National Cancer Control Programme

National Cancer Information System

NCIS Guide

Merge Functionality

1. Background

In the administration of patient information, duplicate healthcare records can occur for various reasons. Where a duplicate record for a patient is identified, a merge process may be carried out to align the information for that patient to a single record. This process can be required for paper records (the patient chart), PAS records and where relevant, for the patient record held within NCIS.

For a patient with a duplicate record in NCIS, the user carrying out the merge will need to review the NCIS case(s) and identify the appropriate merge scenario. This Quick Guide outlines merge types and the steps required to perform an NCIS merge for each scenario.

2. Merge Scenarios

Merging records is always a systematic process. Records will need to be defined as either Major (the surviving record) or Minor (the non-surviving record). Records should only be merged on NCIS once any required merge steps in the Patient Administration System (PAS) have been completed. The steps required for each merge generally fall into one of the following scenarios:

Scenario 1: PAS Merge Only	
Patient Merge in PAS without existing NCIS Record	Records are merged within PAS and an update is sent to the NCIS Master Patient Index (MPI).

Scenario 2: PAS with NCIS Case	
Patient Merge with Existing NCIS Record, Triggered in PAS Scenario 2.1: The Minor Record is not known to NCIS but the Major record is registered in NCIS Scenario 2.2:The Major Record is not known to NCIS but the Minor Patient is registered in NCIS Scenario 2.3: Both the Major and Minor Records are associated with registered cases in NCIS	Where PAS records have been delivered to the MPI and NCIS cases have been registered using one or more of these records. *A Minor Record/Case is the record with the identifier and demographic details that will no longer appear following the merge*. *A Major Record/Case is the record with the identifier and demographic details that will remain following the merge.*

Scenario 3: NCIS Merge Only	
Single PAS record, multiple NCIS cases - Patient Merge Process in NCIS Some relevant considerations: - Do the cases both have the same diagnosis recorded? - Are the cases to be merged linked? - Are the cases to be merged at the same hospital in NCIS.Chart?	Where multiple NCIS cases have been registered using a single PAS record.

Which Merge Scenario Do I Need to Follow?

