Chapter 11: The Patient Set Editor

A "Patient Set" stores all data for the patient. These include patient demographic data and data related to each cancer diagnosis. Consolidated data are stored in Patient Set fields. The source data that contributed the data are "linked" to the Patient Set. The Patient Set Editor provides access to the consolidated and source data. Source data include abstracts, path reports, death certificate records, and records based on linkages; as well as pharmacy data, claims data, and physician reports. Refer to Chapter 2 for a description of the Patient Set data structure.

Two users may open the same Patient Set in the editor at the same time, but only one user will be able to make changes. SEER*DMS implements a lock when the first user opens a Patient Set in the editor. A warning message is displayed if you open a Patient Set that another user is editing.

The features of the Patient Set editor are described in this chapter. Task-specific instructions are provided in *Chapter 12: Consolidating Data* and *Chapter 14: Resolving Patient Set Errors*.

In this chapter, you'll learn about:

- Features of the Patient Set Editor
 - Overview of the Patient Set Editor
 - Links to Data Pages
 - Menus in the Patient Set Editor
 - Supporting Data Panel
 - Supporting Text
 - Treatment Data
- Processes
 - o Editing Data Fields
 - o Polishers
 - Linking Records to a CTC
 - Comparing Consolidated Data to Source Data
 - Moving Records to a Different Patient Set
 - Using Tools to Edit Address Data
 - Geocoding Tools
 - Adding Sequence Placeholders
 - Deleting a Linked Record
- Saving Changes
- Undoing Changes
- Printing
- Keyboard Shortcuts

Overview of the Patient Set Editor

There are three panels, from left to right, in the Patient Set editor.

- Links to data pages are in the left panel. These include links to CTC pages. Each CTC contains the data for a cancer diagnosis. CTC was originally defined as an acronym for cacner/tumor/case but is often understood to mean the consolidated tumor case.
- Data fields are displayed in the center panel.
- Supporting Data are shown in the right panel. Supporting Data include text, image files, system alerts, edit failures, comments from registry coders, claims data, pharmacy data, and other linkage data. The supporting data available varies by patient.

PAT-00010200	Operation Info Record Linkages Text PAT-00010200 PAT-00010200	View Source Data Supporting Data
Save Validate Cancel Demographics	ADAMS, HUGO CORBIN 129-17-7790 Male; White b. 02-13-1940 CTC 00: C443-9, 8742/2; 09-17-2020 Rpt Src: 1 State DX: MD Demographics	Last contact 09-17-2020; Alive Alerts Text Edits Cmt Ref SEER: Y Display Text From Oisplay Text From TC 00 (C43-9) - Record and CTC Text Fields Itide non-values Lock
CTC 00 (09-20 C443-9) Abstract Facility Leads (0) Audit Log (10) Follow-back (0) Special Studies (1) Consolidated (1)	Patient Identifiers & Flags Reviewed 0 \vee Last First M Suf ADAMS HUGO CORBIN Birth Surname Birth Dt Sex OR Name/Sex 1 \vee V	Group Text By Included Record Types Record Included Record Types SSN Included Record Types 1291277790 Included Record Types Surg Txt Ol (J99 WIDE LOCAL EXCISION LT TEMPLE MUSCLE Staging Txt
Townville Regional Hospital (1) ANA 09-12 C443-9 COD	Race, Ethnicity & Birth Place Aliases add Follow-up, Vital Status & Death Data	AJCC- PTX CA2C C MO- STAGE 3B SEER = 2
	COVID-19 Patient Addresses add Patient Contact Information	✓ (1) ✓

The title bar shows the Patient Set ID and tools for consolidating data. Immediately below the title bar is a header with a summary of patient data. The data displayed in title bar and header are:

- **Patient Set ID** PAT-00010200 in the screen shot. The eight-digit segment of the ID is NAACCR item #20. The full ID is stored in the *display_id* field of the patient table.
- **Demo Info** This popup provides a quick method to compare the patient's name and other identifiers between the Patient Set and source records. Use this popup to confirm that all source records are linked to the correct Patient Set.
- **Record Linkages** Use this popup to change or confirm the CTC linkage of source records.
- **Text** Open this popup to view supporting Text in a separate, movable window. The data displayed in this popup are the same as those shown in the Text tab on the right panel.
- View Source Data This link controls the display of data in the center panel. By default, only the consolidated data items are displayed. Click View Source Data to compare the values of consolidated data items to values in source records.
- **Header** Patient identifiers (name, SSN, sex, race, DOB, date of last contact, and vital status) are always shown. The second line of the header is a summary of CTC data. CTC 00 indicates the sequence number. It is followed by site-laterality, histology/behavior, and date of diagnosis. Other labeled fields may also be shown such as Type of Reporting Source, state address at diagnosis, region, and flags indicating whether the CTC is SEER or NPCR reportable. The CTC data summary is shown on every CTC data page; it is shown on all data pages if there is only one CTC in the Patient Set (not including deleted CTCs). Note: Record data items are shown in the header when viewing a source record.

