



Chameleon Information Management Services Limited

# **Design Guidance Notes: Implementation of TNM Version 8 (Released in v9.15 of the Cancer Information System)**

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#### **Document control**

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## 1 Introduction

An updated version of TNM Staging (8) is recommended to be collected from January 2018 as detailed in COSD and RCPATH communications (please contact these organisations if you require further information about this requirement).

This document provides guidance of how to incorporate these requirements into your Cancer Information System design. These changes will be included in v9.15 of the Cancer Information System, to be released following sign-off of the CWT 2.0 and COSD 8.0 updates.

We assume for the purpose of this work that the TNM Version 8 staging data is already in your hands and you have any necessary permissions to use this data in your cancer system.

A full list of the staging versions that will be present (and default) following this update is included in Appendix A. These are a critical part of MDT meetings, therefore we recommend discussion with the relevant clinical teams prior to committing these changes to your live design, to ensure that they are in consistent with the clinical processes they are intended to support.

## 2 Responsibilities

Trusts are responsible for the ongoing maintenance of their Live systems, including implementation of design changes to dictionaries and dataviews, and ongoing maintenance of all data including dictionaries.

This document is intended to provide supporting guidance only and is provided in good faith as being representative of the current dataset requirements. However, in no way does it replace the nationally issued dataset specifications and readers are reminded that they should review the dataset specifications directly to familiarise themselves with the requirements and to ensure that any changes made will continue to support their local and national processes and reporting requirements. Any use is at the readers own risk

Please be aware that the changes made to v9.15 of the Cancer Information System are not limited to those described herein and the reader is directed to the full documentation pack for this design release which details the full list of changes made including general changes and those relating to other datasets.

For a copy of the above referenced design or if you require training or consultancy services to support you with these or any other changes, please contact your CIMS account manager.

### 3 Overview

The following steps are required to complete this implementation and should be completed in full, in the order described:

1. Design updates to support the new data requirements.
2. Data import of new TNM data.
3. Reconfiguration of the TNM addins.

Persons carrying out this work should be familiar with these aspects of the system and will require permissions to make changes in Design Management and User Management modules of InoFlex.

We estimate this piece of work will take one day for an experienced user.

**Important Note:** Whilst the data update itself is quite simple, the changes required to support the collection of Coding Edition for COSD v8.0 make this a more complicated piece of work.

We strongly recommend that this is carried out in a testing environment first to ensure familiarity with the required steps and to allow the user base to test and validate the changes prior to committing them to live.

## 4 Design updates to support the new data requirements

### 4.1 Sub-Diagnosis

The Sub-Diagnosis item / codelist describes the site/disease type and is used to select the appropriate staging algorithm.

TNM Version 8 introduces sub-classification of some staging algorithms based on disease type (oesophagus) or body site (sarcoma). The existing version 7 classifications must be retained to support historical data, therefore we have elected to amend the codelist description with the prefix (DEPRECATED), whilst adding new codes for the new classifications.

We have added a new set of classifications for neuroendocrine tumours using ENETS staging. Any existing UICC staging has been deprecated.

We have updated all sub-diagnosis meanings to include the disease type where not already specified, for additional clarity.

To support these changes, please carry out the following:-

1. Go to the dictionary definition for TNM Staging in design management.
2. Open the item **Sub-Diagnosis**
3. Edit the codelist (**Staging – Sub-diagnosis**) to reflect the changes as described in the following table.

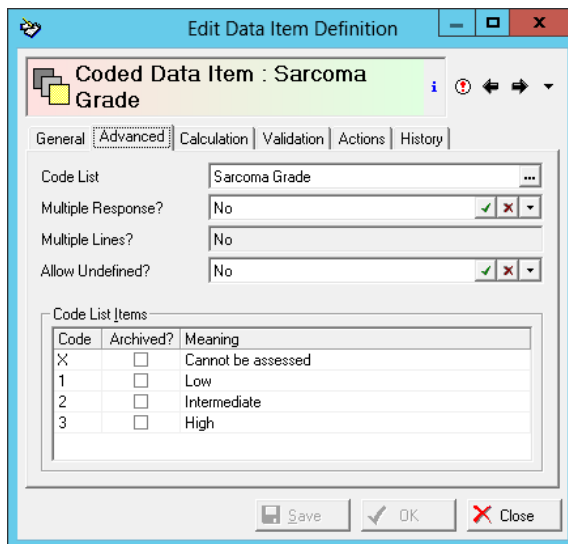
Code	Meaning	Changes
HN01	Lip/Oral Cavity (Carcinoma)	Meaning updated (disease added)
HN02	Oropharynx (Carcinoma)	Meaning updated (disease added)
HN03	Nasopharynx (Carcinoma)	Meaning updated (disease added)
HN04	Hypopharynx (Carcinoma)	Meaning updated (disease added)
HN05	Larynx - Supraglottis (Carcinoma)	Meaning updated (disease added)
HN06	Larynx - Glottis (Carcinoma)	Meaning updated (disease added)
HN07	Larynx - Subglottis (Carcinoma)	Meaning updated (disease added)
HN08	Major Salivary Glands (Carcinoma)	Meaning updated (disease added)

Code	Meaning	Changes
HN09	Maxillary Sinus (Carcinoma)	Meaning updated (disease added)
HN10	Nasal Cavity & Ethmoid Sinus (Carcinoma)	Meaning updated (disease added)
UG01	(DEPRECATED) Oesophagus inc. Oesophagogastric Junction	Meaning updated (deprecated)
UG01A	Oesophagus inc. Oesophagogastric Junction (SCC)	New Code
UG01B	Oesophagus inc. Oesophagogastric Junction (Adenocarcinoma)	New Code
UG02	Stomach (Carcinoma)	Meaning updated (disease added)
UG03	Small Intestine (Carcinoma)	Meaning updated (disease added)
UG04	Liver (Hepatocellular Carcinoma)	Meaning updated (disease added)
UG06	Gallbladder (Carcinoma)	Meaning updated (disease added)
UG07	Perihilar Bile Ducts (Carcinoma)	Meaning updated (disease added)
UG08	Distal Extrahepatic Bile Duct (Carcinoma)	Meaning updated (disease added)
UG09	Ampulla of Vater (Carcinoma)	Meaning updated (disease added)
UG10	Pancreas (Carcinoma)	Meaning updated (disease added)
UG13	(DEPRECATED) Stomach - Carcinoid	Meaning updated (deprecated)
UG14	(DEPRECATED) Large Intestine - Carcinoid	Meaning updated (deprecated)
UG15	(DEPRECATED) Small Intestine - Carcinoid	Meaning updated (deprecated)
LG01	Colon and Rectum (Carcinoma)	Meaning updated (disease added)
LG02	Anal Canal and Perianal Skin (Carcinoma)	Meaning updated (disease added)
LG03	Appendix (Adenocarcinoma)	Meaning updated (disease added)
LG04	(DEPRECATED) Appendix - Carcinoid	Meaning updated (deprecated)
NE01	Colon and rectum (Neuroendocrine)	New Code
NE02	Appendix (Neuroendocrine)	New Code
NE03	Small Intestinal - Jejunum/ileum (Neuroendocrine)	New Code
NE04	Duodenal (Neuroendocrine)	New Code
NE05	Ampullary (Neuroendocrine)	New Code
NE06	Stomach (Neuroendocrine)	New Code
NE07	Pancreas (Neuroendocrine)	New Code
LU01	Lung (Carcinoma)	Meaning updated (disease added)
LU03	Thymic Epithelial Tumours	New Code
SA01A	(DEPRECATED) Bone	Meaning updated (deprecated)
SA01A	Bone - Appendicular Skeleton, Trunk and Facial Bones	New Code
SA01B	Bone - Spine	New Code
SA01C	Bone - Pelvis	New Code
SA02	(DEPRECATED) Soft Tissue	Meaning updated (deprecated)
SA02A	Soft Tissue - Extremity and Superficial Trunk	New Code
SA02B	Soft Tissue - Retroperitoneum	New Code
SA02C	Soft Tissue - Head and Neck	New Code
SA02D	Soft Tissue - Thoracic and Abdominal Viscera	New Code
SK05	Skin Carcinoma of the Head and Neck	New Code
BR01	Breast (Carcinoma)	Meaning updated (disease added)
UR01	Renal Pelvis and Ureter (Carcinoma)	Meaning updated (disease added)
UR02	Urinary Bladder (Carcinoma)	Meaning updated (disease added)
UR03	Urethra - male and female (Carcinoma)	Meaning updated (disease added)
UR04	Urothelial (Transitional Cell) Carcinoma of the Prostate	Meaning updated

Code	Meaning	Changes
UR05	Prostate (Adenocarcinoma)	Meaning updated (disease added)
UR06	Kidney (Renal Cell Carcinoma)	Meaning updated (disease added)
UR07	Penis (Carcinoma)	Meaning updated (disease added)
UR08	Testis (Germ Cell)	Meaning updated (disease added)
OT01	Adrenal Cortex (Carcinoma)	Meaning updated (disease added)

## 4.2 Sarcoma Grade

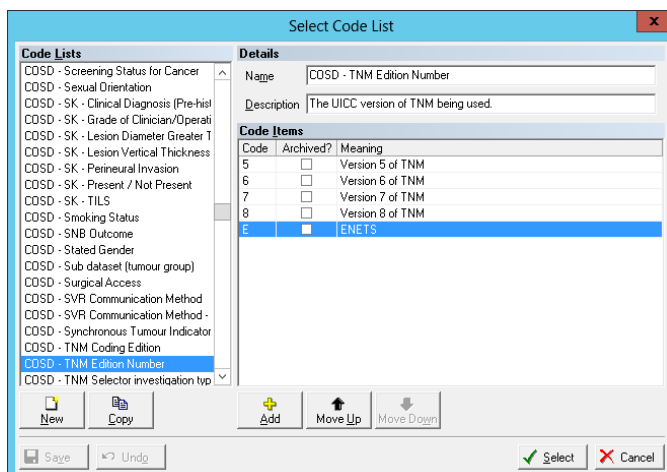
1. Go to the dictionary definition for TNM Staging in design management.
2. Open the item **Sarcoma Grade**
3. Edit the codelist **Sarcoma Grade**
4. Add code **X – Cannot be Assessed**



## 4.3 TNM Version

1. Edit the codelist **COSD – TNM Edition Number** to add the following codes:

**E – ENETS**  
**8 – Version 8 of TNM**

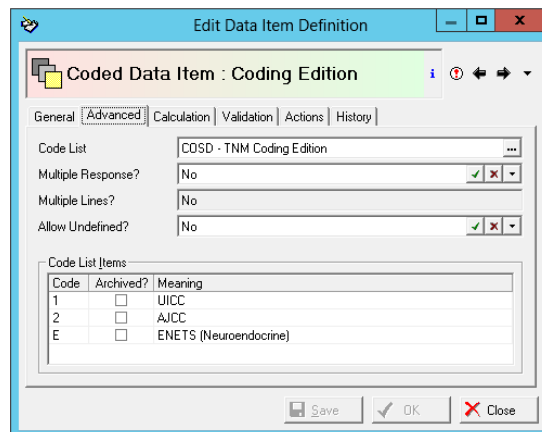
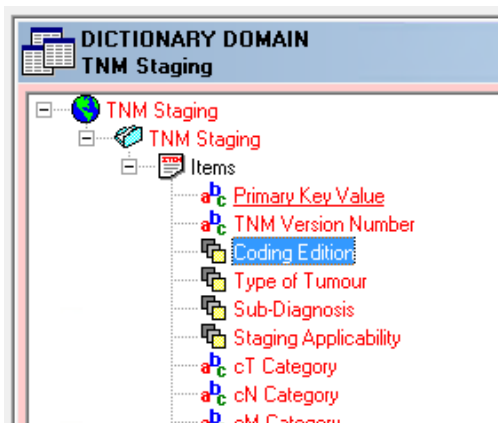


Note: The code list can also be edited from the advanced tab of any TNM version item definition such as **Staging – Last used Version** in the Referral Event.