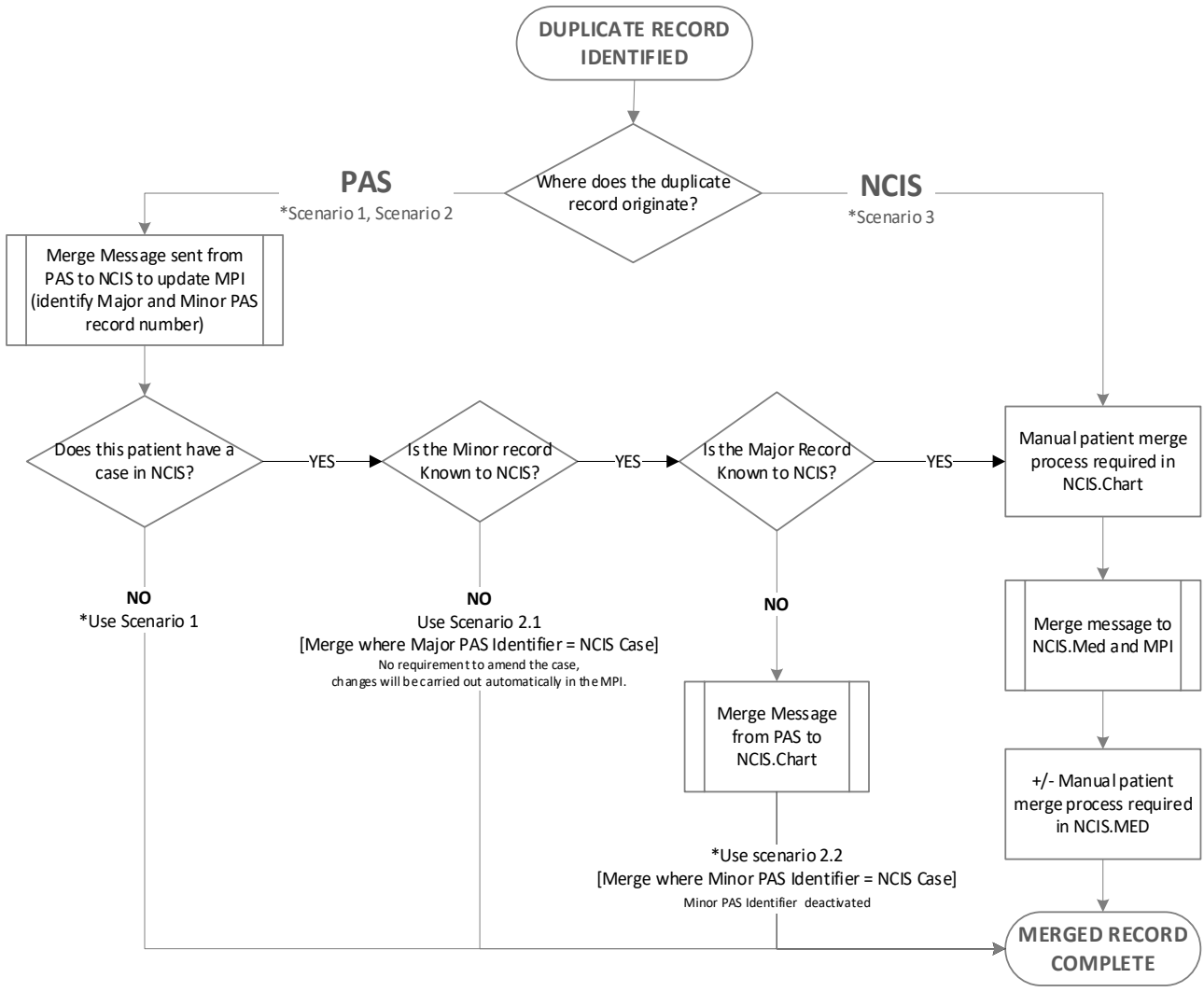


Figure 1: Merge types

Scenario 1: PAS Merge (with or without NCIS Case)

Two or more records exist in PAS for the same individual person. Each PAS record will have a PAS Identifier. The relationship between each PAS record and the corresponding MPI record is relevant whether or not a case has been created in NCIS.

1. A search in NCIS will display what records are in the MPI based on their PAS Identifier (MRN/Local ID). Before a PAS merge takes place, you will see both records in the MPI search in NCIS.

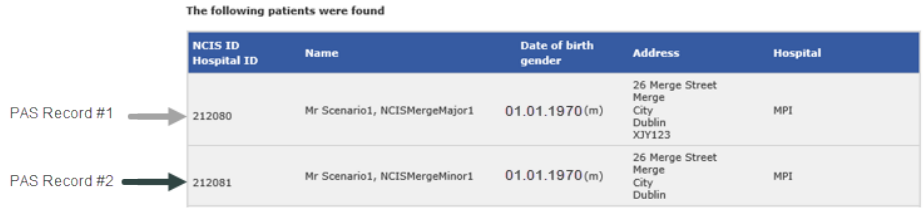


Figure 2: MPI search return

2. Determine which record in PAS will become the Major (surviving) Record and which will be the Minor (non-surviving) Record.
3. Perform a PAS merge.
4. Following the merge of the Major and Minor PAS records, a Merge message will be delivered to the NCIS Master Patient Index (MPI) from PAS.
5. Once this has occurred, an MPI search will result in only the Major record being shown. The Minor record will no longer be seen in the MPI search result in NCIS.

Scenario 2: PAS Merge with NCIS Case(s)

Two or more records exist in PAS for the same individual person. At least one of the PAS records was used to register a case in NCIS.

A search in NCIS will display what records are in the MPI based on their PAS Identifier (MRN). Check which record to be merged is associated with an NCIS case. You will need to plan your NCIS merge depending on the relationship between the case in NCIS and the PAS identifier. The record that has an NCIS case will display both a PAS identifier and an NCIS ID.