Links to Data Pages

The left panel contains links to pages containing Patient Set and source record data. If you have a smaller monitor, you may use the double arrows next to Demo Info in the title bar to hide or show the left navigation. When hidden, a menu icon is show so that you can access the page links. \equiv

PAT-00000196

Pending (1)

Consolidated (1)

Cancel

Data Pages

Source

Records

Validate

Save

Demographics

Audit Log (12)

Follow-back (0)

Special Studies (2)

Registry facility (1)

Registry facility (1)

CTC 01 (C510-9)

Abstract Facility Leads (0)

Use the links in the left panel of the editor to:

- Go to a data page. Clicking **CTC** will take you to the main CTC page and expand the CTC menu.
- Review or create an Abstract Facility Lead (AFL) to indicate that an abstract is needed (see Chapter 21: Managing Abstracting Assignments).
- Review the Patient Set's **Audit Log**. Changes made to data items are listed in the audit log.
- Review or submit a request to the reporting facility for **Follow-back** information.
- View **Images**. These may include pathology reports or other documents that were originally recorded on paper and scanned.
- View Special Studies to which this patient is assigned. You may also add or remove the Patient Set from a special study.
- Access records that need to be consolidated (listed under the **Pending** heading).

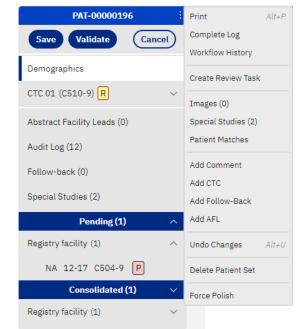


View records that have been fully consolidated (listed under the Consolidated heading).

Menus in the Patient Set Editor

The three-dot menu icon is used throughout SEER*DMS. Click the menu icon to the right of the Patient Set ID to open the Patient Set menu.

The items on the menu vary according to the page that you are viewing. This shows the menu when viewing the Demographics page.



Supporting Data Panel

Supporting Data				
Alerts	Text	Edits	Cmt	Ref

The right panel of the editor displays Supporting Data. The Supporting Data tabs may include:

- System messages and task-specific instructions on the **Alerts** tab.
- **Text** fields stored in the Patient Set and source records.
- **Edits** that are failing for data items in this Patient Set. These include edits maintained by standard setters (SEER, NAACCR, NPCR, etc) and edits defined by the registry.
- PDF files and other digital image files, if available, are displayed on the **Img** (image) tab. These may include scanned versions of paper pathology reports and other documents.
- The **Cmt** tab contains comments. These include notes added by registrars and messages generated by SEER*DMS (there is an option to hide auto-generated system messages).
- Claims and pharmacy data are displayed on the **Rx-Tx** tab. This tab can be used to add treatments based on these data. This tab is only visible if these types of data are available for this patient set and you have the system permission required to view these data.
- Physician reports imported in CDA format are displayed on the **EHR** (electronic health record) tab.
- Reference data are displayed on the **Ref** tab. This tab is only shown if reference data sources are defined in your system. Reference data sets may be defined by registry IT staff and may include data for the patient that are stored in the SEER*DMS database or data stored in external data sources. External linkage data are sometimes shown in the Ref tab.

Supporting Text

View text fields in the right panel of the Patient Set editor; or use the Text link in the title bar to open a separate window showing the Text. If you use a separate window, then you must use the Text link to refresh the contents each time you open a new Patient Set.

Text fields are stored in source records and, to a lesser extent, may also be stored in CTC fields. Use these controls to change the display of text:

- **Display Text From** Use this menu to view text on a specific record or text from one CTC while editing another. A user preference determines the default setting of this menu.
- **Hide non-values** Check this to hide text fields with values like "NA", "No Text", "None", etc. You can view the terms considered to be non-values by clicking the Hide non-values label. The terms are defined in a registry configuration parameter (*text.non.value*). To make changes to the list, submit a request to the SEER*DMS Technical Support team.
- **Lock** The Text tab is updated each time you change pages unless it is Locked. The tab is updated when you go to another record or CTC. The text popup window does not adjust when you change pages; you must manually select a new page in the text window.
- **Group Text By** This controls the way the text fields are organized. Select By Field to see text from all records for the first field; followed by text from all records for the next field.

