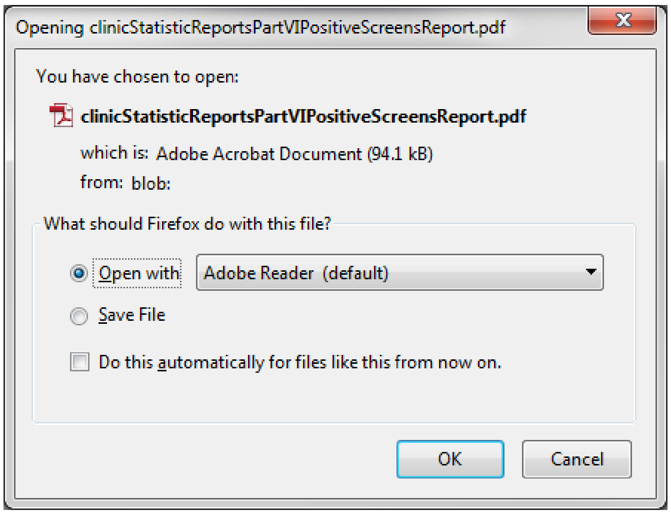
- Most Common Types of Alerts and Percentages Report
- Positive Screens Report
- List of Top 20 Most Skipped questions Report
- eScreening Batteries Report
- Demographics Report
- Average Time Per Module Report

16.2. Report descriptions

- Some graphs present a choice for viewing the data, consisting of option buttons under Report Type for Graph and Numeric, Graph, or Numeric.
- The From and To dates are required.
- You can select the modules that you want to review.
- Only the modules that contribute to the report are available.

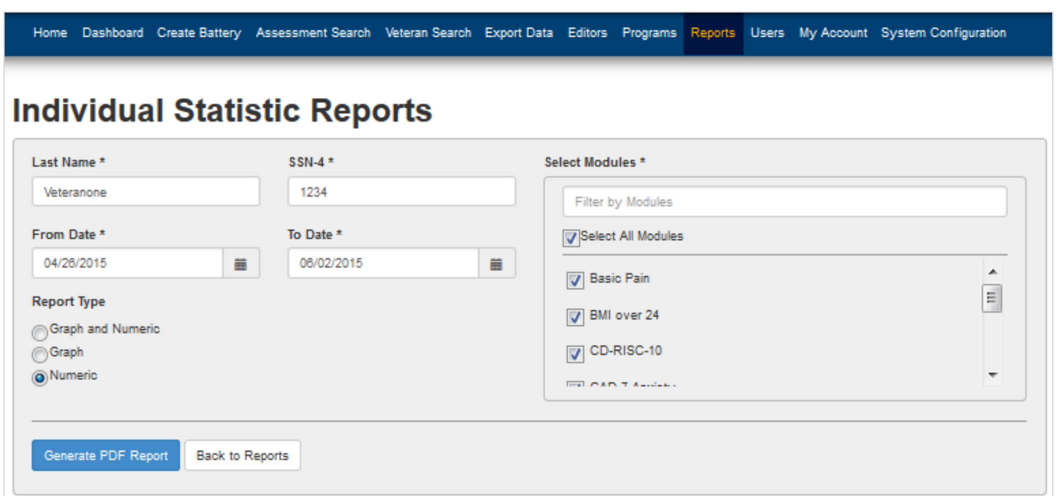
16.3. Generating a report and printing a PDF

1. From the Home page, click **Reports**.
   The Reports page opens.
2. Click **View** in the row of the report you want.
   The report opens.
3. Populate the required fields and select the options and checkboxes that apply to the report you want, then click **Generate PDF Report**.
   The system asks you to save the file, or open it with your choice of helper application.
   Example:



4. Choose the option to **Open**, then click **OK**.
   The report opens, and presents options for saving and printing.

16.4. Individual Statistic Report



Example:

Department of Veterans Affairs
eScreening Program

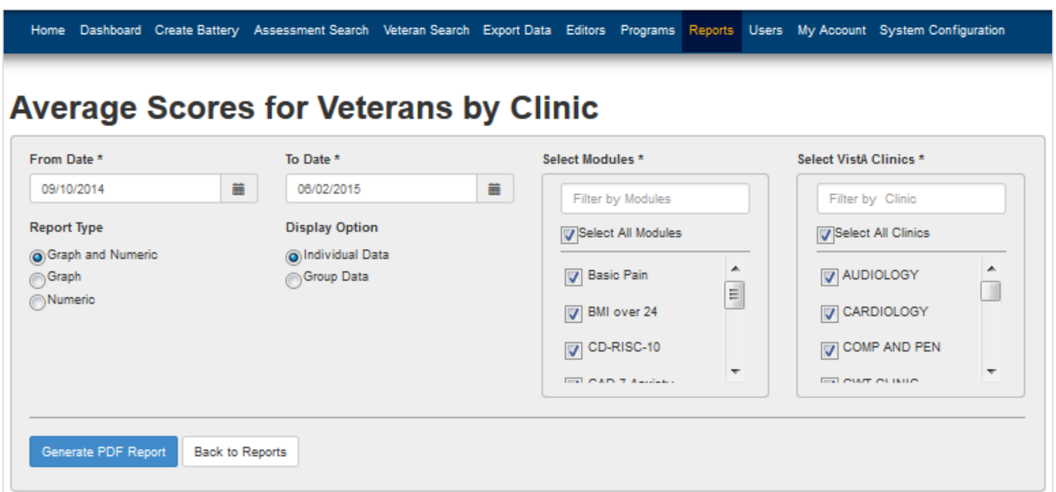
Individual Statistic Reports Period: From 12/01/2014 to 12/18/2014

VeteranOne, 1234

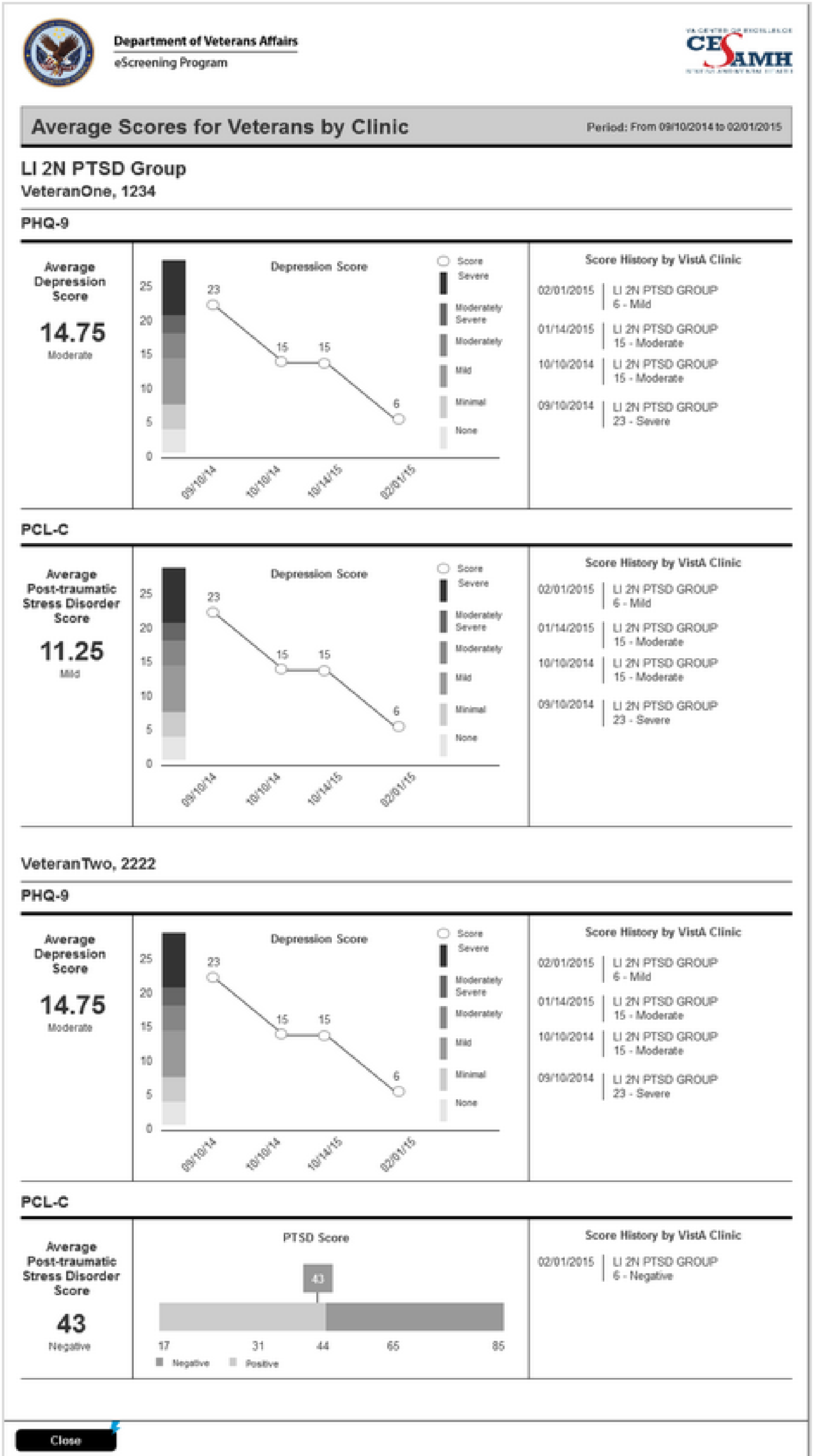
Module	Screening Module	Score	Score History by VistA Clinic
PHQ-9	Depression	15 - Moderate 20 - Moderate Severe 27 - Severe	02/01/2015 | LI SOC WK OEF ESCREENING 01/14/2015 | LI PRIM CARE HAGARICH 10/10/2014 | LI 2N MHAC URGENT CLINIC
PCL-C	Post-traumatic Stress Disorder	43 - Negative	10/10/2014 | LI SOC WK OEF ESCREENING