Scenario 2.1: Merge where the Major PAS Identifier is associated with the NCIS Case

Two or more PAS records, and a single NCIS record

1. The Major (surviving) Record is associated with the NCIS case.
2. Perform a PAS merge.
3. Following the merge of the Major and Minor PAS records, a Merge message will be delivered to the NCIS Master Patient Index (MPI) from PAS.
4. Once this has occurred, an MPI search will result in only the Major record being shown.
5. No further action is required in NCIS.

Scenario 2.2: Merge where the Minor PAS Identifier is associated with the NCIS Case

Two or more PAS records, and a single NCIS record

1. The Minor (non-surviving) Record is associated with a case in NCIS.
2. Perform a PAS merge.
3. Following the merge of the Major and Minor PAS records, a Merge message will be delivered to the NCIS Master Patient Index (MPI) from PAS.
4. Once this has occurred, it will result in an update to NCIS.Chart, the MPI and NCIS.MED.
5. The Minor PAS identifier will be deactivated.
6. In some situations a HIS match is also required to be completed to ensure the major record PAS demographics are in NCIS.

Scenario 2.3: Merge where both the Major and Minor PAS Identifiers are associated with NCIS Cases

Two or more PAS records, each with an associated NCIS record

1. Identify the Major PAS identifier and the Major NCIS Case and plan your required merge steps accordingly.
2. Perform a PAS merge.
3. Following the merge of the Major and Minor PAS records, a Merge message will be delivered to the NCIS Master Patient Index (MPI) from PAS.
4. Once this has occurred, an MPI search will result in an update to NCIS.Chart, the MPI and NCIS.MED.
5. The Minor PAS identifier will be deactivated.
6. Follow the process for an NCIS merge (see Scenario 3) to align the NCIS records to the Major (surviving) patient identifier.

Scenario 3: NCIS Merge

Two or more records exist in NCIS for the same individual person.

Scenario 3.1: Merge where both cases have the same diagnosis recorded

Before completing the merge steps, it is important to review NCIS records' in both NCIS Chart and NCIS Med and working through the anticipated merged record contents.

Following the merge of the Major and Minor PAS records, a merge message will be delivered to the NCIS Master Patient Index (MPI) from PAS.

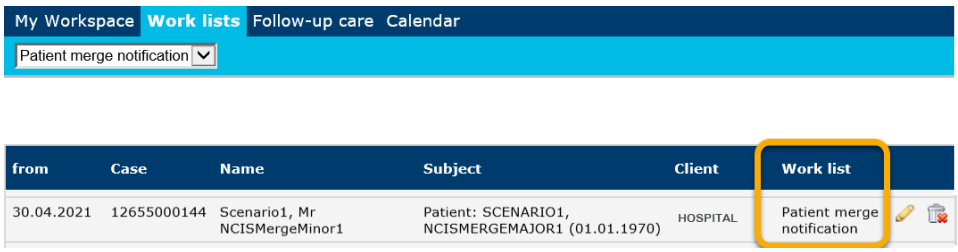


Figure 3: Worklist merge notification (in Worklist menu)