The Patient Set Editor

For example, you could read the Clinical History from all facilities. The other options are to group the text fields By Record or By Facility. Recommended: SEER*DMS automatically hides duplicate text fields if you display By Field.

• **Included Record Types** – Use this option to limit the display by record type, for example, select HL7 to limit the display to text from electronic pathology reports.

		Sup	porting Da	ita		
Alerts Text	Edits	Comments				
Display Text From CTC 00 (C341-1) -	Record	and CTC Text F	ields ∨	∕ 🗹 Hid	e non-values	🔲 Lock
Group Text By Record V		uded Record T (1)	ypes V			Hide All
CTC 00 (C341-1	1)					^
Place DX	_					
	COMM	IUNITY HOS				
NA () 05-22-2						^
DX Proc PE						
XRay/Scan						

Treatment Data Pages

There are 3 types of treatment data pages:

- **Summary TX** Summary treatment fields are stored at the CTC level. These are the consolidated treatment values. SEER*DMS calculates the values, but you may over-ride the calculations.
- **TX** A TX is the registry's copy of treatment both given and reported by one facility. These data are typically copied from the RX hospital fields on a NAACCR abstract record.
- **TXr** A TXr is the registry's copy of treatment given at one facility but reported by a different facility. Two different facility IDs will be shown on a TXr data page. The facility that treated the patient is often unknown. When treatment data are incorporated into a CTC from a NAACCR abstract record, both TX and TXr data pages are created if there are

The Patient Set Editor

treatment data in the NAACCR summary fields that are not included in the NAACCR hospital fields. The TXr data are built from the additional data in the Summary TX fields on the NAACCR abstract.

You may modify the CTC Summary TX data fields; however, it is typically better to modify the data on the TX and TXr pages. SEER*DMS will automatically re-calculate the Summary TX values. The standard way of maintaining treatment data is described below.

- 1. SEER*DMS copies data from a NAACCR abstract record into TX and/or TXr data pages. This happens when the record is linked to the CTC.
- 2. A CTR at the registry corrects coding errors in the TX and TXr data pages. The original values on the abstract are retained for reference.
- 3. SEER*DMS calculates the Summary TX values based on the TX and TXr data. Refer to the CTC Summary polishers on the Help>Polishers page to view the summarization logic.
- 4. The registry CTR may over-write the Summary TX values, if necessary. To prevent SEER*DMS from re-calculating, the CTR must set a review flag. There is a review flag for each section which stops the polisher from re-calculating the fields in that section (Surg Rev, Radtn Rev, and Systemic Rev).

Working with Treatment Data

PAT-00010200 :	The links to the Treatment Data Pages in this Patient Set are:
Save Validate Cancel	Course 1 – click this link to view Summary TX data.
	TX 1 – treatment reported by and provided at FAC-1000.
Demographics	TXr 1 (9999~1000) – treatment reported by FAC-1000 but
CTC 00 (09-20 C443-9)	provided at FAC-9999. FAC-9999 is the unknown facility in this
Staging	registry. FAC-1000 reported that the patient had treatment at another facility, but the facility name was not provided.
Facility (1000)	another facility, but the facility fiame was not provided.
Course 1	
TX 1 (1000)	
TXr 1 (9999~1000)	

There are two screen layouts for viewing treatment data. You may view one TX page at a time (Page Mode) or you may view all data for a course of treatment at once (Comparison Mode). Your account preference determines which mode is shown by default.

The screen shot below shows the Summary TX data in Page Mode. Only the Summary TX data fields are shown. You may use the chevrons to expand or collapse each section, or use the Expand or collapse sections with the chevrons, or the Show All or Hide All links to expand or collapse all sections.

< Demo Info	o <u>Record Linkages</u>	<u>Text</u>	F	PAT-00010200			<u>Compare TXs</u>
ADAMS, HUG CTC 00: C44	0 CORBIN 3-9, 8742/2; 09-17-20	129-17-7 020 Rpt Src:		Male; White State DX: MD	b. 02-13-19	40	Last contact 10-15-2020; Alive SEER: Y
Summary 1	TX						Show All
Course 1 Course Dt 10 15 2	Tx Status	Der Neoadjuv	Rx Flag				^
Surgery							^
Surg Rev	Review Reason	Rs No Surg	Dt Most	Def Surg	Approach]	
			10 1				
Surg 03+	Surg 98-02	Surg 73-97	Surg Dt	5 2020	Margin		

Clicking Compare TXs above will switch the display. The screen shot below shows the same Summary TX data, but in Comparison Mode. The Summary TX values are shown in the first column. The other columns contain the TX and TXr data.