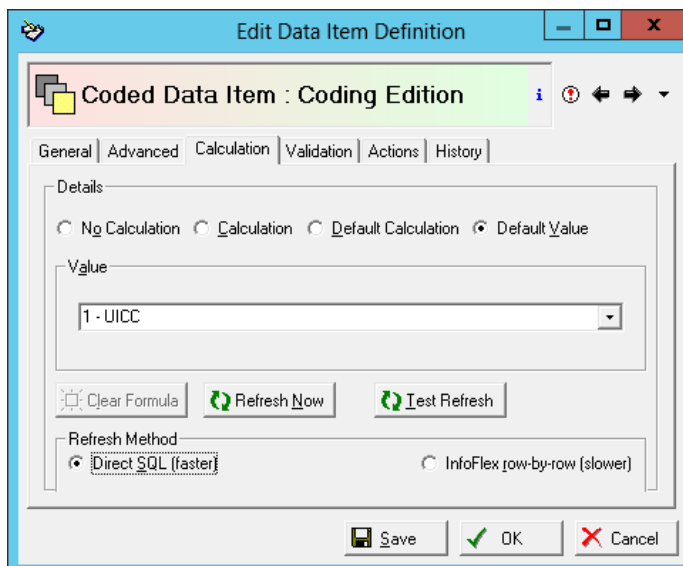
#### 4.4 Coding Edition

COSD version 8 requires the coding edition to be specified for all staging (e.g. UICC, AJCC...). This requires a new item as part of the staging dictionary and a new item in each event that staging is to be captured.

- Go to the dictionary definition for TNM Staging in design management.
- Add a coded item called **Coding Edition**, with codelist as per screenshots below:



- Add a default value to Coding Edition of 1 – UICC and refresh using direct SQL.



NOTE: This sets the coding edition for existing v7 data. Without this, historical data won't be viewable.

- Remove the default calculation (set the property back to "No calculation").
- Add a coded item called **Staging - Last used TNM Coding Edition**, with codelist **COSD - TNM Coding Edition** as per the dictionary, to the referral event (**CRS/CRDS/NCDS/NCWTMDS - Referral**)

This item is used to preserve the last used coding edition for a given referral so that new staging always follows the same edition throughout.

7. Add a coded item to hold the coding edition, with codelist **COSD - TNM Coding Edition** as per the dictionary, to all events that are used to collect staging. In some cases, staging is collected twice in the same event (e.g. clinical/integrated in diagnosis or cancer plan. In this case an item is required for each.

For each item, add a default calculation (as shown below) to initialise the value to the last used coding edition for that referral.

We anticipate the following should be required:

Event	New item	Default Calculation
CRDS/NCDS - Imaging	Staging - TNM Coding Edition	IIF([Suspected or confirmed tumour group] = [CRS/CRDS/NCDS/NCWTMDS - Referral \ Staging - Last used Type of Tumour], [CRS/CRDS/NCDS/NCWTMDS - Referral \ Staging - Last used TNM Coding Edition])
COSD - Diagnostic Pathology	COSD - TNM Coding Edition	IIF([Type of Tumour] = [CRS/CRDS/NCDS/NCWTMDS - Referral \ Staging - Last used Type of Tumour], [CRS/CRDS/NCDS/NCWTMDS - Referral \ Staging - Last used TNM Coding Edition])
CRDS/NCDS - Pathology	COSD - TNM Coding Edition	IIF([Type of Tumour] = [CRS/CRDS/NCDS/NCWTMDS - Referral \ Staging - Last used Type of Tumour], [CRS/CRDS/NCDS/NCWTMDS - Referral \ Staging - Last used TNM Coding Edition])
CRS/CRDS/NCDS/DAHNO/LUCADA/NBOCAP - Diagnosis & First Definitive Treatment	Pre-tx Staging - TNM Coding Edition	IIF([Pre-Tx Staging - Type of tumour] = [CRS/CRDS/NCDS/NCWTMDS - Referral \ Staging - Last used Type of Tumour], [CRS/CRDS/NCDS/NCWTMDS - Referral \ Staging - Last used TNM Coding Edition])
CRS/CRDS/NCDS/DAHNO/LUCADA/NBOCAP - Diagnosis & First Definitive Treatment	Int.Staging - TNM Coding Edition	IIF([Int. Staging - Type of tumour] = [CRS/CRDS/NCDS/NCWTMDS - Referral \ Staging - Last used Type of Tumour], [CRS/CRDS/NCDS/NCWTMDS - Referral \ Staging - Last used TNM Coding Edition])
CRS/CRDS/NCDS - Cancer Care Plan	Clinical Staging - TNM Coding Edition	IIF([Type of tumour] = [CRS/CRDS/NCDS/NCWTMDS - Referral \ Staging - Last used Type of Tumour], [CRS/CRDS/NCDS/NCWTMDS - Referral \ Staging - Last used TNM Coding Edition])
CRS/CRDS/NCDS - Cancer Care Plan	Integrated Staging - TNM Coding Edition	IIF([Integrated Staging - Type of tumour] = [CRS/CRDS/NCDS/NCWTMDS - Referral \ Staging - Last used Type of Tumour], [CRS/CRDS/NCDS/NCWTMDS - Referral \ Staging - Last used TNM Coding Edition])

## 4.5 SACT Final Pre-Treatment Staging

The SACT dataset only permits 5 characters to represent the entire T,N,M staging combination. As such a calculation is used to truncate some codes as agreed at the time. This calculation must be updated to account for some of the new codes introduced in version 8 (additional Tis descriptors, M1d).

1. Open the item definition for **SACT - Final Pre-treatment Staging** (found in the diagnosis event - **CRS/CRDS/NCDS/DAHNO/LUCADA/NBOCAP - Diagnosis & First Definitive Treatment**)
2. Amend the calculation in line with the below screenshot.

The screenshot shows the 'Edit Formula' dialog box with the following formula:

```
REPLACE(REPLACE(IIF(NOTBLANK([CRDS/NCDS - T Category (Final Pre-Treatment)]),
IIF(LIKE([CRDS/NCDS - T Category (Final Pre-Treatment)], "Tis*", "False"),
"is", [CRDS/NCDS - T Category (Final Pre-Treatment)]), "9"), "T", "") &
REPLACE(IIF(NOTBLANK([CRDS/NCDS - N Category (Final Pre-Treatment)]),
[CRDS/NCDS - N Category (Final Pre-Treatment)], "N"), "N", "9") &
REPLACE(IIF(NOTBLANK([CRDS/NCDS - M Category (Final Pre-Treatment)]),
[CRDS/NCDS - M Category (Final Pre-Treatment)], "M"), "M", "999") & ""
```

The formula is displayed in a text area at the top of the dialog. Below it is a list of items and operators with checkboxes for selection. The 'Test' button is highlighted in the bottom right corner.

3. Set refresh method to direct SQL.

Note: The calculation change won't affect existing data therefore no refresh is required provided the calculation is amended prior to entering v8 data.

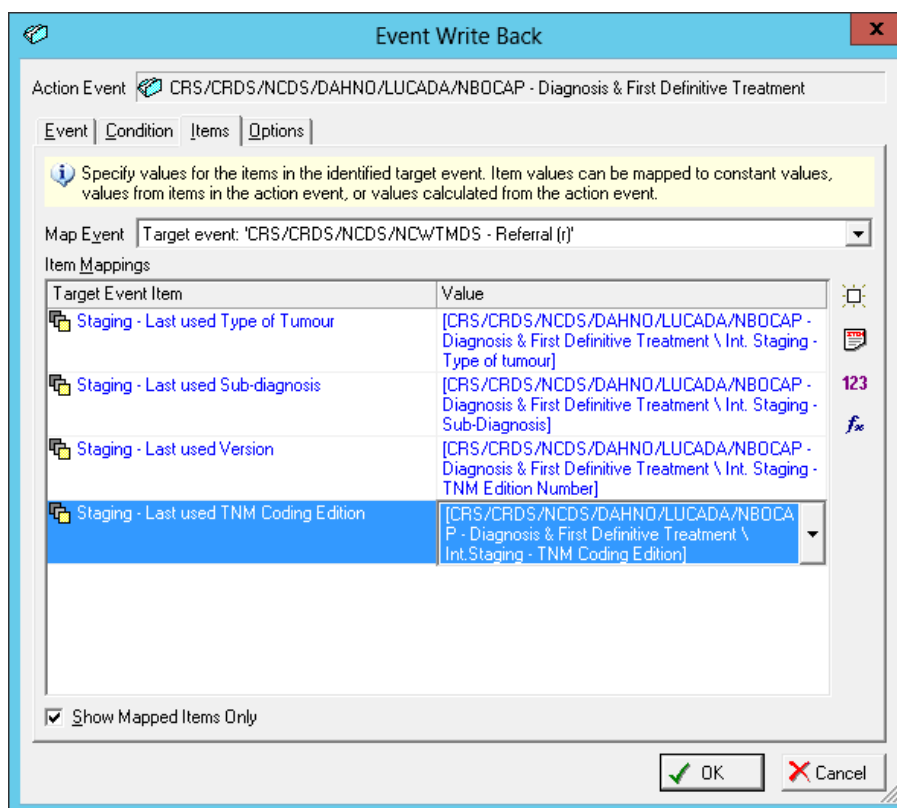


## 4.6 Writebacks for last used staging type

Each set of staging items (see above table of events) has an associated writeback that copies the last used set of staging parameters to the referral event, to ensure future staging follows the same parameters. These writebacks need to be updated to include the new **Coding Edition** item.

