



Overview of NPCR EditWriter 5 and NAACCR Metafiles

Acknowledgements

- Kathleen Beaumont
- Susan Capron

NPCR EditWriter

- Overview of NPCR EDITS software
- Terminology
- Metafiles
- EditWriter 5

Overview of EDITS Software

- EditWriter Version 5 (EW5)
 - Used to write edits and create edit sets
- GenEDITS Plus 5 (GEP5)
 - Used to run edits against data files

Terminology

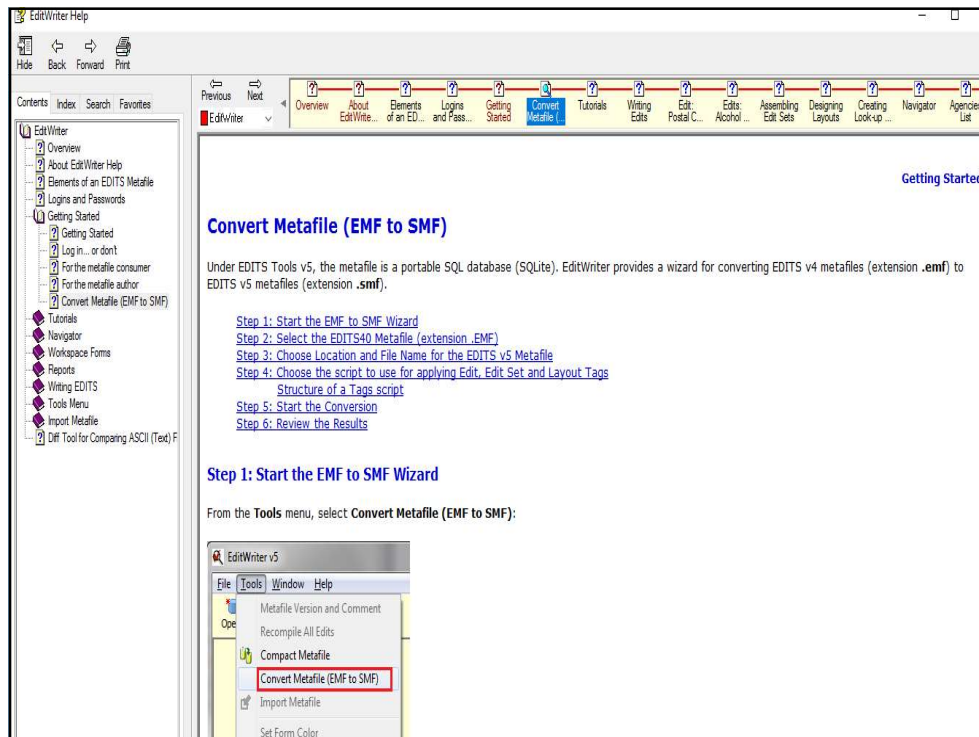
- EDITS (ALL CAPS)
 - A particular software system for applying computerized data validation checks to data
- An edit (not capitalized)
 - A small snippet of computer logic that performs a single test on one or more data files
- Metafile
 - A computer library that organizes edits, data dictionaries, and tables for the EDITS system

Terminology

- Edit Engine
 - A collection of computer functions that may be called by a running program to edit fields of data
 - “Pulls” information from the metafile into another program
- Driver Program
 - A program that uses the Edit Engine
 - GenEDITS Plus is a driver program

EditWriter Help

- Extensively updated
- Excellent resource
- Detailed instructions with print screens
- Press F1 key anywhere within program



Metafiles

- NAACCR Edits Metafile
- NPCR-CSS Call for Data Metafile
- NPCR CER-PCOR Call for Data Metafile
 - 2011 cases only
- NAACCR Call for Data Metafile
- NCDB Metafile
- State-Specific Metafile

What is a Metafile?

- EDITS Metafiles contain everything needed to edit a data file, except the data
- Created and modified using EditWriter

What is a Metafile?

- Key components (objects):
 - Agencies
 - Edits
 - Edit Sets
 - Fields
 - Layouts
 - Messages
 - Tables

What Are Tags?

- Short unique identifiers
- Provide a unique matching key for import
- Simplify look-up of edit object

Edit Tag

Edit Set Tag

Layout Tag

Tag Script

Tag Script

- Critical for converting metafiles containing objects originating from the NAACCR metafile
- EMF-to-SMF converter assigns default Tags
- Provided by NAACCR Metafile Administrator (NAACCR_Tags.txt)
- Assigns universal and unique tag values
- Authors of custom metafiles can create custom tags for custom Edits, Edits Sets, and Layouts
 - Suggest prefixing with USPS two-digit state code

Structure of Tag Script

Contains three sections

```

1  [Edits]
2  N0001=Age, Primary Site, Morphology ICD02 (SEER IF15)
3  N0002=Birthplace (SEER POB)
4  N0003=Diagnostic Confirmation (SEER DXCONF)
5  N0004=Diagnostic Confirmation, Histology ICD02(SEER IF48)
6  N0005=Laterality (SEER LATERAL)
7  ...
8  N2441=Census Tract 2010, State, County GC 2010 (NAACCR)
9  N2442=TNM Path T, N, M, In Situ (COC)
10 N2443=TNM Clin T, N, M, In Situ (COC)
11 [EditSets]
12 ...
13 NES0150=Central: Vs14 State Example - Incoming Abstracts
14 NES0150=Central: Vs15 State Example - Incoming Abstracts
15 NES0150=Central: Vs16 State Example - Incoming Abstracts
16 NES0150=Central: Vs17 State Example - Incoming Abstracts
17 NES0150=Central: Vs18 State Example - Incoming Abstracts
18 ...
19 [Layouts]
20 NL0001=NAACCR DATA EXCHANGE VS 14
21 NL0001=NAACCR DATA EXCHANGE VS 15
22 NL0001=NAACCR DATA EXCHANGE VS 16
23 NL0001=NAACCR DATA EXCHANGE VS 17
24 NL0001=NAACCR DATA EXCHANGE VS 18

```

Customizing Tag Script

- Copy NAACCR_Tags.txt and add custom items.
- Customized script should be updated as new custom objects are created.

Customized Tag Script

```

0 10 20 30 40 50 60
1 [Edits]
2 AR2447=Alcohol History (ACCR)
3 AR2448=County at DX, Addr at DX--State (ACCR)
4 AR2449=Family History (ACCR)
5 AR2450=RX Date--Surgery, RX Text--Surgery (ACCR)
6 AR2451=RX Summ--Chemo, RX Text--Chemo (ACCR)
7 AR2452=RX Summ--Hormone, RX Text--Hormone (ACCR)
8 AR2453=RX Summ--Radiation, RX Text--Radiation (ACCR)
9 AR2454=Tobacco History (ACCR)
10 N0001=Age, Primary Site, Morphology ICD02 (SEER IF15)
11 N0002=Birthplace (SEER POB)
12 N0003=Diagnostic Confirmation (SEER DXCONF)
13 N0004=Diagnostic Confirmation, Histology ICD02 (SEER IF48)
14 N0005=Laterality (SEER LATFRAT)

```


How To Use EditWriter

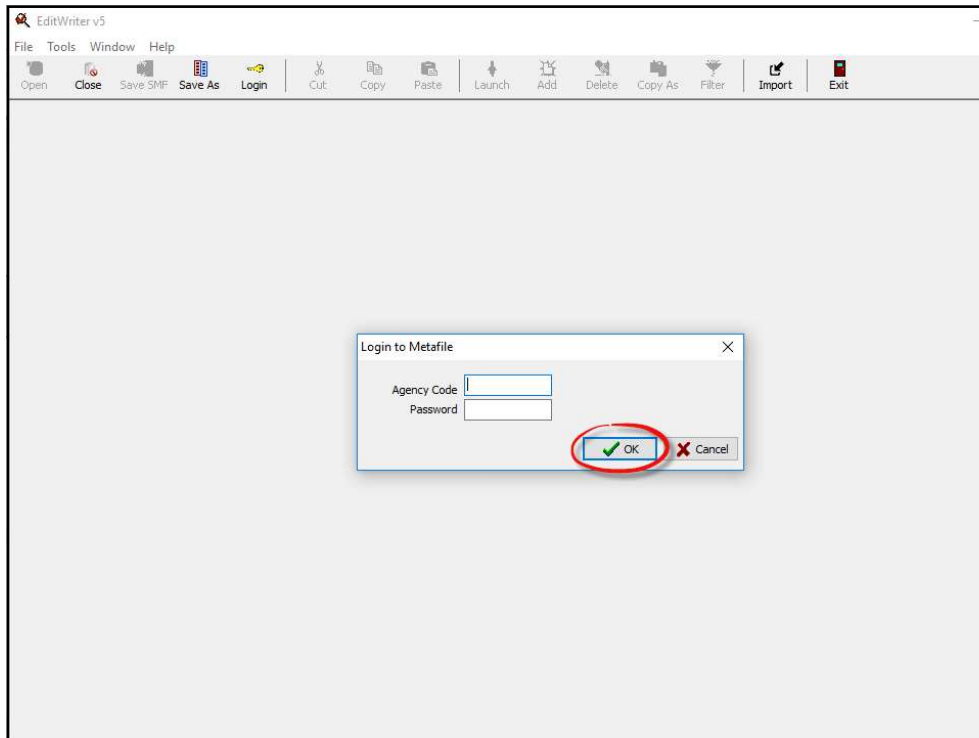
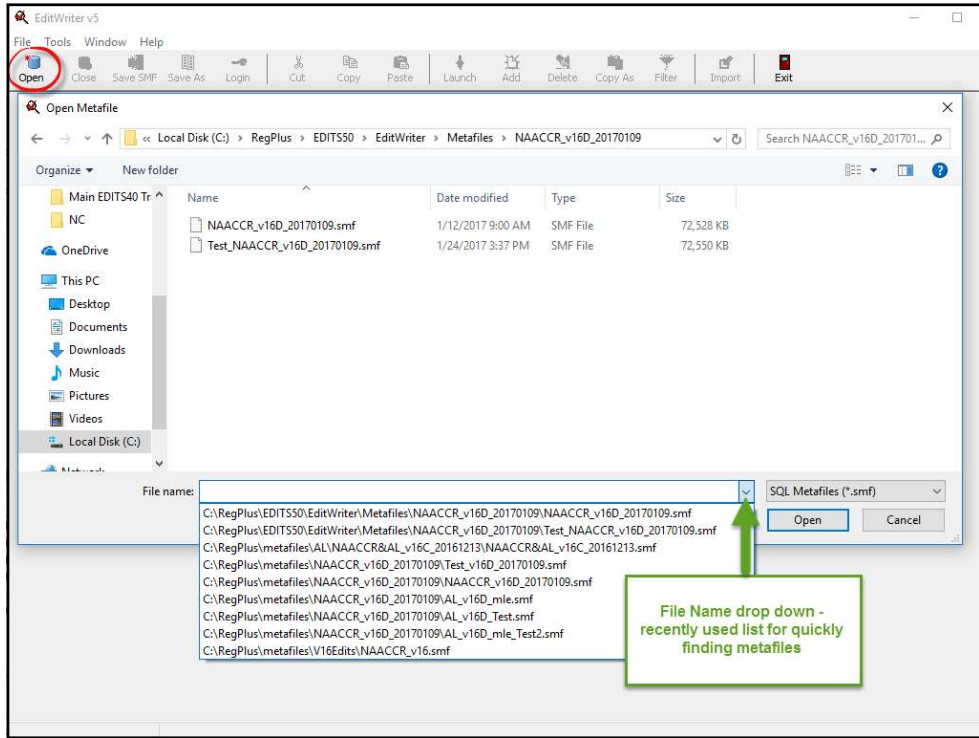
- Have the latest version of EDITS software
 - Available from NPCR
 - <https://www.cdc.gov/cancer/npcr/tools/edits/edits50.htm>
- Have the latest version of appropriate metafile
 - NAACCR_v16E metafile
 - <http://www.naacr.org/StandardsandRegistryOperations/VolumelV.aspx>

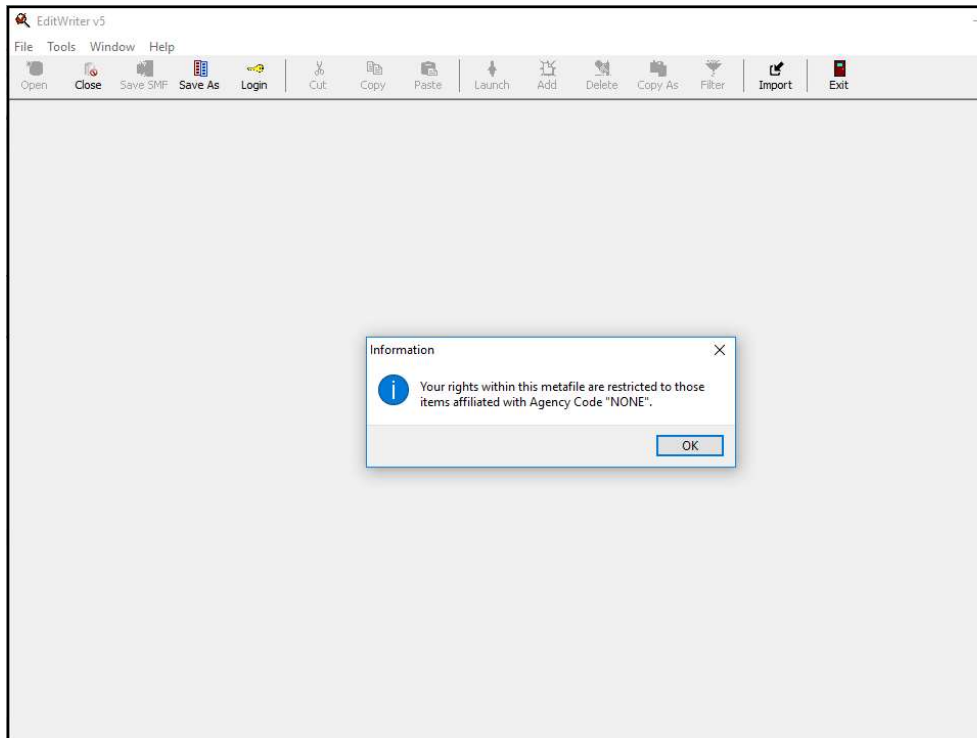
To Use EditWriter

- Launch EditWriter
 - Click on icon
- Select metafile
- Log in

EditWriter



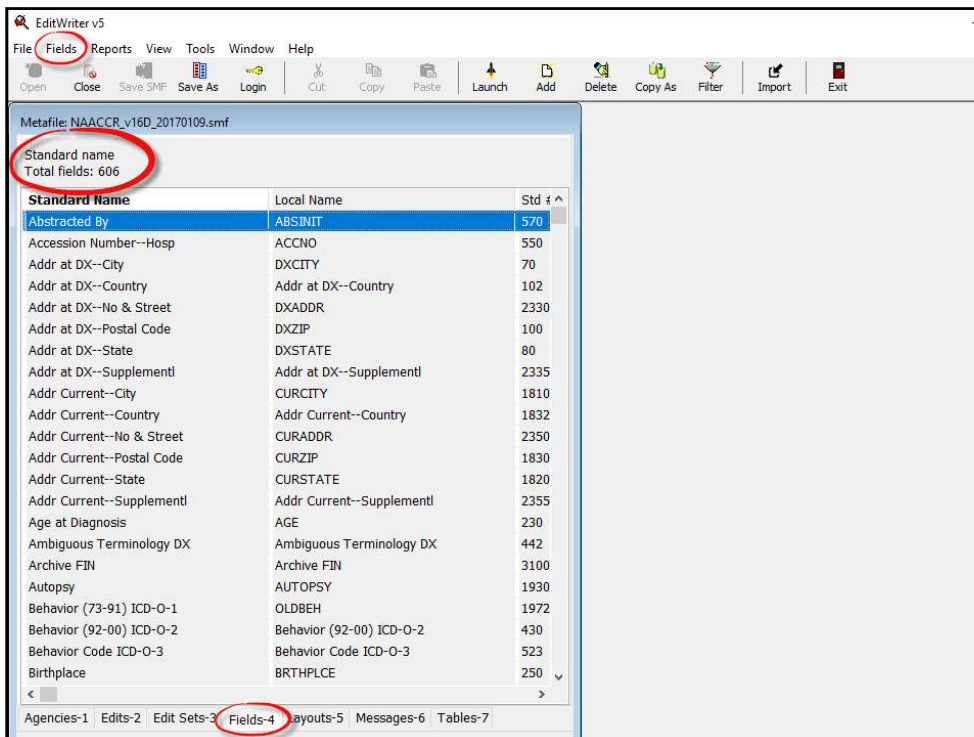
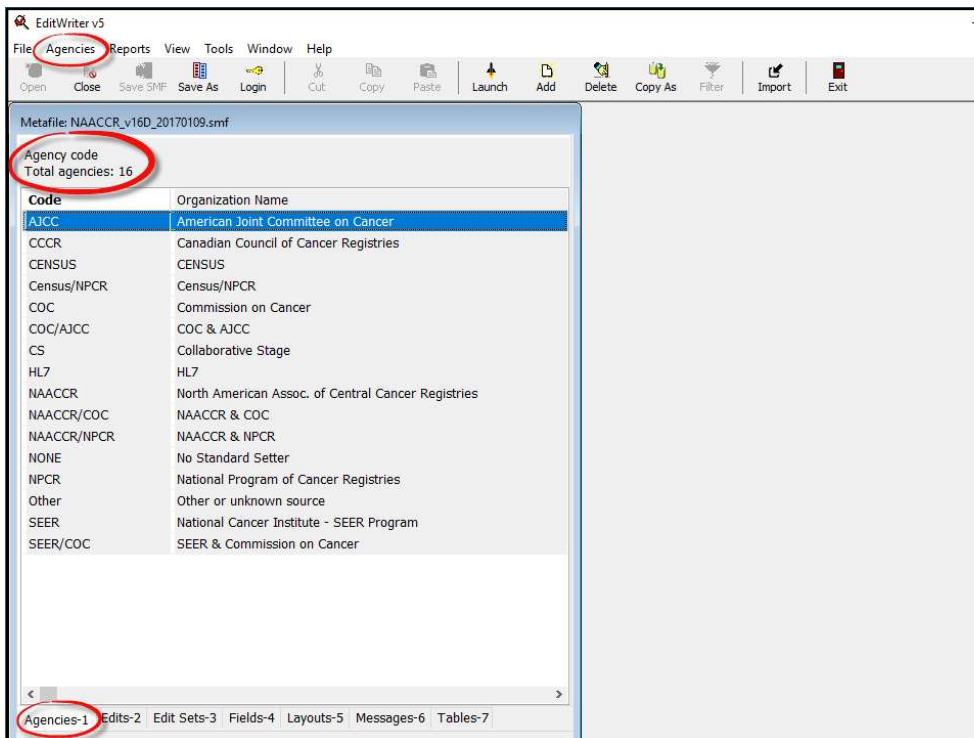




EditWriter

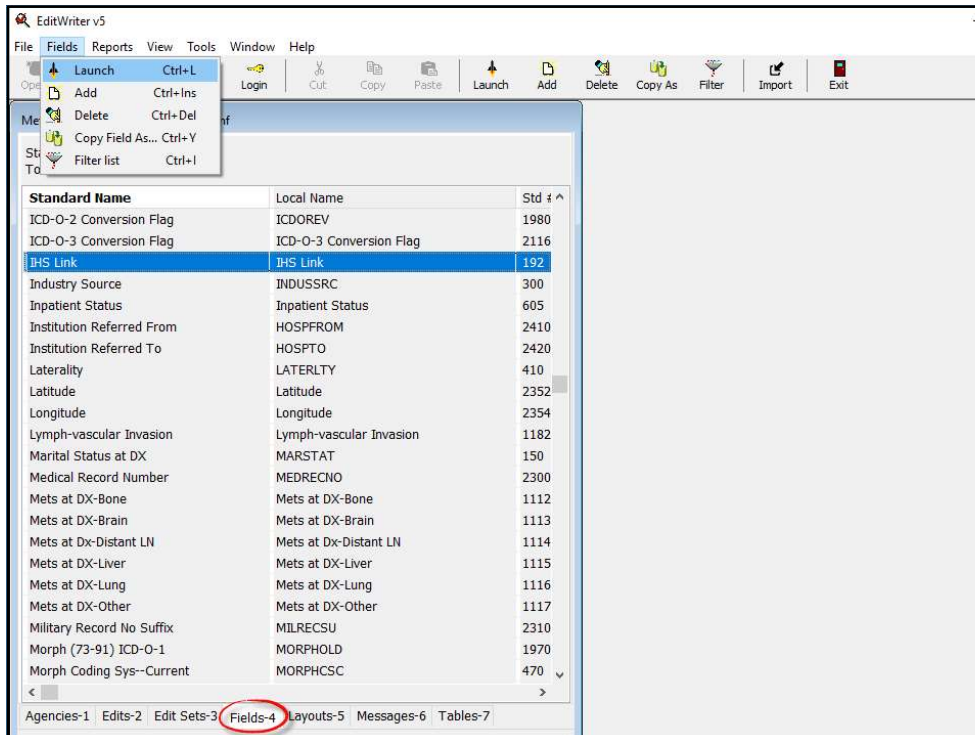
■ Navigation Panel

- View lists of objects (Agencies, Edits, Edit Sets, Fields, Layouts, Messages, Tables)
 - Click View (top menu)
OR
 - Click on tab at bottom
OR
 - Press CTRL + [number on tab]
 - **Agency** is default list



