

Chapter 8: Resolving Record Errors

When a record enters the workflow, an automated task checks the record for edit errors. A manual Resolve Record Errors task is created to correct edit errors that must be resolved at an early stage in the workflow (prior to screening). The severity level of each record edit is defined by registry management; therefore, registry management determines which edits will trigger a manual Resolve Record Errors task.

A Resolve Record Errors task is created if edits fail and those edits have a severity level of high or critical. Typically, record editing tasks are only created to resolve errors in required fields such as physician codes, facility codes, fields required to determine reportability (site, histology, behavior, etc), and fields used in rapid case ascertainment.

Although the Resolve Record Errors task provides full editing functionality, you should limit your attention to resolving the edits that have high or critical severity levels. The purpose of this task is to move the record forward in the workflow through the screening and matching processes. Other editing tasks should be performed when the data are consolidated into a patient set (see *Chapter 14: Resolving Patient Set Errors*).

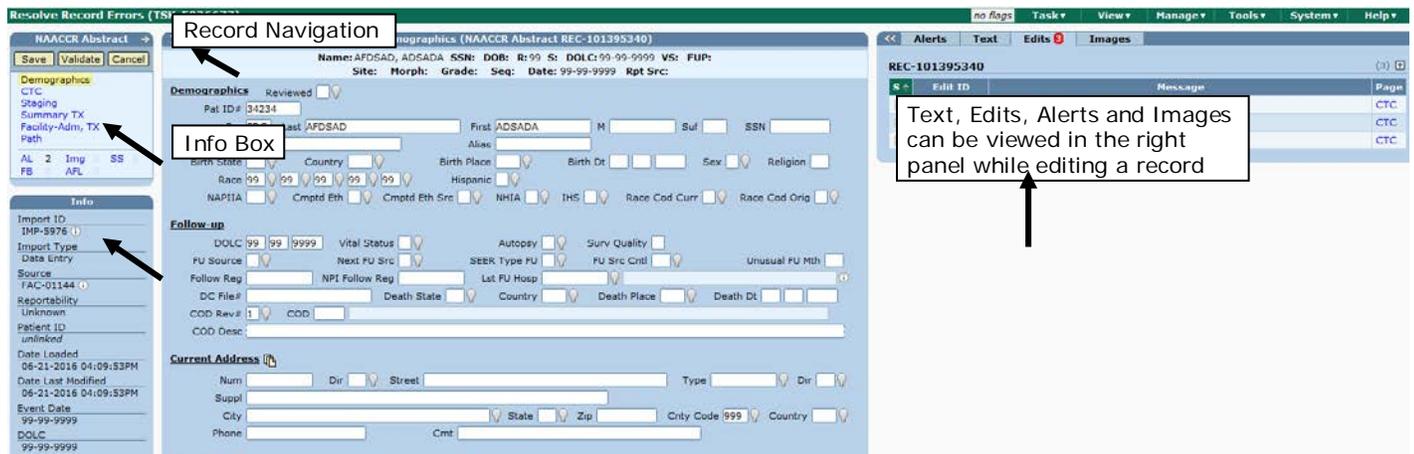
In this chapter, you'll learn about

- Understanding the Record Editor
- Correcting Errors in a Record
- Saving Changes to a Record
- Undoing Changes
- Rerouting a Resolve Record Errors Task
- Requesting Follow-Back Information
- Keyboard Controls in the Record Editor

Understanding the Record Editor

When you open a Resolve Record Errors task, the record will be displayed in an editor similar to the one shown below. Navigation controls are on the left, data fields are displayed in the body of the page in the center, and the failing edits are listed in the right panel.

The Record Navigation panel has links to data pages and other features of the editor. The Save, Validate, and Cancel buttons are always available above the navigation panel. Text fields can either be displayed in the Text tab on the right panel or in a separate window.