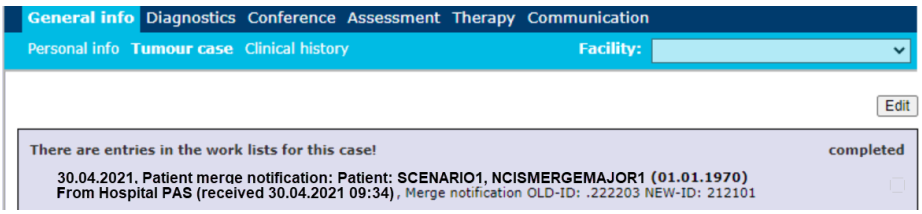
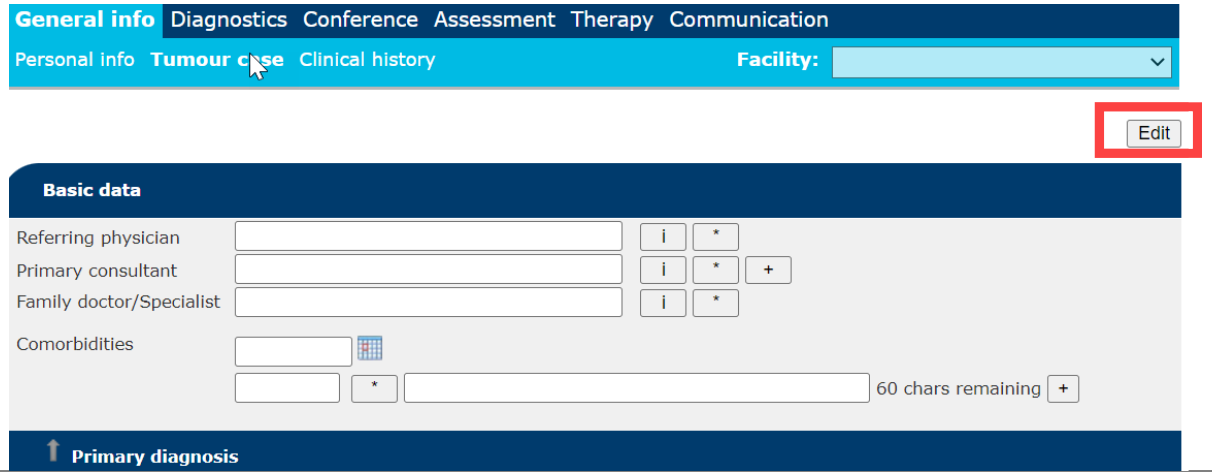
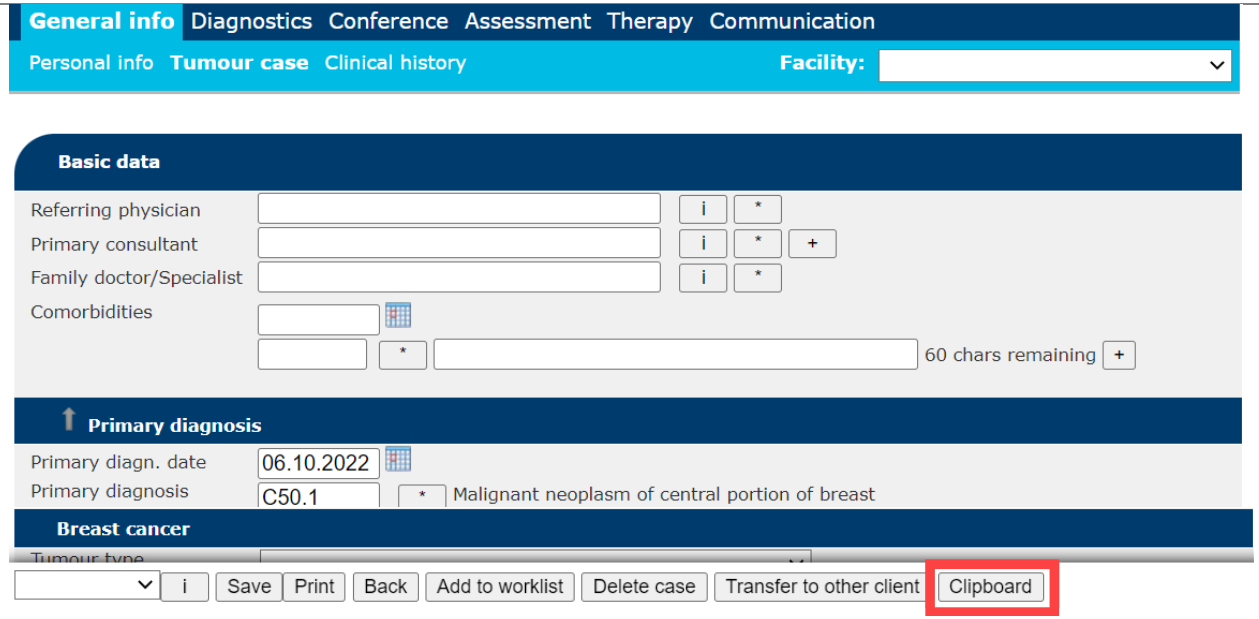
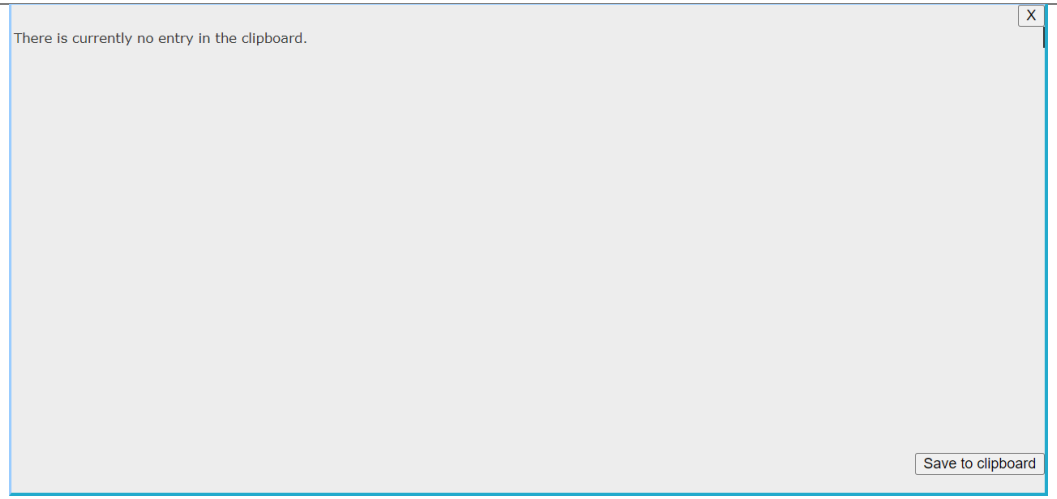