EditWriter

- As each list is displayed, the menu at the top will change to include a drop-down menu specific to that list

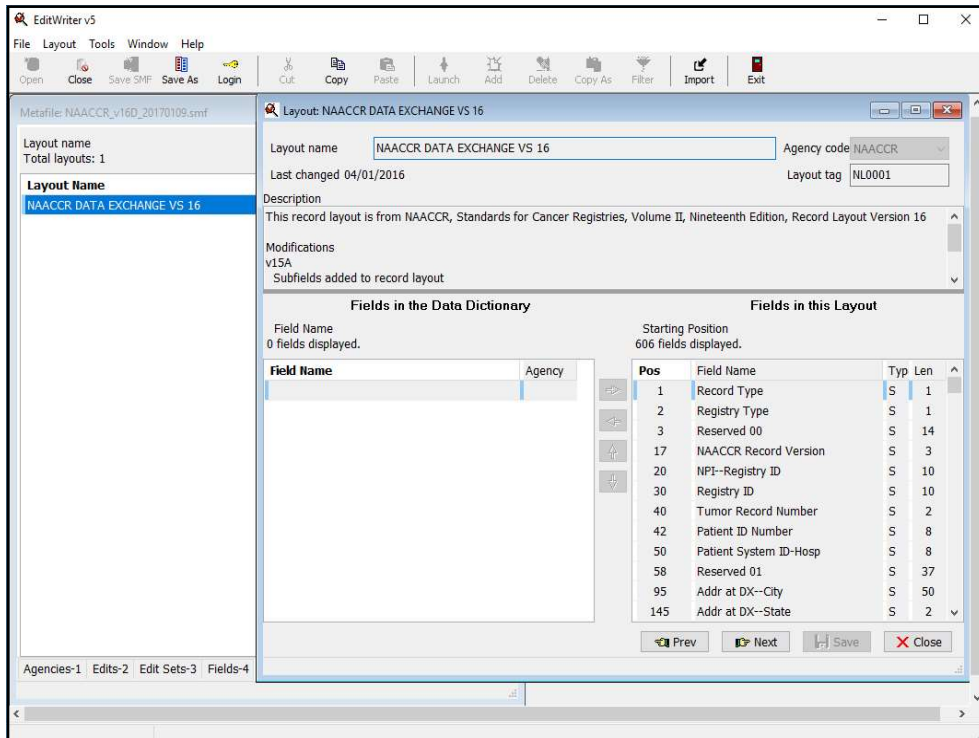
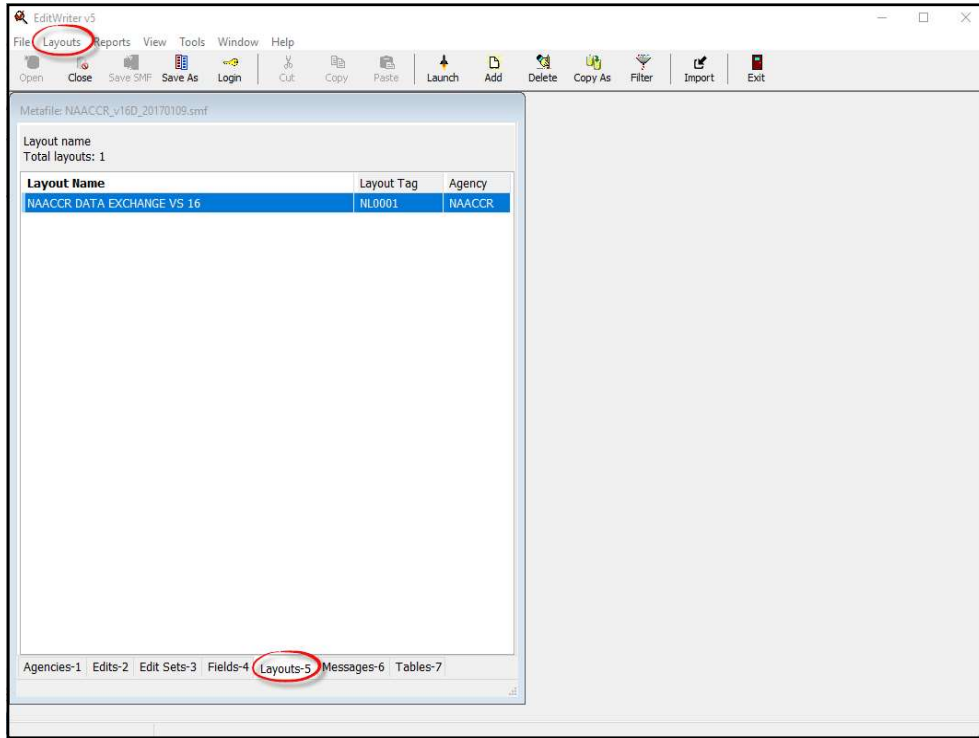


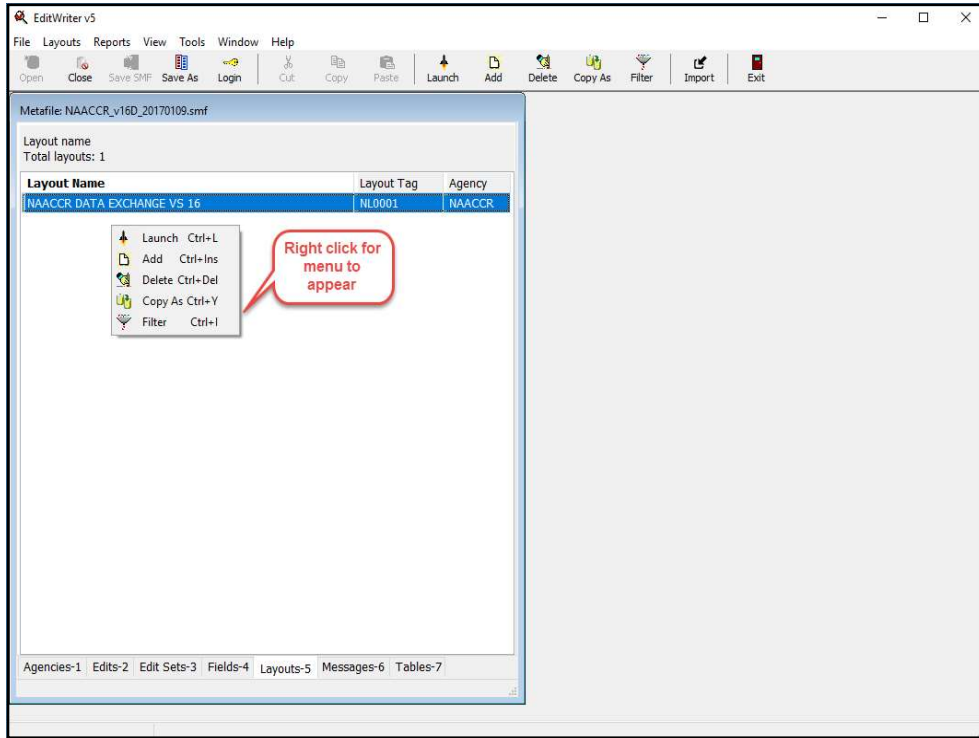
EditWriter

- To select an object to view or modify
 - Highlight the object's name and double click on it
 - OR
 - Drag it to the workspace (on the right)
 - OR
 - Use drop-down menu and select "Launch"
 - OR
 - Click on the launch button
- Some selected objects have additional tabs

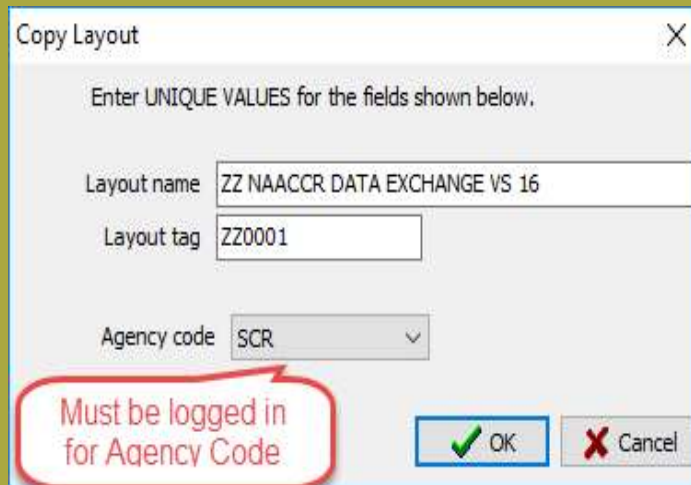
The screenshot displays the EditWriter v5 application window. The main interface shows a list of fields on the left, with 'IHS Link' selected. A detailed view of the 'IHS Link' field is shown in a pop-up window. The field name is 'IHS Link', the local name is 'IHS Link', and the data type is 'String (S)'. The field number is 192 and the field length is 1. The field is referenced from the 'IHS Link (NPCR) [Tag: N0753]' and is used in the 'NAACCR DATA EXCHANGE VS 16, Column 421'. The record area is 'Non-Confidential'. The description field is empty. The 'Fields-4' tab is selected in the bottom navigation bar.

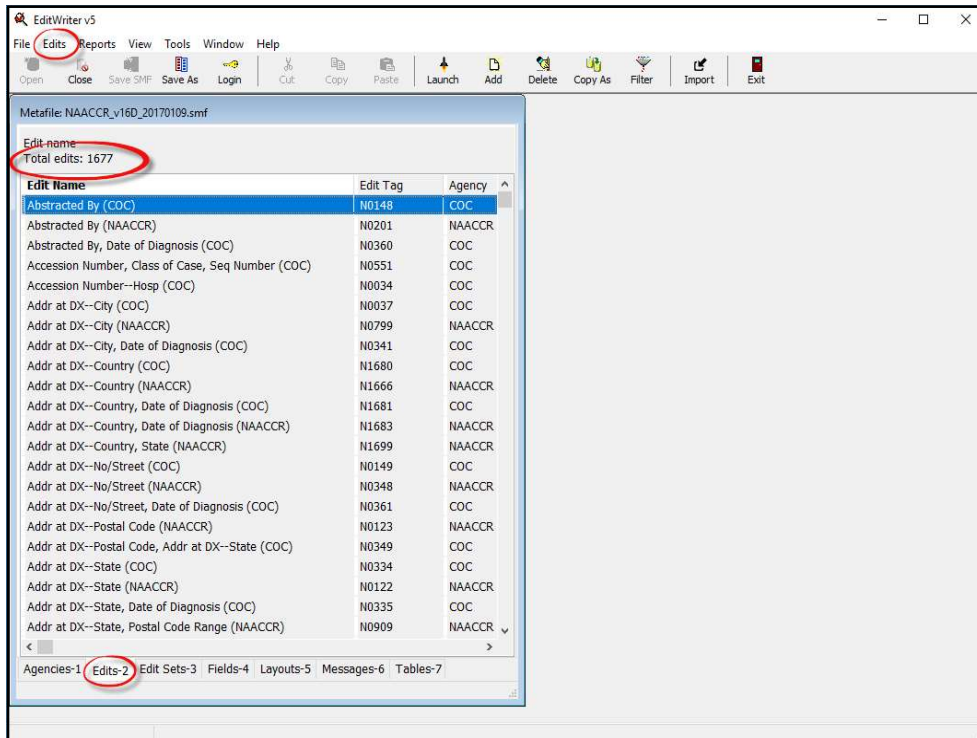
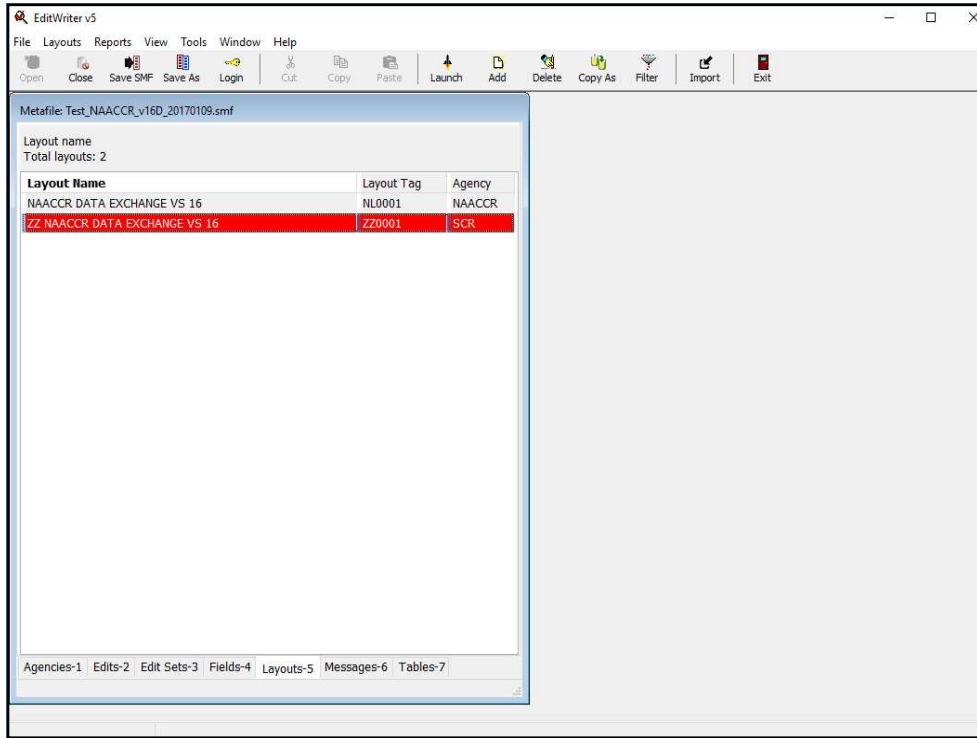
Standard Name	Local Name	Agency code	Field number	Field length
ICD-O-2 Conversion Flag	ICDOREV			
ICD-O-3 Conversion Flag	ICD-O-3 Con			
IHS Link	IHS Link	NPCR	192	1
Industry Source	INDUSSRC			
Inpatient Status	Inpatient Sta			
Institution Referred From	HOSPFROM			
Institution Referred To	HOSPPTO			
Laterality	LATERLTY			
Latitude	Latitude			
Longitude	Longitude			
Lymph-vascular Invasion	Lymph-vascu			
Marital Status at DX	MARSTAT			
Medical Record Number	MEDRECNO			
Mets at DX-Bone	Mets at DX-B			
Mets at DX-Brain	Mets at DX-B			
Mets at Dx-Distant LN	Mets at Dx-D			
Mets at DX-Liver	Mets at DX-L			
Mets at DX-Lung	Mets at DX-L			
Mets at DX-Other	Mets at DX-C			
Military Record No Suffix	MILRECSU			
Morph (73-91) ICD-O-1	MORPHOLD			
Morph Coding Sys--Current	MORPHCSC			





Select Copy As and modify the Layout name and Layout tag





Metafile: NAACCR_v16D_20170109.smf

Edit name: **tnm**
Total edits: 1677

Begin typing - list repositions to nearest match

Incremental searching is supported in the lists

Edit Name	Edit Tag	Agency
Systemic RX, Surgery, Systemic/Sur Seq (COC)	N0759	COC
Telephone (COC)	N0173	COC
Text--Dx Proc--Path, Diagnostic Confirm (NAACCR)	N0402	NAACCR
Text--Histology Title (NAACCR)	N0403	NAACCR
Text--Primary Site Title (NAACCR)	N0404	NAACCR
TNM Clin Descriptor (COC)	N0144	COC
TNM Clin Descriptor, Date of Diagnosis (NPCR)	N1907	NPCR
TNM Clin Descriptor, Date of Diagnosis (SEER)	N2015	SEER
TNM Clin Descriptor, Histologies - Ed 7 (COC)	N2223	COC
TNM Clin Descriptor, Stage, Lymphoma (COC)	N2398	COC
TNM Clin Descriptor, TNM Fields (NPCR)	N2345	NPCR
TNM Clin M c,p pre2016 (NAACCR)	N2311	NAACCR
TNM Clin M Conv (COC)	N2226	COC
TNM Clin M, Date of Diagnosis (COC)	N2225	COC
TNM Clin N c,p pre2016 (NAACCR)	N2312	NAACCR
TNM Clin N Conv (COC)	N2346	COC
TNM Clin N, Date of Diagnosis (COC)	N2227	COC
TNM Clin N, Digestive, Assess Nodes SSF (COC)	N2229	COC
TNM Clin Stage Group (COC)	N0038	COC
TNM Clin Stage Group, 2016 (COC)	N2421	COC
TNM Clin Stage Group, Date of Diagnosis (COC)	N2392	COC
TNM Clin Stage Group, Date of Diagnosis (SEER)	N2422	SEER
TNM Clin Stage Group, SSF 2 Lymphoma (COC)	N2231	COC

Agencies-1 | Edits-2 | Edit Sets-3 | Fields-4 | Layouts-5 | Messages-6 | Tables-7

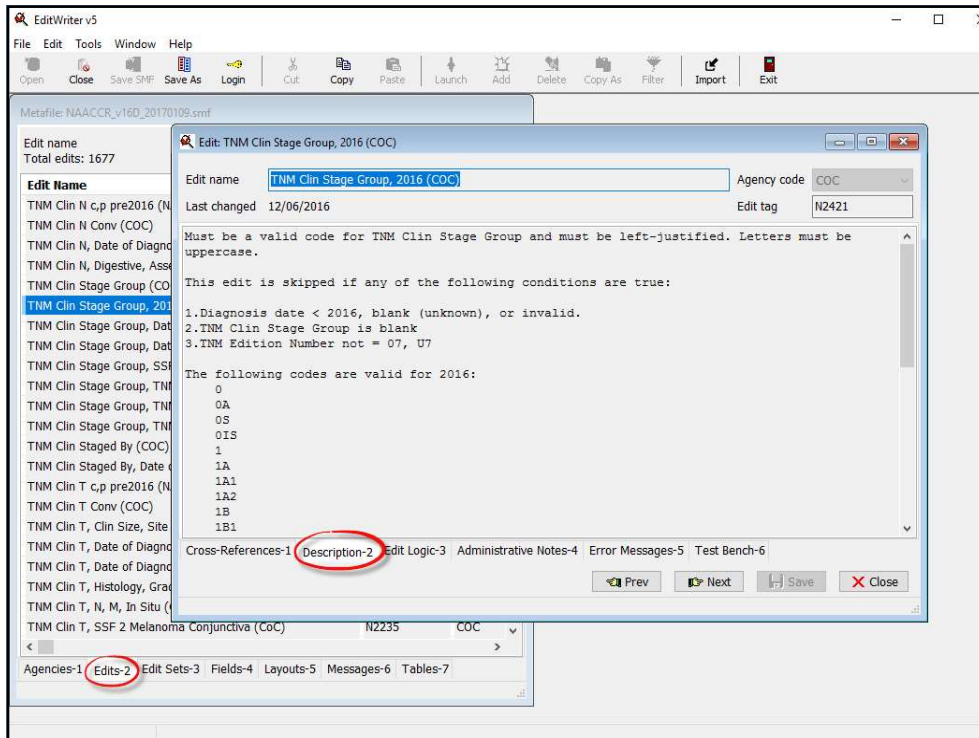
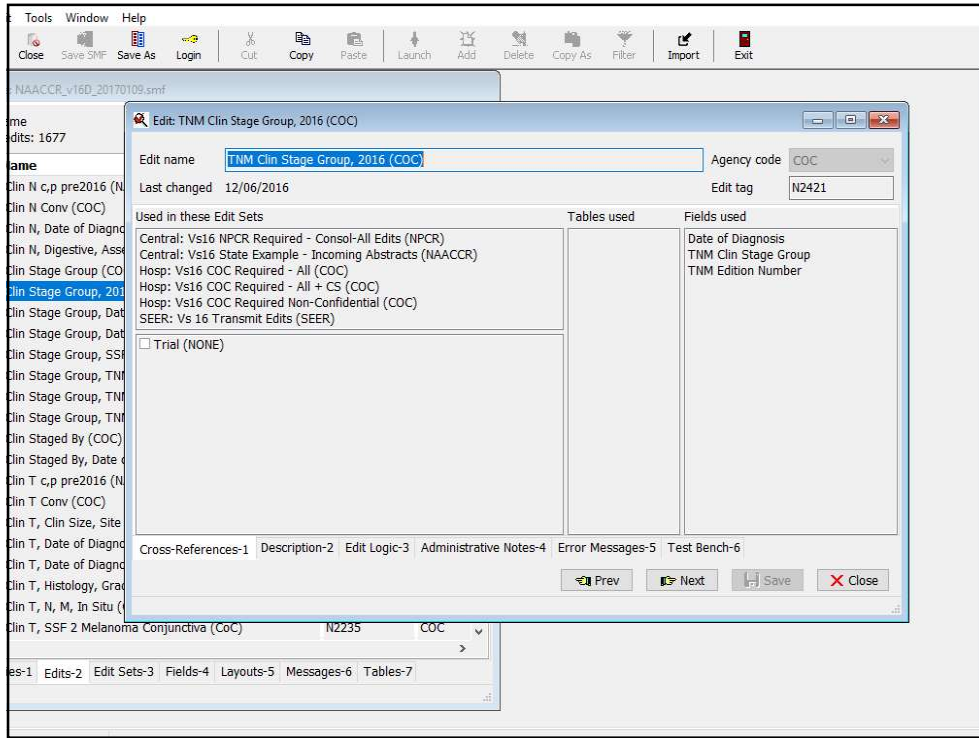
Use Backspace to back up and Escape key to clear the incremental search