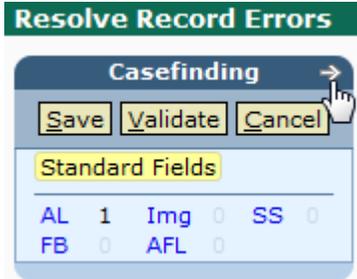
Record Navigation

You can use the links in the navigation panel to:

- View each page of record data. The number of pages varies by record type. The example above shows a NAACCR abstract which has six pages: Demographics, CTC, Staging, Summary TX, Facility-Adm and TX, and Path.
- Review the records's **Audit Log (AL)**. Each change made to a record data field is documented in the audit log. The information in the audit log includes the user or process which modified the data, comments related to the change, the date and time of modification, and the original and modified value of each data field that was changed. For more information about audit logs, please refer to *Chapter 2: Records and Patient Sets*.
- Submit a request to the reporting facility for **Follow-Back (FB)** information related to the record data. Please refer to the *Requesting Follow-Back Information* section of this chapter.
- View, add, or delete scanned documents, i.e., **Image Files (IMG)** related to the record data. An image file may be a scanned copy of a pathology report, death certificate, or other document.
- Review the status and outcome of each **Abstract Facility Lead (AFL)** associated with the record. Refer to *Chapter 21: Managing Abstracting Assignments* for more information.
- View any **Special Studies (SS)** to which this record is assigned. Add or remove the record from a special study. Refer to *Chapter 28: Special Studies* for more information.

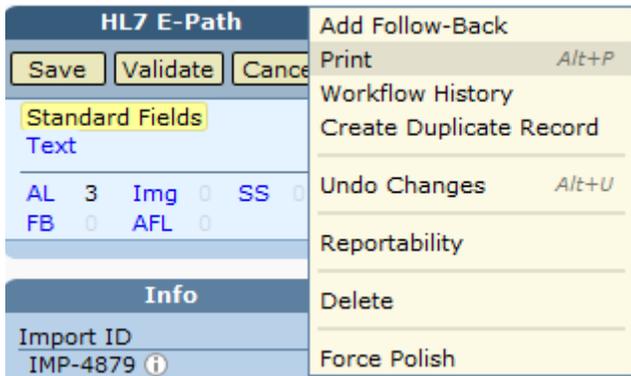
Note: The Resolve Record Errors task occurs prior to the automated task that creates an AFL and prior to the automated task that evaluates the record for Special Studies. Therefore, a record in a Resolve Record Errors task will, typically, not have an AFL or a Special Study defined. The only exception would be if the record was manually forced to go through the workflow again and the AFLs were not deleted upon workflow restart.

Record Menu



The figure on the left is a snapshot of the left navigation panel in the record editor.

The cursor is pointing to an arrow that will open the record menu.



Click the arrow to open the menu.

If a keyboard shortcut is assigned to a menu item, the key combination will be listed. For example, you can either press *Alt+P* to print a record or you can go to the record menu and select Print as shown on the left.

Create Duplicate Record is only shown for Casefinding and HL7 records.

The record menu allows you to:

- **Add Follow-Back** – Submit a request to the reporting facility for more information related to the record (see the *Requesting Follow-Back Information* section of this chapter).
- **Print** – Open a printable version of the record data.
- **Workflow History** – View a list of the tasks that were completed to process this record. The history includes all manual tasks, but only the automated tasks completed in the time period specified in the `workflow.history.retaining-period.months` configuration parameter. This log includes task ID, user, task type, and the date completed.
- **Create Duplicate Record** – Create a record that is a copy of the current record. This menu item is only available for Casefinding and HL7 records. Site, site title, histology, histology title, behavior, grade, and laterality are set to blank in the new record. The values of all other fields are copied. Use this feature when a record contains data for multiple primaries. Set all values in the original record before creating and editing the new record.
- **Undo Changes** – Reload the last saved version of the record; this “un-does” or reverses changes that you have not saved (see the *Undoing Changes* section of this chapter).
- **Reportability** – View the reportability status. The reportability status will always be unknown during a Resolve Record Errors task; the record will be screened for reportability in a subsequent step in the workflow (see *Chapter 9: Screening for Reportability*).
- **Delete** – Physically remove the record from the database. This menu item is only active if your account has the `rec_delete` or `system_administration` permission. If the record is linked to a Patient Set, then the record will be unlinked and deleted from the database. If you use this menu item to delete a record that is in a worklist task, SEER*DMS will auto-terminate the task.