< <u>Demo Info Re</u>	cord Linkages <u>Text</u>		PAT-00010200		<u>View Summary TX Page</u>
ADAMS, HUGO CO CTC 00: C443-9, 8	RBIN 3742/2; 09-17-2020	129-17-7790 Rpt Src: 1	Male; White State DX: MD	b. 02-13-1940	Last contact 10-15-2020; Alive SEER: Y
Course 1					Hide All
Diagnostic Pro	cedures				<u>^</u> *
Surgery Surg Rev Rev	view Reason				^
🗆 Text (All)	Summary TX	TX 1 🗆	TXr 1 🗆		
Record		NA 🕕	NA 🕕		
Facility		1000	9999~1000		
Rs No Surg	0 🗸	0	0		
Surg Dt	10 15 2020	10-15-2020	99-99-9999		
1st Recon					
Surg 03+	20 🗸	20	99		
Scope 03+	0 🗸	0	9		
Oth 03+	0 ~	0	9		
0.000.00					

You may edit all fields in the Page or Comparison Mode. To edit a data item, click the edit link for the TX column. If you wish to delete a TX page, click a delete link at the bottom of any section. Be aware that clicking a delete link will delete the full TX or TXr page. In some registries, the data page is permanently removed when a treatment procedure is deleted. In other registries, the page is marked as deleted and the data are excluded from the summarization polisher. The permission pat_tx_delete is required to delete a TX or TXr.

You may limit the comparison to TX and TXr data from one facility. This allows you to manually consolidate the data for a single facility into one TX. Use the left navigation to open a TX page from that facility. Click Compare FAC-NNNN TXs (upper right). TX and TXr data pages for the same facility will be displayed.

CTC 01 (C504-9)	ТХ		
Staging			
Facility (1000)	Diagnostic Procee	dures	
0 1	Text (All)	TX 1 🗆	TXr 1 🗖
Course 1	Record	NA 🛈	NA 🛈
TX1 (1000)	Facility	1000	9999~1000
TX 2 (0100)	DX/Stg (NonCa)	00 ~	09
TXr 1 (9999~1000)	TX Status	0 ~	9
		delete	edit delete

Editing Data Fields

You may type a value into the field or select a value from a pick list (or lookup). To open a field's lookup, click the drop-down arrow or go to the field and click ALT-L.

You cannot modify read-only fields set by the system. Read-only fields are displayed in gray boxes to show that the edit box is disabled. Fields that can be changed are shown in white edit boxes. Read-only fields are set by polishers, auto-consolidation rules, and other system algorithms. In this screen shot, NAPIIA is a read-only field and the Race fields are fields that can be modified.

Race 01 🗸 88	88 ~ (38 🗸 88 🗸	Hispanic 0 🗸	Race Rev	Birth State	Country USA 🗸	Birth Place
NAPIIA 01 V	Comp Eth	Comp Eth Src	NHIA 0 V	IHS			

Use the search box to find a value in a lookup that has too many values to display. You can enter a code (like C048) or text (like "overlapping"). Items that match your search terms will be listed. Use your mouse to select a value or use the arrow keys to go to a value and press Enter.

(Site	e	
		overlapping	
		C008 : Overlapping lesion of lip	
		C028 : Overlapping lesion of tongue	
		C048 : Overlapping lesion of floor of mouth	
		C058 : Overlapping lesion of palate	
		C068 : Overlapping lesion of other and unspecified parts of mouth	

Click the field's label to view documentation. Registry-specific instructions are shown first. If the field is a NAACCR item, the Info tab includes text from the NAACCR coding manual.

Field Name			NAACCR	
NameFirst			2240	
Comment				
Info Audit Log 0	Mappings			
CSS Instructions				
	full legal first name used by t te. (It is very rare for patien			
(Last updated on 04-16-20	013 by jhafters)			
Field Description				
Longth	urce of Year andard Implemented	 	Version (Retired	Column #
2240 40 0	CoC			4089 - 4128
NAACCR XML: Patient.na	ameFirst			
Alternate Names First Name (CoC)				
Description First name of the patient.				