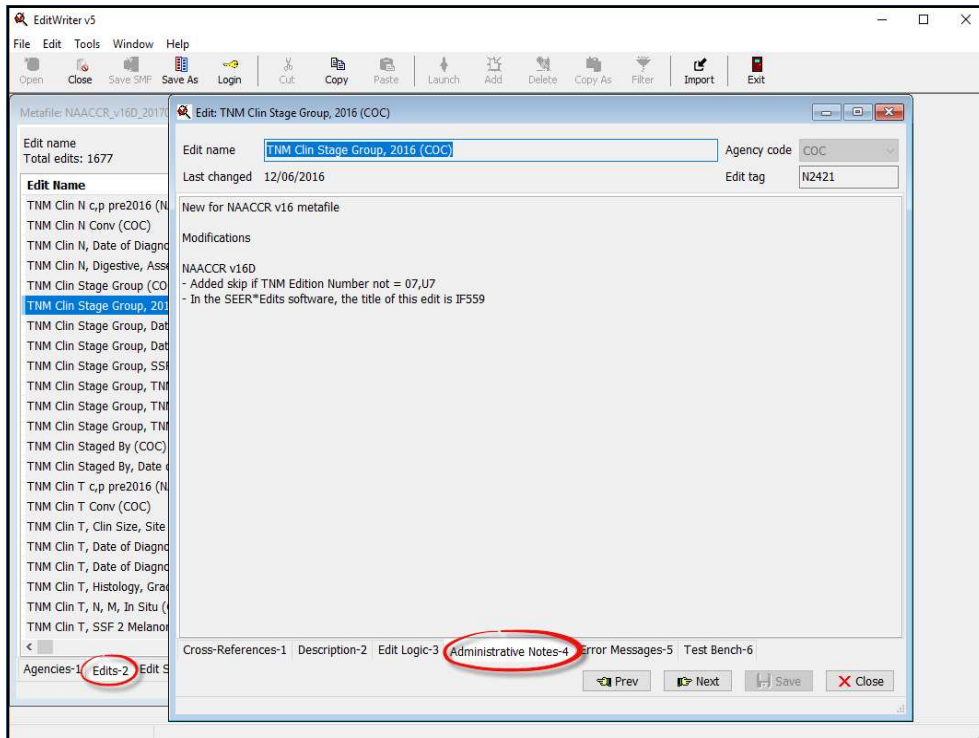
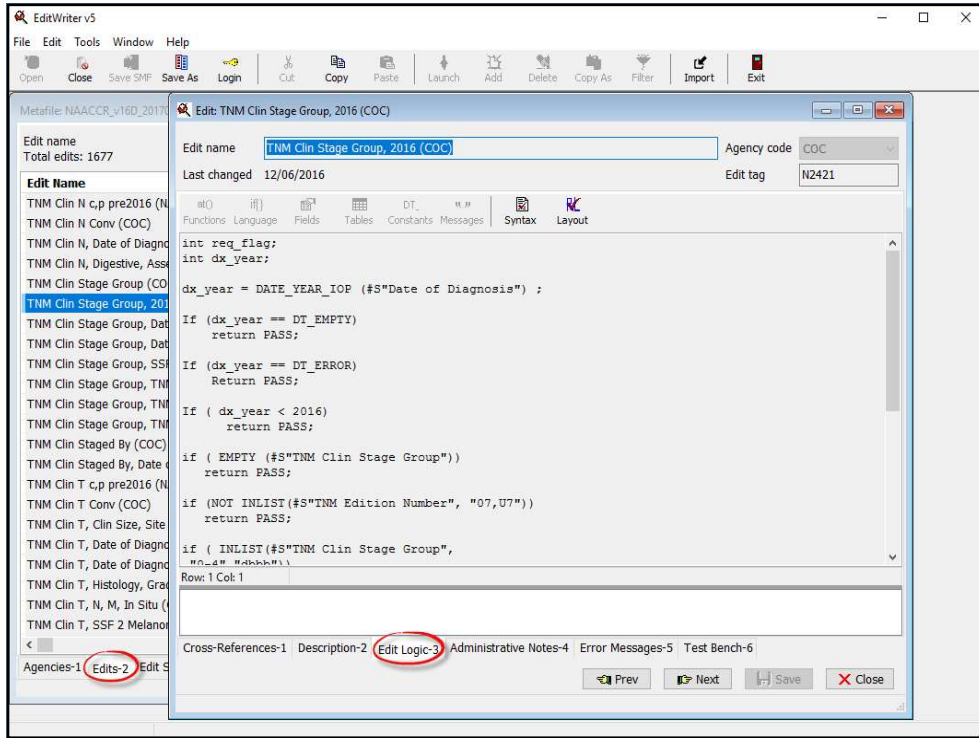
Metafile: NAACCR_v16D_20170109.smf

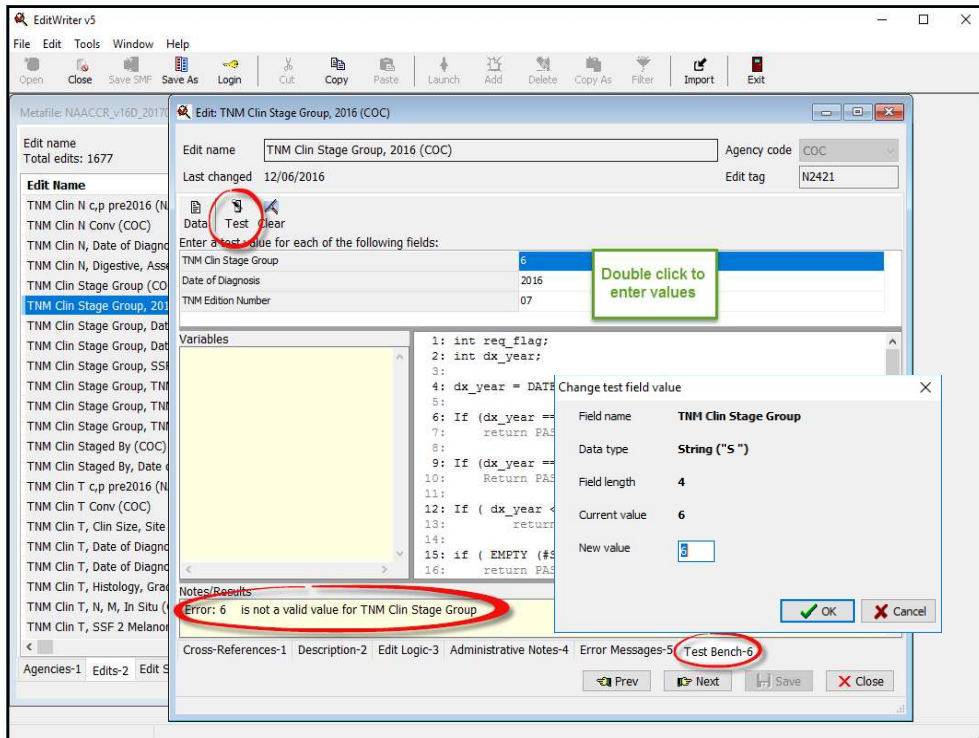
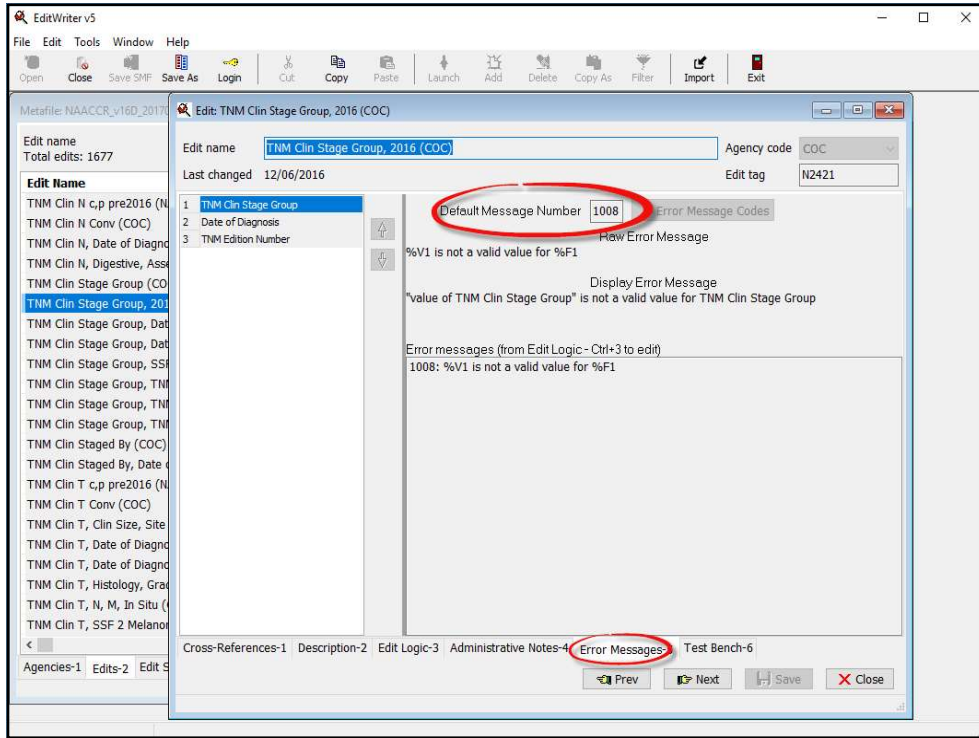
Edit name:
Total edits: 1677

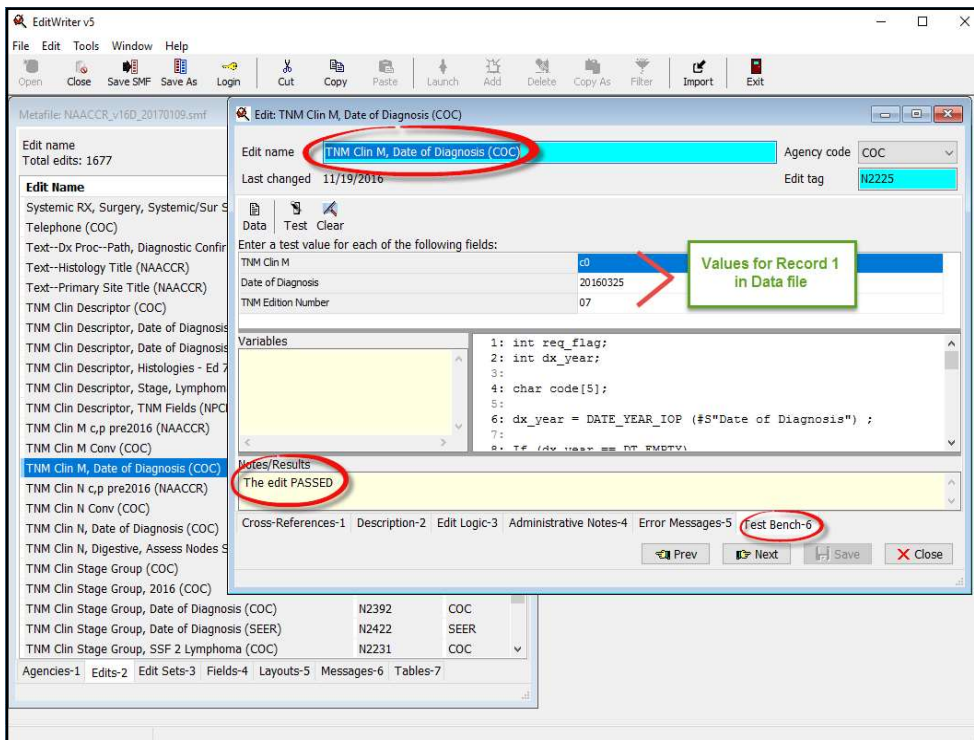
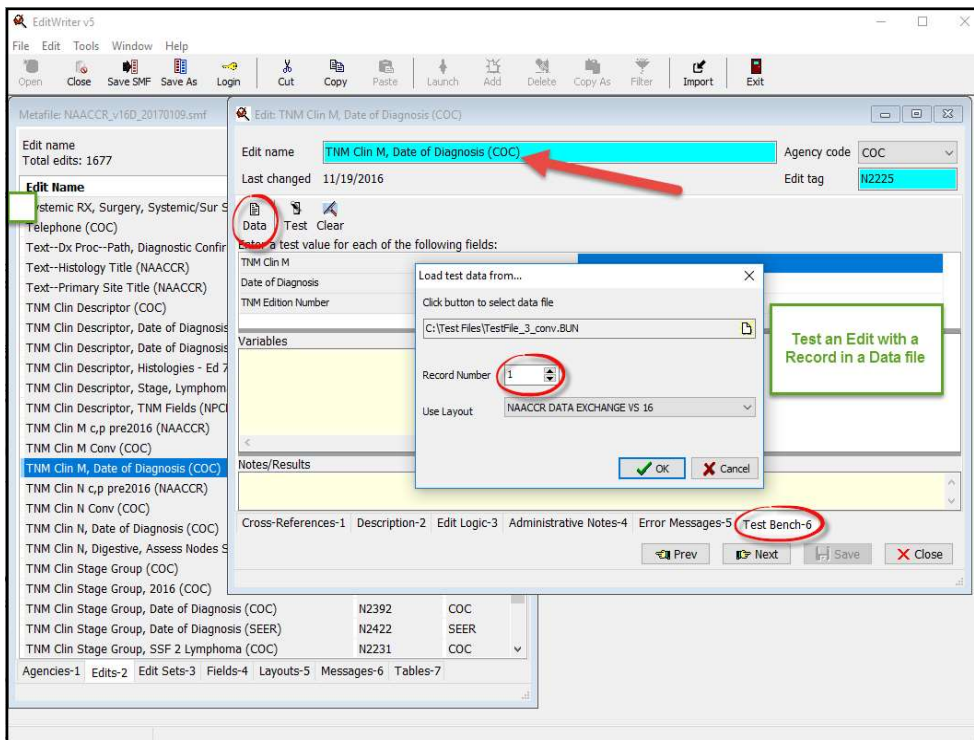
Edit Name	Edit Tag	Agency
TNM Clin N c,p pre2016 (NAACCR)	N2312	NAACCR
TNM Clin N Conv (COC)	N2346	COC
TNM Clin N, Date of Diagnosis (COC)	N2227	COC
TNM Clin N, Digestive, Assess Nodes SSF (COC)	N2229	COC
TNM Clin Stage Group (COC)	N0038	COC
TNM Clin Stage Group, 2016 (COC)	N2421	COC
TNM Clin Stage Group, Date of Diagnosis (COC)	N2392	COC
TNM Clin Stage Group, Date of Diagnosis (SEER)	N2422	SEER
TNM Clin Stage Group, SSF 2 Lymphoma (COC)	N2231	COC
TNM Clin Stage Group, TNM Items, ICD03 (COC)	N0852	COC
TNM Clin Stage Group, TNM Path Stage Group (COC)	N0243	COC
TNM Clin Stage Group, TNM Path Stage Group (NAACCR)	N0931	NAACCR
TNM Clin Staged By (COC)	N0145	COC
TNM Clin Staged By, Date of Diagnosis (SEER)	N2018	SEER
TNM Clin T c,p pre2016 (NAACCR)	N2317	NAACCR
TNM Clin T Conv (COC)	N2233	COC
TNM Clin T, Clin Size, Site Spec - Ed 7 (SEER)	N2238	SEER
TNM Clin T, Date of Diagnosis (COC)	N2232	COC
TNM Clin T, Date of Diagnosis (SEER)	N2403	SEER
TNM Clin T, Histology, Grade, Thyroid (CoC)	N2234	COC
TNM Clin T, N, M, In Situ (COC)	N2443	COC
TNM Clin T, SSF 2 Melanoma Conjunctiva (CoC)	N2235	COC

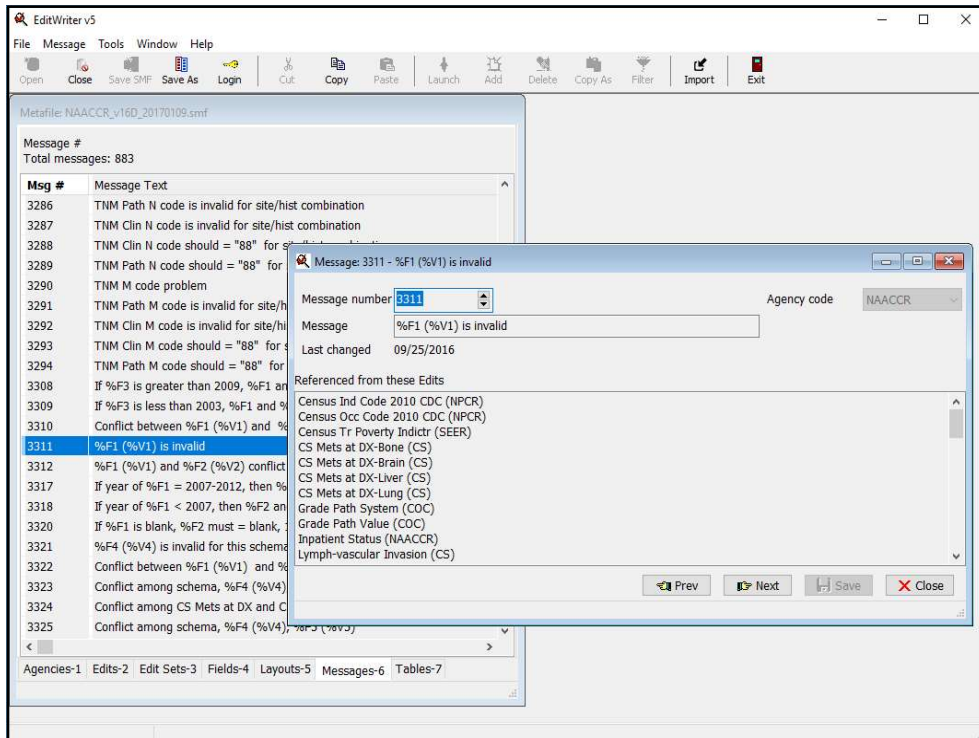
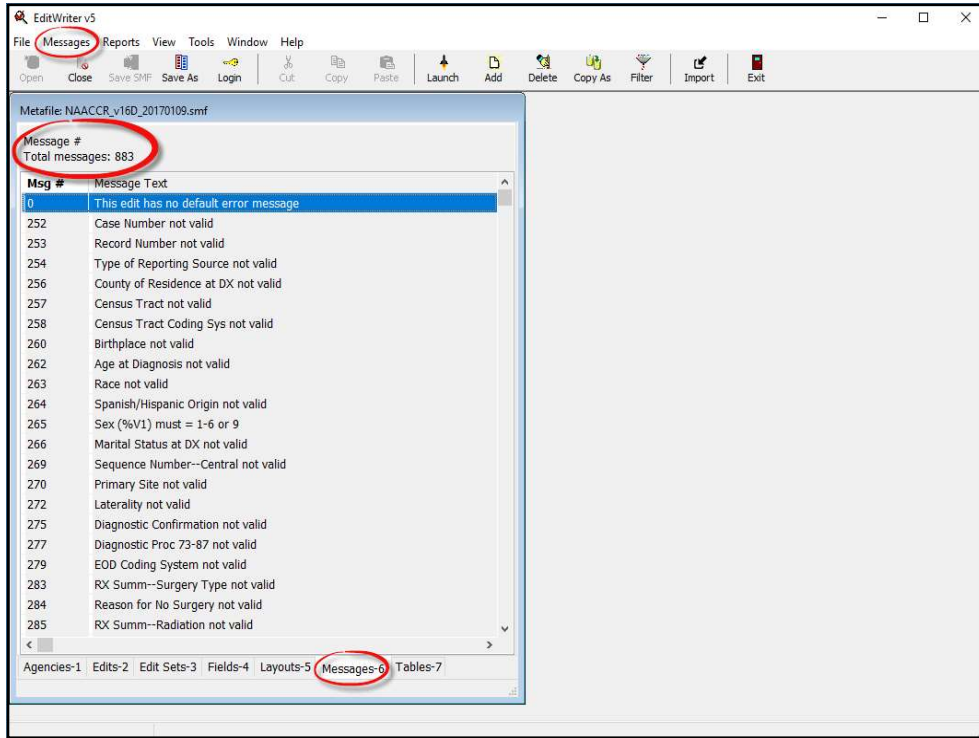
Agencies-1 | **Edits-2** | Edit Sets-3 | Fields-4 | Layouts-5 | Messages-6 | Tables-7