- **Force Polish** – Execute all record polishers. A polisher is a utility program to automatically set the value of one field based on the values of other fields. The polishers execute automatically when trigger fields are changed. You should rarely, if ever, need to force the polishers to execute. If you do force the polishers then you should review all changes made to data fields on the record.

Info Box

The following items are included in the Info Box:

- **Import ID** – A unique identifier associated with records imported in the same set of files or entered in the same data entry session. Click the Information Icon ⓘ next to the ID for details including the name of the file containing the original source data for this record.
- **Import Type** – If the record was loaded from a file, the specific type of file will be displayed. Other values for Import Type are Data Entry, Migrated, and Linked Image (record was created in an Image Data Entry task).
- **Source** – The ID of the record’s source or reporting facility. For some record types, this field is the facility specified when the file was imported and cannot be changed. For other record types, the facility is an editable field on the record (Rpt Hosp).
- **Reportability** – The reportability value set during a manual or automatic screening task. Records are not screened for eligibility until severe and critical errors are resolved, therefore this value will always be unknown in Resolve Record Errors tasks.
- **Patient ID** – The ID of the consolidated Patient Set. Since the record has not yet been linked to a Patient Set, “unlinked” will be shown in this field during Resolve Record Errors tasks.
- **Date Loaded** – Time stamp indicating the time that this record was loaded into SEER*DMS. This field shows the date and time of the import, data entry session, or migration.
- **Date Last Modified** – Time stamp indicating the last time this record was saved by a user or modified by an automatic system task.
- **Event Date** – A record field that is assigned a value based on other date fields. It provides a single date field that SEER*DMS can use regardless of record type. Event Date is set to date of diagnosis for most records, but would be date of last contact for a death certificate record. The logic for setting Event Date is documented on the Polishers help page.
- **Date of Last Contact** – A record field that is assigned based on the Date of Last Contact (Record) polisher.

Text Viewer

The record’s text fields can be viewed on the Text tab in the right panel. If you wish to print the text fields or view the text in a separate window, click **Text** on the center panel to open the text popup window. You may move the popup window to a second monitor. If you have a single monitor, you may need to resize your browser window to view a data page while displaying the Text Viewer popup. The keyboard shortcut for opening the Text Viewer popup is *Alt+T*.

Data Header

The Data Header is a read-only display of patient and tumor fields. If you need to modify one of these fields, click the link for the appropriate data page and edit the field in the body of that page.

Body

The body of the record editor displays the content for the currently selected page. The layout of the fields in the body of the page varies by record type. The NAACCR record type is consistent in all registry configurations, other record types vary. A variety of controls are used on the data pages to edit specific fields; the process is described in *Correcting Errors in a Record*.

Save, Validate, Cancel

The Save, Validate, and Cancel buttons enable you to:

- **Save** – Save changes as you work or save changes when exiting. Save is a two-step process. The Review Changes page is displayed when you first click Save, but your changes will not be saved in the database until you review and confirm the modified data fields. For specific instructions, please refer to the *Saving Changes to a Record* section of this chapter.
- **Validate** – Execute polishers and edits. The edits were executed when you first opened the record in the editor. After making changes to data fields, click Validate to see if your changes have resolved errors or generated additional errors.
- **Cancel** – Exit the editor without saving changes made on any page. Changes that you did save will be retained.