1. Open each domain event listed above (or as applicable in your design, if different)
2. Selection the actions tab.
3. Edit the writeback labelled “Writeback last used staging type” or similar (there will be two for care plan or diagnosis event. One for pre-treatment and one for integrated)
4. Click “Define” to edit the mapping.
5. Click the items tab
6. Scroll down to find the item “Staging – Last used TNM Coding Edition”
7. Select the relevant **Coding Edition** item for the source event as created in step 0 , sub-step 7.

See example screenshot below for integrated staging in the diagnosis event.

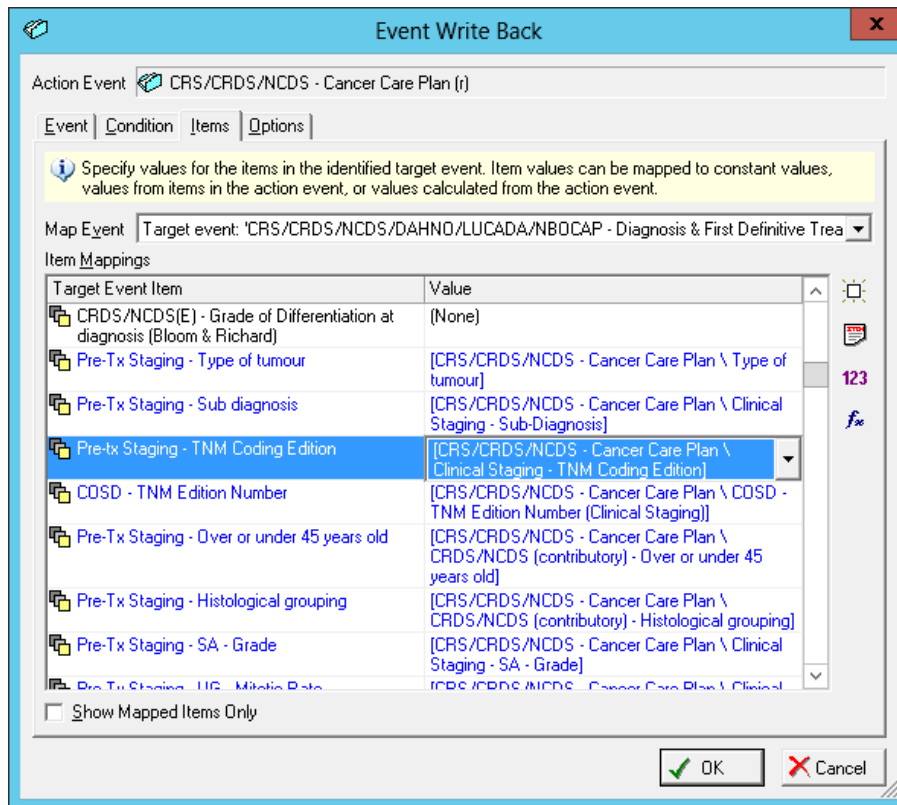


## 4.7 Writebacks for final pre-treatment / integrated values

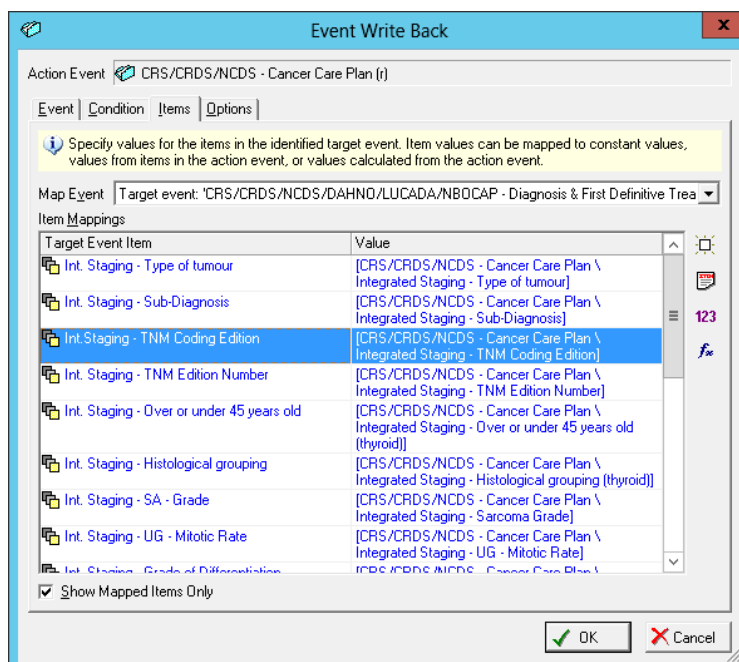
It is necessary to update the writebacks for final pre-treatment and integrated staging from the cancer care plan event to the diagnosis event to include the new coding edition item.

1. Open the domain definition for the cancer care plan event.
2. Select the actions tab.
3. Edit the action “Staging 1. Writeback Final Pre-Treatment Staging”.

4. Click the “Define” button.
5. Select the “items” tab.
6. Scroll down to find the item pre-treatment Coding Edition item created in step 0 sub-step 7 (for diagnosis event).
7. Map to the equivalent item from the cancer care plan event (See example screenshot below)



8. Repeat for the action “Staging 2. Writeback Final Integrated Staging”, substituting the relevant integrated staging coding edition items instead of pre-treatment as per below screenshot.



## Update T, N and M Codelists

The version 8 update introduces some additional T, N, M and group codes which must be added to the code lists used by any such items that are mapped to the addin.

The code lists used locally may differ from those in the standard design therefore should be checked manually. The code lists from the standard design are tabulated below:

Category	Codelist (Standard design only) – Check locally
Clinical T	UICC - T Category (Clinical)
Clinical N	UICC - N Category (Clinical)
Clinical M	NCDS - M Category
Clinical Stage Group	NCDS – TNM Stage
Pathological T	NCDS - pT Category
Pathological N	NCDS - pN Category
Pathological M	NCDS - pM Category
Pathological Stage Group	NCDS – TNM Stage
Integrated T	n/a – standard design uses text items.
Integrated N	n/a – standard design uses text items.
Integrated M	n/a – standard design uses text items.
Integrated Stage Group	n/a – standard design uses text items.

**Note:** Where coded items are used for T, N, M and stage group, we recommend using the same code as the meaning. The full clinical meaning is dependent on the type of staging, and is therefore only displayed when viewing data in the addin.

The use of coded items is generally only applicable to legacy items that were setup this way for staging prior to the implementation of the addin. If setting up new staging items, we recommend using text only items for T,N,M and Stage Group – as per the integrated staging example above.

The following table includes the full list of codes used across all staging versions once version 8 is added.

Clinical T	Clinical N	Clinical M	Path. T	Path. N	Path. M	Int. T	Int. N	Int. M	Group
T9	N9	M9	T9	N9	M9	T9	N9	M9	0
TX	NX	MX	pTX	pNX	pMX	TX	NX	MX	0a
T0	N0	M0	pT0	pN0	pM1	T0	N0	M0	0is
Ta	N1	M1	pTa	pN1	pM1a	Ta	N1	M1	I
Tis	N1a	M1a	pTis	pN1mi	pM1b	Tis	N1mi	M1a	IA
Tispd	N1b	M1b	pTispd	pN1a	pM1c	Tispd	N1a	M1b	IA1
Tispu	N1c	M1c	pTispu	pN1a(sn)	pM1d	Tispu	N1b	M1c	IA2
Tis(DCIS)	N2	M1d	pTis(DCIS)	pN1b	pM1e	Tis(DCIS)	N1c	M1d	IA3
Tis(LAMN)	N2a		pTis(LAMN)	pN1c		Tis(LAMN)	N2	M1e	IB
Tis(LCIS)	N2b		pTis(LCIS)	pN2		Tis(LCIS)	N2a	pM1	IC
Tis(Paget)	N2c		pTis(Paget)	pN2a		Tis(Paget)	N2b	pM1a	II
T1	N3		pT1	pN2b		T1	N2c	pM1b	IIA
T1mi	N3a		pT1mi	pN2c		T1mi	N3	pM1c	IIB
T1a	N3b		pT1a	pN3		T1a	N3a	pM1d	IIC
T1b	N3c		pT1b	pN3a		T1b	N3b		III
T1c			pT1c	pN3b		T1c	N3c		IIIA
T1d			pT1d	pN3c		T1d	pN0		IIIB
T2			pT2			T2	pN1		IIIC

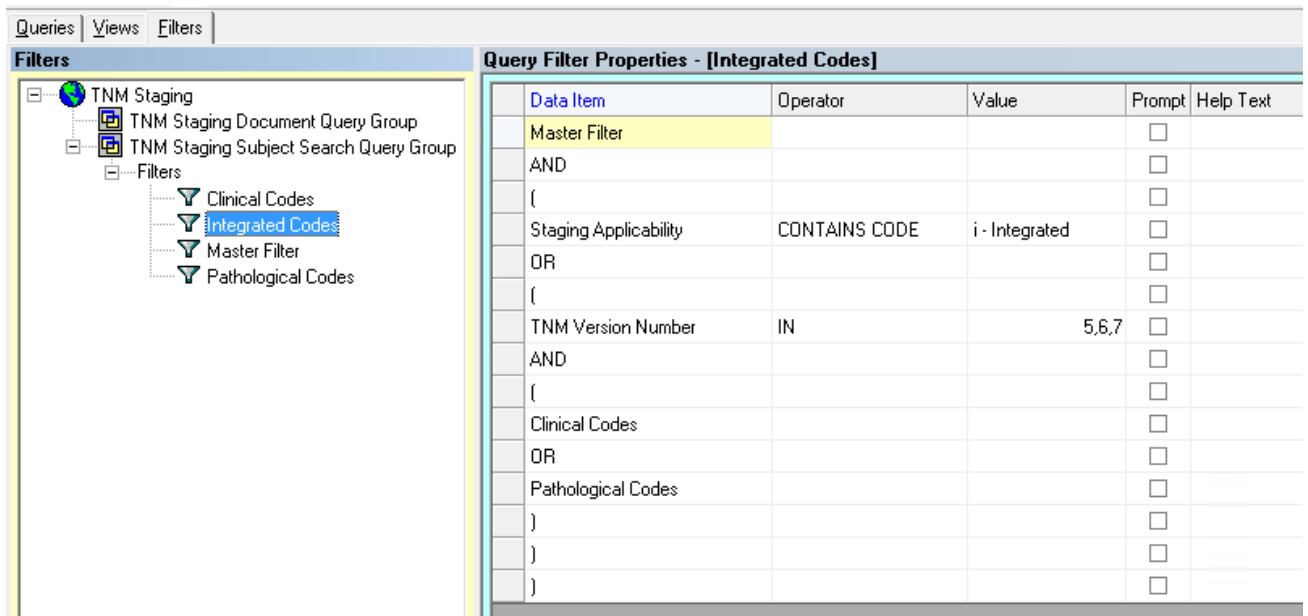
Clinical T	Clinical N	Clinical M	Path. T	Path. N	Path. M	Int. T	Int. N	Int. M	Group
T2a			pT2a			T2a	pN1mi		IIID
T2b			pT2b			T2b	pN1a		IV
T2c			pT2c			T2c	pN1a(sn)		IVA
T2d			pT2d			T2d	pN1b		IVB
T3			pT3			T3	pN1c		IVC
T3a			pT3a			T3a	pN2		Occult
T3b			pT3b			T3b	pN2a		
T3c			pT3c			T3c	pN2b		
T3d			pT3d			T3d	pN2c		
T3e			pT4			T3e	pN3		
T4			pT4a			T4	pN3a		
T4a			pT4b			T4a	pN3b		
T4b			pT4c			T4b	pN3c		
T4c			pT4d			T4c			
T4d			pT4e			T4d			
T4e						T4e			
						pT0			
						pTa			
						pTis			
						pTispu			
						pTis(DCIS)			
						pTis(LAMN)			
						pTis(LCIS)			
						pTis(Paget)			
						pT1			
						pT1mi			
						pT1a			
						pT1b			
						pT1c			
						pT1d			
						pT2			
						pT2a			
						pT2b			
						pT2c			
						pT2d			
						pT3			
						pT3a			
						pT3b			
						pT3c			
						pT3d			
						pT4			
						pT4a			
						pT4b			
						pT4c			
						pT4d			