You may enter a comment related to the field's value in the Comment box. All changes and comments will be displayed in the Patient Set audit log and audit log.

Field Name					NAACCR	
Social Security N	umber				2320	
Comment						SSN
						372105914
Info Audit Lo	g 1 Mappi	ings				
User	Date	Field	Old	N	ew	
adamss Cmt [u]	01-23-2020	Social Security Number				
	"SSN Value match	es DMV records"				

The Mappings Tab shows technical documentation for the field.

- Use Java Path when referring to the field in Mass Change imports and workflow scripts.
- Use database name in SQL queries.
- Java Type and Database Type show field length and type.
- If Updatable is false, the field cannot be modified via Mass Change (this does not indicate whether changes can be made via the editor).
- Nullable indicates whether the field can be blank.
- A Lookup is listed if there one associated with the field. The lookup may be a database table, or it may be a query defined in the lookups.xml system file.

Field Name			NAACCR	SSN
Social Security Number			2320	22381992
Comment				
Info Audit Log 0	Mappings			
Java Path			Java Type	
patient.socialSecurityNum	ber		String (9)	
Database			DB Туре	-
PATIENT.SOCIAL_SECURI	TY_NUMBER		Varchar (9)	
Data Item Updatable	Nullable Case	Lookup		
20072 Yes	Yes Upper			
	Col N18	XML ID		
NAACCR				

Polishers

A polisher is a function in SEER*DMS that sets the value of a field based on the values of other fields ("trigger" fields). A polisher executes each time a trigger field changes. All changes made by polishers are listed in the Audit Log (designated by a [p]). The fields that trigger the polisher and the polisher's algorithm are documented on the Polishers help page.

The Patient Set menu allows you to **Force Polish**, that is, run all polishers despite the fact that the trigger fields were not changed. This feature should be used with caution. All polishers will execute and, therefore, there may be unexpected changes in fields unrelated to your editing task. If you use Force Polish, you must carefully review the list of changes displayed when you save the Patient Set. If an undesirable change was made to the data, you should either correct the data manually or reverse the changes before saving (see the *Undoing Changes* section of this chapter).

Linking Records to CTCs

Requires system permission: *pat_edit*

Linking and unlinking records may be done from the record menu or with the Record Linkages tool. If a record is linked inappropriately, review the relevant Patient Set and/or CTC data fields to determine whether you must also modify some data fields manually. Use the Audit Log as a reference. You may also want to print the Patient Set prior to changing the links.

After completing your review, either use the record's menu or the Record Linkages tool to modify the record's link. The following instructions involve the use of the record's menu.

- 1. Open the record in the editor and click the record menu icon.
 - a. To completely disassociate the record from this Patient Set, select **Unlink**. The record will be sent into the workflow at the point of matching. It will follow the workflow route designated for a record of its type.
 - b. To link the record to an existing CTC, select the appropriate **CTC** from the **Move To** submenu (sequence number is displayed for each CTC listed in the menu).
 - c. If you wish to use the record to create a new CTC, select **New CTC** from the **Move To** sub-menu. This menu item will not be available if the system is unable to build a CTC from a record of its type. If you are creating a CTC from a non-abstract record, you should perform the appropriate Casefinding and Death Clearance processes prior to creating a new CTC from the record.
 - d. To link the record at the Patient Set level, select **Patient** from the **Move To** sub-menu. If the pending record is not an abstract record and is for a new CTC, you may wish to link the record at the patient level and defer creating the new CTC until an abstract is received. Later, when the abstract record is received and used to build the new CTC, you can link this record to that CTC. This will minimize the level of effort required to consolidate the data for the new CTC.
- 2. Once the record's link is moved, the new linkage will be indicated in the white box in the record navigation:
 - a. If the record is linked to a CTC, "CNN" will be displayed. This indicates that the record is now linked to the CTC that has a central sequence number equal to NN. SEER*DMS attempts to set the sequence number appropriately, based on the central sequence number coded in the record and the dates of diagnosis on CTCs in the Patient Set. If you have multiple CTCs with the same sequence number, you should review the CTCs and manually over-ride the sequence number polisher by setting the Auto-Seq field (refer to the help text for the Increase CTC Sequence Number polisher on the Polishers help page).
 - b. If the record is linked at the patient level, P will be displayed.
 - c. If the record is unlinked, an X will be displayed.
- 3. Perform a thorough review of the Patient Set data, including the data pages of all CTCs that were affected by the change. You must determine whether any admissions or treatments need to be manually deleted from the original CTC. If you have unlinked a record completely, you should verify that the patient's follow-up information has been modified appropriately.