Close

16.5. Average Scores for Veterans by Clinic



Example of a result in graph and numeric form:



Department of Veterans Affairs
eScreening Program

CESAMH

Average Scores for Veterans by Clinic

Period: From 09/10/2014 to 02/01/2015

LI 2N PTSD Group

VeteranOne, 1234

PHQ-9

Average Depression Score
14.75
Moderate

Score History by VistA Clinic

02/01/2015	LI 2N PTSD GROUP 6 - Mild
01/14/2015	LI 2N PTSD GROUP 15 - Moderate
10/10/2014	LI 2N PTSD GROUP 15 - Moderate
09/10/2014	LI 2N PTSD GROUP 23 - Severe

PCL-C

Average Post-traumatic Stress Disorder Score
11.25
Mild

Score History by VistA Clinic

02/01/2015	LI 2N PTSD GROUP 6 - Mild
01/14/2015	LI 2N PTSD GROUP 15 - Moderate
10/10/2014	LI 2N PTSD GROUP 15 - Moderate
09/10/2014	LI 2N PTSD GROUP 23 - Severe

VeteranTwo, 2222

PHQ-9

Average Depression Score
14.75
Moderate

Score History by VistA Clinic

02/01/2015	LI 2N PTSD GROUP 6 - Mild
01/14/2015	LI 2N PTSD GROUP 15 - Moderate
10/10/2014	LI 2N PTSD GROUP 15 - Moderate
09/10/2014	LI 2N PTSD GROUP 23 - Severe

PCL-C

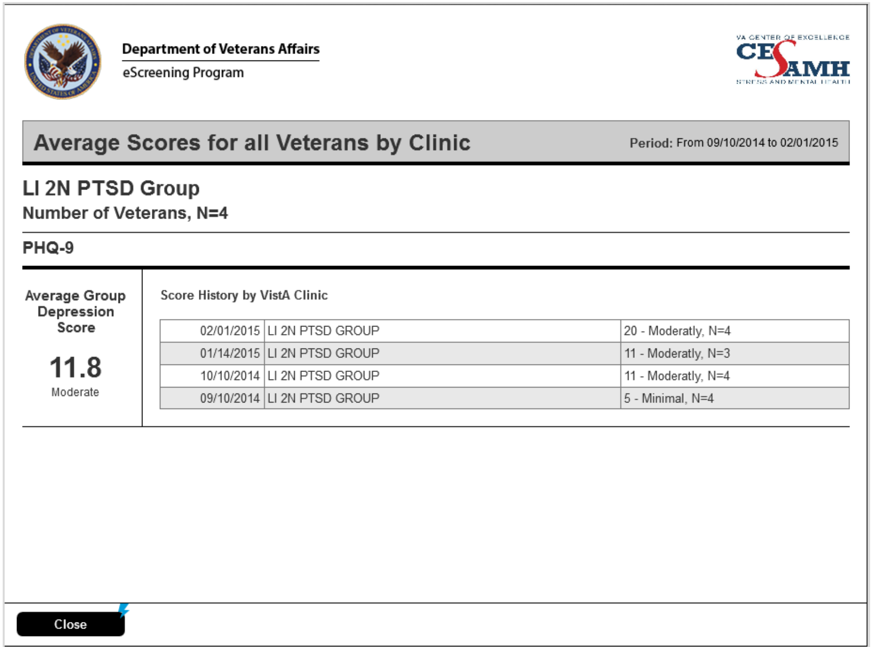
Average Post-traumatic Stress Disorder Score
43
Negative

Score History by VistA Clinic

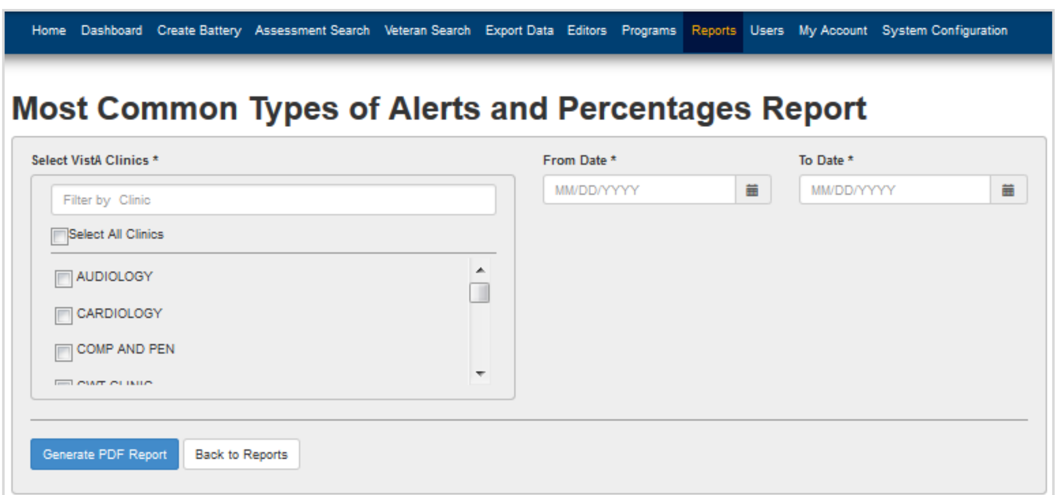
02/01/2015	LI 2N PTSD GROUP 6 - Negative

Close

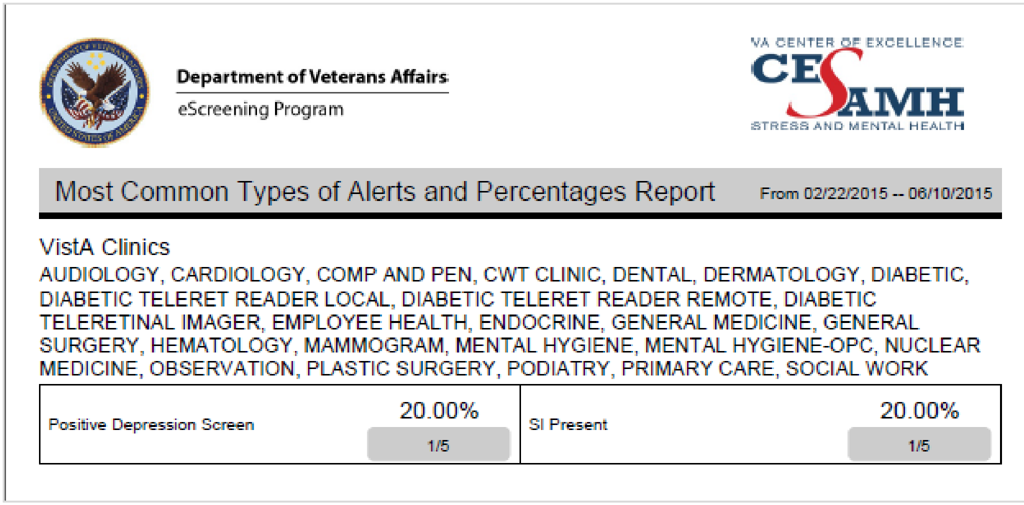
Example in numeric format:



16.6. Most Common Types of Alerts and Percentages



Example:



Department of Veterans Affairs
eScreening Program

VA CENTER OF EXCELLENCE
CESAMH
STRESS AND MENTAL HEALTH

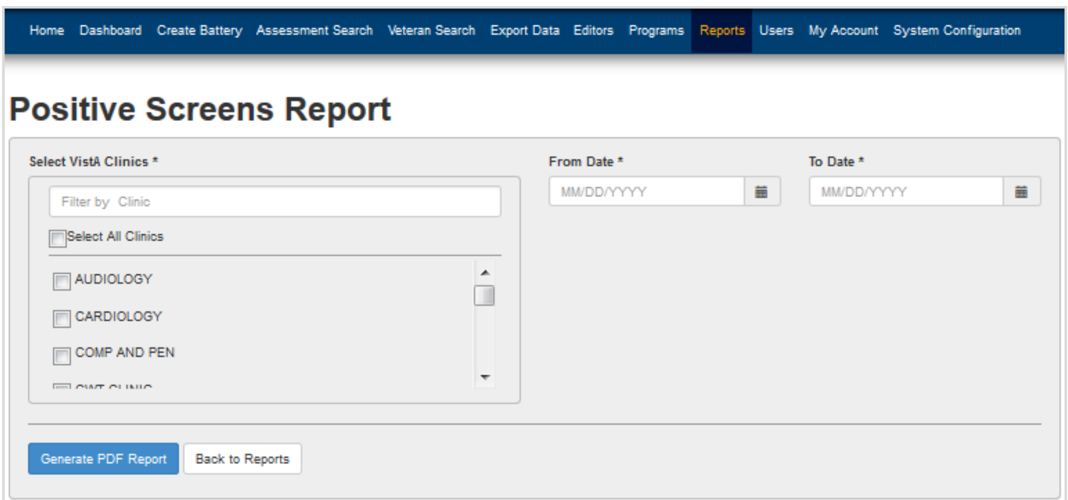
Most Common Types of Alerts and Percentages Report From 02/22/2015 -- 06/10/2015