Clinical T	Clinical N	Clinical M	Path. T	Path. N	Path. M	Int. T	Int. N	Int. M	Group
						pT4e			

### 4.8 Integrated Staging Filter

The version 8 TNM data requires an amendment to the filter used to select the integrated staging algorithms. It is critical that this change is made, otherwise incorrect codes may appear in version 8.

1. Go to the dictionary definition for TNM Staging in design management.
2. Open Query Design Manager for the dictionary domain.
3. Select the Filters tab
4. Select the Integrated Codes filter
5. Amend the filter as per the screenshot below:



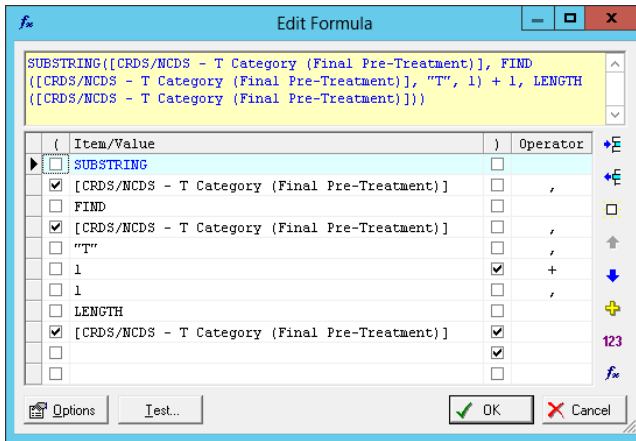
### 4.9 COSD Reporting Codes

The codes reported to COSD should not have the prefix T,N,M. Historically these have been replaced with a blank value in the queries used to export data to the reporting system. However, with the introduction of version 8 TNM staging, this is no longer possible since some codes use these characters (e.g. Tis(Paget)) and queries do not support the expressions required to accommodate these scenarios.

As such, it is necessary to create additional items in the design to calculate the COSD version of the code and substitute these items into the COSD export queries.

#### 4.9.1 Pre-treatment Staging

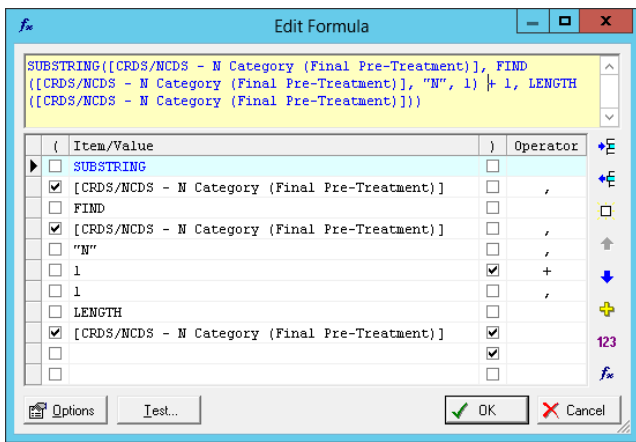
1. Go to the diagnosis event (**CRS/CRDS/NCDS/DAHNO/LUCADA/NBOCAP - Diagnosis & First Definitive Treatment**).
2. Add new item **COSD Coding - T Category (final pre-treatment)**
3. Set the calculation as follows:



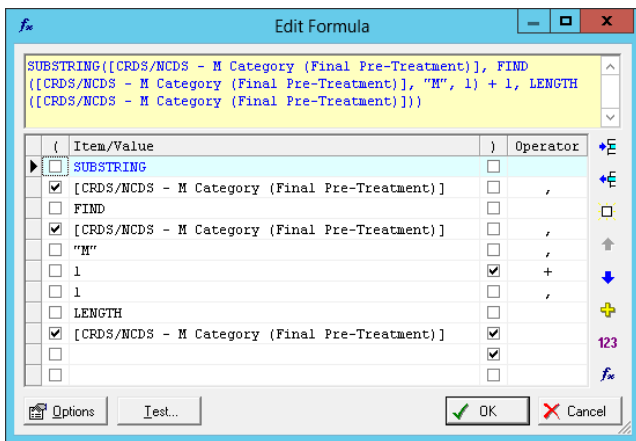
4. Set the refresh method to direct SQL and refresh.
5. Add new item **COSD Coding - N Category (final pre-treatment)**

Tip: Copy the item **COSD Coding - T Category (final pre-treatment)** and amend the calculation.

6. Set the calculation as follows:



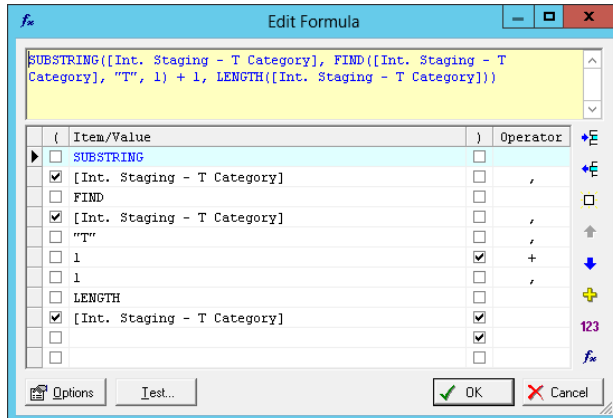
7. Set the refresh method to direct SQL and refresh.
8. Add new item **COSD Coding - M Category (final pre-treatment)**
9. Set the calculation as follows:



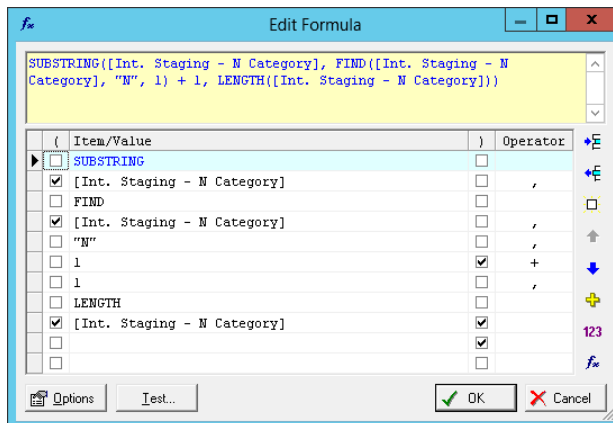
10. Set the refresh method to direct SQL and refresh.

## 4.9.2 Integrated Staging

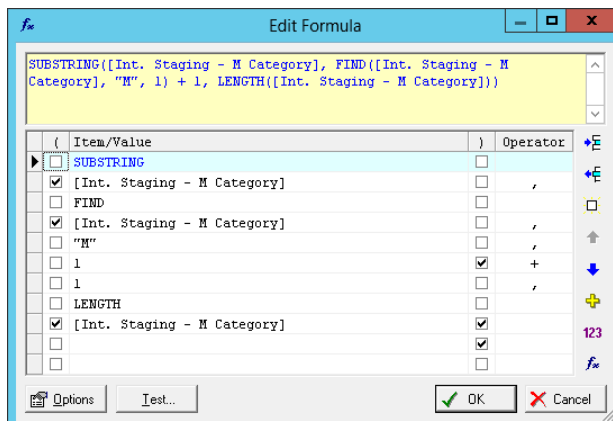
1. Go to the diagnosis event (**CRS/CRDS/NCDS/DAHNO/LUCADA/NBOCAP - Diagnosis & First Definitive Treatment**).
2. Add new item **COSD Coding - T Category (integrated)**, and set the calculation as follows:



3. Set the refresh method to direct SQL and refresh.
4. Add new item **COSD Coding - N Category (integrated)**, and set the calculation as follows:



5. Set the refresh method to direct SQL and refresh.
6. Add new item **COSD Coding - M Category (integrated)**, and set the calculation as follows:



7. Set the refresh method to direct SQL and refresh.

### 4.9.3 COSD Reporting System Queries

1. Open Query Design Manager for the clinical domain.
2. Select the **views** tab.
3. Select the query view **COSD\_CR\_Staging**.