Correcting Errors in a Record

Requires system permission: *rec_edit*

The purpose of a Resolve Record Errors task is to resolve edits that prevent the record from moving through the screening process in the workflow. Edit errors with a severity level of critical and high must be resolved prior to screening the record for reportability. Edit errors of lesser severity may also be indicated. You are encouraged to correct the critical and high errors, and ignore less important edits. All other editing tasks should be performed when the data are consolidated into a patient set. In general, the majority of changes should be made to patient set data fields and as few changes as possible should be made to data fields in the source records.

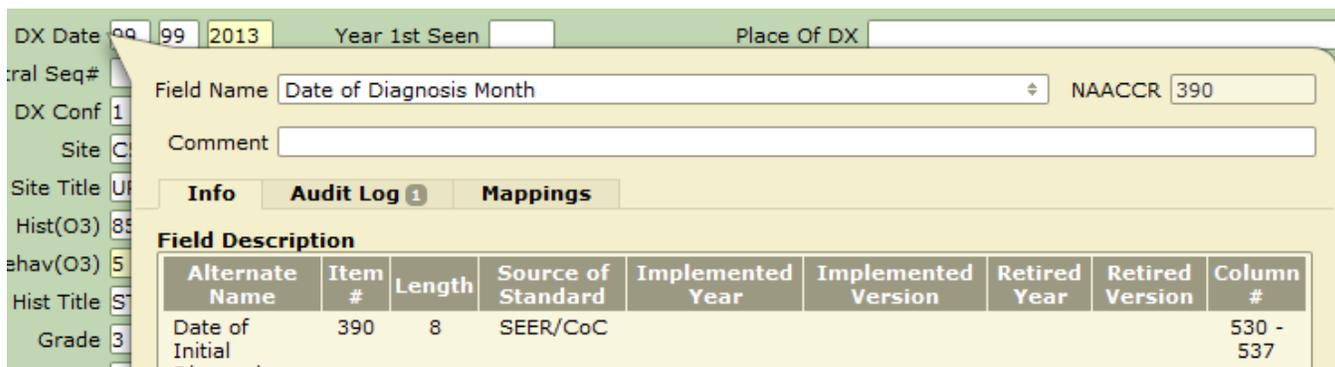
Review each error prior to making changes to a data field. To evaluate and correct the problem, you must determine if a single field is causing the error or if an inter-field edit has identified a conflict between multiple fields.

To review and correct the errors in a record:

1. The edits that are failing will be listed in the right panel. Review and resolve each edit error. Edits with a severity level of critical or high must be resolved in order to move the record forward in the workflow. The columns listed on the edits tab are described below.
 - a. The following symbols are displayed in the **S (Severity)** column:
 -  **Critical** – exclamation point is used to alert you to critical errors
 -  **High** – directional symbols indicate the relative severity level of the other levels, the up arrow is used for a high severity level
 -  **Moderate** – flat indicates a moderate severity level
 -  **Low** – a down arrow indicates a low severity level

*Tip: If you hold your mouse over any symbol in SEER*DMS, the symbol's meaning will be displayed.*
 - b. **Error ID** – Edit name or identifier. Click the information icon  next to the ID to view more detailed documentation and source code. SEER, SEER Extended, and registry-defined edits are implemented in SEER*DMS. In addition, SEER*DMS applies system edits to enforce database rules. (For more information, see *Chapter 7: Edit Errors*.)
 - c. **Error Message** – A brief description of the edit error.