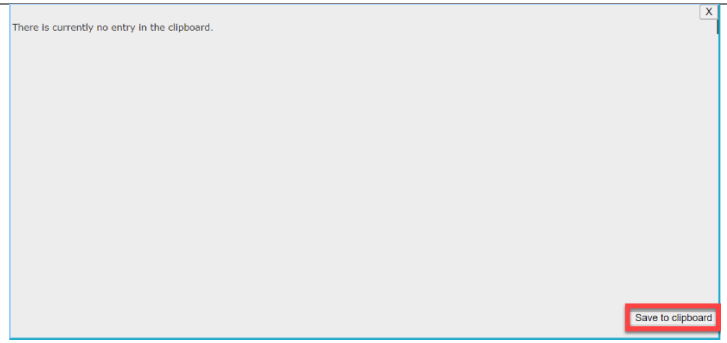
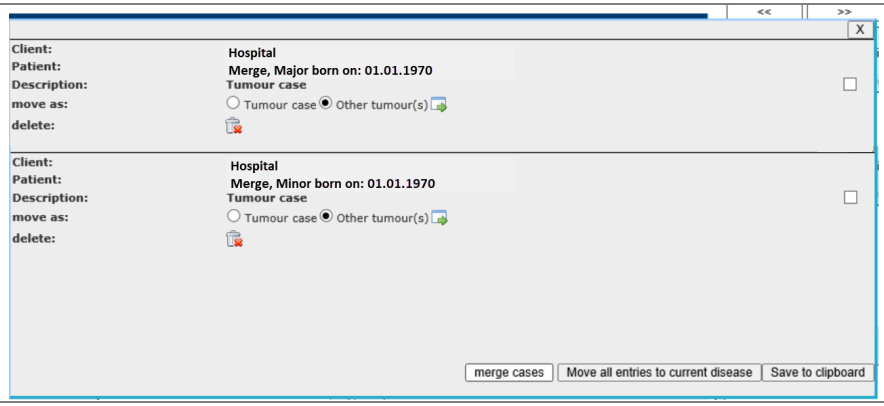
Figure 4: Worklist merge notification (in patient's tumour case banner)