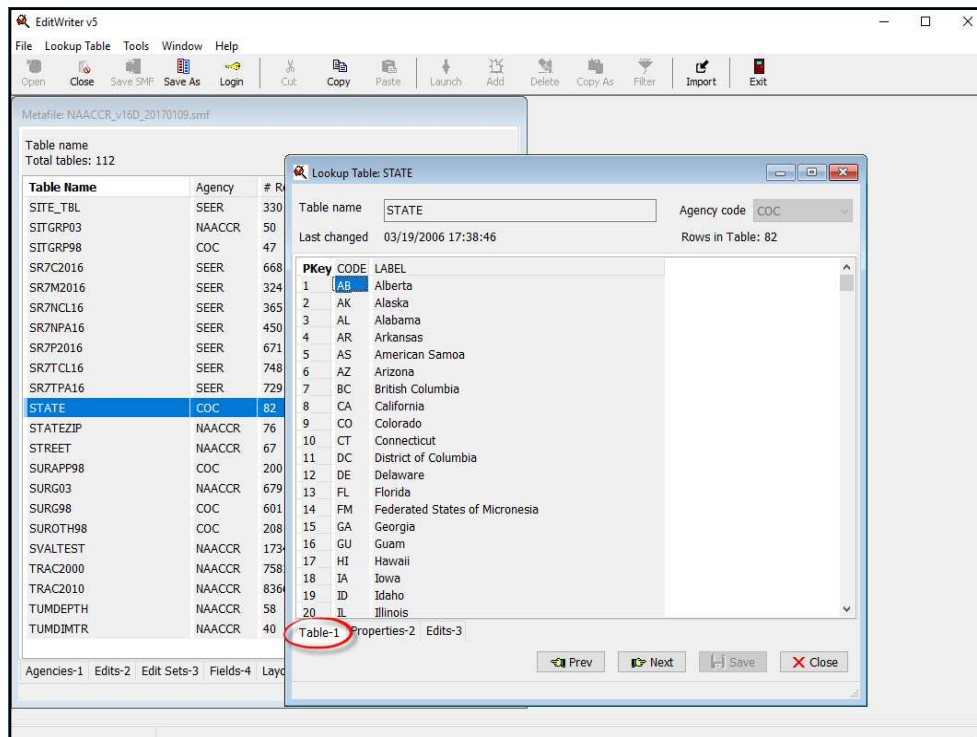
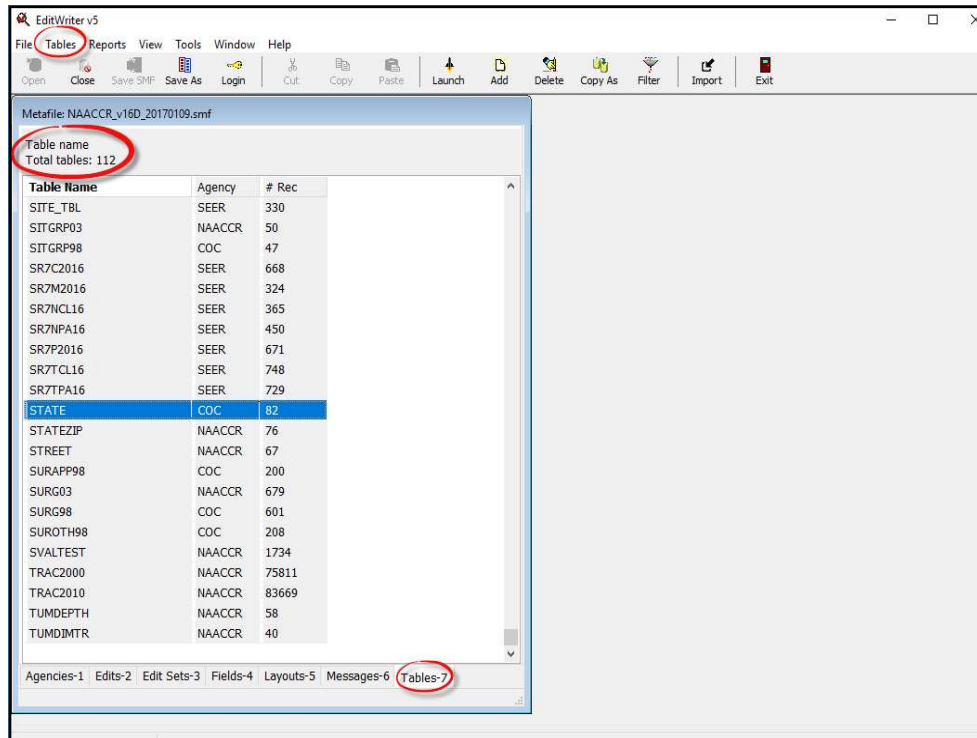


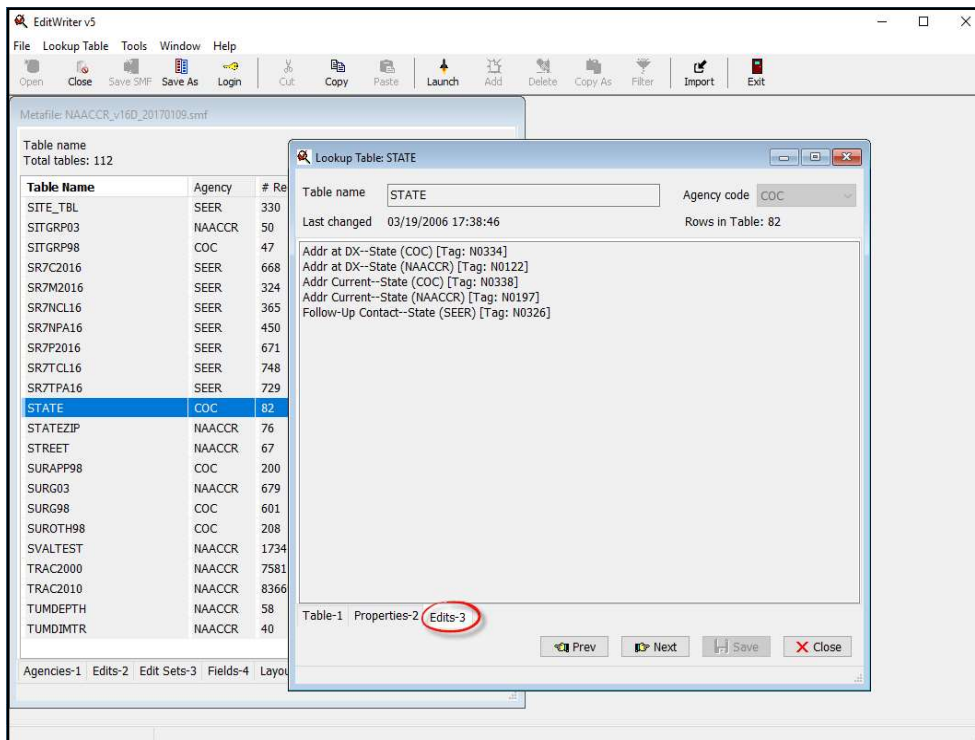
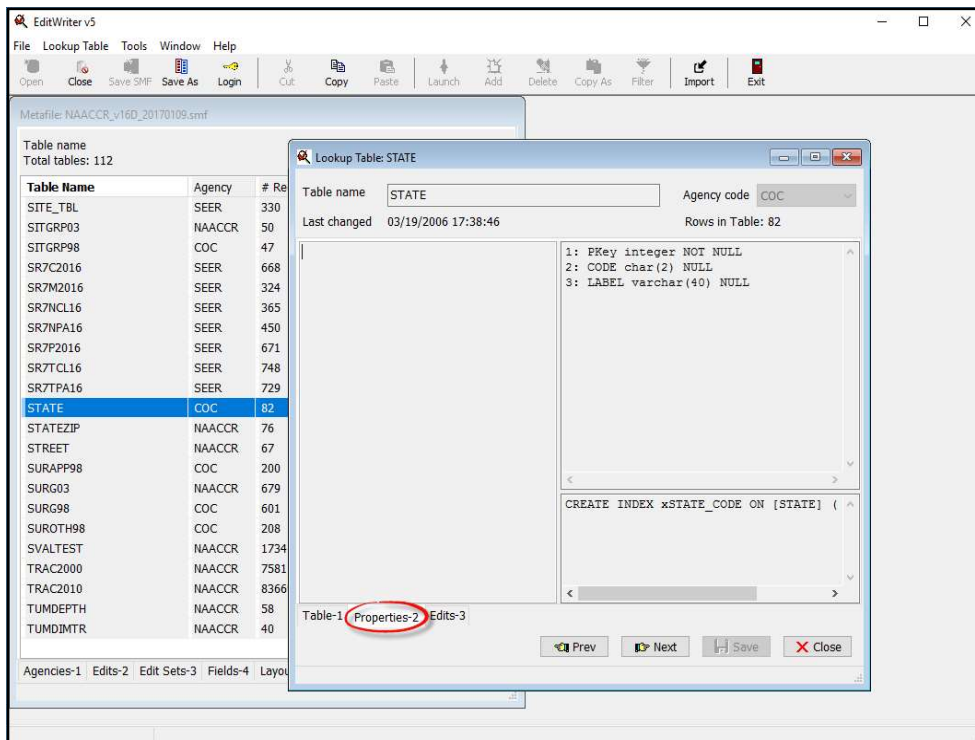












EditWriter

- Edits are grouped into Edit Sets
 - Central: Vs16 NPCR Required - Consol-All Edits
 - Includes edits that NPCR would expect a state registry to run on consolidated data
 - Central: Vs16 State Example -Incoming Abstracts
 - Includes edits a state registry might wish to run on incoming abstracts
 - Can be copied and used as starting point for state-specific edit set
 - And many others!

Metatile: NAACCR_v16D_20170109.smf

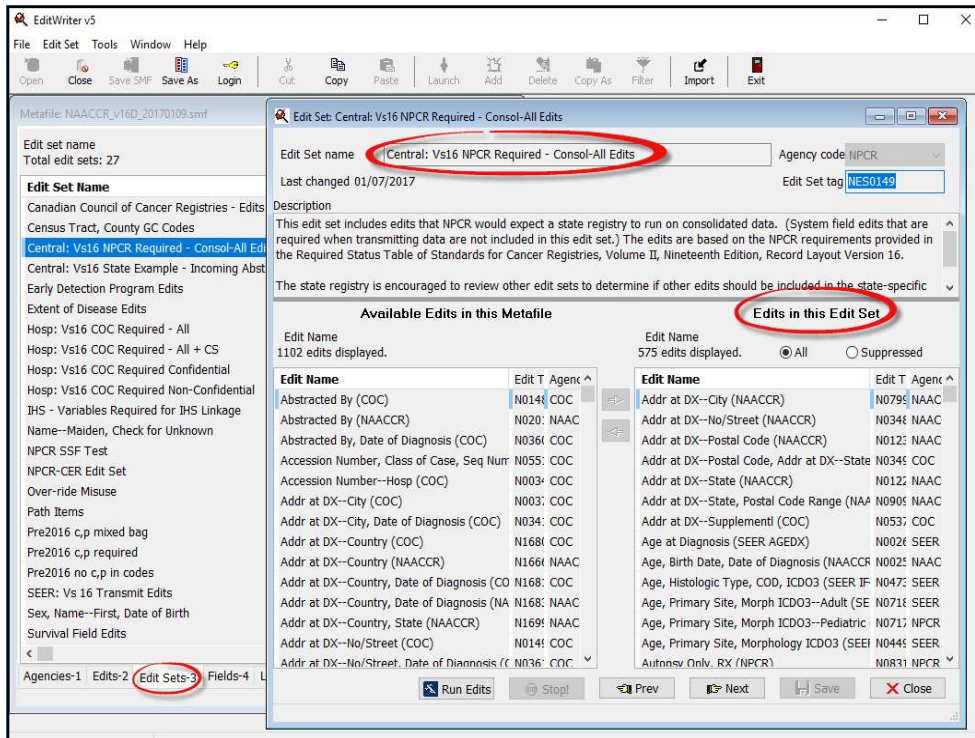
Agency code
Total edit sets in filtered list: 26

Edit Set Name	Edit Set Tag	Agency
Hosp: Vs16 COC Required Non-Confidential	NES0126	COC
Census Tract, County GC Codes	NES0348	NAACCR
Central: Vs16 State Example - Incoming Abstracts	NES0150	NAACCR
Extent of Disease Edits	NES0013	NAACCR
Name--Maiden, Check for Unknown	NES0018	NAACCR
Over-ride Misuse	NES0019	NAACCR
Path Items	NES0052	NAACCR
Pre2016 c.p mixed bag	NES0336	NAACCR
Pre2016 c.p required	NES0337	NAACCR
Pre2016 no c.p in codes	NES0338	NAACCR
Sex, Name--First, Date of Birth	NES0293	NAACCR
Text Edits	NES0001	NAACCR
Verify ICDD2 to ICDD3 Conversion	NES0002	NAACCR
Verify Birthplace Conversion	NES0228	NAACCR/
Verify Place of Death Conversion	NES0229	NAACCR/
Central: Vs16 NPCR Required - Consol-All Edits	NES0149	NPCR
Early Detection Program Edits	NES0278	NPCR
IHS - Variables Required for IHS Linkage	NES0117	NPCR
NPCR SSF Test	NES0306	NPCR
NPCR-CER Edit Set	NES0266	NPCR
SEER: Vs 16 Transmit Edits	NES0334	SEER
Survival Field Edits	NES0277	SEER

Agencies-1 | Edits-2 | Edit Sets-3 | Fields-4 | Layouts-5 | Messages-6 | Tables-7

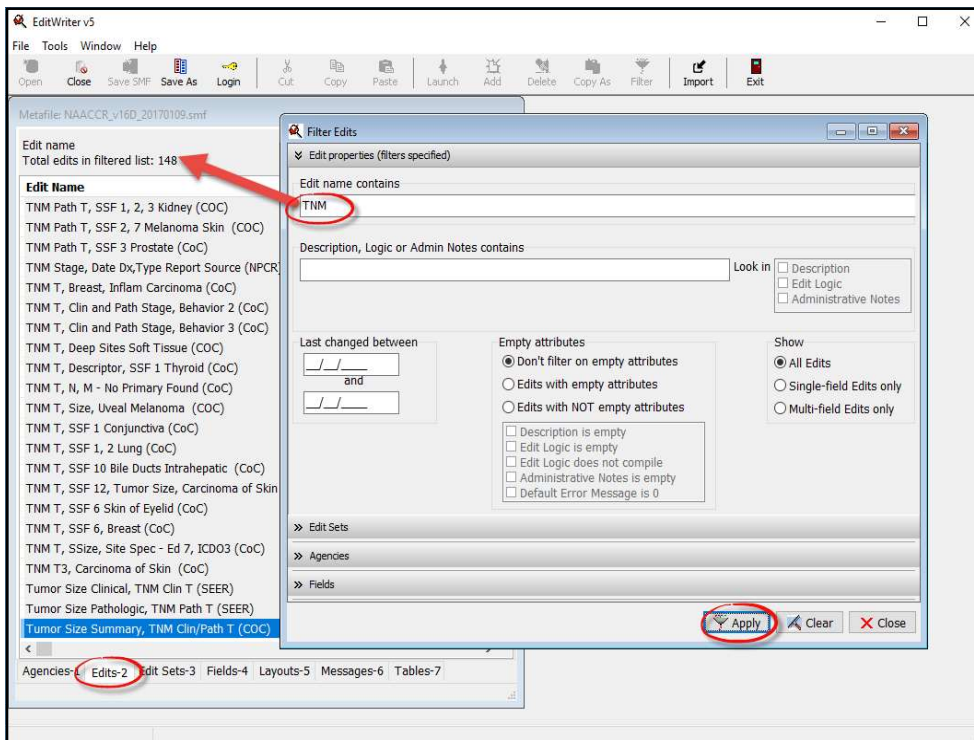
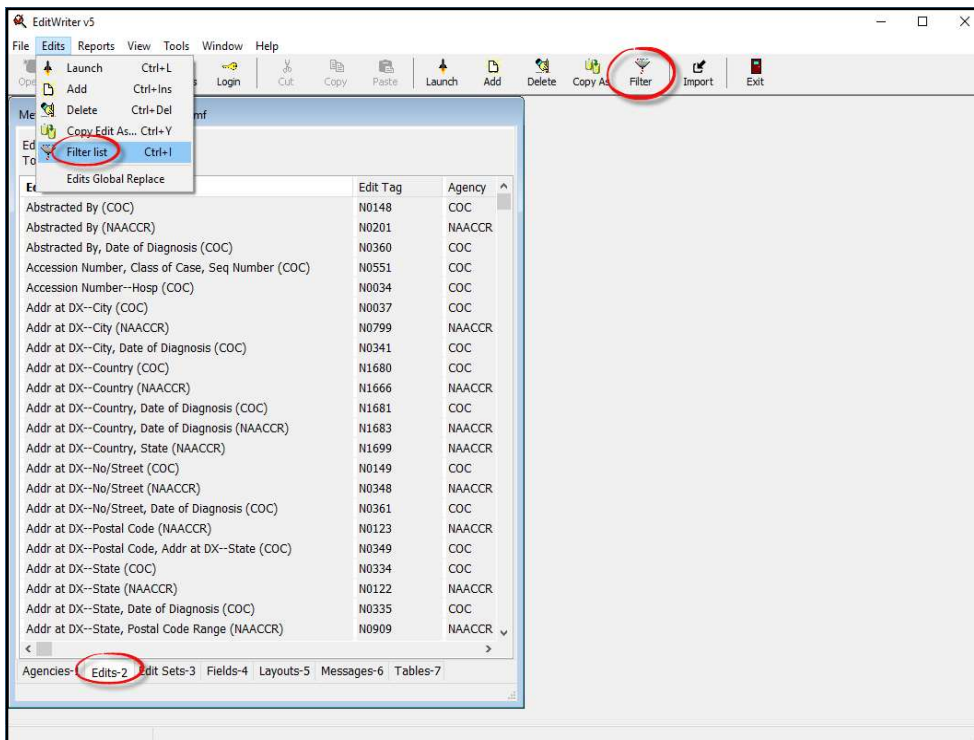
Sort by different tabs in Navigator