VistA Clinics

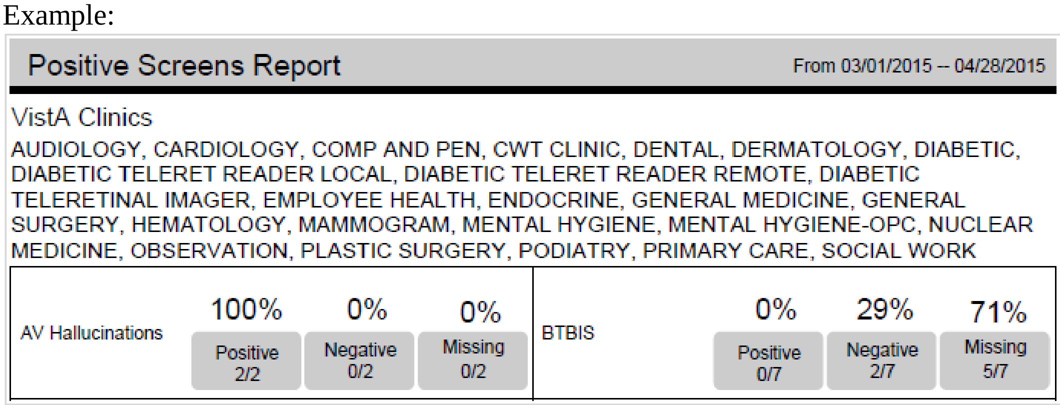
AUDIOLOGY, CARDIOLOGY, COMP AND PEN, CWT CLINIC, DENTAL, DERMATOLOGY, DIABETIC, DIABETIC TELERET READER LOCAL, DIABETIC TELERET READER REMOTE, DIABETIC TELERETINAL IMAGER, EMPLOYEE HEALTH, ENDOCRINE, GENERAL MEDICINE, GENERAL SURGERY, HEMATOLOGY, MAMMOGRAM, MENTAL HYGIENE, MENTAL HYGIENE-OPC, NUCLEAR MEDICINE, OBSERVATION, PLASTIC SURGERY, PODIATRY, PRIMARY CARE, SOCIAL WORK

Positive Depression Screen	20.00% 1/5	SI Present	20.00% 1/5

16.7. Positive Screens Report



Example:



Positive Screens Report From 03/01/2015 -- 04/28/2015

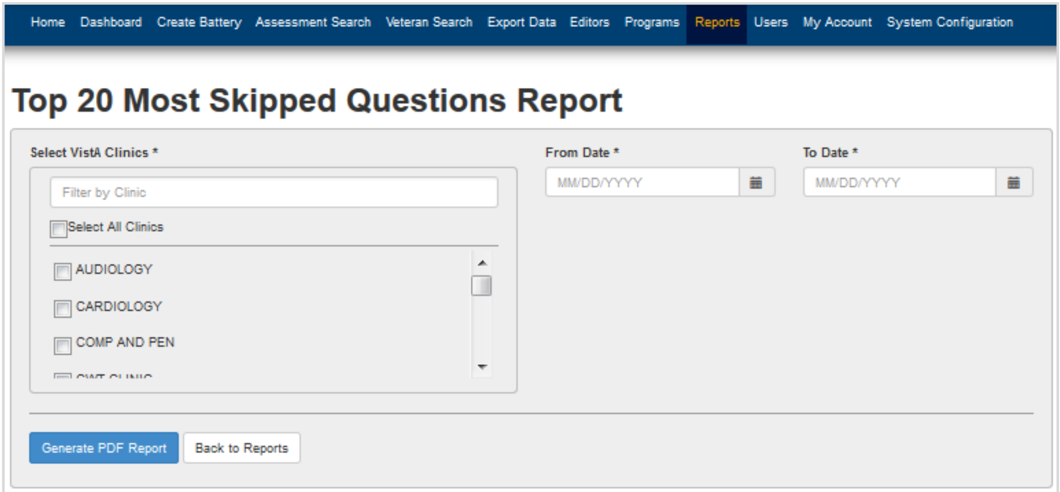
VistA Clinics

AUDIOLOGY, CARDIOLOGY, COMP AND PEN, CWT CLINIC, DENTAL, DERMATOLOGY, DIABETIC, DIABETIC TELERET READER LOCAL, DIABETIC TELERET READER REMOTE, DIABETIC TELERETINAL IMAGER, EMPLOYEE HEALTH, ENDOCRINE, GENERAL MEDICINE, GENERAL SURGERY, HEMATOLOGY, MAMMOGRAM, MENTAL HYGIENE, MENTAL HYGIENE-OPC, NUCLEAR MEDICINE, OBSERVATION, PLASTIC SURGERY, PODIATRY, PRIMARY CARE, SOCIAL WORK

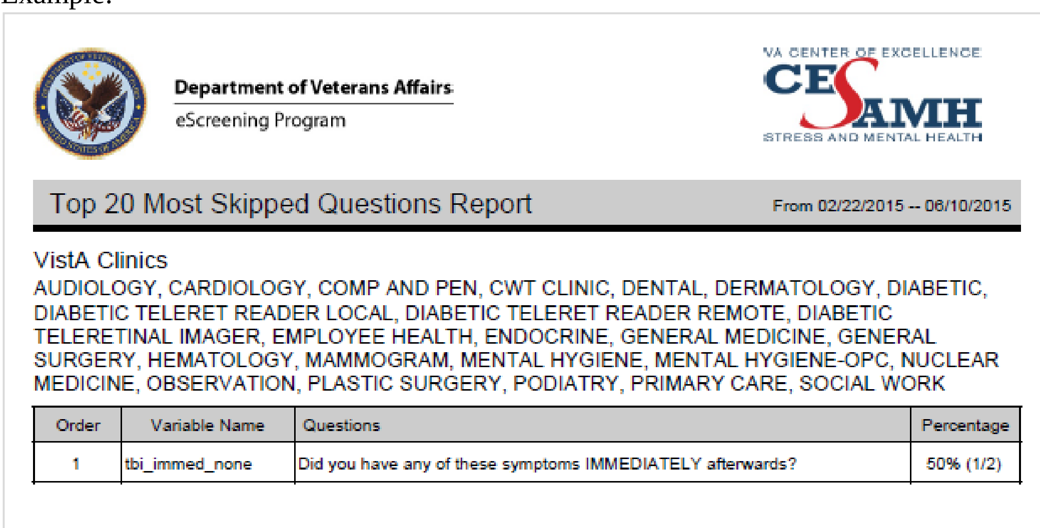
AV Hallucinations	100% Positive 2/2	0% Negative 0/2	0% Missing 0/2	BTBIS	0% Positive 0/7	29% Negative 2/7	71% Missing 5/7

16.8. List of top 20 Most Skipped Questions Report

This report sorts by percentage column in descending order.



Example:



Department of Veterans Affairs
eScreening Program

VA CENTER OF EXCELLENCE CESAMH STRESS AND MENTAL HEALTH

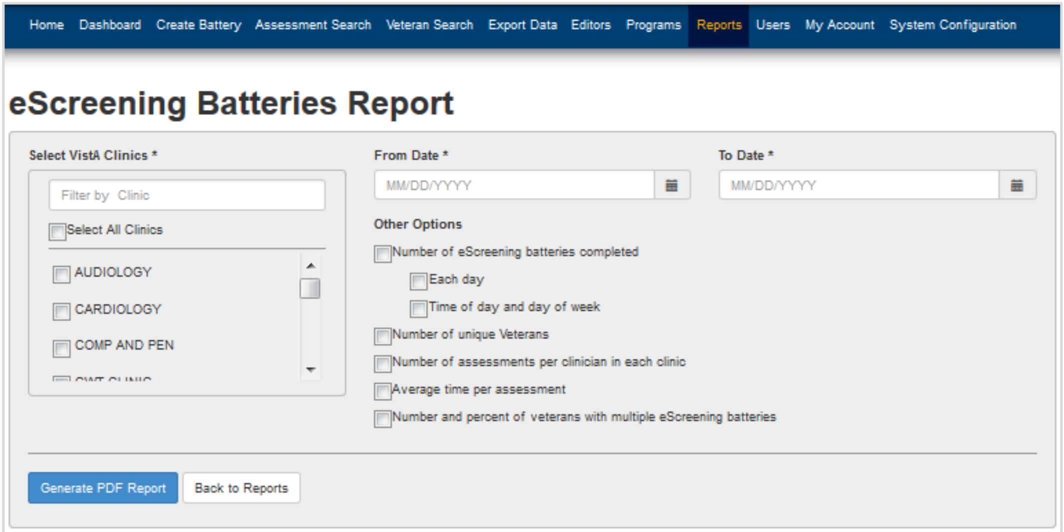
Top 20 Most Skipped Questions Report From 02/22/2015 -- 06/10/2015

VistA Clinics

AUDIOLOGY, CARDIOLOGY, COMP AND PEN, CWT CLINIC, DENTAL, DERMATOLOGY, DIABETIC, DIABETIC TELERET READER LOCAL, DIABETIC TELERET READER REMOTE, DIABETIC TELERETINAL IMAGER, EMPLOYEE HEALTH, ENDOCRINE, GENERAL MEDICINE, GENERAL SURGERY, HEMATOLOGY, MAMMOGRAM, MENTAL HYGIENE, MENTAL HYGIENE-OPC, NUCLEAR MEDICINE, OBSERVATION, PLASTIC SURGERY, PODIATRY, PRIMARY CARE, SOCIAL WORK

Order	Variable Name	Questions	Percentage
1	tbi_immed_none	Did you have any of these symptoms IMMEDIATELY afterwards?	50% (1/2)