- d. The **Page** column provides a link to a data page containing at least one of the data fields causing the error.
2. Click the link in the **Page** column to find and edit the fields. All fields validated by an edit may not be shown on the same page, use the links in the Record Navigation box to go to other data pages.
 3. Review the fields with an error severity level of high or critical. As described in *Chapter 7: Edit Errors*, these errors will be highlighted in red. Hold your mouse over the field's value to view the edit errors failing for that field. As you edit the data, you may need to:
 - a. Review the text in the right panel or click **Text** to open the text viewer.
 - b. If the original data was provided in image files, use the **Img** link to confirm codes and review the text provided in the image.
 - c. Use the links in the Record Navigation Box to review fields on other data pages.
 4. If you are able to resolve the error:
 - a. Depending on the field, you may either enter a value directly into the data field or use a lookup control to select the value. See *Editing a Data Field* for a more detailed description of methods for modifying fields in the record editor.
 - b. The color of the edited field will change when you move to another field (see *Chapter 7: Edit Errors* for a description of the color codes used in the editor).
 - c. Click **Validate** to run the edits and to determine if your change has corrected the error. If the color of the field still indicates an error, hold your mouse over the field to review the error message.
 - d. To add a field comment, **click the field label** and then enter a comment into the **Comment** text box. This will save as a comment for that particular field in the Audit Log.



5. If you are *unable* to resolve the error, follow the procedures defined by your registry's management. For example:
 - a. For some edits, like edits related to physicians, the proper course of action may be to add a follow-back need about the data item and set the record's review flag to Reviewed (the review flag is usually on the top of the first page in the editor). Confer with your manager to determine your registry's policy related to setting the review flag.
 - b. If information from the reporting facility is required to resolve an error, follow the instructions provided in the *Requesting Follow-Back Information* in this chapter.
 - c. If you encounter a problem that you can not resolve, follow the instructions provided in *Rerouting a Resolve Record Errors Task*.

6. To save changes and/or exit the task, follow the steps in *Saving Changes to a Record*.

Saving Changes to a Record

Requires system permission: *rec_edit*

Two steps are required to save changes in the SEER*DMS editor. Clicking the Save button in the left navigation box will open the Review Changes page. The changes are not actually saved until you review and confirm your changes.

You may enter comments regarding changes made during the task. General comments about the task can be entered in the comment box on the Review Changes page. Field comments can be entered for each modified field by clicking **add** in the **Cmt** column. All comments are stored in the record's audit log.

To save a record and continue editing:

1. Click **Save** (or press *Alt+S*).
2. Enter comments to document your changes.
3. Click the **Save** button at the bottom of the Review Changes page (or press *Alt+S* again).

To save the record and exit the editor:

1. Click **Save** (or press *Alt+S*).
2. Enter comments to document your changes.
3. Click **Save & Exit** (or press *Alt+E*). If errors with a high or critical severity level are resolved, the record will move forward in the workflow. Otherwise, the Resolve Record Errors Task will remain in your worklist.

Undoing Changes

Requires system permission: *rec_edit*

You may use Undo Changes menu item to undo all *unsaved* changes, that is, to reload the data from the database. Any changes that you made and saved will not be reversed. However, all changes are documented in the Audit Log. If you need to reverse a saved change, manually edit the field and enter the original value as noted in the Audit Log.

To undo changes:

1. Click the  menu indicator next to the record type. Select **Undo Changes**. (Or use the *Alt+U* keyboard combination.)
2. Click **OK** to confirm.

Rerouting a Resolve Record Errors Task

Requires system permission: *rec_edit* and *worklist_task_reassignment*

If you are unable to resolve the errors with a severity level of high or critical, registry guidelines will determine your next steps. You may be instructed to forward the task to a manager or coworker with a particular expertise; or you may be instructed to release the task to the unassigned list so that other users will have access to it.

To reroute or release an open Resolve Record Errors task:

1. If you wish to set a worklist flag before you release or reroute the task:
 - a. Select **Worklist Flags** from the Task menu.
 - b. Check the flags that are appropriate for this task.
2. To assign the task to another user, select **Reassign** from the Task menu.
 - a. Set the **Action** to *Assign to User Account(s)*, and select a user name from the list. The list will only include users who have the system permissions required to open the task.
 - b. Enter text into the **Comment** box. This text will be included in the e-mail notification sent to the user receiving the task.
3. To designate the task as unassigned, select **Release** from the Task menu.
4. If you have the *system_administration* permission, *Terminate* and *Restart* will be included on the Task menu (*Restart* will only be available in tasks related to records, not patient sets). These actions should be used with care as discussed in *Chapter 4: Using the Worklist*.