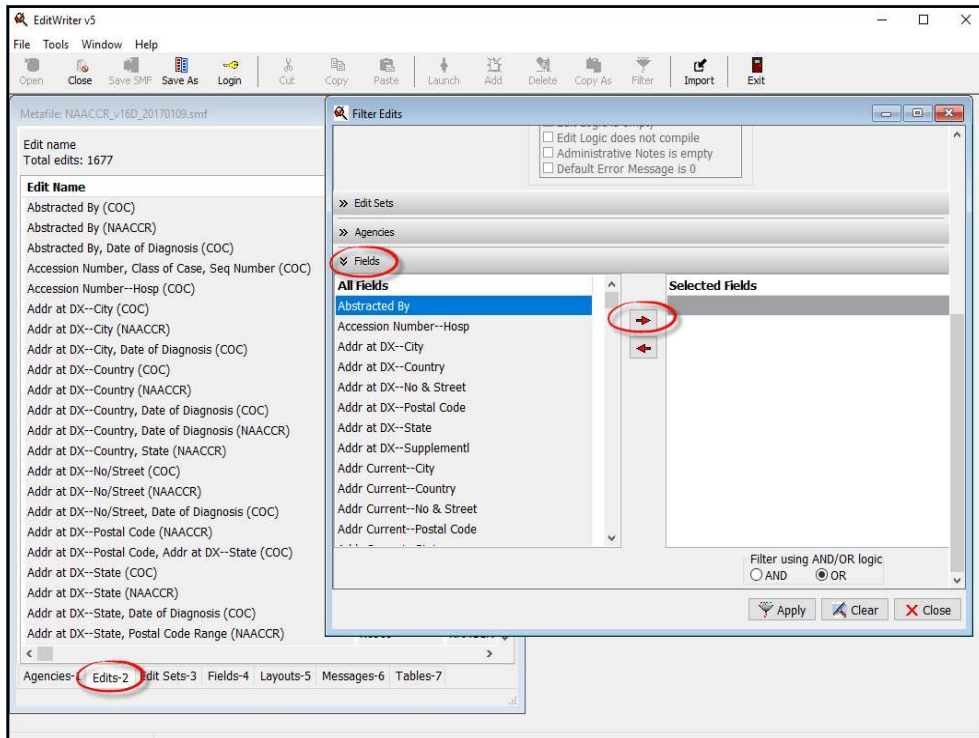
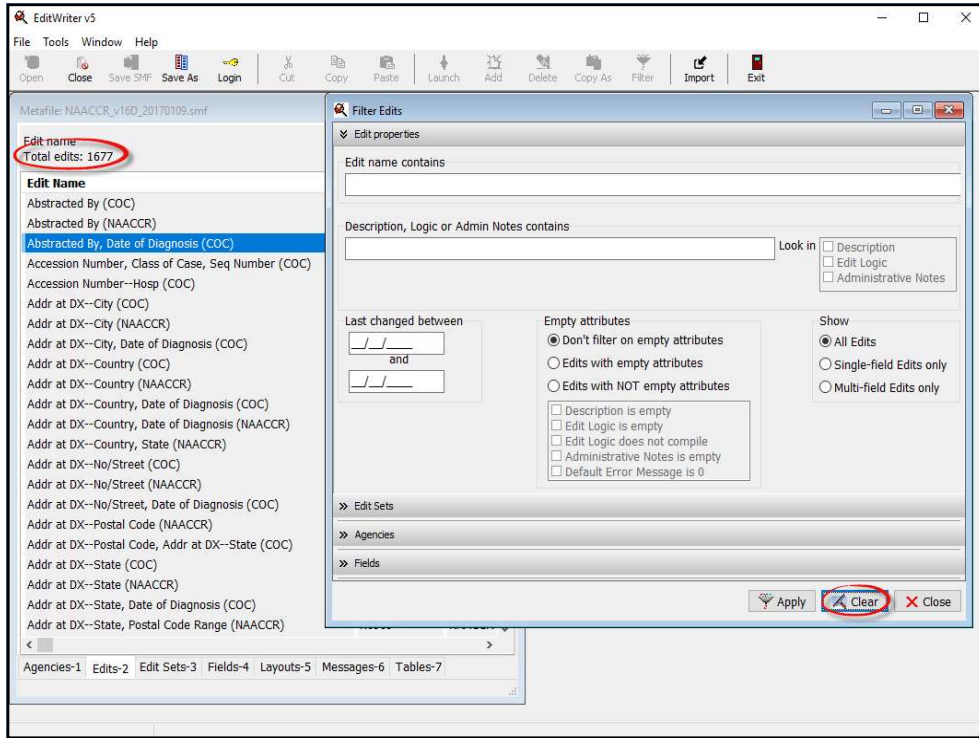
Sort by Agency to view all Edit Sets for an Agency

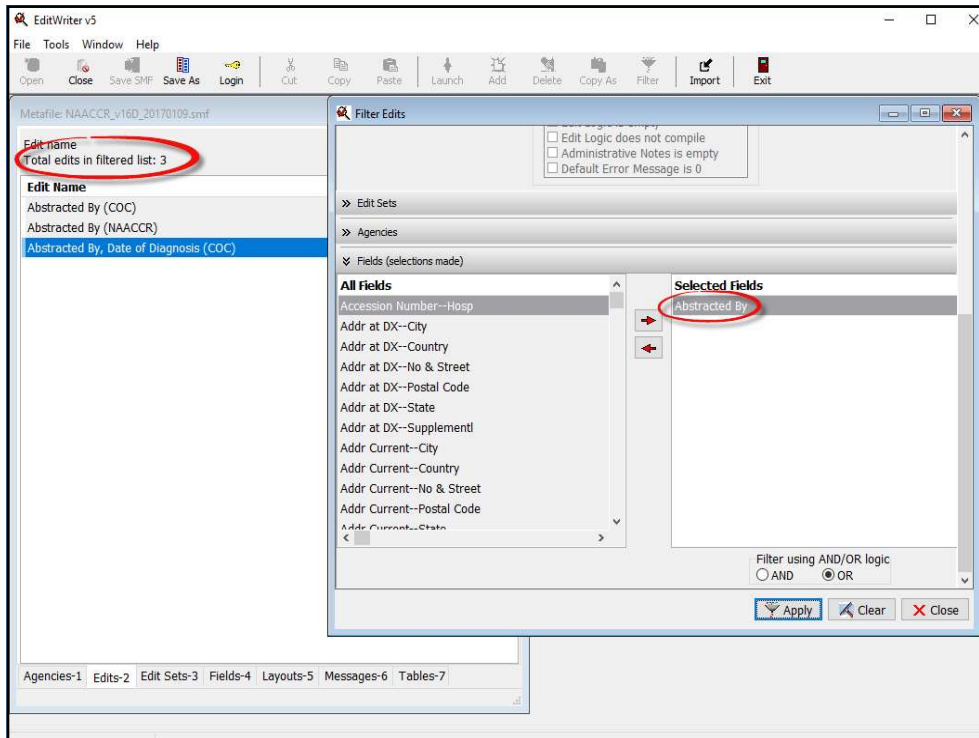
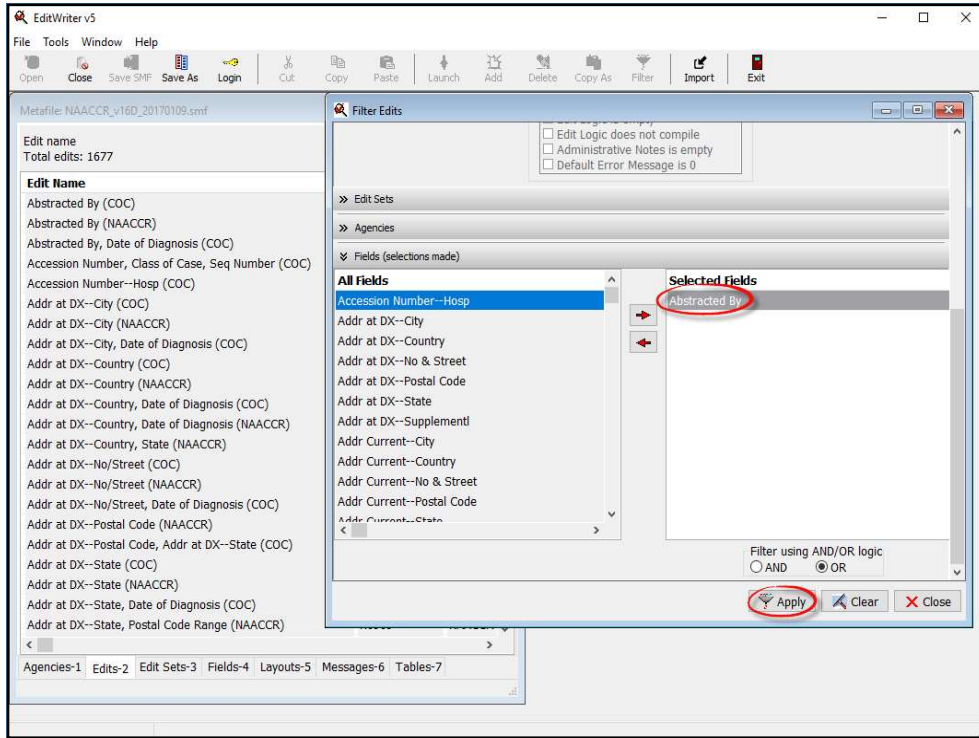


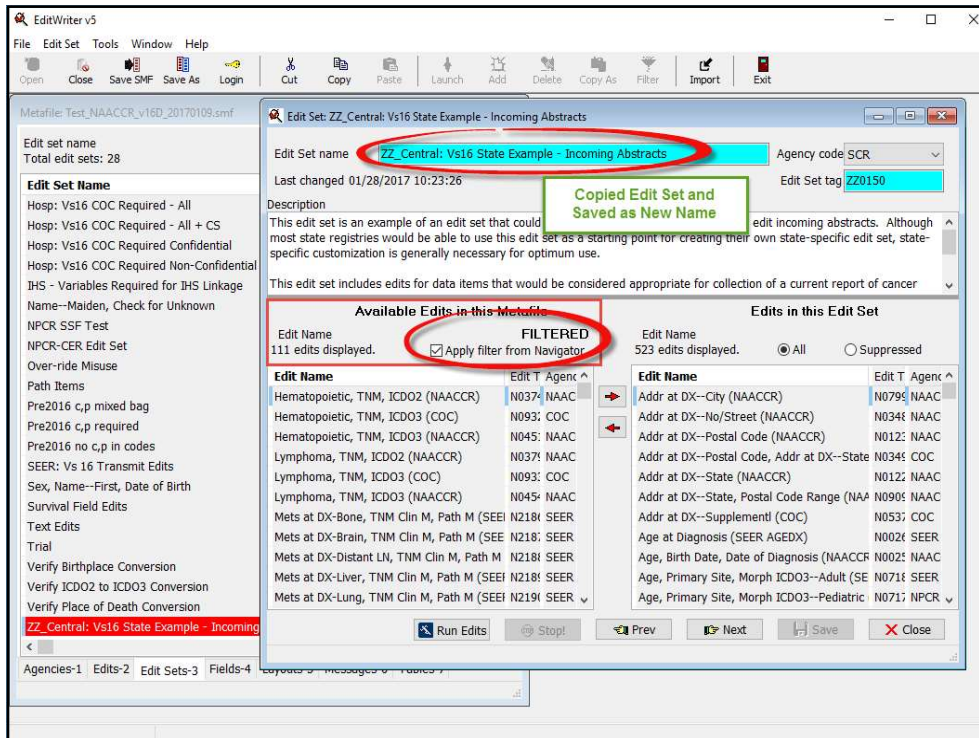
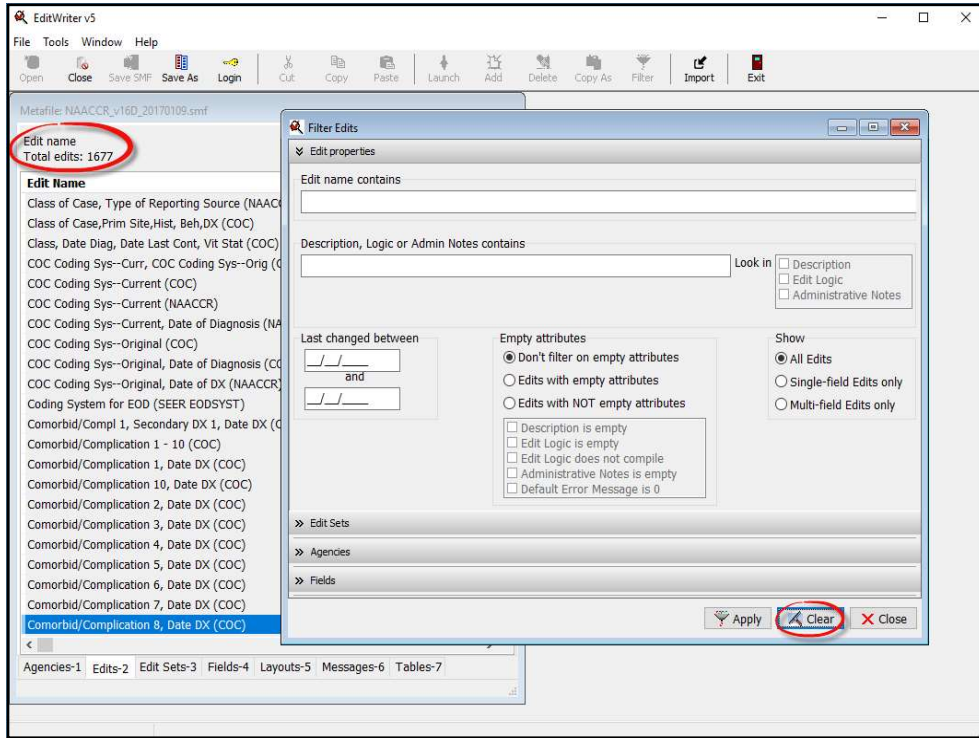
EditWriter - Filter

- List of edits (and all other objects) can be filtered









Metafiler: Test_NAACCR_v16D_20170109.smf

Edit Set: ZZ_Central: Vs16 State Example - Incoming Abstracts

Edit Set name: ZZ_Central: Vs16 State Example - Incoming Abstracts Agency code: SCR

Last changed: 01/28/2017 10:23:26 Edit Set tag: ZZ0150

Description: This edit set is an example of an edit set that could be used by a central cancer registry to edit incoming abstracts. Although most state registries would be able to use this edit set as a starting point for creating their own state-specific edit set, state-specific customization is generally necessary for optimum use. This edit set includes edits for data items that would be considered appropriate for collection of a current report of cancer

Available Edits in this Metafile		Edits in this Edit Set	
Edit Name	Edit T. Agency	Edit Name	Edit T. Agency
Primary Site, TNM N - c,p pre2016 (NPCR)	N230: NPCR	Primary Site, Heme Morph, DateDX, NoOver	N2021: SEER
Primary Site, TNM Path Stage Valid A-Ed 7	N241: COC	Primary Site, Heme Morph, DateDX, Overri	N2022: SEER
Primary Site, TNM Path Stage Valid B- Ed 7	N241: COC	Primary Site, Laterality (SEER IF82)	N039: SEER
SS1977, TNM M c,p pre2016 (NAACCR)	N233: NAAC	Primary Site, M 2016 - Ed 7 (COC-NPCR)	N233: COC
SS1977, TNM M c,p pre2016 (NAACCR)	N234: NAAC	Primary Site, Morphology-Impos 1CDO3 (S	N044: SEER
SS2000, TNM M c,p pre2016 (NAACCR)	N234: NAAC	Primary Site, Morphology-Type,Beh 1CDO3(N125: SEER
SS2000, TNM M c,p pre2016 (NAACCR)	N234: NAAC	Primary Site, N 2016 - Ed 7 (COC-NPCR)	N220: COC
Summary Stage 1977, TNM M (NAACCR)	N048: NAAC	Primary Site, Stage Group 2016 - Ed 7 (NPC	N230: NPCR
Summary Stage 1977, TNM N (NAACCR)	N048: NAAC	Primary Site, T 2016 - Ed 7, 1CDO3 (COC-N	N221: COC
Summary Stage 1977, TNM Stage Group (C	N023: COC	Primary Site, TNM Clin Stage Valid A- Ed 7	N221: COC
Summary Stage 2000, TNM M (NAACCR)	N048: NAAC	Primary Site, TNM T - c,p pre2016 (NPCR)	N231: NPCR

Run Edits Stop! Prev Next Save Close

Agencies-1 Edits-2 Edit Sets-3 Fields-4

Edit from Filtered list was selected and added to the list of Edits in this Edit Set on the right using the right arrow button

EditWriter

Print Reports

- Agency
- Fields
- Record Layout
- Edits
- Edit Sets
- Messages
- Tables
- Excel: Edits/Edit Sets

EditWriter

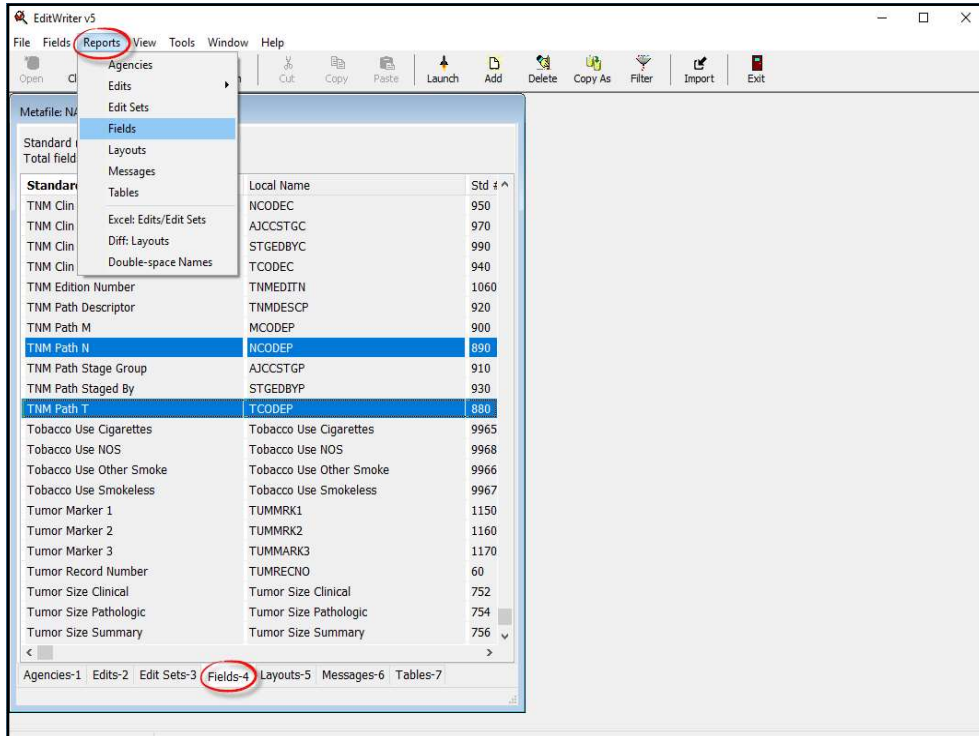
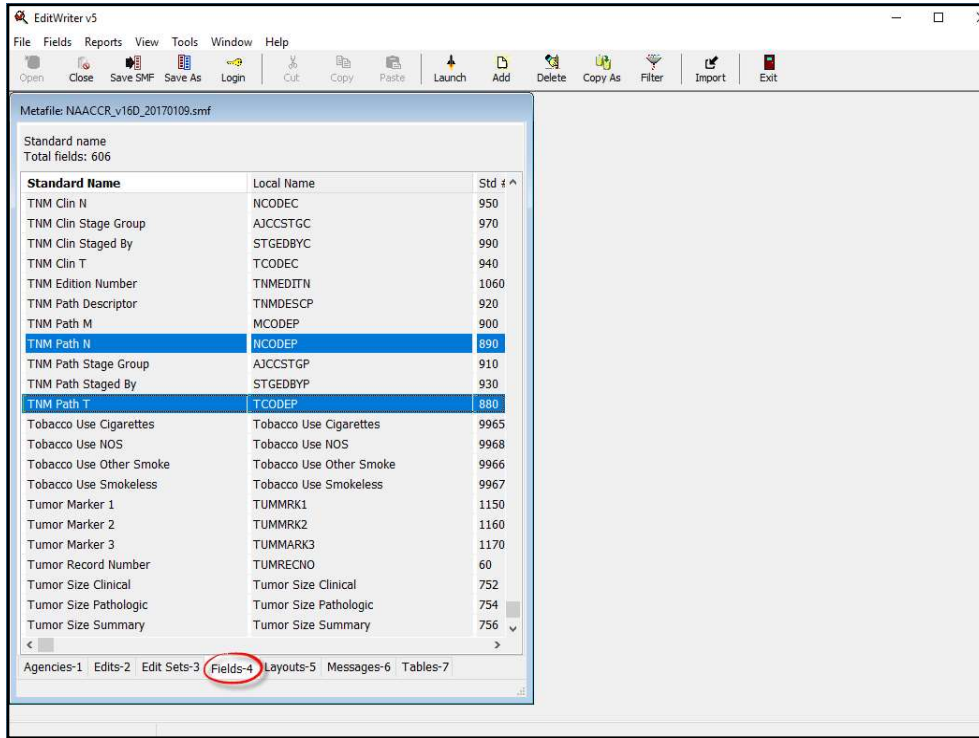