16.9. eScreening Batteries Report



Example:

Department of Veterans Affairs
eScreening Program

VA CENTER OF EXCELLENCE
CESAMH
STRESS AND MENTAL HEALTH

eScreening Batteries Report

From 02/22/2015 -- 04/29/2015

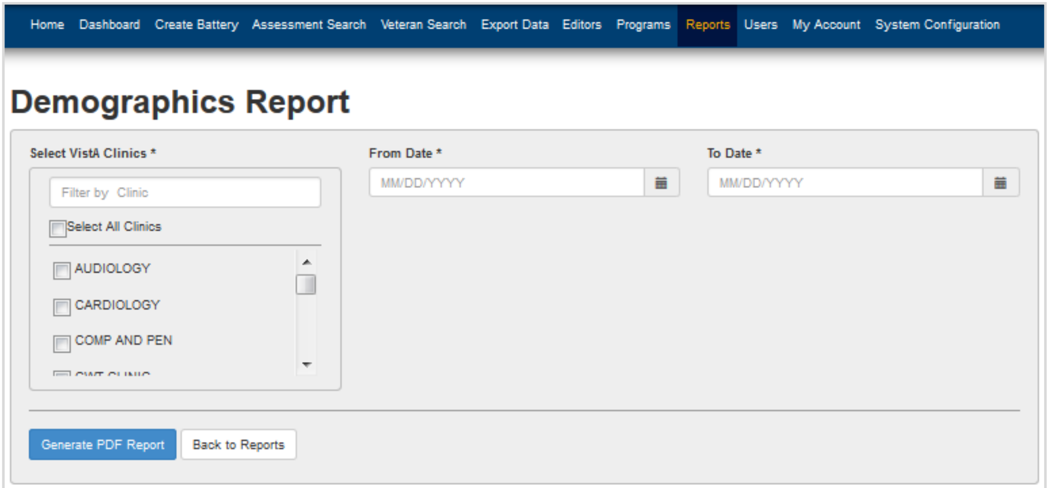
VistA Clinics
AUDIOLOGY, CARDIOLOGY, COMP AND PEN, CWT CLINIC, DENTAL, DERMATOLOGY, DIABETIC,

Number of eScreening Batteries Completed Each Day		
Date	Day of Week	Total
04/29/2015	Wednesday	3
	Grand Total	3

Number of eScreening Batteries Completed by Each Day and Time of Day and Day of Week								
Date	Day Of Week	6am-8am	8am-10am	10am-12pm	12pm-2pm	2pm-4pm	4pm-6pm	Total
04/29/2015	Wednesday	0	0	2	1	0	0	3
							Grand Total	3

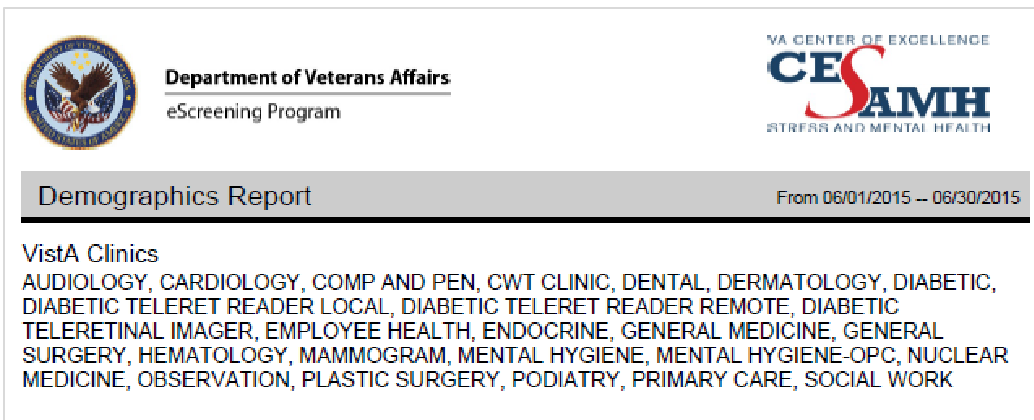
Number of Unique Veterans	3	Number of eScreening batteries completed	3	Average number of assessments per clinician in each clinic	1

16.10. Demographics Report



Example:

Page 1


Department of Veterans Affairs
eScreening Program

VA CENTER OF EXCELLENCE
CESAMH
STRESS AND MENTAL HEALTH

Demographics Report
From 06/01/2015 -- 06/30/2015

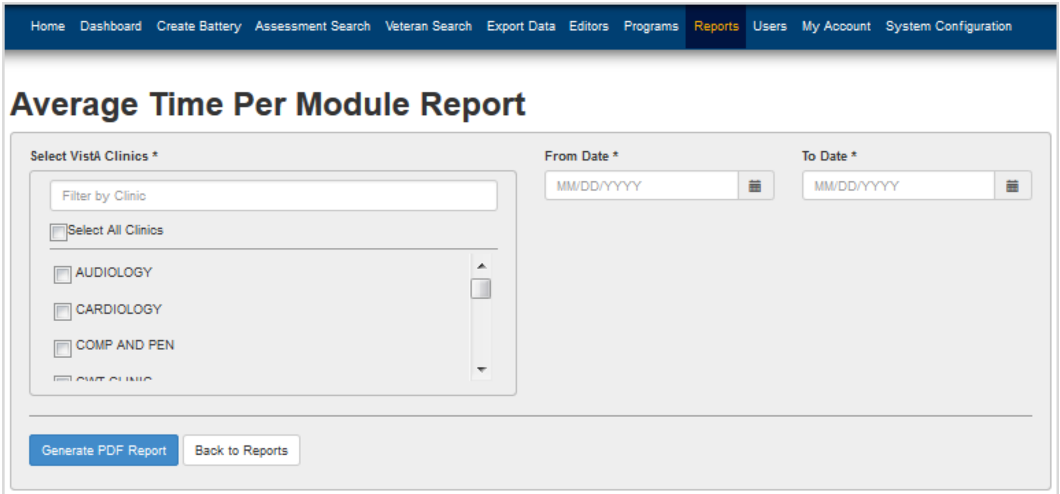
VistA Clinics

AUDIOLOGY, CARDIOLOGY, COMP AND PEN, CWT CLINIC, DENTAL, DERMATOLOGY, DIABETIC, DIABETIC TELERET READER LOCAL, DIABETIC TELERET READER REMOTE, DIABETIC TELERETINAL IMAGER, EMPLOYEE HEALTH, ENDOCRINE, GENERAL MEDICINE, GENERAL SURGERY, HEMATOLOGY, MAMMOGRAM, MENTAL HYGIENE, MENTAL HYGIENE-OPC, NUCLEAR MEDICINE, OBSERVATION, PLASTIC SURGERY, PODIATRY, PRIMARY CARE, SOCIAL WORK

Page 2

Demographics	Questions		
Gender	66%	Male	2/3
	33%	Female	1/3
Ethinicity/Race	Ethnicity		
	33%	Hispanic	1/3
	66%	Non Hispanic	2/3
	00%	Missing	0/3
	Race		
	20%	White/Caucasian	1/5
	20%	Black/African American	1/5
	20%	American Indian or Alaskan Native	1/5
	20%	Native Hawaiian or Pacific Islander	1/5
	20%	Asian (Filipino, Japanese, Korean, Chinese, Vietnamese, etc.)	1/5
	00%	Decline To Answer	0/5
	00%	Other	0/5
Age	Mean Age 48.8 years Minimum Value = 28 and Maximum value = 69		
Education	00%	Some High School	0/1
	00%	GED	0/1
	00%	High School Diploma	0/1
	00%	Some College	0/1
	100%	Associate Degree	1/1
	00%	4-year College Degree	0/1
	00%	Master's Degree	0/1
	00%	Doctoral Degree (Ph.D., M.D., DDS, etc.)	0/1
	00%	Missing	0/1
Employment Status	00%	Full Time	0/1
	00%	Part Time	0/1
	00%	Seasonal	0/1
	00%	Day Labor	0/1
	100%	Unemployed	1/1
	00%	Missing	0/1
Branch of Military	100%	Army	1/1
	00%	Air Force	0/1
	00%	Coast Guard	0/1
	00%	Marines	0/1
	00%	National Guard	0/1
	00%	Navy	0/1
	00%	Missing	0/1
Num of Deployments	Mean number of deployments = 1.0 and minimum Value = 1 and Maximum Value = 1		
Tobacco Use Status	00%	Never. I have never used tobacco on a regular basis	0/1
	00%	No. I used tobacco in the past, but have quit.	0/1
	100%	Yes. I currently use tobacco on a regular basis.	1/1
	00%	Missing	0/1

16.11. Average Time per Module



Example:

Department of Veterans Affairs
eScreening Program

VA CENTER OF EXCELLENCE CESAMH STRESS AND MENTAL HEALTH

Average Time Per Module Report

From 06/01/2015 -- 06/30/2015

VistA Clinics

AUDIOLOGY, CARDIOLOGY, COMP AND PEN, CWT CLINIC, DENTAL, DERMATOLOGY, DIABETIC, DIABETIC TELERET READER LOCAL, DIABETIC TELERET READER REMOTE, DIABETIC TELERETINAL IMAGER, EMPLOYEE HEALTH, ENDOCRINE, GENERAL MEDICINE, GENERAL SURGERY, HEMATOLOGY, MAMMOGRAM, MENTAL HYGIENE, MENTAL HYGIENE-OPC, NUCLEAR MEDICINE, OBSERVATION, PLASTIC SURGERY, PODIATRY, PRIMARY CARE, SOCIAL WORK