You may also use the modify feature of the worklist to release or reroute a task that is assigned to your account (see *Chapter 4: SEER*DMS Workflow*). However, there are limitations. All users can set worklist flags in the task that they are viewing, but the *system_administration* permission is required to set worklist flags for a set of tasks in the worklist.

Requesting Follow-Back Information

Requires system permission: *rec_edit* and *fb_initiate*

In SEER*DMS, a request for follow-back information is referred to as a "follow-back need". If you determine that additional information must be obtained from the reporting facility, you should submit a follow-back need for the record. Your request will be maintained with the record, allowing all users to review pending follow-back issues when reviewing the record data. After submitting the follow-back need, you may continue editing or save the record in a Resolve Record Errors task that can be continued at a later time. Methods for saving the record and exiting the task are described in the *Saving Changes to a Record* section of this chapter.

You will receive an e-mail notification when a response to your request is processed and the follow-back need is closed. You or another staff member may update data fields based on the new information. As determined by registry policy, one staff member may be responsible for processing all follow-back responses, or the information may be given directly to the staff members who entered the follow-back needs.

SEER*DMS enables users to access patient data via two routes: 1) the data can be modified while completing a worklist task, or 2) the record or patient set may be edited directly, outside the context of a task. If you suspended a task pending the receipt of follow-back information, you must re-open and complete the task to allow the record to move forward in the workflow. You must either make changes to data fields based on the new information or verify that the appropriate changes were made. If you completed the task but need to update the record with the new information, use the Patient Lookup to search for the record. Instructions for submitting follow-back requests and processing the responses are provided in *Chapter 22: Follow-Back*.

Keyboard Controls in the Record Editor

Requires system permission: *rec_edit*

The keyboard functions that can be used to modify fields in the editor are listed below. Once you modify a field, it will be highlighted based on the color code described in *Chapter 7: Edit Errors*

Use your mouse to go directly to a field or use the following keystrokes:

Keystroke	Function
Tab	Go to the next field
Shift + Tab	Go to the previous field

To edit a data field, type the value into the text box or use these controls:

Keystroke	Function
Click  or press Alt+L	Open a lookup table to select a value from the field's valid values. You may also define new values for some lookups (e.g., physicians).
Ctrl + A	Select all text (highlight without using the mouse)
Ctrl + C	Copy to clipboard
Ctrl + X	Cut – deletes highlighted text and copies it to the clipboard
Ctrl + V	Paste from clipboard to cursor location
Ctrl + Z	Undo changes made in a field.
Ctrl + Y	“Redo” changes. This reverses changes made by Ctrl + Z.
Home and End	Go to beginning or end of current field

Command	Shortcut
Navigation	
Shortcut Help	F1
Home	Alt+H
Worklist	Alt+W
Field Editing	
Copy	Ctrl+C
Cut	Ctrl+X
Paste	Ctrl+V
Redo	Ctrl+Y
Select All	Ctrl+A
Undo	Ctrl+Z
Expand drop-down list	Space
Record Editor	
Save	Alt+S
Save & Exit	Alt+E
Cancel	Alt+C
Print	Alt+P
Undo Changes	Alt+U
Validate	Alt+V
Text	Alt+T
Field Information	Alt+I
Lookup	Alt+L

SEER*DMS supports keyboard shortcuts for some menu items and actions. The keyboard shortcuts shown on the left can be used when editing records in SEER*DMS.

The **Save**, **Cancel**, and **Validate** shortcuts are provided as alternatives to the buttons. The **Print** and **Undo Changes** shortcuts are alternatives to the record menu items.

The keyboard combination for **Save & Exit (Ctrl+Alt+E)** is not active unless you are viewing the Review Changes page of the editor.

The shortcut for opening a **Lookup** is only active if your cursor is on a field that has a lookup.

The shortcut for viewing the **Field Information** is only active if your cursor is on a field.