Comparing Consolidated Data to Source Data

A link in the upper right of the main data panel allows you to toggle the current page from one view to another. You can View Source Data or View Consolidated Data. The Source Data View enables you to compare data fields on records with the fields in the consolidated Patient Set, and it provides a convenient method to copy values into the appropriate Patient Set fields.

The Source Data Viewer is available on pages that contain data consolidated from multiple records. Therefore, it can be used on the Demographics, CTC, and Staging pages. The Summary TX page contains data summarized from other pages within the CTC; it is not consolidated directly from the records. The "Compare TXs" view on the Course Page allows you to compare TX, TXr, and Summary TX values.

Instructions for using the Source Data View to consolidate data are included in Chapter 12: Consolidating Data.

Deleting a Linked Record

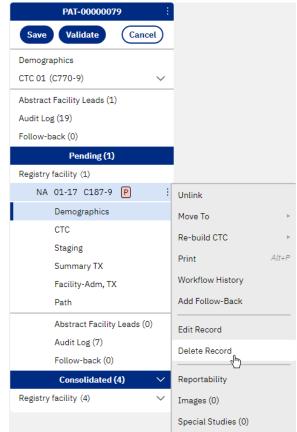
Requires the *rec_delete* permission for each record type (10 total permissions)

Deleting a record must be done with care. When deleted, a record is completely and permanently removed from the database. To delete a linked record, open the record in the Patient Set editor. Check the information at the top of the page to be sure that you are viewing the correct record.

To delete a linked record:

- 1. Open the record in the editor. The record will be displayed in read only mode.
- 2. View the record header at the top of the page and confirm that it is the correct record.
- 3. Open the record menu and select "Delete Record". This menu item will not be available if you do not have the system permission to delete the record type.
- 4. Save changes for the deletion to take effect.
- 5. Perform a thorough review of the Patient Set data, including the data pages of all CTCs that were affected by the change. You must determine

whether any admissions or treatments need to be manually deleted from the original CTC. You should verify that the patient's follow-up information has been modified appropriately.



Using the Geocoding Tools

There are special tools in the SEER*DMS Patient Set editor for consolidating and editing addresses. These can be found with the Address fields.

When a Patient Set address is changed, SEER*DMS submits the address to the Texas A&M, NAACCR, NCI Geocoding Service called AGGIE. The geocoder will check to see if it is a valid street address for the city and zip. SEER*DMS sets several variables using the AGGIE results (county, census tract, latitude, longitude, and other geo-spatial data items).

Click "View AGGIE Data" to view the geocoder results. If the appropriate address is listed in the results then select the line to set fields based on that address. The data items that are geo-coded in your registry are listed in the Census Tract polisher documentation on the Polishers Help page.

Click the "View Source Record Addresses" link to view all addresses in Patient Set and source record fields. The Address Review flag indicates whether an address has been manually reviewed.

Saving Changes

Use the steps below to save changes to a Patient Set. If you are completing a Consolidate task then there will be options not shown below (refer to *Chapter 12: Consolidation*).

To save changes to the Patient Set:

- 1. Click **Save** or press **Alt+S**.
- 2. Review the list of changes. These will include changes that you entered and changes made by SEER*DMS polishers, auto-consolidation rules, and other algorithms.
- 3. You may enter comments to document your changes. Use the Comments box above the list of data changes to enter a general comment. Or enter a comment to document a change made to a specific field by clicking **add** in the Cmt column next to the field. Your comments will be stored and displayed in the Patient Set's audit log
- 4. Save your changes:
 - a. To save and continue editing this Patient Set: click the **Save** button or press **Alt+S**.
 - b. To save and exit the editor: click **Save & Exit** or press **Alt+E**. Note: The keyboard shortcut for Save & Exit only works from the Review Changes page.

Undoing Changes

You may use the **Undo Changes** menu item (or press **Alt+U**) to undo all *unsaved* changes by reloading the Patient Set from the database. Changes that you saved will not be undone. All saved changes are documented in the Audit Log. If you need to reverse saved changes, manually edit the fields, and enter the original values as noted in the Audit Log.

Printing

You may use the **Print** menu item (or press **Alt+P**) to open a print preview window. Checkboxes will be displayed next to each section and all sections will be checked by default. Uncheck the box next to each section that you wish to exclude from the printed copy. Select File > Print from your browser menu.