Advance Directive	N= 2 01 Min(s) 17 Sec(s)	AUDIT-C	N= 0 00 Min(s) 00 Sec(s)
AV Hallucinations	N= 2 00 Min(s) 53 Sec(s)	Basic Demographics	N= 3 01 Min(s) 21 Sec(s)
Basic Pain	N= 1 03 Min(s) 48 Sec(s)	BTBIS	N= 4 00 Min(s) 11 Sec(s)
Caffeine Use	N= 1 00 Min(s) 08 Sec(s)	CD-RISC-10	N= 0 00 Min(s) 00 Sec(s)
DAST-10	N= 0 00 Min(s) 00 Sec(s)	Education, Employment & Income	N= 1 01 Min(s) 10 Sec(s)
Exposures	N= 0 00 Min(s) 00 Sec(s)	GAD 7 Anxiety	N= 0 00 Min(s) 00 Sec(s)
Homelessness Clinical Reminder	N= 2 00 Min(s) 37 Sec(s)	Identification	N= 2 00 Min(s) 11 Sec(s)
ISI	N= 0 00 Min(s) 00 Sec(s)	MDQ	N= 0 00 Min(s) 00 Sec(s)
Medications	N= 0 00 Min(s) 00 Sec(s)	Military Deployments & History	N= 2 01 Min(s) 24 Sec(s)
MST	N= 0 00 Min(s) 00 Sec(s)	OEF OIF Clinical Reminder	N= 1 00 Min(s) 16 Sec(s)
OOO Infect & Embedded Fragment CR	N= 0 00 Min(s) 00 Sec(s)	Other Health Symptoms	N= 0 00 Min(s) 00 Sec(s)

17. Troubleshooting & additional support

The eScreening support procedures will consist of triage, troubleshooting, and change management.

1. Defect and change requests triaged by Program Administrator
2. Troubleshooting by Healthcare System Technical Administrator
3. Change management performed by application developers as authorized by the Change Control Board (CCB)

1. **Triage**: The Program Administrator will collect and triage application defect and change requests from users. These requests will be entered in the eScreening change management backlog in the form of trouble tickets.
2. **Troubleshooting**: The program administrator will assign trouble tickets to the Healthcare System Technical Administrator (HSTA), who will analyze, troubleshoot, and document the reported issues. If the HSTA can resolve the issue at the configuration or database level, or through coordination with the National Service Desk (in the event of a CPRS or VistA issue), the HSTA will document the resolution within the ticket and mark it resolved. Some basic problems and solutions are documented in a table, below.
3. **Change management**: If the HSTA is unable to resolve an issue without modification of the application source code, the HSTA will change the ticket state to needing Change Control Board (CCB) review. The CCB, which will consist of the VA PM, Program Administrators, Healthcare System Technical Administrators, and designated VA IT support staff, will prioritize and assign all application change requests to designated application developers. The application developers will estimate the amount of time needed to complete the work associated with the ticket, and the PM will allocate the ticket to a specific development sprint. After the application development team completes and tests the work, they will mark the ticket resolved and perform the application release as authorized by the CCB.

Category	Description	Actions
Verify VistA Account in the MyAccount Page	User is presented with "Account is locked. Failed to verify Acess/Verify codes"	User’s account is locked in VistA. User must close their browser, start a new session, and then retry. If the account is still locked, then the user needs to contact the VistA System Administrator to resolve the locked account issue.
Verify VistA Account in the MyAccount Page	User is presented with: "Another account has already verified this Acess/Verify codes"	Another user has already verified their VistA account and is using the DUZ associated with the verify code. Sys admin should use CPRS to look up the user’s DUZ, search the MySQL USER.VISTA_DUZ field to determine who is using it, and then determine which user owns that DUZ. If the existing user made a mistake, then the system administrator should NULL out the USER.DUZ field and set USER.CPRS_VERIFIED to "0"
Verify VistA Account in the MyAccount Page	User is presented with: "Invalid Access/Verify codes. Please see your admin. Too many attempts to verify a VistA account will lock your account."	User has entered the wrong Access/Verify code more than 2 times. User should seek assistance with a VistA admin to ensure their Access/Verify code is correct or have it be reset to something else.

Category	Description	Actions
Verify VistA Account in the MyAccount Page	User is presented with "Failed to connect to VistA" and the application log file will contain "VistaSocketException" entry.	See "VistA Connection Issues" below
Staff Login	Nobody is able to log in to the system despite providing valid credentials. This can happen when the database is down and the server cannot access the database to verify a user's credential. The application log file entry will have a "CannotGetJdbcConnectionException" exception.	See "Database Connection Issues" below
Select Veteran Page in the Create Battery Tab	After clicking on Search, the application spins for a minute and then redirects to the System Exception page. The application log file entry will have "VistaSocketException" entry.	See "VistA Connection Issues" below
Import Data Page of the System Configuration Tab	After clicking on one of the Import buttons, user is presented with "An unexpected error occurred while trying to import Clinical Reminder list from VistA." The application log file entry will have "VistaSocketException" entry.	See "VistA Connection Issues" below
Veteran Login	If veteran doesn't include Last name a form error is shown: "Last name is required"	Veteran should be directed to give last name
Veteran Login	If veteran doesn't include 4 numbers for SSN field a form error is shown: "The last 4 SSN is required"	Veteran should be directed to give valid last four of social security number
Veteran Login	Veteran is presented with "Unable to connect" page after trying to log in.	See "Unable to Connect" below
Veteran Login	If Veteran is show form error: "Last name / Last 4 SSN were not found, please try again." Veteran has entered an incorrect combination of last name and last four of SSN.	Log into eScreening as a VA staff member. Search for the Veteran to make sure there is an account. If not, then an assessment should be created with the veteran's credentials. If the Veteran does have an account, verify the credentials the Veteran is using. If the credentials are incorrect in eScreening, go to 'create battery' find the Veteran's battery, click on select to select the battery, and then from the 'Veteran Detail' page, click on 'map to vista record' or 'refresh from vista'. If the credentials are still incorrect they CPRS must be used to update the VistA record for the Veteran
Veteran Login	Veteran is presented with a page titled "Please See A Clerk for Assistance" with message "For assistance, please contact the Help Desk". This happens when the Veteran does not have a battery in either the Clean nor the Incomplete state. This can happen if no battery was assigned to the Veteran or if the Veteran has completed the battery.	Log into eScreening as a VA staff member. Navigate to "create battery" and create the correct battery for the Veteran's appointment.
Veteran Login	Could not communicate with the database. Please try again and if the problem persists, notify the clerk.	See "Database Connection Issues" below
Veteran Assessment	During the taking of a battery, Veteran is shown a dialog with title "Server Error!" and message "Unable to connect. Please see	See "Unable to Connect" below

Category	Description	Actions
	support staff for assistance." This occurs when the Veteran's device is unable to connect to the eScreening server.	
Veteran Assessment	After answering a question a banner error with the text "Error, Please contact support" shows up. This is shown because the Veteran answered a question which may have follow-up questions and the Veteran's device is unable to contact the eScreening server.	See "Unable to Connect" below.
Veteran Assessment	During the taking of a battery, Veteran is shown a dialog with title "Server Error!" and message "Unable to process submitted data." or "Submitted data could not be processed". This indicates that the client application running in the Veteran's browser is submitting invalid data to the eScreening server.	Baring malicious intent, this is most likely a bug and should be reported to the developer team. A code is sent to the Veteran's device and can be shown if the Details link is clicked in the dialog. This will provide an error code that can be used by the system administrator to find the correct place in the eScreening system log. The eScreening system log should be inspected to look for the Veteran's submission by the system administrator. Then the log segment tracking this submission should be sent to the developer team.

Category	Actions
Unable to Connect	The server cannot be connected to from the device the Veteran is using. The network used by the Veteran should be checked to make sure it has a network connection (e.g. navigate to a page within the VA's network). If the device can navigate to another VA site then the server should be checked to make sure it is still running. If it is then IT should be contacted to ensure that the network hasn't become fragmented.
Database Connection Issues	As a system administrator, log into the web server and ensure the web server can communicate with the database, ensure the database is running by checking the Windows service list, and ensure the database account the web site is using is able to be used to log into MySQL
VistA Connection Issue	As a system administrator, log into the web server and ensure the web server can reach the VistA server. Contact the VistA administrator to verify the Proxy Connection account is still valid. This can be found in the following file $(rootwebsite)/WEB-INF/classes/gov.va.med.vistalink.connectorConfig.xml, If the access code or the verify code needs to be updated, update the fields, set the connector attribute of encrypted="false", and then restart Tomcat. This will trigger VistA Link to encrypt the fields and save it back into the XML file.

For additional details regarding MHE system administration, see the *eScreening SysAdmin Manual*.

For a detailed explanation of change and defect management for MHE, see the *eScreening Change Management Guide*.