Tip: This is usually found within the query group:

CIMS → COSD Reporting System → 01. Core

4. Map the new items created in 4.9.1 and 4.9.2 as shown below.

Function	Data Items	Format	Options	Sort	Group By	Hide	Alias
0	CRDS/NCDS Local Patient Identifier				<input type="checkbox"/>	<input type="checkbox"/>	Patient Identifier
1	CRS (contributory)/CRDS/NCDS - Referral Request R...	dd/mm/yyyy hhnn			<input type="checkbox"/>	<input type="checkbox"/>	Referral Identifier
2	COSD Coding - T Category (final pre-treatment)				<input type="checkbox"/>	<input type="checkbox"/>	PreTx T
3	COSD Coding - N Category (final pre-treatment)				<input type="checkbox"/>	<input type="checkbox"/>	PreTx N
4	COSD Coding - M Category (final pre-treatment)				<input type="checkbox"/>	<input type="checkbox"/>	PreTx M
5	CRS/CRDS/NCDS/DAHNO/LUCADA/NBOCAP - Dia...	Code			<input type="checkbox"/>	<input type="checkbox"/>	PreTx Group
6	COSD Coding - T Category (integrated)				<input type="checkbox"/>	<input type="checkbox"/>	Int T
7	COSD Coding - N Category (integrated)				<input type="checkbox"/>	<input type="checkbox"/>	Int N
8	COSD Coding - M Category (integrated)				<input type="checkbox"/>	<input type="checkbox"/>	Int M
9	CRS/CRDS/NCDS/DAHNO/LUCADA/NBOCAP - Dia...				<input type="checkbox"/>	<input type="checkbox"/>	Int Group
10	IIF(IFNULL(CRS/CRDS/NCDS/DAHNO/LUCADA/NB...	Code			<input type="checkbox"/>	<input type="checkbox"/>	TNM Version
11	Int Staging - TNM Edition Number	Code			<input type="checkbox"/>	<input type="checkbox"/>	Int Version
12	COSD - Stage Date (Final Pre-treatment Stage)	dd/mm/yyyy			<input type="checkbox"/>	<input type="checkbox"/>	
13	COSD - Stage Date (Final Integrated Stage)	dd/mm/yyyy			<input type="checkbox"/>	<input type="checkbox"/>	

5. Save the query view and test run the associated query **CR10 – COSD\_Staging** to verify that the correct data is returned.
6. Select the query view **COSD\_CR\_Pathology\_postop**.
7. Amend the following item expressions:

23	REPLACE(REPLACE(CRDS/NCDS - Pathology \ CRDS/NCDS - T Category (Pathological), "p", ""), "T", "")
24	REPLACE(REPLACE(CRDS/NCDS - Pathology \ CRDS/NCDS - N Category (Pathological), "p", ""), "N", "")
25	REPLACE(REPLACE(CRDS/NCDS - Pathology \ CRDS/NCDS - M Category (Pathological), "p", ""), "M", "")

To

23	REPLACE(REPLACE(CRDS/NCDS - Pathology \ CRDS/NCDS - T Category (Pathological), "pT", ""), "T9", "9")
24	REPLACE(REPLACE(CRDS/NCDS - Pathology \ CRDS/NCDS - N Category (Pathological), "pN", ""), "N9", "9")
25	REPLACE(REPLACE(CRDS/NCDS - Pathology \ CRDS/NCDS - M Category (Pathological), "pM", ""), "M9", "9")

i.e. change "p" to "pT";  
change "T" to "T9";  
change last "" to "9".

(substituting N and M as applicable for line 24 and 25)

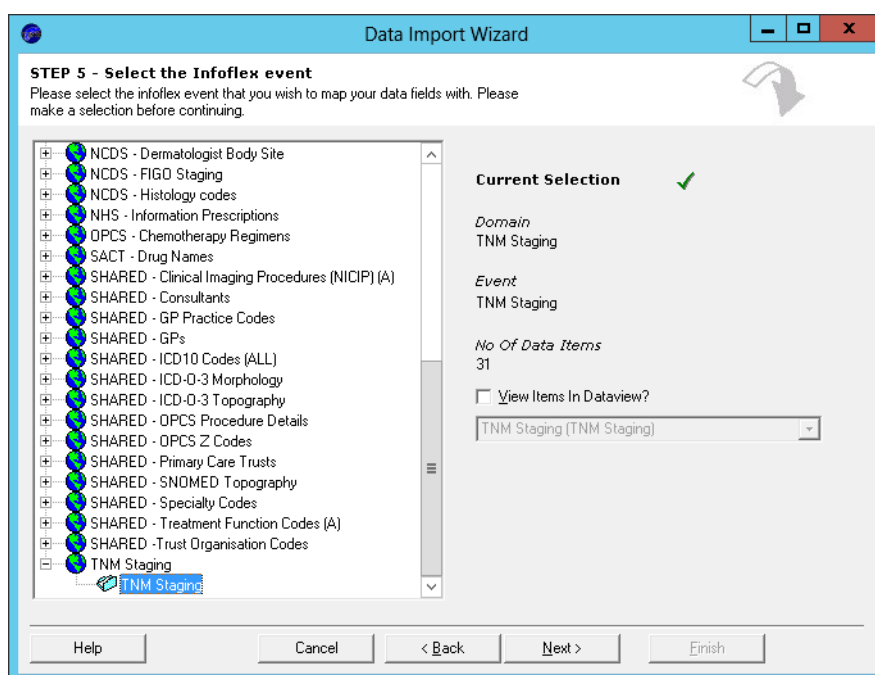
8. Repeat step 7 for the query view **COSD\_CR\_Pathology\_pretx**.



## 5 Data import of new TNM data.

The TNM data available to trusts via the UICC has been reformatted to work with the cancer design to save trusts from having to do this individually. It is assumed that this data is already available to trusts with permission to use it in your clinical designs.

1. Use the data import tool to import new staging combinations from:  
“171221 TNM Dictionary Update Rev 3 - TNM version 8.txt”
2. Select tab delimited as the data file type.
3. Check the “first row contains field names” checkbox.
4. Select “TNM Staging” in the “TNM Staging” dictionary as the target event.



## 5. Map the import fields as shown below:

**Data Import Wizard**

**STEP 6 - Map fields to Infoflex Database**  
Which fields require importing and mapping? Please make your selection before continuing.

Infoflex Data Items

File Mapping Items

Save

Input Fields	Values	Ifx Data Items
UNIQUEKEY	ENETS_E_NE01_cji_____T	Primary Key Value
VERSION	E	TNM Version Number
TUMOURTYPE_ID	3	Type of Tumour
TUMOURTYPE_MEANING	Lower Gastronintestinal	
SUBDIAGNOSIS_ID	NE01	Sub-Diagnosis
SUBDIAGNOSIS_MEANING	Colon and rectum	
HISTOLOGICALGROUPING		Histological Grouping
INCLUDE	1	Master inclusion flag
STAGINGTYPE	cji	Staging Applicability
T	T0	Int. T Category
N	N0	Int. N Category
M	M1	Int. M Category
AGEGROUP		Age Group
MITOTICRATE		Mitotic Rate
GRADEDIFFERENTIATION		Grade
SARCOMAGRADE		Sarcoma Grade
STAGEGROUP	IV	UICC Stage Grouping
NOTES		Notes
REVISION	3	Revision
S_CATEGORY		S Category
EXPLANATORYNOTES		
cT	T0	cT Category
cN	N0	cN Category
cM	M1	cM Category
pT		pT Category
pN		pN Category
pM		pM Category
T_MEANING	No evidence of primary	T (meaning)
N_MEANING	No regional lymph node	N (meaning)
M_MEANING	Distant metastasis	M (meaning)
FIGO		
REVISION_NOTE		
CODING_EDITION	ENETS	
CODING_EDITION_COSD_CODE	E	Coding Edition

Show Archived     Display Domain Item Names

1 (of 30721) Records

Help    Cancel    < Back    Next >    Finish

## 6. Import the data for “New Records Only” (30,721).

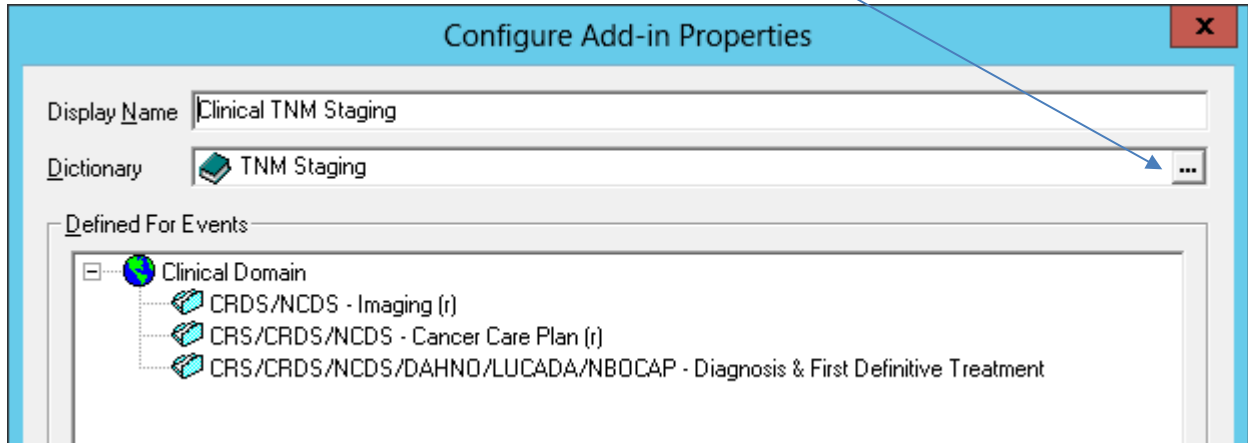
If all steps have been carried out as described, there will be no errors or rejects.