Keyboard Shortcuts

Command Shortcut

Navigation

Shortcut Help	F1
Home	Alt+H
Worklist	Alt+W

Field Editing

_	
Сору	Ctrl+C
Cut	Ctrl+X
Paste	Ctrl+V
Redo	Ctrl+Y
Select All	Ctrl+A
Undo	Ctrl+Z
Expand drop-down list	Space

Patient Set Editor

Save	Alt+S
Save & Exit	Alt+E
Cancel	Alt+C
Print	Alt+P
Undo Changes	Alt+U
Validate	Alt+V
Demo Info	Alt+D
DX Info	Alt+X
Text	Alt+T
Field Information	Alt+I
Lookup	Alt+L
Show/Hide All	Alt+A

SEER*DMS supports the keyboard alternatives for many menu items and buttons. Select **Help > Shortcuts** or press **F1** to view the list of shortcuts available for the current page.

Viewing the Logic of Integrated Edits

In the Patient Set or record editor, you can view documentation for any failing edit. On the edits tab, click the information icon ^① next to the Edit ID. Click on the Documentation tab to view documentation available for the edit. To view the source code, select the Definition tab. Documentation is available for all SEER edits and many SEER-Extended edits. Documentation for registry-specific edits will be displayed, if available.

See the Chapter on Edit Errors for more information on edits.

Rule	Documentation Y Source Code
D	
Name	gic_Type_ICD-O-3 gic Type ICDO3 (SEER)
- 1essage	2
	gic Type ICD-O-3 is not valid.
Source	
SEER	
Severity	
Moderat	te
Condition	ins
CTC is n	not deleted

Visual Editing

Quality control of new data involves a visual review of data fields, regardless of whether edits failed. Visual editing is a quality control process that involves comparing coded fields to supporting text fields. In SEER*DMS, this process is done when a registrar completes a Consolidate or Resolve Patient Set Errors tasks.

The Visual Editing flag on the CTC page is set to "Needs review", per registry rules. If the registry has a policy of visual editing 100% of new cases, then the flag will be set to "Needs review" when a CTC is built. If the registry's policy is to require visual editing when standard-setter edits are failing, then the flag will be set accordingly. In some registries, the visual editing flag will be reset to require a review whenever an abstract is linked to the CTC.

When visually editing a case, compare the coded fields to the supporting text fields. Work through each page of the CTC, including Staging, Facility, and Course pages. When completed, set the Visual Editing Flag to 1 (Reviewed). The case may remain in the worklist if other edits persist, or if the case has not yet been consolidated.

Identifying and Removing Duplicate Patient Sets

The Duplicate Patient Set task is executed each night to identify Patient Sets that may be duplicates. It uses a registry-specific matching algorithm documented on the Matching help page.

The nightly task only checks Patient Sets modified on that day. A Patient Set is matched against the database if one of the fields used in the matching algorithm was updated or the Patient Set was

created that day. The system task can also be run across the entire database. This is done when a registry first starts using SEER*DMS and when the matching algorithms are updated.

The matching algorithm is also executed each time the Patient Set editor is opened and when the Patient Set is saved. If a possible match is found, an Alert is displayed in the right panel and a warning is displayed on the save page. The intent is to prevent duplicate Patient Sets from being created. It is much more time consuming to combine existing duplicates than to prevent.

If the matching algorithm falsely identified a Patient Set as a duplicate, click **Not Duplicate – Set Match Status** and indicate that it is a false positive match. Set the Action field to "Not a Match". The two Patient Sets will no longer be identified as a pair of potential duplicates when the nightly task is executed.

If two Patient Sets exist for the same patient, follow the steps below to consolidate the data into one of the Patient Sets and delete the other.

- 1. Select a Patient Set to retain.
- 2. Move source records from the unwanted Patient Set to the other Patient Set.
 - a. Verify that the unwanted Patient Set is open in the editor.
 - b. For each record listed in the Consolidated record section of the navigation box:
 - i. Click the record in the navigation to go to that record.
 - ii. Select **Move To > Different Patient Set** from the record's menu.
 - iii. Enter the other Patient Set ID (the ID of the Patient Set that you are keeping).
- 3. Mark the unwanted Patient Set as deleted:
 - a. Click **Demographics** in the Patient Set's section of the navigation box and open the Patient Set menu.
 - b. Click **Delete Patient Set**. The Patient Set and all of its CTCs will be marked as deleted. This is a reversible delete.
- 4. Save your changes to this Patient Set, enter a reason for deletion, and click Save and Exit.
- 5. Verify that each record that was unlinked from the deleted Patient Set has been linked to the retained Patient Set.
- 6. Once you have linked and consolidated data from all available source records, you must incorporate any data from the deleted Patient Set that was not loaded from a record. This includes data that was migrated and data that was entered manually. Even though the Patient Set was deleted, you may open it in the Patient Set editor to view or print the data or audit log. If you wish to view both Patient Sets, use the browser's controls to open two windows or tabs.