For general questions, contact:

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Appendix A – Acronyms, Terms, and Definitions

Term	Definition
Answers	Answers are associated to questions, and provide a way for the user to respond. Types of answers include: text, select-one, and select-many. The type of answer is dictated by the type of question.
Battery	A customized container of modules.
Clinical Reminder	A decision support tool that assists health care providers and health care systems to implement recommended actions and practices. Reminders can direct clinicians to perform certain tests or to provide treatments appropriate for specific populations.
Consult	An indication in a Veteran's VistA record that the Veteran should see a Clinician. An appointment will address this.
CPRS Note	A clinical-level narrative generated by a Veteran's responses to an assessment, which becomes part of the Veteran's CPRS record.
Dashboard alert	An essential message that is displayed on the Assessment Dashboard. The alert is triggered by a Veteran's answers to certain questions, and signals that the Veteran requires immediate attention (such as a suicide indication). Alerts are added to the dashboard by the rules engine.
Editors screen	The screen located in the technical administrator section, which houses all form editors (for example, the editors for Battery, Module, Formula, Rule, and so forth).
eScreening Summary	A simple feedback summary that is generated by the system, based on the Veteran's answers to the eScreening assessment. It contains customized beneficial information, and is given to the Veteran as a printout. Links to resources can be included in the summary set-up design.
Forms editor	A visual, code-free editor in which the content displayed onscreen during editing is closely representative of the finished product. The forms editor is a tool for designing assessment forms and note templates. Staff use the designer to create or edit existing assessment and notes templates; the assessment forms are then used by the assessments runtime and the notes templates are used by the dashboard.
Formula	A calculation made up of constants, other formulas, and mapped Veteran responses to questions.
Health Factors	Health factors are a major patient health management tool that allows care providers to highlight any significant environmental, lifestyle, employment, genetic conditions, habits, and attitudes that may be relevant to an individual's health and care. These are customizable and can be reviewed regularly during vitals exams or other encounters. The resulting records become available for broad analysis and evaluation of the provider's total patient population, and can contribute significantly to achieving meaningful use in a number of important areas: smoking status, patient list generation for quality improvement, identification of the need for -and use of - patient-specific education materials, reporting of required lab results to public health agencies, and the generation of syndromic surveillance data.
Module	A customized container of questions.
Module page	A collection of questions within a module which displays on a single screen.
Questions	Interrogatives presented in the assessment. Types of questions include: free text, select-one, select-many, table, matrix-select-one, and matrix-select-many.
Rule	A group of Boolean conditions which are evaluated. If at least one condition is true, the

	entire Rule is true. When a rule evaluates to “true”, a set of associated events are executed.
Rule event	An action which is taken when a rule evaluates as true. Actions include: associate Health Factor, add Consult, and add Dashboard Alert.
Rules engine	A real-time subsystem for applying rules to a Veteran’s battery as responses are recorded.
Section	A grouping of modules, which will be used to indicate the progress of an assessment-in-process.
Template	This defines a document and includes formatting, variables, and logic. Logic in a template evaluates variable values to fill segments of text in the rendered document. Templates are used to create a CPRS Note, Veteran Summary Note, and Clinical Notes, among other things.
Validation	A parameter that dictates the form a text answer may take. Validations include: number, email, date, exact length, maximum length, minimum length, minimum value, and maximum value.
Variable	A general construct which can be mapped to a question, a question’s answer, a formula, or a custom value calculated by the system.
Acronym	**Definition**
CCB	Change Control Board
CESAMH	Center of Excellence for Stress and Mental Health. A congressionally mandated, multidisciplinary team of clinicians, educators, and researchers devoted to advancing research and enhancing care for mental health issues that affect Veterans.
CPRS	Computerized Patient Record System. A Veterans Health Information Systems and Technology Architecture (VistA) computer application that enables health care providers to review and update a Veteran's electronic medical record.
CSRA	Comprehensive Suicide Risk Assessment
CSV	Comma separated values (an output format for results)
GAD	Generalized Anxiety Disorder
GAD-7	A self-report questionnaire for screening of generalized anxiety disorder, and assessing its severity.
HSTA	Healthcare System Technical Administrator
MHA	Mental Health Assistant (a VistA application)
MHE	Mental Health eScreening
OEF	Operation Enduring Freedom
OIF	Operation Iraqi Freedom
OND	Operation New Dawn
OOO	An abbreviation referring to Operation Enduring Freedom, Operation Iraqi Freedom, and Operation New Dawn, collectively.
PHQ	Patient Health Questionnaire is a diagnostic tool for mental health disorders and physical health issues used by health care professionals. It includes the PHQ-15, a 15-item questionnaire on somatic symptoms.
PHQ-9	A 9-item depression scale of the Patient Health Questionnaire that can be used as a tool for diagnosing depression and monitoring the patient’s treatment.
PIN	Personal Identification Number
PTSD	Post-Traumatic Stress Disorder
SOR	Systems of Records is a file, database, or program from which personal information is retrieved by name or other personal identifier.
SSN	Social Security Number

TIU	Text Integration Utilities, a package for document handling that includes Consults, Discharge Summary, and Progress Notes.
VA	Veterans Affairs
VASDHS	Veterans Affairs San Diego Healthcare System
VISN	Veterans Integrated Service Networks, the collective name of the regional organizations that manage computerization within a region.
VistA	Veterans Health Information Systems and Technology Architecture, an integrated inpatient and outpatient electronic health record for VA patients.
VPN	Virtual Private Network

Appendix B – Choosing a Question Type

Question types

The type of question being asked, and the number of possible answer choices available will help you select the proper format (type). Six question types and 1 format for instruction are available in the WYSIWYG forms builder. See each type for guidance.

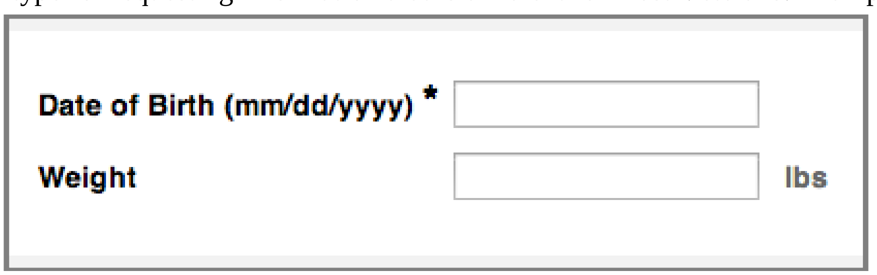
1. Free Text
2. Select One (from list)
3. Select Multi (multiple from list)
4. Select One Matrix
5. Select Multi Matrix
6. Table
7. Instructions

Exporting data from question types

A data export feature allows the export of incomplete and completed assessments in a .CSV file to other applications (one row per assessment). The data can be exported in identifiable or de-identified format. Every export is logged; if a logged export is downloaded again, a new log entry will be generated for that download. Every row in the export log table is viewable by users with access to the Export Data page. See each question type for details.

1. Free Text

Use this type for requesting information that is different for most Veterans. Example:



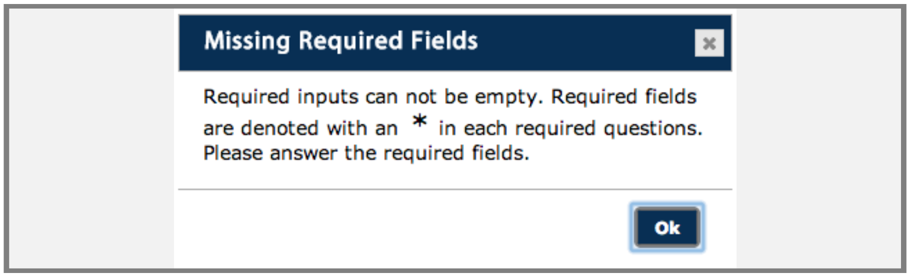
- Free Text is often used when you ask the Veteran to clarify an answer.
- Free Text can include items that require formatting, such as a birth date. If so, assign data type properties, and place instructions next to the text field as in *Date of Birth*, above. Examples:

If you're asking for this …	Then display this …
Email Address	(johndoe@email.com)
Phone Number	(5551234567)
Birthdate	(mm/dd/yyyy)

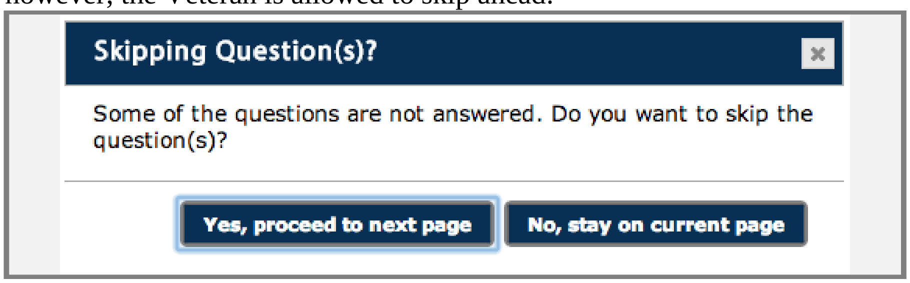
Free Text that requires formatting (has properties assigned) is automatically evaluated by the system. This makes sure that the Veteran has entered information in a way that can be exported. If so, the data is validated. If not, a prompt will provide guidance and the Veteran may try again.