## 7. Test the new version (for example)

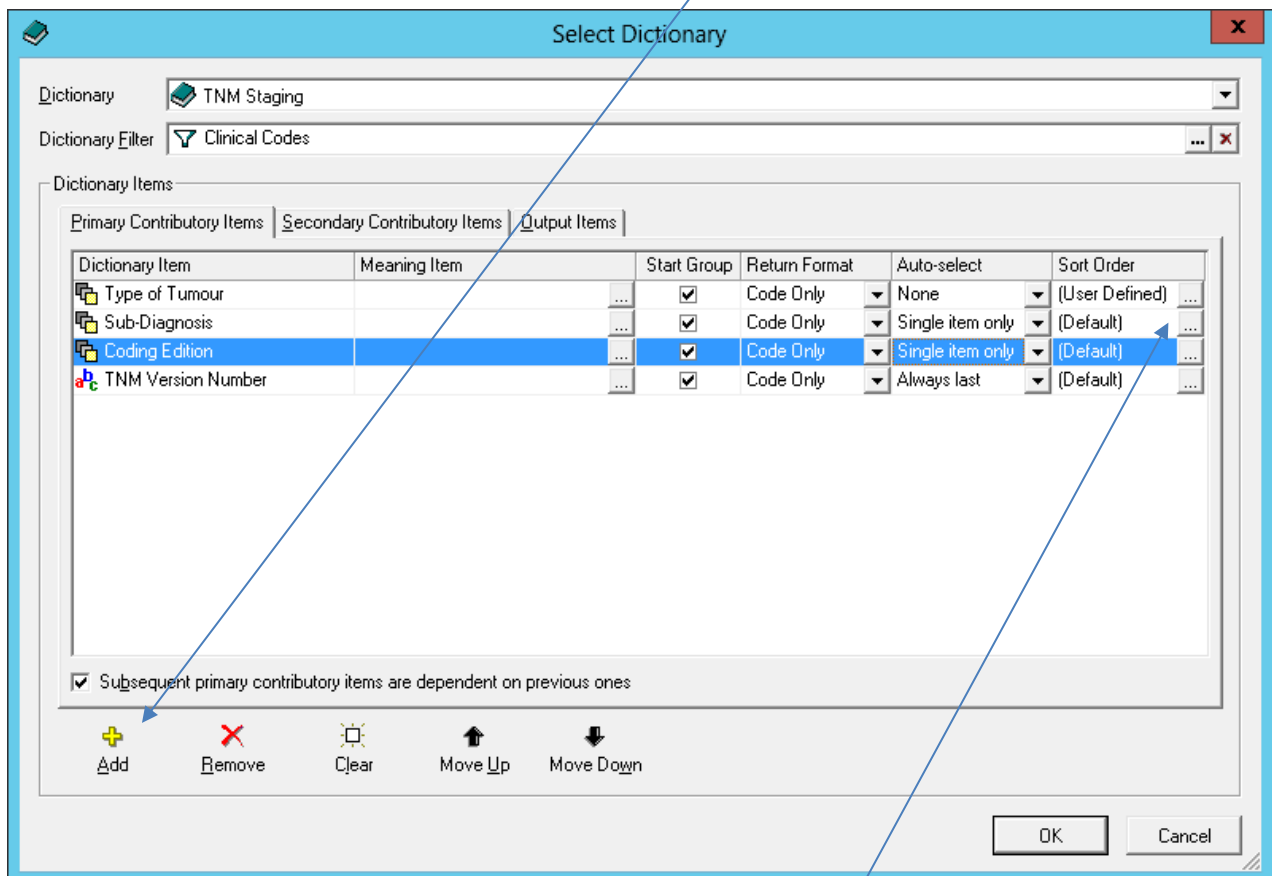
- Ensure existing staging still displays as expected.
- Existing staging should have the Coding Edition automatically populated.
- All staging except Head and Neck should have version 8 available for selection.
- Verify that codelists appear in the correct order.
- Verify that all codelists have meanings.
- Check the sub-diagnosis codelists – particularly UGI, LGI and Sarcoma, that have deprecated codelists. These should appear at the end of the codelist.
- When selecting new staging, coding edition and version should auto-populate as follows:
  - UICC version 7 for Head and Neck
  - ENETS version E for NE01-07 (LGI and UGI)
  - UICC version 8 for every other type.

## 6 Reconfiguration of the TNM addins

1. Go to the **User Management** module.
2. Go to the **Add-Ins** menu and select **Add-In Manager**
3. Select “**Clinical TNM Staging**” and click the **Edit** button
4. Click the ellipsis button next to the TNM Staging Dictionary



5. On the Primary Contributory Items tab, click the Add button and select **Coding Edition**



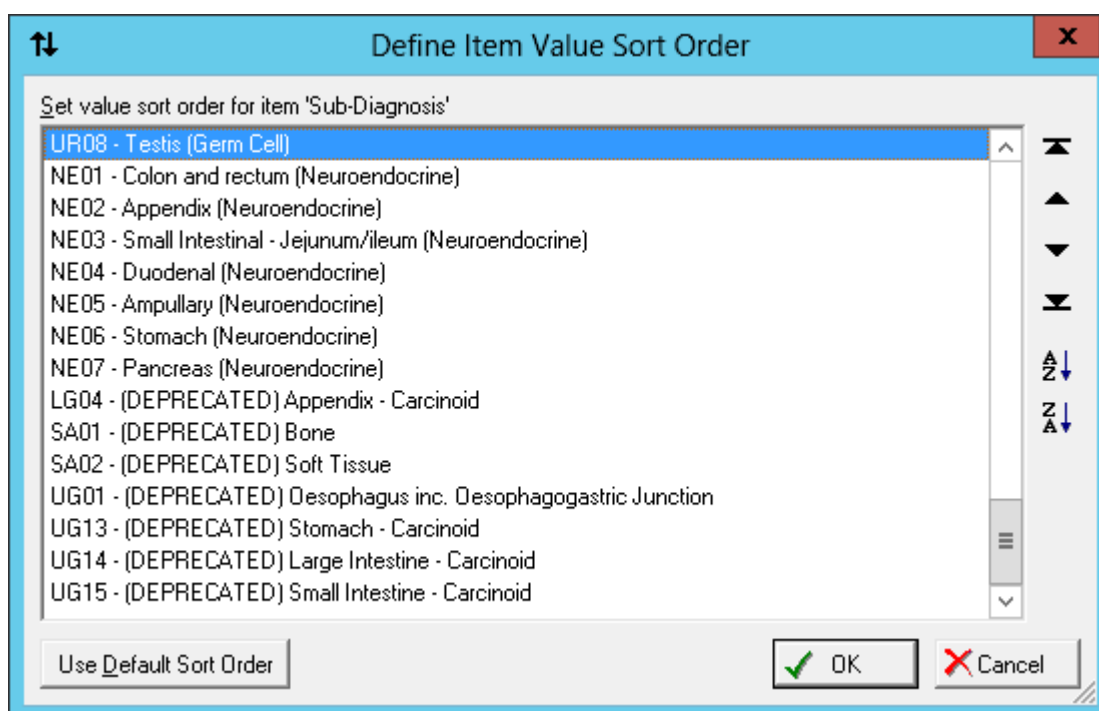
6. Reposition Coding Edition as shown above, using the **Move Up** / **Move Down** buttons.
7. Set the **Auto-select** property to “Single item only”
8. Select the ellipsis in the **sort order** column for **Sub-Diagnosis**

9. Re-order the following items using the up/down arrows:
  - NE01 – NE07 – Position these after all UR08
  - Move all deprecated codes to the bottom (in alphabetical order) – i.e. where meaning prefix (DEPRECATED).

Tip: Select the items in the order you want them to appear at the bottom, and click “Move Last”. i.e. NE01 first, then NE02 through to UG15.

Drag the bottom right corner of the dialog to make the form bigger.

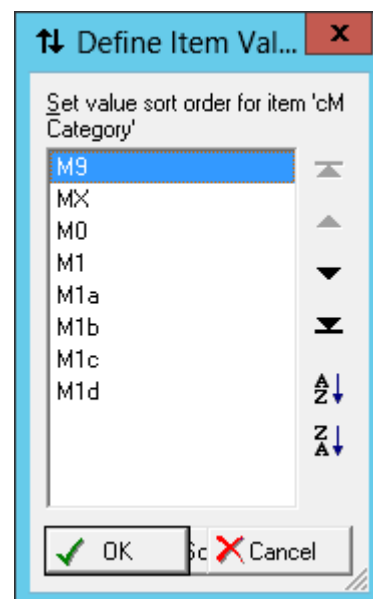
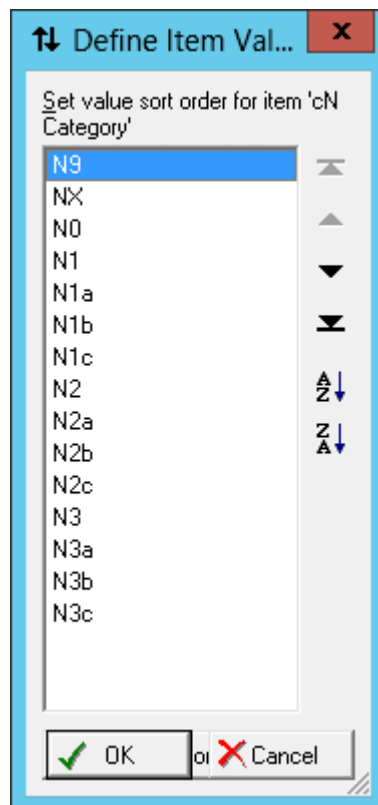
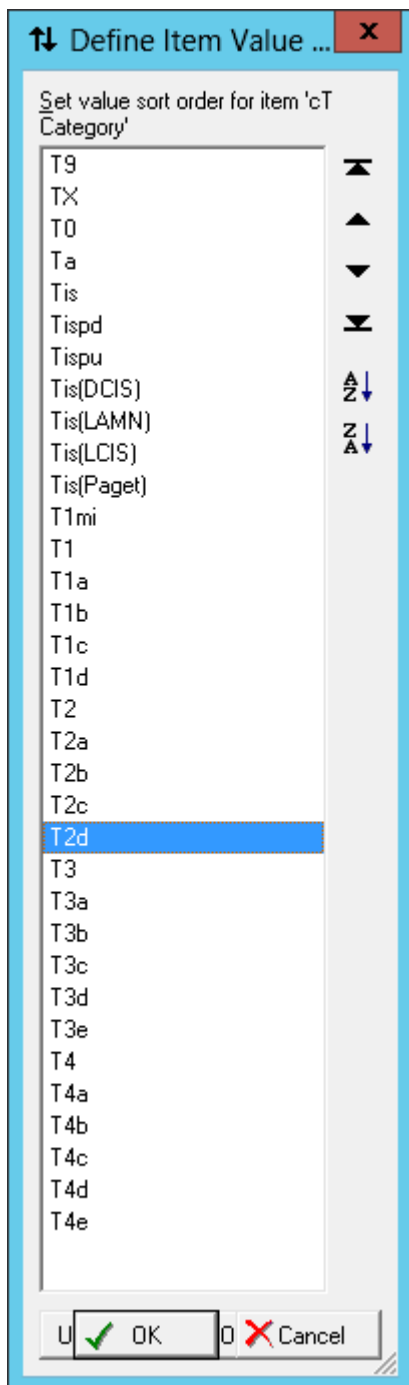
Once complete, the bottom of the order list should look like the screenshot below with all codes above being in alphabetical order:



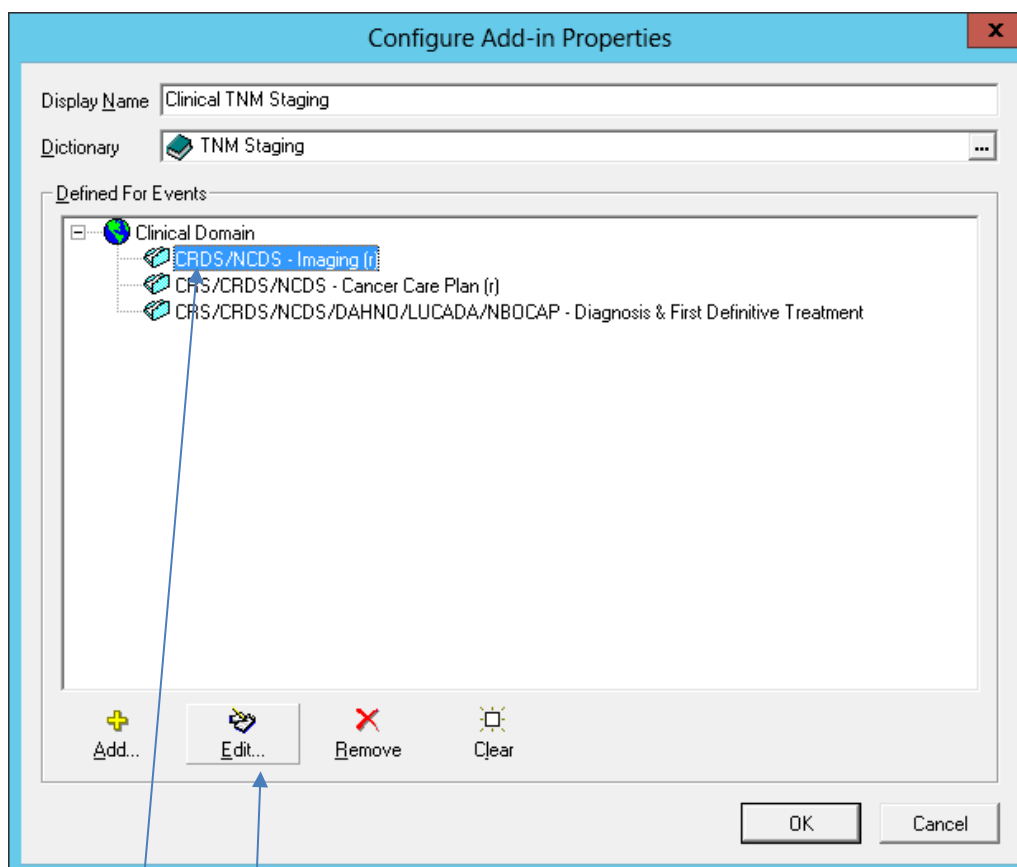
This step ensures that the rarer neuroendocrine types appear after the more common carcinoma types in the codelist, and that any deprecated codes appear at the bottom of the codelist.

10. Click OK to close.
11. Select the “Secondary Contributory Items” tab
12. Select the Sort order ellipsis for the T category
13. Reposition any new codes (at the bottom) to the required place in the codelist. (See example screenshots below)
14. Select the Sort order ellipsis for the N category
15. Reposition any new codes (at the bottom) to the required place in the codelist. (See example screenshots below)
16. The M category should not require any changes but is shown below for completeness.

Recommended Sort Order for Clinical T, N and M Category

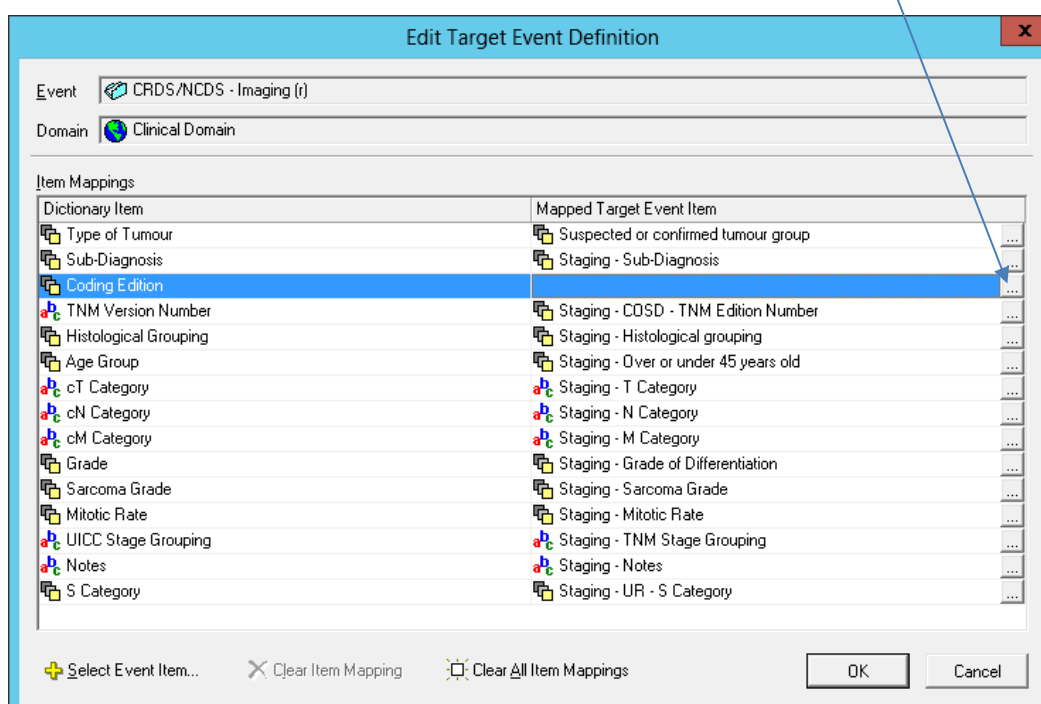


17. Click OK to close the dictionary configuration dialog and return to the Addin properties dialog.



18. For each of the defined events:

- a. Select the event in the tree
- b. Click the edit button
- c. Select the ellipsis button to select a mapped item for **Coding Edition**



- d. Choose the corresponding item created in step 0 (sub-step 7). For example in the imaging event the item is “Staging - TNM Coding Edition”

This defines where the data entered into the TNM staging dialog is saved to.

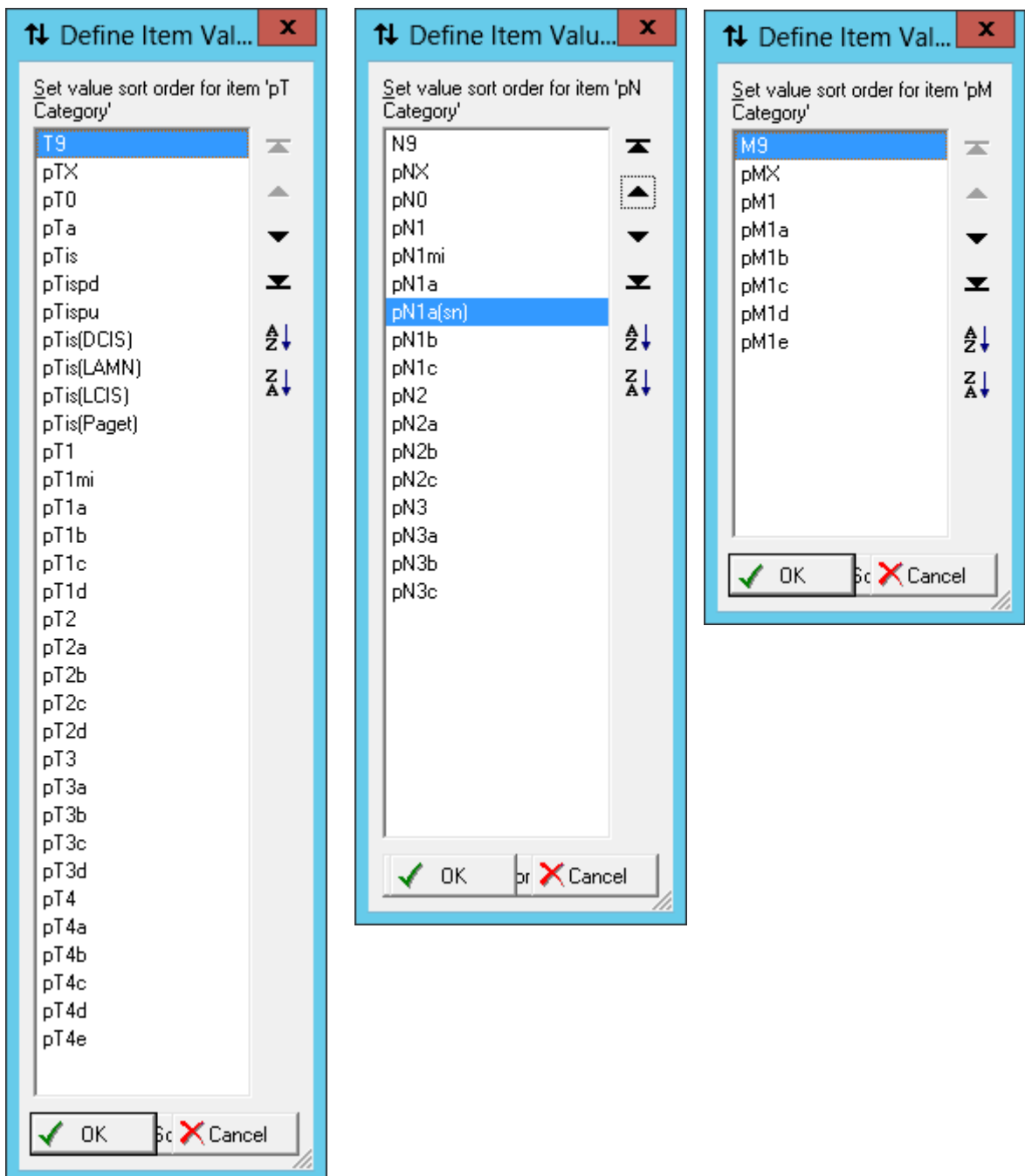
- 19. Once all events have been mapped in the same way, click OK on the addin properties dialog to close it and save the new configuration.

Note: All events must have this new item mapped or the configuration will be invalid.

- 20. Repeat steps 3 – 19 for the **Pathological TNM Staging** addin.

Recommended Sort Order for Pathological T, N and M Category

The M category should not require any changes but is shown here for completeness.