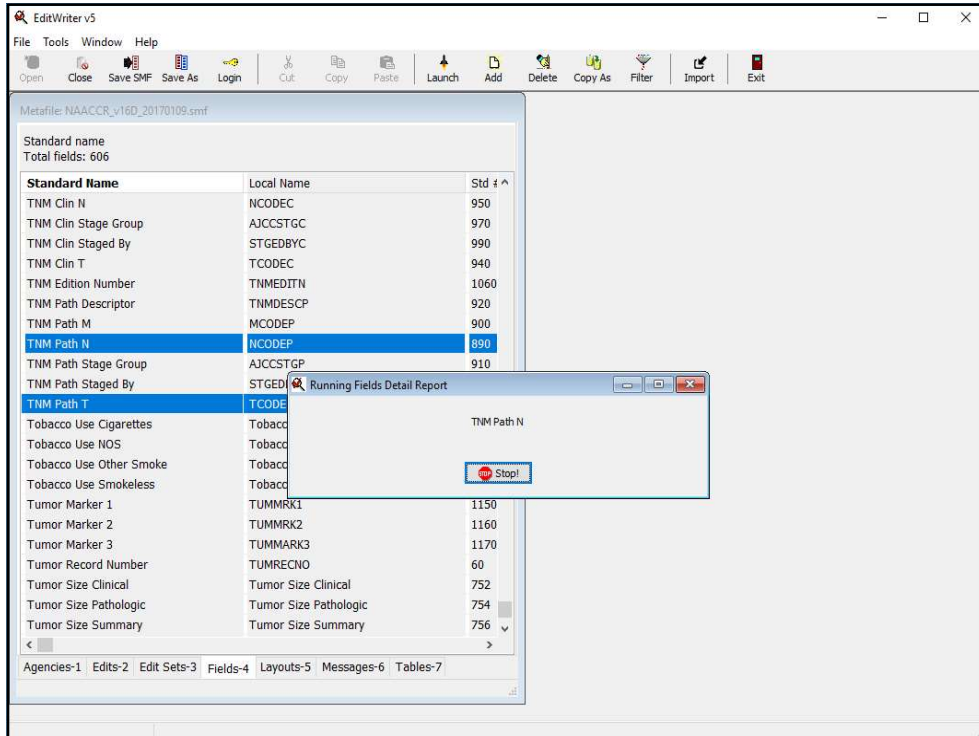
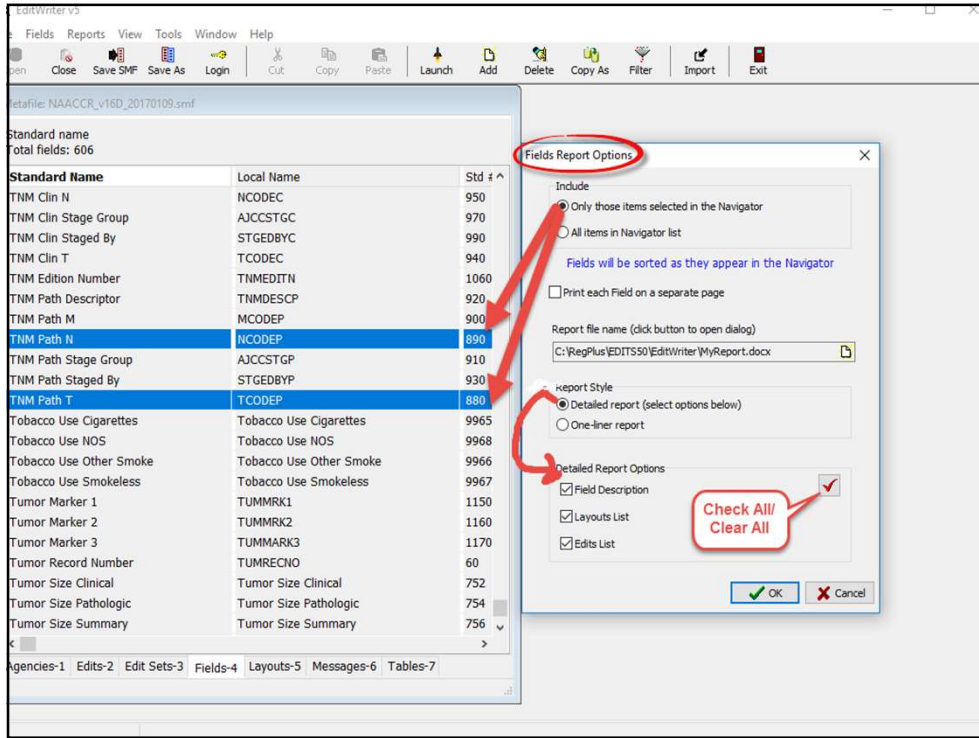
Reports – Fields Detail Report

- Produce Fields Detail Report in one of two ways
 - Print only selected fields
 - Use Navigator to **View** list of **Fields** and select individual fields (Ctrl+Left Mouse Click)
 - Select **Reports** and select **Only Those Items Selected in the Navigator**
 - Print all fields
 - Select **Reports** and select **All Items in Navigator List**

Reports – Fields Detail Report

- Fields Detail Report
 - Available edits are listed for each field





Document1 [Compatibility Mode] - Microsoft Word

NAACCR_v16D_20170109.smf TNM Path N Fields Detail Report

TNM Path N
 Agency: AJCC Last changed: 07/20/2016
 Local Name NCODEP
 Field Number 890
 Data Type S
 Field Length 4

Description
 Record Area: Non-Confidential
 Stage/Prognostic Factors

Used in these Layouts

Layout Name	Layout Tag	Start Pos	Agency Code
NAACCR DATA EXCHANGE VS 16	NL0001	944	NAACCR

Referenced from these Edits

Edit Name	Edit Tag	Agency Code
Hematopoietic, TNM, ICDO2 (NAACCR)	N0374	NAACCR
Hematopoietic, TNM, ICDO3 (COC)	N0932	COC
Hematopoietic, TNM, ICDO2 (NAACCR)	N0451	NAACCR

Page: 1 of 4 | Words: 1,048

Reports – Edit Detail Report

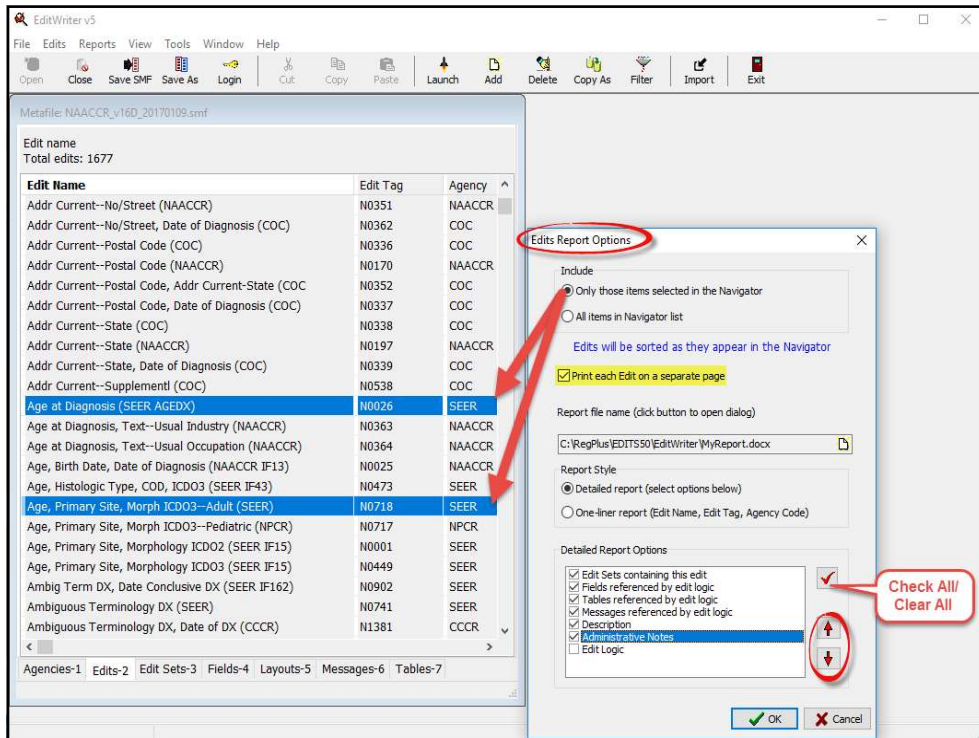
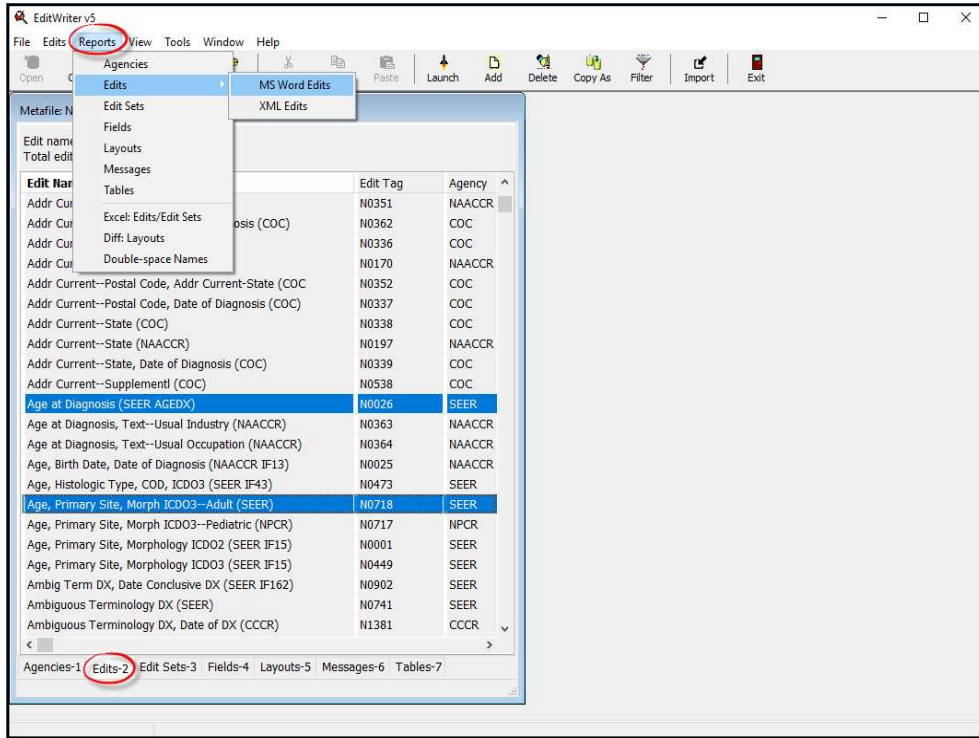
- Print only selected edits
OR
- Print all edits
 - VERY LARGE report – 1000+ edits
- Read descriptions

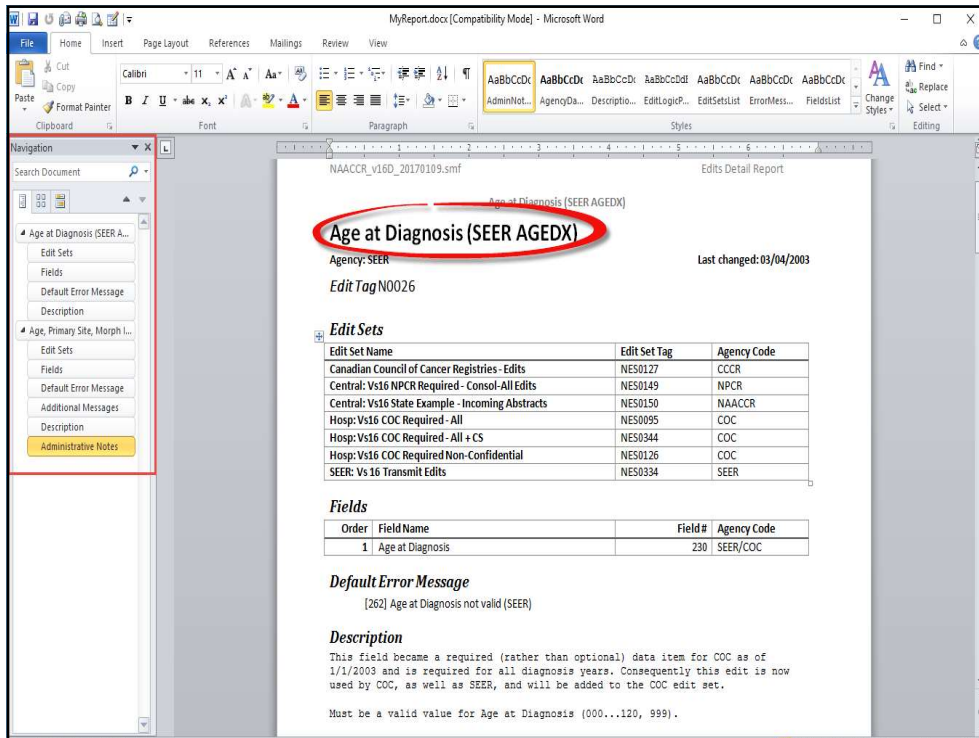
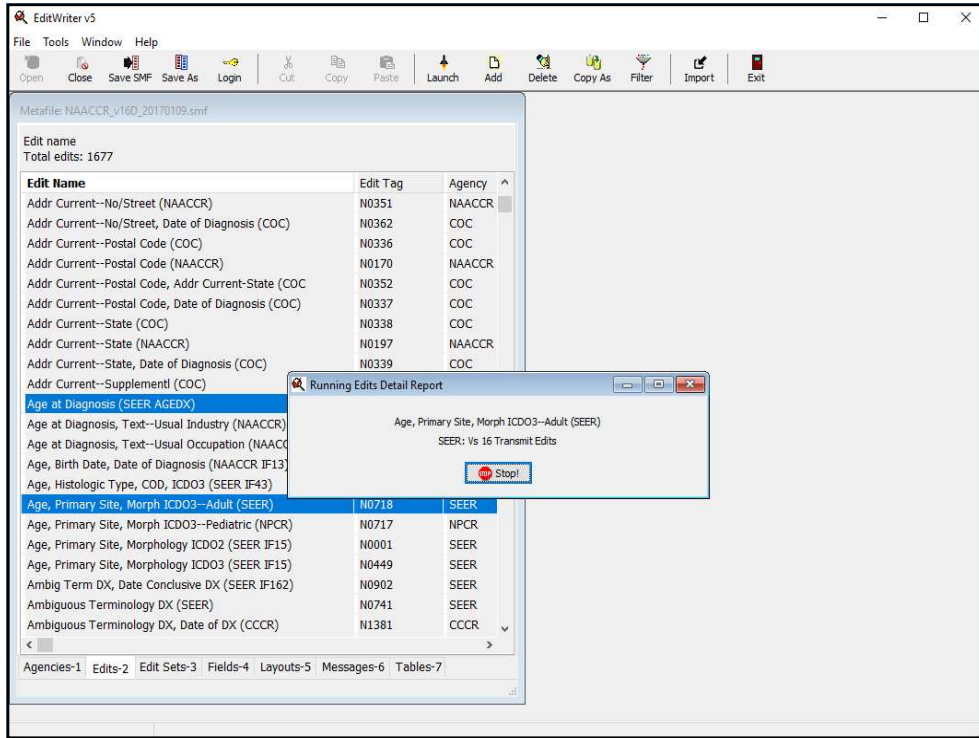
Reports – Edit Detail Report

- **Report Format Options**
 - XML Edits
 - MS Word Edits

Reports – Edit Detail Report

- **Additional Options**
 - Print only filtered edits
 - Print list of edits





Reports – Edit Set Report

- Print only selected edit sets

OR

- Print all edit sets
- **Read descriptions**

NAACCR_v16D_20170109.smf

Central: Vs16 NPCR Required - Consol-All Edits

Edit Sets Report

Central: Vs16 NPCR Required - Consol-All Edits

Agency: NPCR

Last changed: 01/07/2017

Edit Set Tag NES0149

Description

This edit set includes edits that NPCR would expect a state registry to run on consolidated data. (System field edits that are required when transmitting data are not included in this edit set.) The edits are based on the NPCR requirements provided in the Required Status Table of Standards for Cancer Registries, Volume II, Nineteenth Edition, Record Layout Version 16.

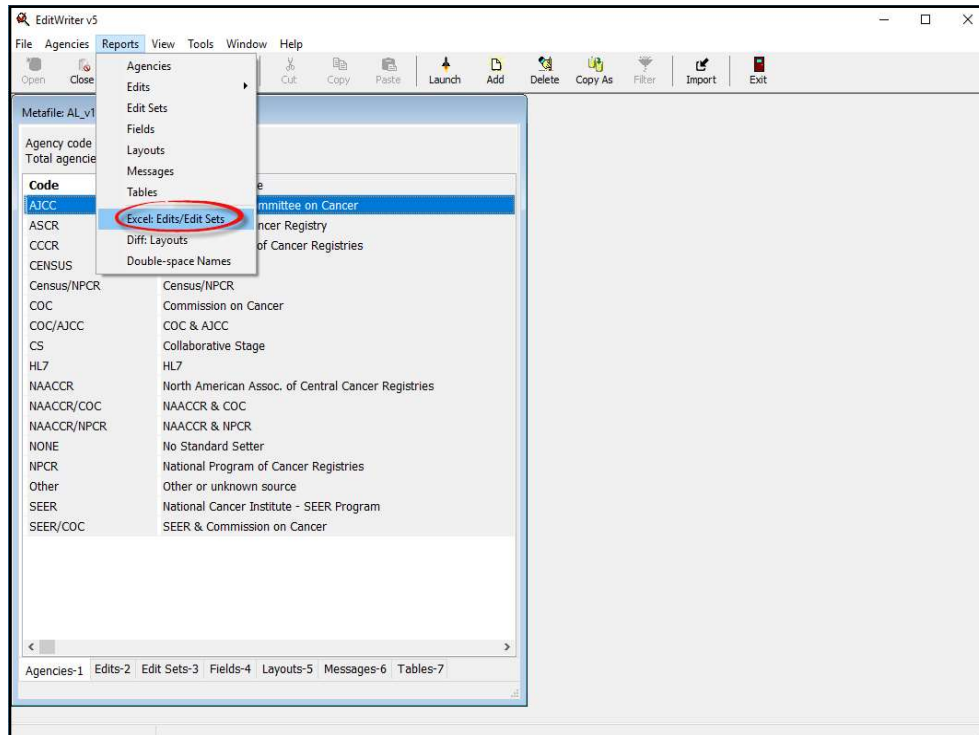
The state registry is encouraged to review other edit sets to determine if other edits should be included in the state-specific edit set.