Free Text properties that you can assign, and their validation rules

- **Data Type**:
  Designates the type of data allowed, and dictates the format.
  - **Date**: must be entered in mm-dd-yyyy format.
  - **Number**: numbers only; no alphabet or special characters allowed.
  - **Email**: addresses must be in an XXXX@something.com format.
- **minLength**: the minimum number of characters allowed.
- **maxLength**: the maximum number of characters allowed.
- **exactLength**: the exact number of characters that must be entered.
- **minValue**: the minimum value allowed.
- **maxValue**: the maximum value allowed.
- **Required**: the Veteran can or cannot skip answering.
  - **If set to "True"**:
    The question must be answered before the Veteran can proceed to the next page. If the Veteran tries to skip ahead, a message appears:



  - **If set to "False"**:
    A confirmation message will display if the Veteran does not answer the question, however, the Veteran is allowed to skip ahead:



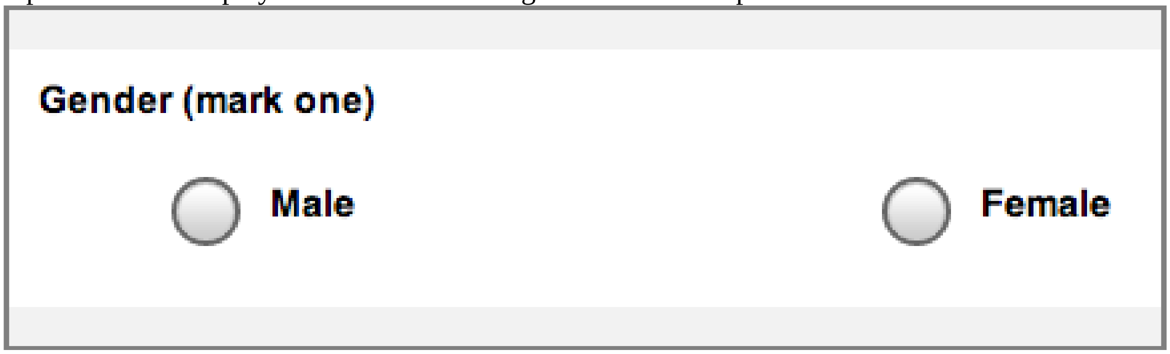
Exporting data from a Free Text

- Column header name: Defined in the forms editor, and set for the answer.
- Exported value: User entered value.

2. Select One

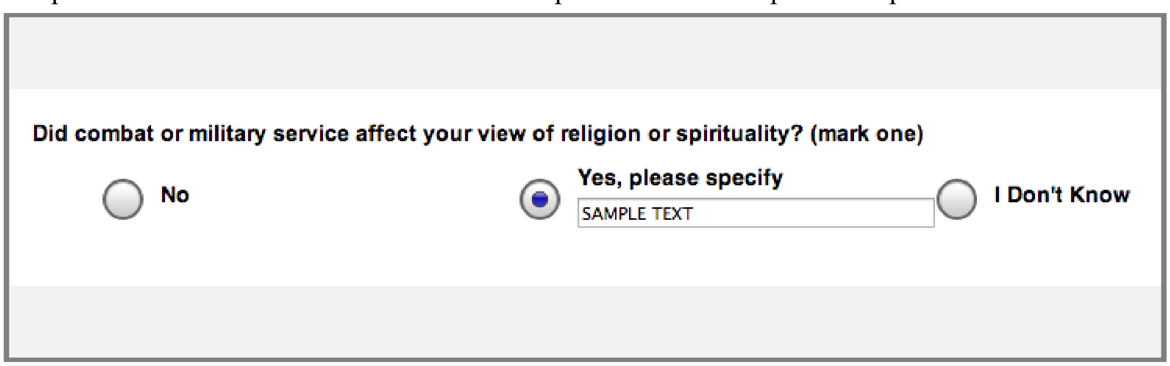
Use this type when the Veteran is allowed only one answer out of a set. The system decides how the answers will display to the Veteran based on the number of answers you provide for selection.

- Option buttons display when the Veteran is given 4 or fewer options:



- Answers display as a clickable list when there are 5 or more options:

- It's possible to allow the Veteran to select an option button that opens an input field:



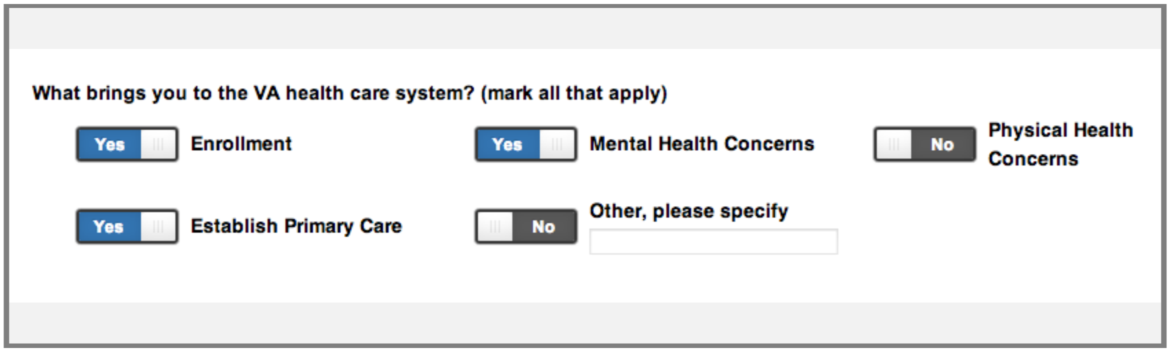
Exporting data from a Select One

- Column header name: Defined in forms editor at the answer level.
- Exported value: Value as defined by the Battery_Matrix document (0 or 1, etc.).
- All of the answers for a question are exported.

3. Select Multi

Use this type when the Veteran is allowed many answers out of a set. A Yes/No switch is used.

- Either a None choice, or one or more of the other choices, must be switched to Yes.
- It's possible to allow the Veteran to select a Yes response that opens an input field:

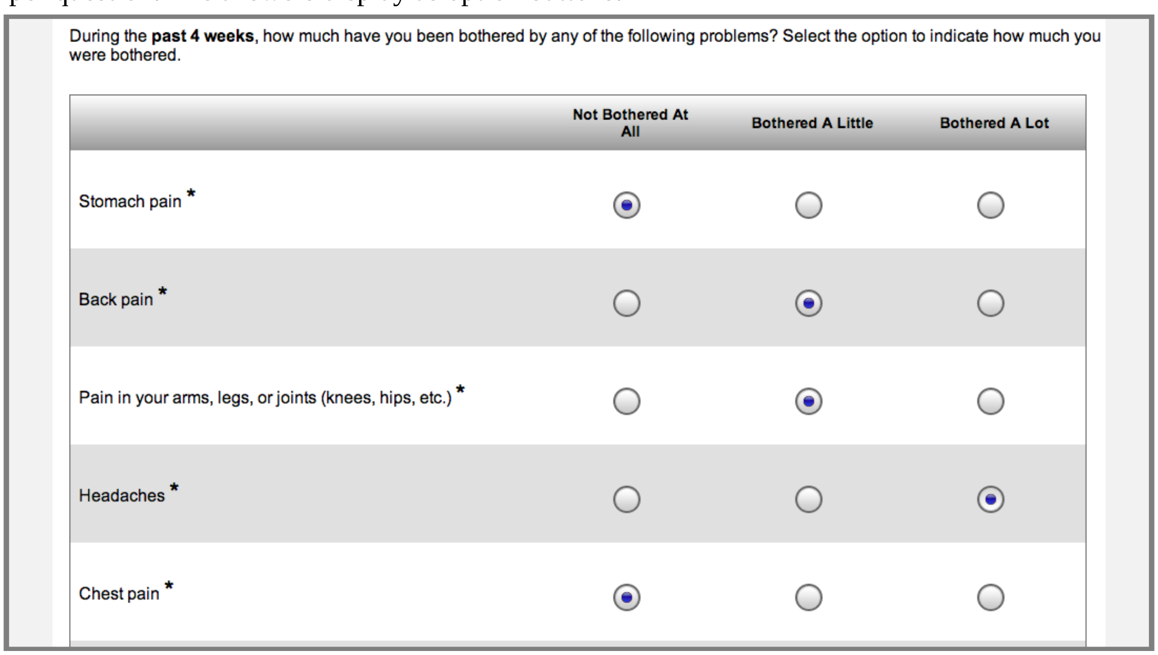


Exporting data from a Select Multi

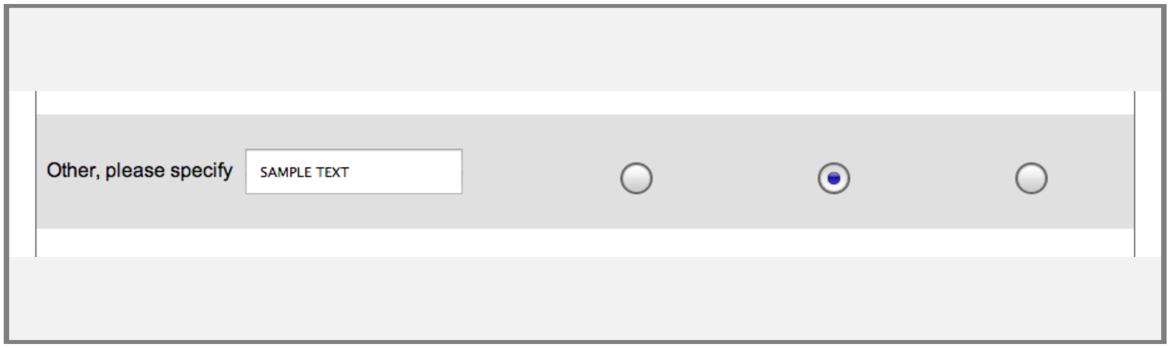
- Column header name: Defined in forms editor at the answer level.
- Exported value: Value as defined by the Battery_Matrix document (0 or 1, etc.).
- All of the answers for a question are exported.