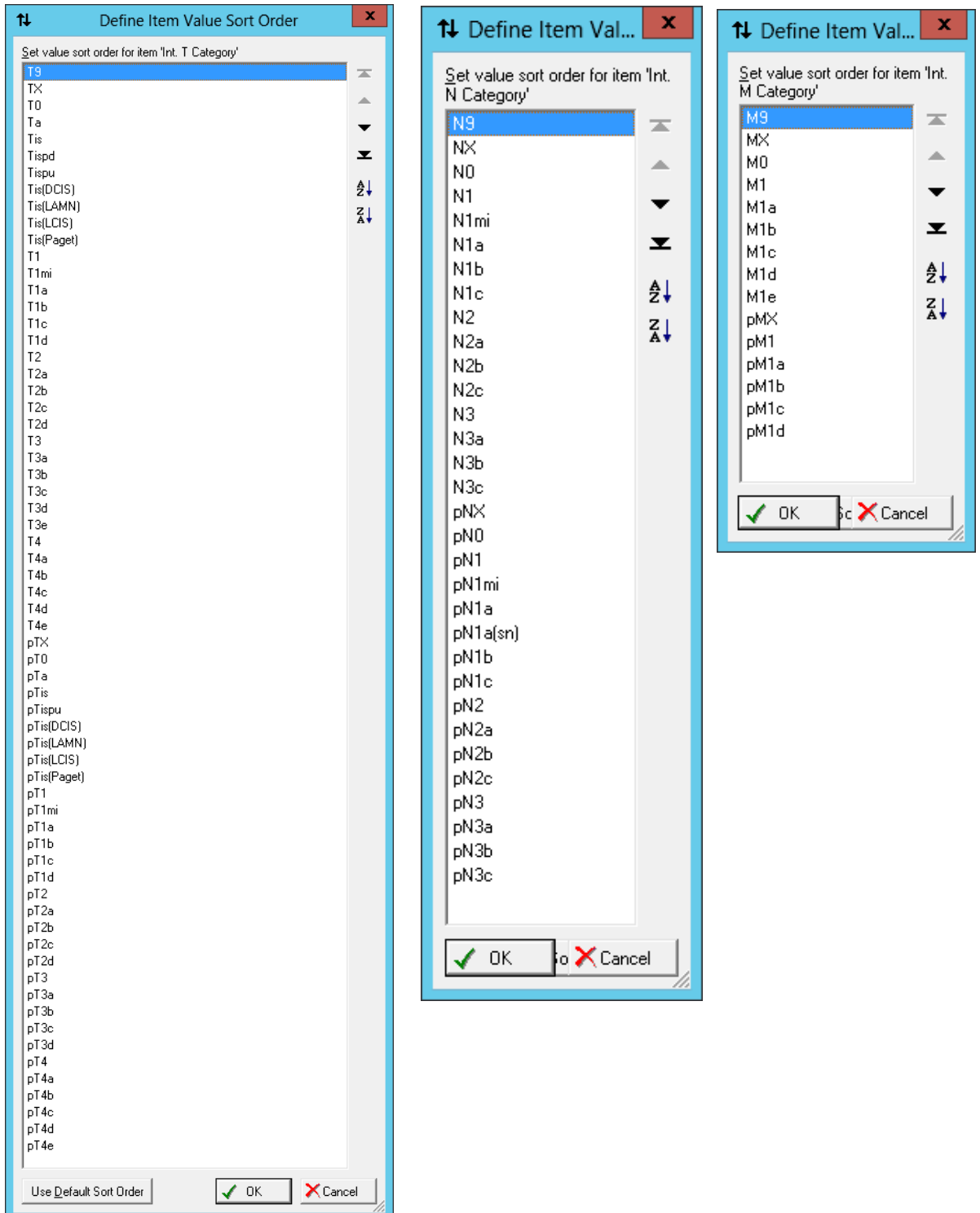
21. Repeat steps 3 – 19 for the **Integrated TNM Staging** addin.

**Important Note:** For version 8, we have included the full pT, pN, pM notation for pathologically derived components. This provides greater clarity and removes the need for separate staging types.

Clinically derived components are implied from the absence of a p prefix.

Recommended Sort Order for Pathological T, N and M Category

In this case, the M category will also require sorting.





## Appendix A - Summary of Staging in Cancer System

The following table summarises the status of staging available following this update.

Code	Meaning	Current Version	Notes
HN01	Lip/Oral Cavity (Carcinoma)	7	RCPATH recommend version 7
HN02	Oropharynx (Carcinoma)	7	RCPATH recommend version 7
HN03	Nasopharynx (Carcinoma)	7	RCPATH recommend version 7
HN04	Hypopharynx (Carcinoma)	7	RCPATH recommend version 7
HN05	Larynx - Supraglottis (Carcinoma)	7	RCPATH recommend version 7
HN06	Larynx - Glottis (Carcinoma)	7	RCPATH recommend version 7
HN07	Larynx - Subglottis (Carcinoma)	7	RCPATH recommend version 7
HN08	Major Salivary Glands (Carcinoma)	7	RCPATH recommend version 7
HN09	Maxillary Sinus (Carcinoma)	7	RCPATH recommend version 7
HN10	Nasal Cavity & Ethmoid Sinus (Carcinoma)	7	RCPATH recommend version 7
HN11	Thyroid - Papillary, Follicular And Medullary Carcinoma	7	RCPATH recommend version 7
HN11A	Thyroid - Anaplastic/Undifferentiated Carcinoma	7	RCPATH recommend version 7
HN13	Malignant Melanoma of Upper Aerodigestive Tract	7	Malignant Melanoma of Upper Aerodigestive Tract
UG01	(DEPRECATED) Oesophagus inc. Oesophagogastric Junction	-	Version 8 now sub-categorises based on disease type
UG01A	Oesophagus inc. Oesophagogastric Junction (SCC)	8	
UG01B	Oesophagus inc. Oesophagogastric Junction (Adenocarcinoma)	8	
UG02	Stomach (Carcinoma)	8	
UG03	Small Intestine (Carcinoma)	8	
UG04	Liver (Hepatocellular Carcinoma)	8	
UG05	Intrahepatic Bile Ducts	8	
UG06	Gallbladder (Carcinoma)	8	
UG07	Perihilar Bile Ducts (Carcinoma)	8	
UG08	Distal Extrahepatic Bile Duct (Carcinoma)	8	
UG09	Ampulla of Vater (Carcinoma)	8	
UG10	Pancreas (Carcinoma)	8	
UG11	Small Intestinal GIST	8	
UG12	Gastric GIST	8	
UG13	(DEPRECATED) Stomach - Carcinoid	-	All Neuroendocrine tumours reclassified as NE code using ENETS staging
UG14	(DEPRECATED) Large Intestine - Carcinoid	-	All Neuroendocrine tumours reclassified as NE code using ENETS staging
UG15	(DEPRECATED) Small Intestine - Carcinoid	-	All Neuroendocrine tumours reclassified as NE code using ENETS staging
LG01	Colon and Rectum (Carcinoma)	8	
LG02	Anal Canal and Perianal Skin (Carcinoma)	8	
LG03	Appendix (Adenocarcinoma)	8	
LG04	(DEPRECATED) Appendix - Carcinoid	-	All Neuroendocrine tumours reclassified as NE code using ENETS staging
NE01	Colon and rectum (Neuroendocrine)	E	ENETS staging
NE02	Appendix (Neuroendocrine)	E	ENETS staging

Code	Meaning	Current Version	Notes
NE03	Small Intestinal - Jejunum/ileum (Neuroendocrine)	E	ENETS staging
NE04	Duodenal (Neuroendocrine)	E	ENETS staging
NE05	Ampullary (Neuroendocrine)	E	ENETS staging
NE06	Stomach (Neuroendocrine)	E	ENETS staging
NE07	Pancreas (Neuroendocrine)	E	ENETS staging
LU01	Lung (Carcinoma)	8	
LU02	Pleural Mesothelioma	8	
LU03	Thymic Epithelial Tumours	8	
SA01A	(DEPRECATED) Bone	-	Version 8 now sub-categorises based on site
SA01A	Bone - Appendicular Skeleton, Trunk and Facial Bones	8	
SA01B	Bone - Spine	8	
SA01C	Bone - Pelvis	8	
SA02	(DEPRECATED) Soft Tissue	-	Version 8 now sub-categorises based on site
SA02A	Soft Tissue - Extremity and Superficial Trunk	8	
SA02B	Soft Tissue - Retroperitoneum	8	
SA02C	Soft Tissue - Head and Neck	8	
SA02D	Soft Tissue - Thoracic and Abdominal Viscera	8	
SK01	Malignant Melanoma of Skin	8	
SK02	Carcinoma of Skin	8	
SK03	Carcinoma of Skin of Eyelid	8	
SK04	Merkel Cell Carcinoma of Skin	8	
SK05	Skin Carcinoma of the Head and Neck	8	
BR01	Breast (Carcinoma)	8	
GY01	Vulva	-	N/A to Addin - FIGO is entered directly into FIGO item
GY02	Vagina	-	N/A to Addin - FIGO is entered directly into FIGO item
GY03	Cervix Uteri	-	N/A to Addin - FIGO is entered directly into FIGO item
GY04	Uterus - Endometrium	-	N/A to Addin - FIGO is entered directly into FIGO item
GY05	Uterus - Uterine Sarcomas (Leiomyosarcoma, Endometrial stromal sarcoma)	-	N/A to Addin - FIGO is entered directly into FIGO item
GY06	Uterus - Uterine Sarcomas (Adenosarcoma)	-	N/A to Addin - FIGO is entered directly into FIGO item
GY07	Ovary, Fallopian Tube and Primary Peritoneal Carcinoma	-	N/A to Addin - FIGO is entered directly into FIGO item
GY09	Gestational Trophoblastic Tumours	-	N/A to Addin - FIGO is entered directly into FIGO item
UR01	Renal Pelvis and Ureter (Carcinoma)	8	
UR02	Urinary Bladder (Carcinoma)	8	
UR03	Urethra - male and female (Carcinoma)	8	
UR04	Urothelial (Transitional Cell) Carcinoma of the Prostate	8	
UR05	Prostate (Adenocarcinoma)	8	
UR06	Kidney (Renal Cell Carcinoma)	8	
UR07	Penis (Carcinoma)	8	
UR08	Testis (Germ Cell)	8	
OT01	Adrenal Cortex (Carcinoma)	8	Adrenal Cortex (Carcinoma)

Code	Meaning	Current Version	Notes
BA01	Carcinoma of Conjunctiva	8	
BA02	Malignant Melanoma of Conjunctiva	8	
BA03	Malignant Melanoma of Uvea - Iris	8	
BA04	Malignant Melanoma of Uvea - Ciliary body or Choroid	8	
BA05	Retinoblastoma	8	
BA06	Sarcoma of Orbit	8	
BA07	Carcinoma of Lacrimal Gland	8	

## Appendix B - Clarifications and Assumptions

Based on clarifications received via NCRAS and their clinical associates, and internal review, we have considered the following general principles:

- Header categories have been omitted where possible, following clarification.
- The COSD special codes T9, N9 and M9 have been omitted from the version 8 update, since they are no longer included in the guidance for COSD version 8.0.
- The COSD special code pMX is retained for pathological staging only based on previous discussions with NCRAS since it is not possible to record the clinical assessment of the M category in the pM field as defined by COSD.

Note: This used to be stated in the guidance for COSD but is no longer present in version 8.0. We have not received any comment from NCRAS as to why.

- We have not received any comment from NCRAS as to the required coding edition for ENETS staging. As such we have elected to use the code E. It may be necessary to recode this for reporting purposes once we have instruction from NCRAS.
- The staging included in the “Diagnostic Pathology” event is based on the pathological staging classification.

In practice, associated staging made pre-treatment would normally contribute to the clinical staging and therefore the inclusion of pathological staging here may be of limited use.

We welcome any feedback on what users would like to record here for consideration in future versions.

- Any guidance and supporting information is provided in good faith. We have endeavoured to clarify the requirements for TNM with the relevant organisations and test thoroughly. However, the requirements and functionality must be validated and tested locally to verify suitability and correctness.