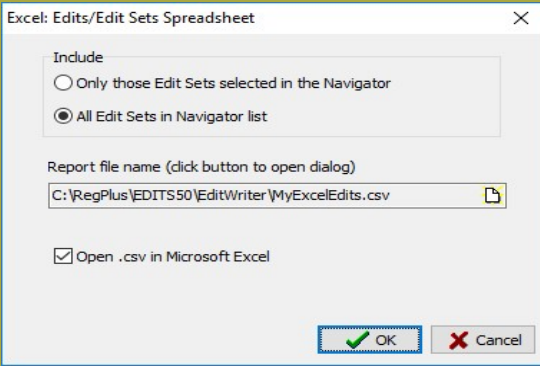
Edit Set includes these 575 Edits

Edit Name	Edit Tag	Agency Code
Addr at DX--City (NAACCR)	N0799	NAACCR
Addr at DX--No/Street (NAACCR)	N0348	NAACCR
Addr at DX--Postal Code (NAACCR)	N0123	NAACCR
Addr at DX--Postal Code, Addr at DX--State (COC)	N0349	COC
Addr at DX--State (NAACCR)	N0122	NAACCR
Addr at DX--State, Postal Code, Race (NAACCR)	N0888	NAACCR

Reports – Edits/Edit Sets Report

- Displays edits included in each selected edit set
- Useful to compare edits in edit set
- Compare to standard setter edit sets for verification
- Compare multiple versions of the same edit

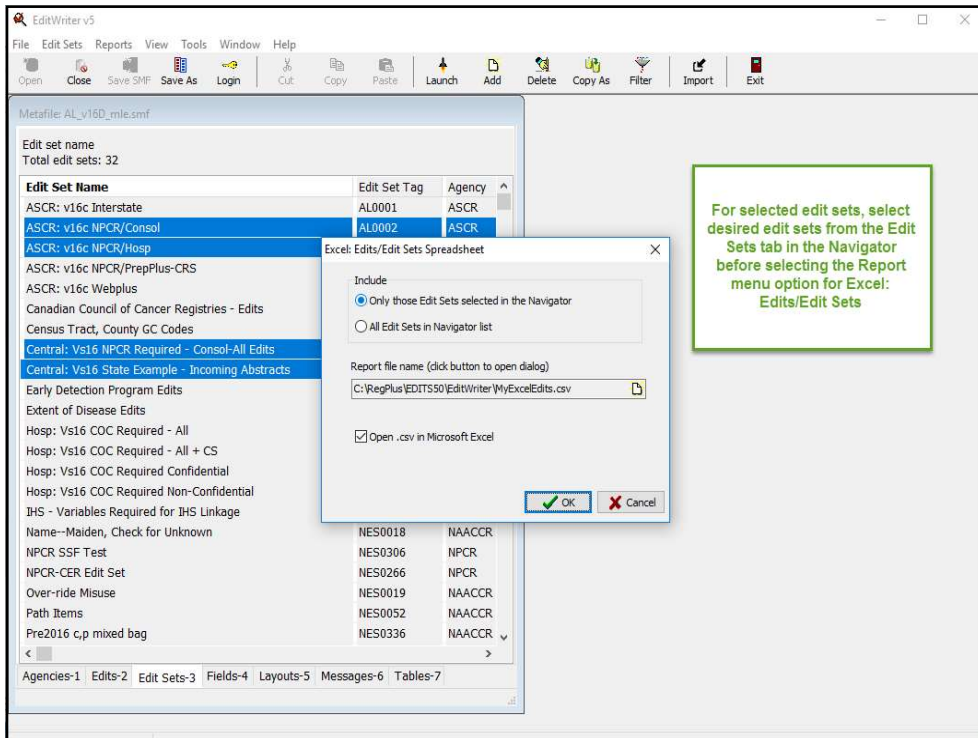




The dialog box titled "Excel: Edits/Edit Sets Spreadsheet" contains the following elements:

- Include:** Two radio buttons. The first is "Only those Edit Sets selected in the Navigator" (unselected). The second is "All Edit Sets in Navigator list" (selected).
- Report file name (click button to open dialog):** A text field containing "C:\RegPlus\EDITS50>EditWriter\MyExcelEdits.csv" and a file icon button.
- Open .csv in Microsoft Excel:** A checked checkbox.
- Buttons:** "OK" (with a green checkmark) and "Cancel" (with a red X).

Option to include only Edit Sets selected or all Edit Sets in Navigator list



The screenshot shows the EditWriter v5 application interface. The main window displays a list of edit sets with columns for "Edit Set Name", "Edit Set Tag", and "Agency". A dialog box is overlaid on the interface, and a callout box provides instructions.

Edit Set Name	Edit Set Tag	Agency
ASCR: v16c Interstate	AL0001	ASCR
ASCR: v16c NPCR/Consol	AL0002	ASCR
ASCR: v16c NPCR/Hosp		
ASCR: v16c NPCR/PrepPlus-CRS		
ASCR: v16c Webplus		
Canadian Council of Cancer Registries - Edits		
Census Tract, County GC Codes		
Central: Vs16 NPCR Required - Consol-All Edits		
Central: Vs16 State Example - Incoming Abstracts		
Early Detection Program Edits		
Extent of Disease Edits		
Hosp: Vs16 COC Required - All		
Hosp: Vs16 COC Required - All + CS		
Hosp: Vs16 COC Required Confidential		
Hosp: Vs16 COC Required Non-Confidential		
IHS - Variables Required for IHS Linkage		
Name-Maiden, Check for Unknown	NES0018	NAACCR
NPCR SSF Test	NES0306	NPCR
NPCR-CER Edit Set	NES0266	NPCR
Over-ride Misuse	NES0019	NAACCR
Path Items	NES0052	NAACCR
Pre2016 cp mixed bag	NES0336	NAACCR

For selected edit sets, select desired edit sets from the Edit Sets tab in the Navigator before selecting the Report menu option for Excel: Edits/Edit Sets

When Open .csv in Microsoft Excel is checked, the report will automatically open in Excel.

1	Edit Name	Edit Tag	Agency	ASCR: v16	ASCR: v16 Central: V	ASCR: v16 Central: Vs16	ASCR: v16 State Example - Incoming Abstracts	[Tag: NES0150]	[Agency: NAACCR]
2	Abstracter N0148		COC						
3	Abstracter N0201		NAACCR		X				
4	Abstracter N0360		COC						
5	Accession N0551		COC						
6	Accession N0034		COC						
7	Addr at D N0037		COC						
8	Addr at D N0799		NAACCR	X	X	X	X		
9	Addr at D N0341		COC						
10	Addr at D N1680		COC						
11	Addr at D N1666		NAACCR		X				
12	Addr at D N1681		COC						
13	Addr at D N1683		NAACCR		X				
14	Addr at D N1699		NAACCR		X				

1	Edit Name	Edit Tag	Agency	ASCR	NPCR	ASCR	ASCR	ASCR: v16c NPCR/Pr epPlus- CRS [Tag: AL0004]	Central: Vs16 NPCR Required - Consol- All Edits [Tag: NES0149]	ASCR: v16c NPCR/Pr epPlus- CRS [Tag: AL0004]	Central: Vs16 State Example - Incoming Abstracts [Tag: NES0150]
1585	TNM Path Descriptor, Date of Diagnosis (NPCR)	N1809	NPCR	X	X			X	X		
1586	TNM Path Descriptor, Date of Diagnosis (SEER)	N2016	SEER								
1587	TNM Path Descriptor, RX Dates - Ed 7 (CoC)	N2251	COC		X			X	X		
1588	TNM Path Descriptor, TNM Fields (NPCR)	N2348	NPCR	X				X	X		
1589	TNM Path M c,p pre2016 (NAACCR)	N2319	NAACCR	X				X	X		
1590	TNM Path M Conv (COC)	N2253	COC								
1591	TNM Path M, Date of Diagnosis (COC)	N2252	COC	X	X			X	X		
1592	TNM Path M, TNM Path T (COC)	2463	COC								
1593	TNM Path N c,p pre2016 (NAACCR)	N2320	NAACCR	X				X	X		
1594	TNM Path N Conv (COC)	N2255	COC								
1595	TNM Path N, Date of Diagnosis (COC)	N2254	COC		X			X	X		
1596	TNM Path N, Reg Nodes Ex - Ed 7 (CoC)	N2256	COC		X			X	X		
1597	TNM Path N, Reg Nodes Pos - Ed 7 (COC)	N2257	COC		X			X	X		
1598	TNM Path N, Reg Nodes Pos,Ex, Breast - Ed 7 (CoC)	N2258	COC		X			X	X		
1599	TNM Path N, RNP, Site Spec - Ed 7, ICDO3 (COC)	N2259	COC		X			X	X		

Selecting Edits for State Edit Sets: Tips

- Choose from among multiple edits for same item – by Agency
 - SEER edits
 - COC edits
 - NPCR edits
 - NAACCR edits

Agency Edit Differences: SEER

- Strict application of rules by diagnosis year
 - Ex. Treatment edits
- Many edits include Sequence Number--
Central

Agency Edit Differences: COC

- Assume data conversion rather than strict application of rules by diagnosis year
 - Ex. Treatment edits
 - Ex. Conversion required for TNM c and p indicators for pre-2016 data
- Many edits include Sequence Number--Hosp

NAACCR Edits

- Written to supplement other standards – do not duplicate SEER, COC, or NPCR edits

Selecting Edits for Customized Edit Sets

■ Critical Step

- Only include edits for data items collected
- Selected Edits need to match registry requirements
- Edits for Incoming Abstracts vs Consolidated
 - Edits for facility-specific data items should not be included in edit sets for consolidated records
- Review Edit Descriptions carefully
- Utilize Test Bench to assist in making decisions

Edit Selection Examples

The screenshot shows a software window titled "Edit: Date of 1st Contact (COC)". The "Edit name" field contains "Date of 1st Contact (COC)" and is circled in red. The "Agency code" is "COC" and the "Edit tag" is "N0542". The "Last changed" date is "09/28/2009".

Under "Used in these Edit Sets", a list of checkboxes is shown. The checkbox for "Central: Vs16 State Example - Incoming Abstracts (NAACCR)" is checked and highlighted with a red box. Other items include "Canadian Council of Cancer Registries - Edits (CCCR)", "Central: Vs16 NPCR Required - Consol-All Edits (NPCR)", "Early Detection Program Edits (NPCR)", "Extent of Disease Edits (NAACCR)", "Hosp: Vs16 COC Required - All (COC)", "Hosp: Vs16 COC Required - All + CS (COC)", "Hosp: Vs16 COC Required Confidential (COC)", "Hosp: Vs16 COC Required Non-Confidential (COC)", "IHS - Variables Required for IHS Linkage (NPCR)", "Name-Maiden, Check for Unknown (NAACCR)", "NPCR SSF Test (NPCR)", "NPCR-CER Edit Set (NPCR)", "Over-ride Misuse (NAACCR)", "Path Items (NAACCR)", "Pre2016 c,p mixed bag (NAACCR)", "Pre2016 c,p required (NAACCR)", and "Pre2016 no c,p in codes (NAACCR)".

On the right, under "Fields used", "Date of 1st Contact" is listed. A green-bordered box contains the following text:

Use Edit Sets existing in the NAACCR metafile as a guide.

Note Date of 1st Contact (COC) is not included in the Central: Vs 16 NPCR Required - Consol-All Edits (NPCR).

Date of 1st Contact is a facility-specific data item.

At the bottom, there are tabs for "Cross-References-1", "Description-2", "Edit Logic-3", "Administrative Notes-4", "Error Messages-5", and "Test Bench-6". Navigation buttons for "Prev", "Next", "Save", and "Close" are also visible.

Edit Selection Examples

Edit: Primary Site, TNM T - c,p.pre2016 (NPCR)

Edit name: Primary Site, TNM T - c,p.pre2016 (NPCR) Agency code: NPCR

Last changed: 07/20/2016 Edit tag: N2310

This edit is skipped if any of the following conditions are true:

1. Year of Date of Diagnosis is less than 2014, or blank (unknown), or invalid, or year of diagnosis is greater than 2015
2. Type of Reporting Source = 7 (Death Certificate Only)
3. Histologic Type ICD-O-3 is blank
4. Behavior Code ICD-O-3 = 0 (benign) or 1 (borderline)
5. TNM Edition Number is not = 07 and not = 88
6. TNM Clin T and TNM Path T are both blank

TNM Clin T and TNM Path T may be blank. If entered, they will be edited site-specifically. The edit will check valid TNM Clin N and TNM Path N codes either with or without the "c" or "p" component.

The site-specific TNM T values are listed below. The number next to each site group indicates the chapter in the AJCC Cancer Staging Manual, Edition 7. The sites for each chapter are listed along with the histologies requiring AJCC staging. The allowable values for the clinical and pathologic T codes are listed under TNM T. When there is a difference in allowable values for clinical and pathologic T codes, they will be specified separately.

3. Lip and Oral Cavity

Sites:

- C000-C006,C008,C009
- C020-C023,C028,C029
- C030,C031,C039
- C040,C041,C048,C049
- C050,C058,C059

Cross-References-1 Description-2 Edit Logic-3 Administrative

Example of an edit Central Registries may decide to include in an edit set.

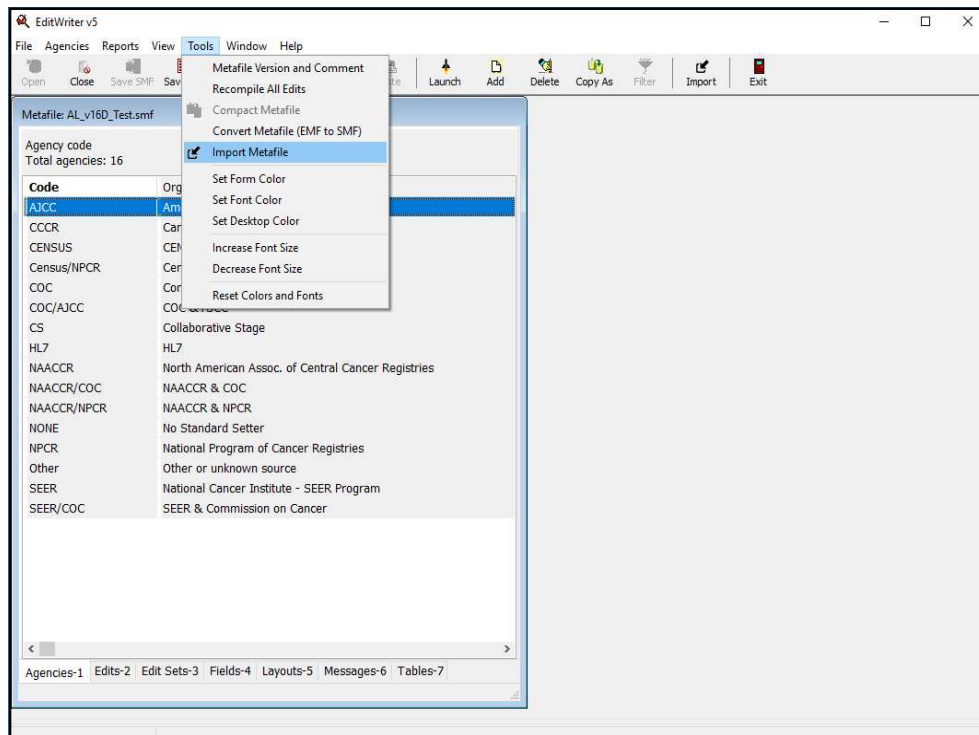
If TNM were reported for a case diagnosed prior to 2016, the edit will check for valid values by site regardless whether or not c and p indicators are included.

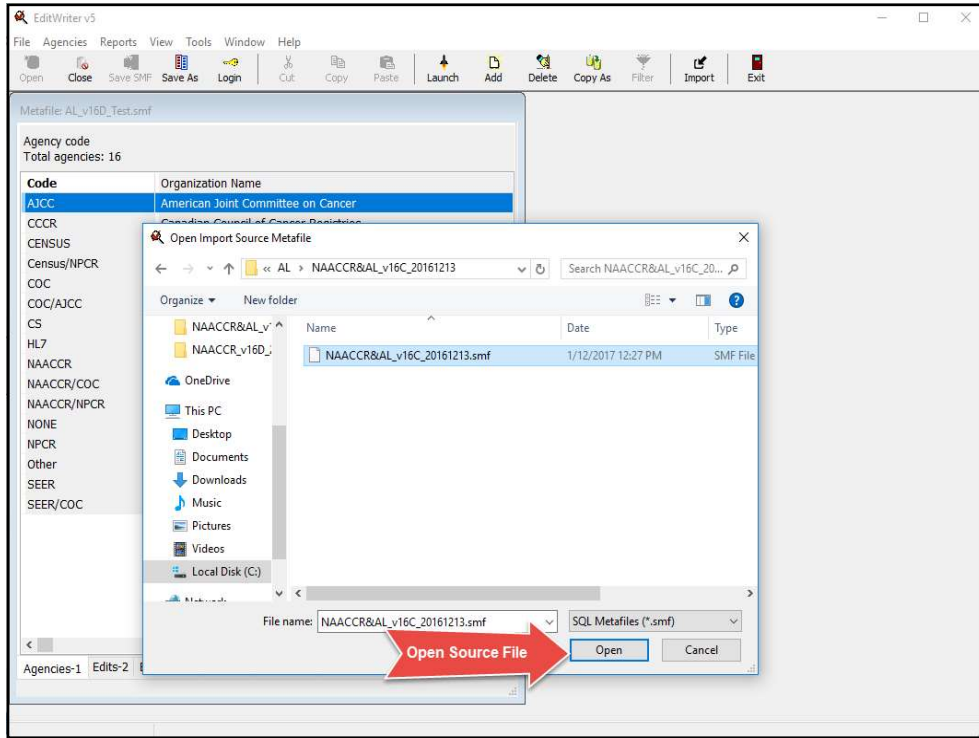
EditWriter – Import Metafile

- Copy objects from one metafile into another
- Import state-specific edits and edit sets

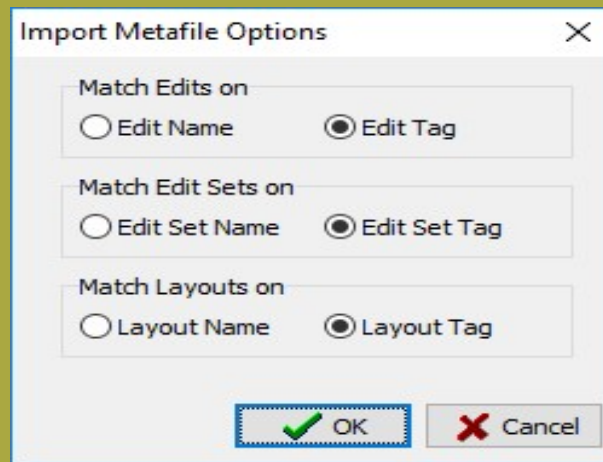
EditWriter Import Metafile Definitions

- **Target Metafile**
 - Metafile that will receive imported objects
 - The metafile open in the Navigator
- **Import or Source Metafile**
 - Metafile from which objects will be selected for import





Import Metafile Options



Import Metafile Options

- If both metafiles were converted from EMF using a Tags script – select matching on Tags.
- Matching on Tags ensures more accurate matching of objects than matching on Name.