4. Select One Matrix

Use this type when a series of questions have the same answer choices, and *only one* answer can be selected per question. The answers display as option buttons:



It’s possible to allow the Veteran to select an option that opens an input field:



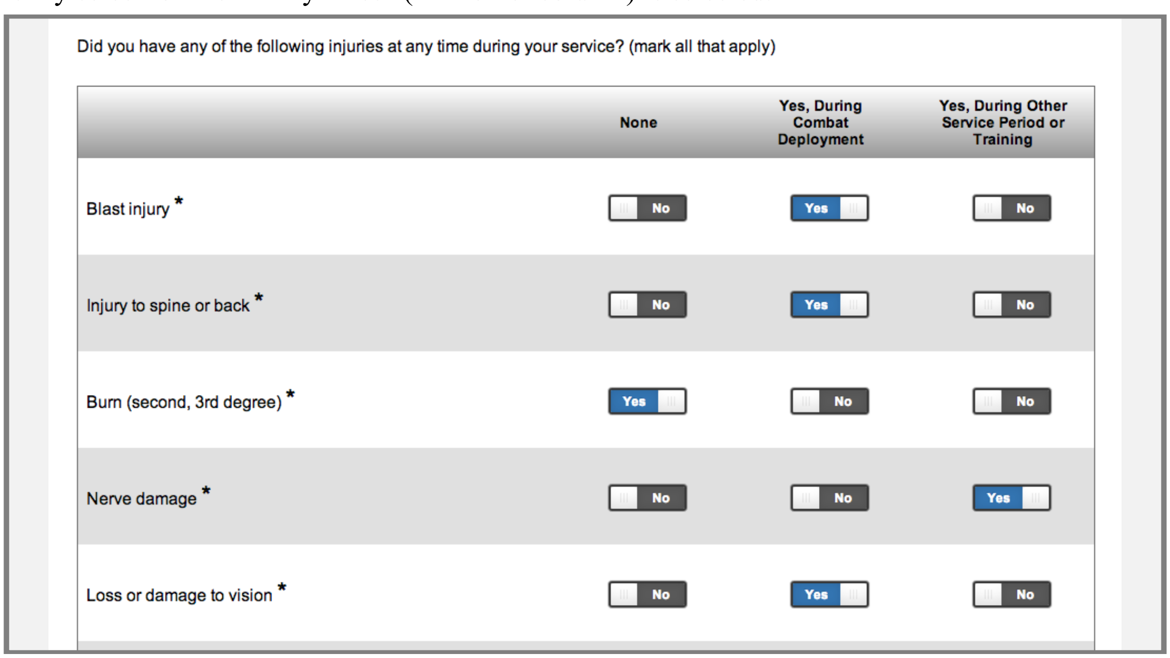
Exporting Data from a Select One Matrix

- Column header name: Defined in forms editor at the answer level.
- Exported value: Value as defined by the Battery_Matrix document (0 or 1, etc.).
- All of the answers for a question are exported.

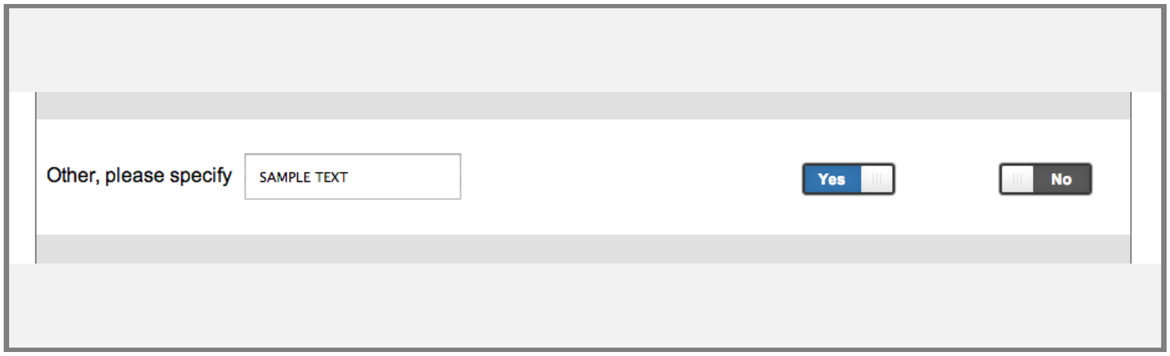
5. Select Multi Matrix

Use this type when a series of questions have the same answer choices, and *one or more* answers can be selected per question. Yes/No switches are used.

If “None” is provided as an answer choice in the column header, the “None” Yes/No switch will automatically select to “No” if any “Yes” (in another column) is selected:



It’s possible to allow the Veteran to select a Yes response that opens an input field:

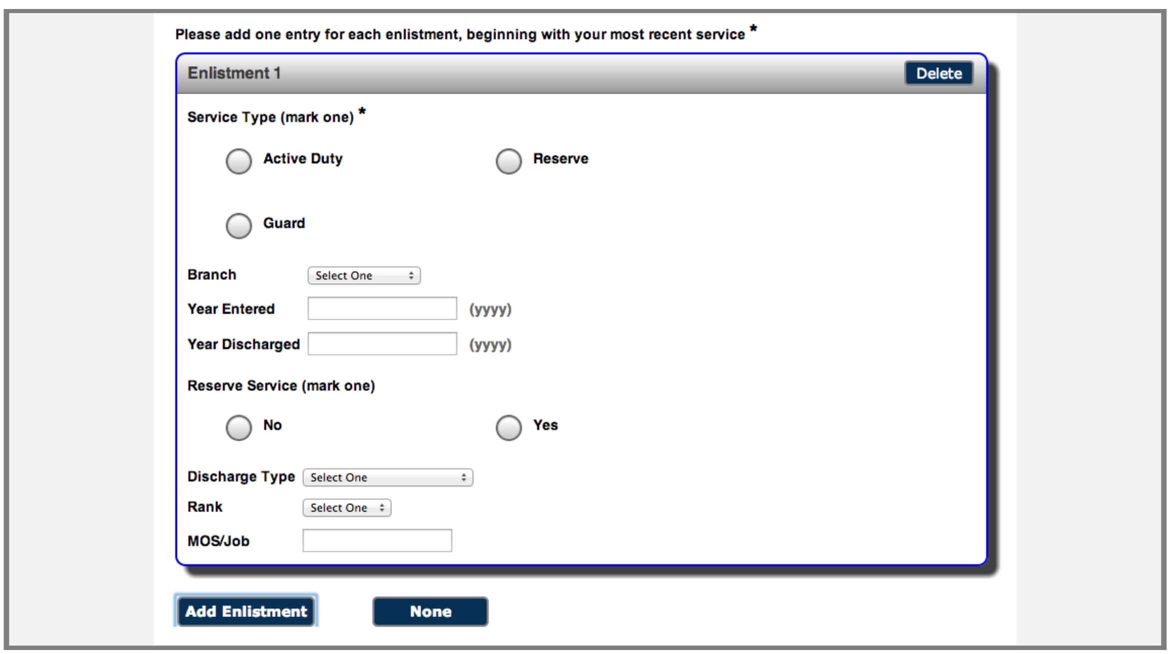


Exporting Data from a Select Multi Matrix

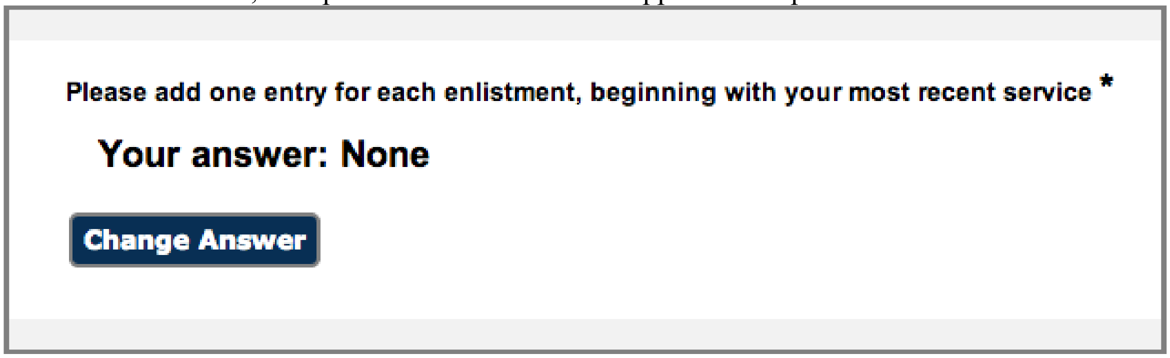
- Column header name: Defined in forms editor at the answer level.
- Exported value: Value as defined by the Battery_Matrix document (0 or 1, etc.).
- All of the answers for a question are exported.

6. Table

Use this type when the number of answers to a question will vary by Veteran. For example, “List medications you currently take.” The system will allow a Veteran to add more input fields if needed. For example, “Child” might display for a question asking for a list of children, or “Enlistment” when the question asks for a list of enlistments.



If “None” is selected, the option to enter data will disappear. Example:



Exporting data from a Table

- Column header name: Defined in the forms editor at the answer level, but each row has a corresponding row number appended to the column name.
- Exported value: Value as defined by the Battery_Matrix document (0 or 1, etc.).
- Associated assessment variables are exported with a variable name.
    - Includes formulas – for example, BMI.
    - Includes custom variables – for example “today’s date” on the Identification survey page.

7. Instructions

Use this type when you want to add instructions or other information to the page to supplement a question. Example:

Data is not gathered or exported from this type.

Template Revision History

Date	Version	Description	Author
May 2015	1.4	Reviewed and approved by PMAS Process Improvement Lockdown. Updated instructional test.	Process Management
November 2014	1.3	Updated to conform with latest Section 508 guidelines and remediated with Common Look Office tool	Process Management
April 2014	1.2	Changed title page to clarify that version number refers to software version	Process Management
April 2011	1.1	Formatted to current ProPath documentation standards and edited to conform with latest Alternative Text (Section 508) guidelines	Process Management
June 2009	1.0	Initial Version	PMAS Business Office