Creating and Completing Review Tasks

A Review Task is a manual worklist task created by one user for another user. For example, you could create a review task when you need a manager or lead editor to review an unusual case.

To create a Review Task:

- 1. Select **Create Review Task** from the Patient Set menu.
- 2. Select a user in the **Assign To** drop-down list.
- 3. You may assign one worklist **Flag** to the task and enter a **Subject**, if appropriate.

The Patient Set Editor

4. Enter **Instructions** and click **OK**.

To complete a review task:

1. Access the task from the Worklist and review the instructions provided on the Alerts tab.

Alerts 4	Text Ec	lits <mark>3</mark> Cmt	Ref
Complet	e Review Da	ta Task (1)	^
User	Date	Subject	Instructions
adamss	01-27-2020	Help with Edits	Please help me resolve these critical edits.

- 2. Review the data, make any necessary changes and click **Save**.
- 3. Enter comments stating that you reviewed the data and provide any information that you think may be useful. Your notes and the original instructions for the task will be permanently recorded in the Patient Set audit log.
- 4. If you have completed the review, click **Close the task on Save & Exit** in the Workflow Options section. If you wish to keep the task open in your worklist, deselect this checkbox.

Creating and Completing Quality Control (QC) Tasks

Quality Control tasks can be used to perform quality control on a subset of records or Patient Sets.

To create QC tasks:

- 1. Use the data search tools (View>Data Search) to identify a subset of records or Patient Sets to include in the batch of QC tasks.
- 2. Click on the Actions Menu and select Create QC Tasks.
- 3. You will be prompted to provide instructions for the coders who complete the tasks. You will be able to assign the tasks to another user, assign them to your own account, or leave the user field blank to create unassigned tasks. If appropriate, you can set a worklist flag and/or assign a subject to the QC project. You may also set the parameters of the tasks in the Parameters tab.

Task Definition Parameters
Assign to
sarah (Gibbons, Sarah) 🗸
Flag
Problem Case 🗸
Subject
Histology 9980
Instructions *
Send email to user
4 QC Tasks will be created.
OK Cancel

- 4. To complete a QC task that is assigned to you, click on the task in your worklist. The Alerts panel will display the instructions for the QC task. Make any necessary changes to the record or Patient Set.
- 5. To close the QC task, click Save. In the save screen, check the box for "Close the task on Save & Exit". You may optionally enter a comment. Click Save & Exit.

Comparing Abstract Records

The Patient Set Editor includes a tool to compare one abstract record to another. You may use this to identify duplicate records. To compare records, open a consolidated abstract record in the Patient Set editor. Click the **Compare Records** at the top right of the main data panel. You may use this to compare a Health Record to other Health Records; or to compare NAACCR Abstract, NAACCR Modified, and NAACCR Casefinding records to each other. In the example below, a NAACCR Modified record linked at the patient level is compared to all candidate records in the Patient Set. As determined by registry algorithms, a record will not be considered as a candidate if it does not match the focus record on a standard set of fields such as facility, site, histology, or laterality.

Demogra	phics						
Fields used	l by D	uplicate Recor	d Task	∨ 🖉 Differ	rences Only		
Section	÷	Field	÷	NA 🛈 (1000)	NA 🛈 (1000) 😫	NA 🕕 (1000) 😵	
СТС		DX Year		2017	2017	2015	•
CTC		DX Zip		21076	21212	21212	
СТС		Hist(O3)		8520	8500	8523	
СТС		Lat		9	2	9	
СТС		Marital DX		4	3	2	
CTC		Multi Day		30	05	26	
СТС		Site		C504	C502	C504	
Staging		Bone				9	
Staging		Brain				9	

Submitting Follow-back to Facilities

Requires system permission: *pat_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. Select **Add Follow-Back** from the Patient Set menu.

Periodically, a manager will review, edit, and send the follow-back requests to a physician or other representative at a facility. Subsequently, the manager will process the facility's responses.

You will receive an e-mail 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 needs.

If you suspended a task pending the receipt of follow-back information, you must re-open and complete the task to allow the data 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 Patient Set with the new information, use the Patient Lookup to search for the Patient Set.