Agencies match on AdminCode
 Edits match on EditTag
 Edit Sets match on EditSetTag
 Fields match on FieldNumber
 Layouts match on LayoutTag
 Messages match on MessageNumber
 Tables match on TableName

Agencies **Objects**
 Edits
 Edit Sets
 Fields
 Layouts
 Messages
 Tables

Show status
 New objects only
 Changed objects only
 Conflict resolution needed
 All objects

New/Changed Objects from Import Metafile
 130 objects showing

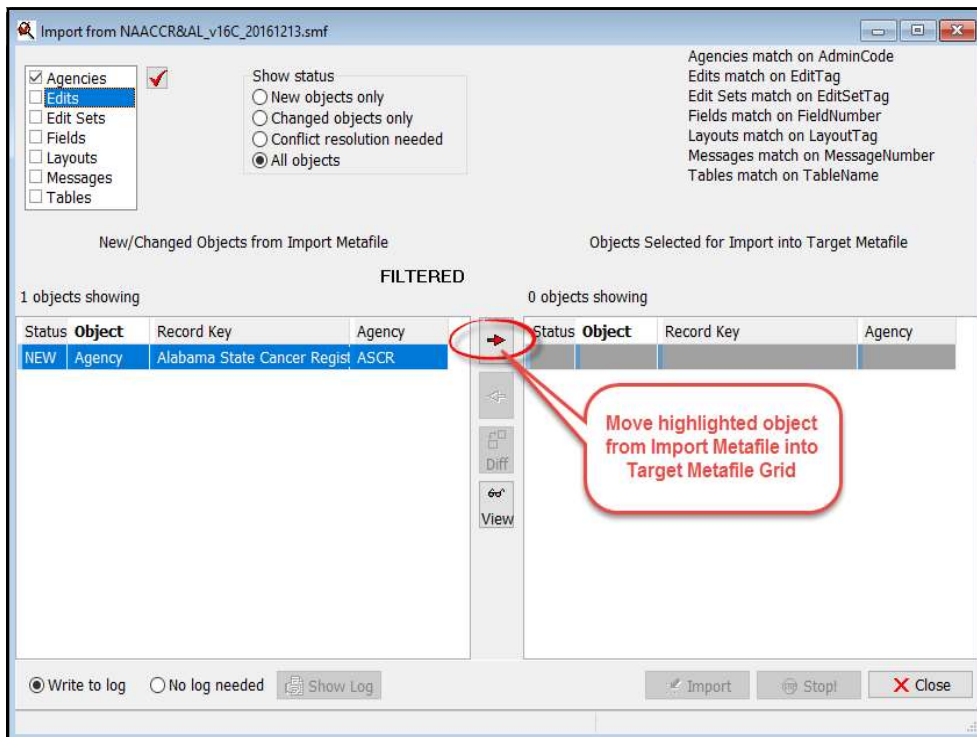
Status	Object	Record Key	Agency
NEW	Agency	Alabama State Cancer Regist	ASCR
CHG	Edit	Census Tract 2000, State, Cc	NPCR
CHG	Edit	Census Tract 2010, State, Cc	NPCR
NEW	Edit	Class of Case, Date of DX (A	ASCR
NEW	Edit	Class of Case, Prim Site, Hist,	ASCR
NEW	Edit	County at DX, Addr at DX--St	ASCR
NEW	Edit	County at DX, Addr at DX--Zij	NAACCR
CHG	Edit	CS Items - NPCR Required - !	NPCR
CHG	Edit	CS Items - SEER Required - !	SEER
CHG	Edit	CS Items - SEER Required - !	SEER
CHG	Edit	CS Items - SEER Required - !	SEER
CHG	Edit	CS Items - SEER Required - !	SEER

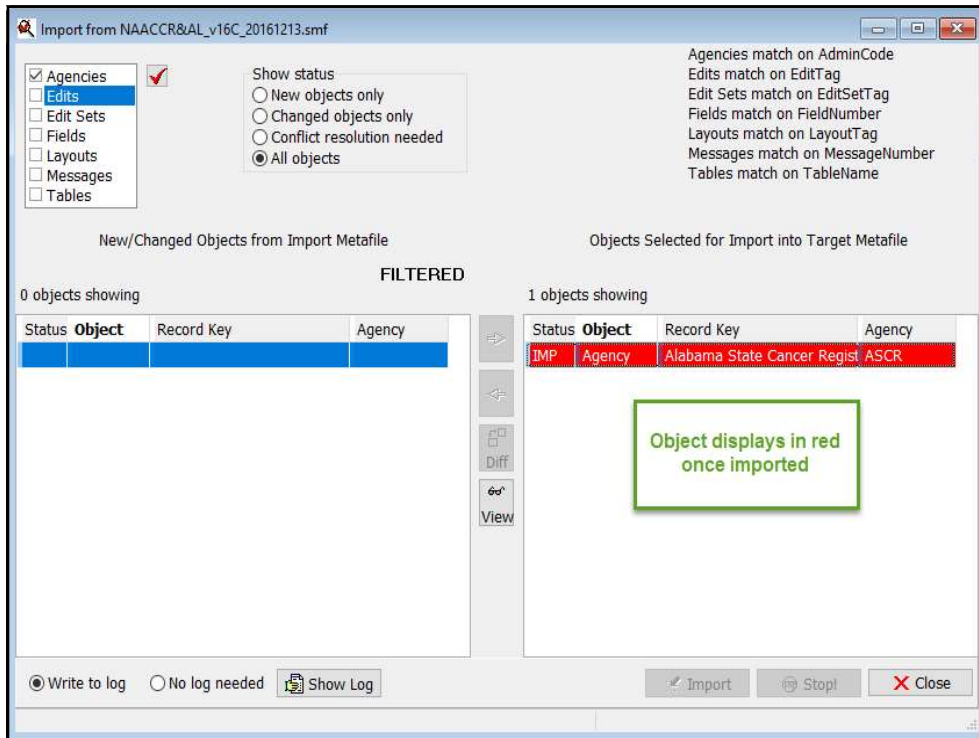
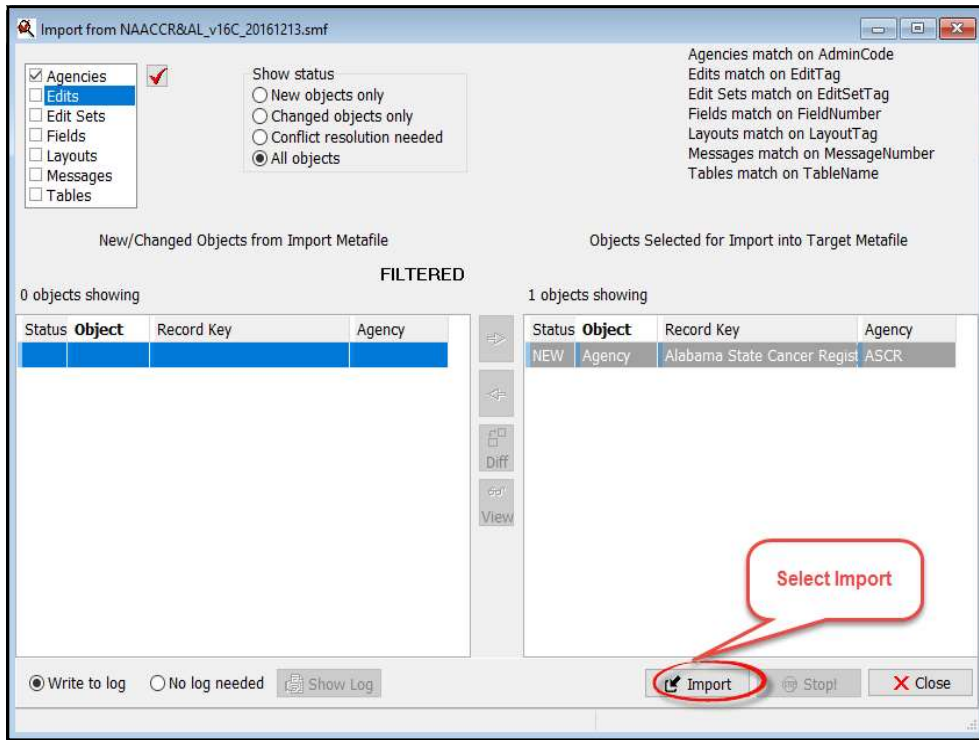
Objects Selected for Import into Target Metafile
 0 objects showing

Write to log No log needed Show Log **Import Metafile Log** Import Stop Close

Import Order

- Agencies
- Fields
- Messages
- Tables
- Edits
- Edit Sets
- Layouts





Import Status Codes

- Status codes indicate whether an object is new or changed. Asterisk indicates conflict resolution required.

NEW	Object does not exist in target metafile; may be added
NEW*	Object does not exist in target metafile; one of its critical fields conflicts with another object in the target metafile
CHG	Object exists in target metafile; differences exist in one or more non-critical fields
CHG*	Object exists in target metafile; one of its critical fields conflicts with another object in the target metafile
IMP	Object has been successfully imported into target metafile

Importing Objects

- Import all appropriate objects
- Review objects with Status NEW and CHG carefully
 - Compare to NAACCR spreadsheet of changes
 - Use Diff tool to view differences

NAACCR Metafile Change Spreadsheet

	A	B	C	D
88			Added U7 to required TNM Edition Numbers	159
89		Primary Site, TNM Clin Stage Valid A - Ed 7 (COC)	Table referenced by edit updated, TXN2M0, Stage 3 for lung updated to TXN2M0, Stage 99	161
90			Table referenced by edit updated, T4NXM0, Stage 3 for lung updated to T4NXM0, Stage 99	161

Import from NAACCR&AL_v16C_20161213.smf

Agencies
 Edits
 Edit Sets
 Fields
 Layouts
 Messages
 Tables

Show status

New objects only
 Changed objects only
 Conflict resolution needed
 All objects

Agencies match on AdminCode
 Edits match on EditTag
 Edit Sets match on EditSetTag
 Fields match on FieldNumber
 Layouts match on LayoutTag
 Messages match on MessageNumber
 Tables match on TableName

New/Changed Objects from Import Metafile Objects Selected for Import into Target Metafile

107 objects showing FILTERED 10 objects showing

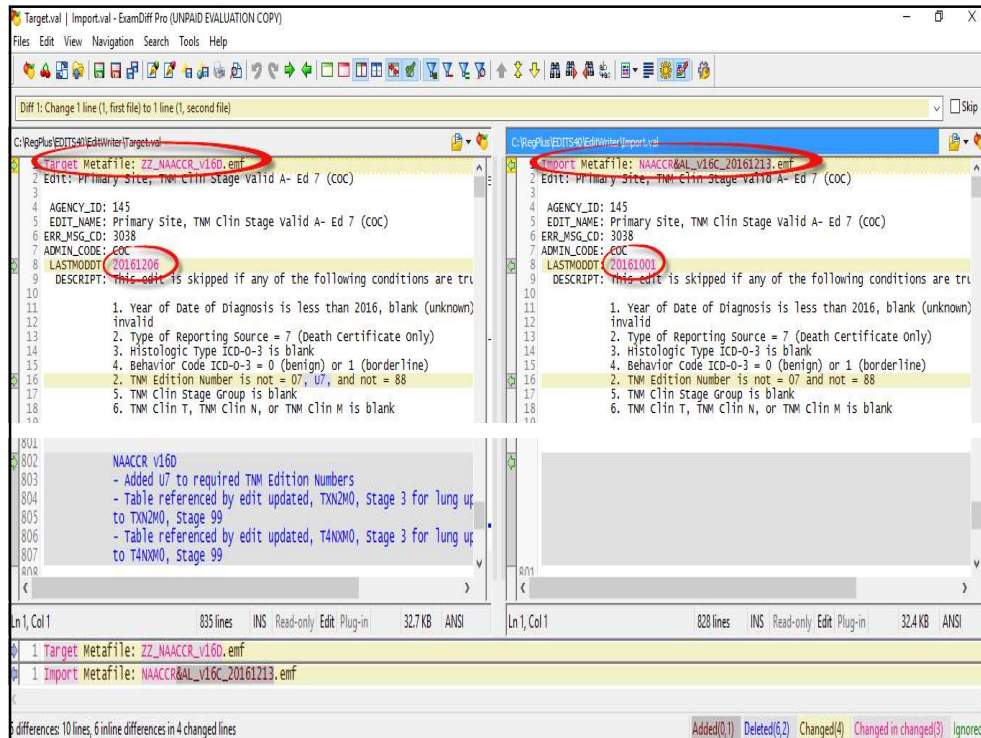
Status	Object	Record Key	Agency
CHG	Edit	Primary Site, T 2016 - Ed 7, : SEER	
CHG	Edit	Primary Site, TNM Clin Stage COC	
CHG	Edit	Primary Site, TNM Clin Stage COC	
CHG	Edit	Primary Site, TNM Path Stage COC	
CHG	Edit	Primary Site, TNM Path Stage COC	
NEW	Edit	Race 1, Reporting Facility(AS ASCR	
CHG	Edit	RX Summ--Surgery Type, Sit SEER	
CHG	Edit	Sex, Primary Site (SEER IF17 SEER	
CHG	Edit	Summ Stg 2000, Site, Hist IC NAACCR	
CHG	Edit	Summ Stg 2000, Site, Hist IC NAACCR	
CHG	Edit	Summary Stage 2000, TNM I NAACCR	
CHG	Edit	TNM Clin M, Date of Diagnosi COC	

Status	Object	Record Key	Agency
IMP	Agency	Alabama State Cancer Regist	ASCR
NEW	Edit Set	ASCR: v16c Interstate	ASCR
NEW	Edit Set	ASCR: v16c NPCR/Consol	ASCR
NEW	Edit Set	ASCR: v16c NPCR/Hosp	ASCR
NEW	Edit Set	ASCR: v16c NPCR/PrepPlus-C	ASCR
NEW	Edit Set	ASCR: v16c Webplus	ASCR
NEW	Message	5001: If %F3= %V3, then %I NAACCR	
NEW	Message	9011: Please Verify Race1 fr	ASCR
NEW	Message	9999: If %F1 is within 00-22,	ASCR
NEW	Table	ZIPCOCY	ASCR

Write to log No log needed

Diff Tool Details

- Diff tool to compare contents of two text files required
 - Diff: Layouts report
 - Import Metafile module
- ExamDiff Pro[®] recommended
 - Freely-available
 - Download at <http://www.prestosoft.com/>
- Additional information in EditWriter Help



Conflict Resolution

- If an Agency, Field, Message, or Table object's status is NEW, it will be imported.
- If an object is an Edit, Edit Set, or Layout, the object's dependencies are considered.

If one or more dependent objects is new or changed...

Import NEW Edit

Name **Class of Case, Date of DX (ASCR)**

Tag **AL2449**

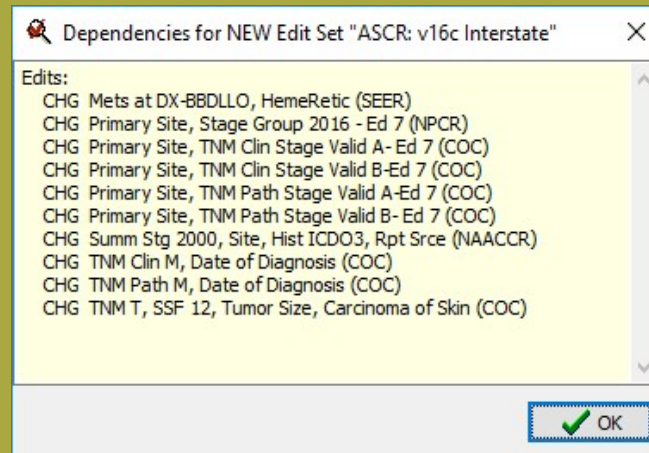
Import with dependencies (Fields, Messages, Tables) Show me...

Import without dependencies (I'll resolve the Edit later)

Always do this for NEW Edits

View OK Stop Import

Viewing Dependencies

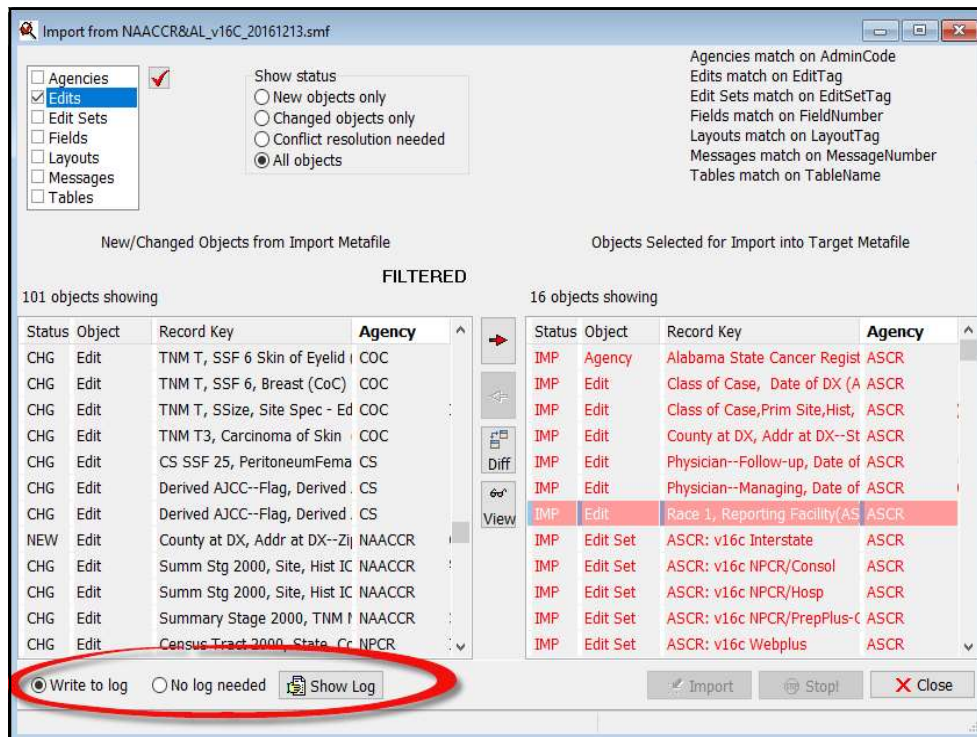


Importing With Dependencies

- Disposition or conflict resolution dialogs presented if one or more dependent objects of an Edit, Edit Set or Layout has Status Code = NEW, NEW*, CHG, or CHG*
- Cascading effect
- Objects are dependencies of other objects
 - Fields are referenced from Edits, and used in layouts
 - Messages and Tables are referenced from Edits

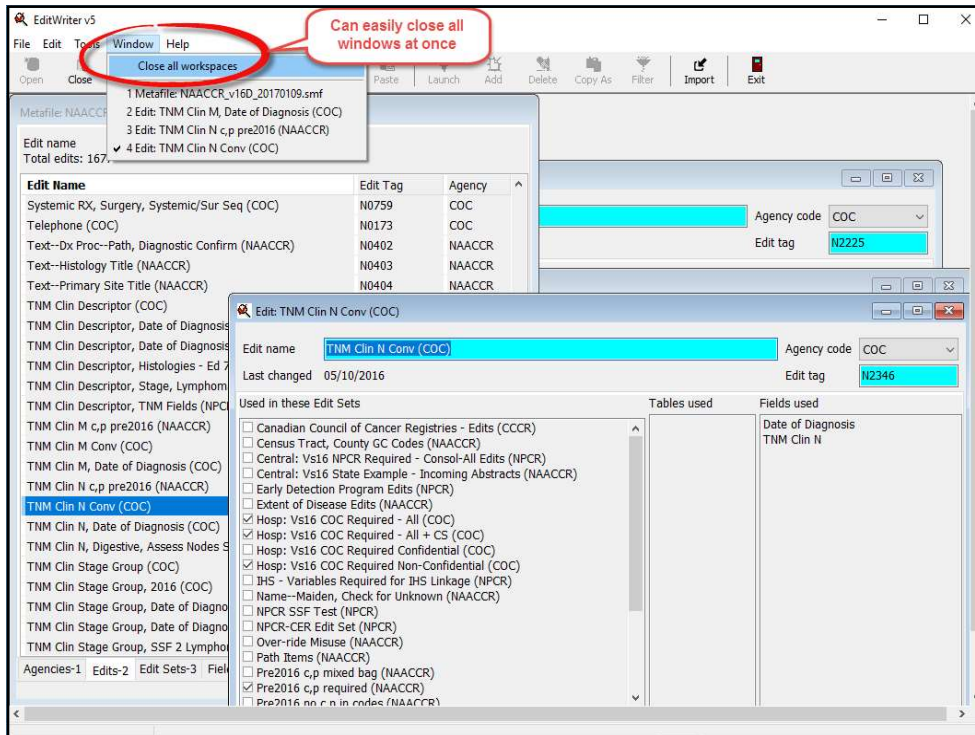
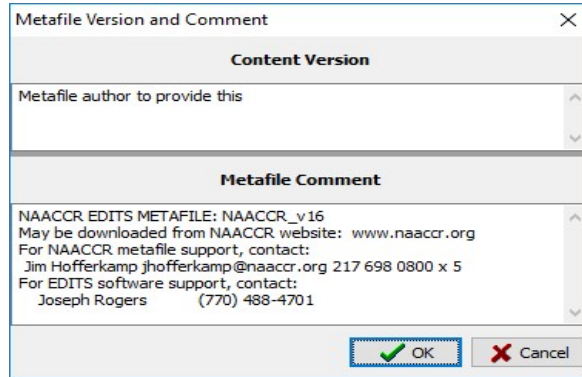
Importing Without Dependencies (Resolve the object later)

- When importing a custom Edit Set from a previous version/year metafile
 - Edit Set in previous metafile likely references Edits, Fields, Messages, and Tables that have been changed in the newer version
- Process will link newer versions of all dependent objects to the imported edit set
- Supports following recommended order for importing



Update the Metafile Version

- Metafile author descriptions
- Tools  Metafile Version and Comment



EditWriter

If you have made ANY changes to the metafile, you must **SAVE** the metafile.

EditWriter/GenEDITS Plus

- Use the metafile with GenEDITS Plus
 - Selected edit sets are run against data and edit error reports are produced

Recommendations

- Review the EditWriter Help documentation for additional details
 - Sections for *Updating a Metafile to a New Major Version*
- Follow the Recommended Import Order in the EditWriter Help
- Verify new edits are included in the new customized metafile
- Verify modified edits in the new customized metafile – most recent version of the edit
- Verify edits with name changes

For Further Information

Registry Plus website

<http://www.cdc.gov/cancer/npcr>

cancerinformatics@cdc.gov

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