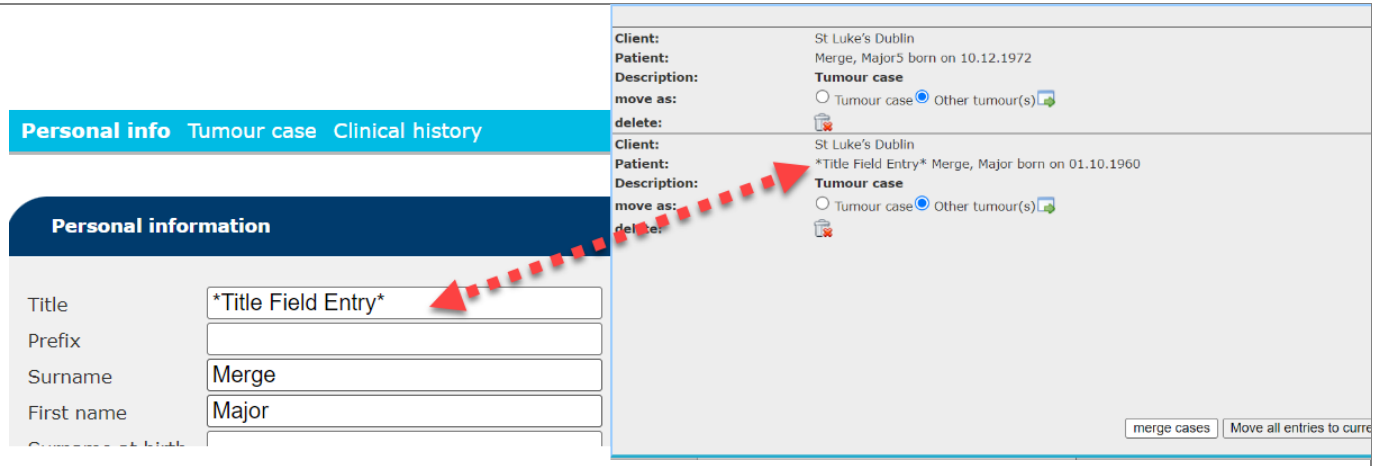
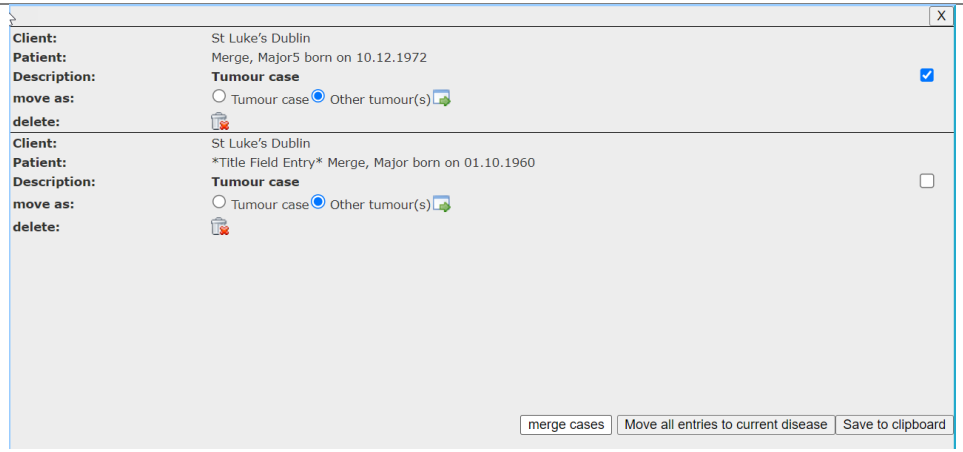
Process for an NCIS Chart Merge

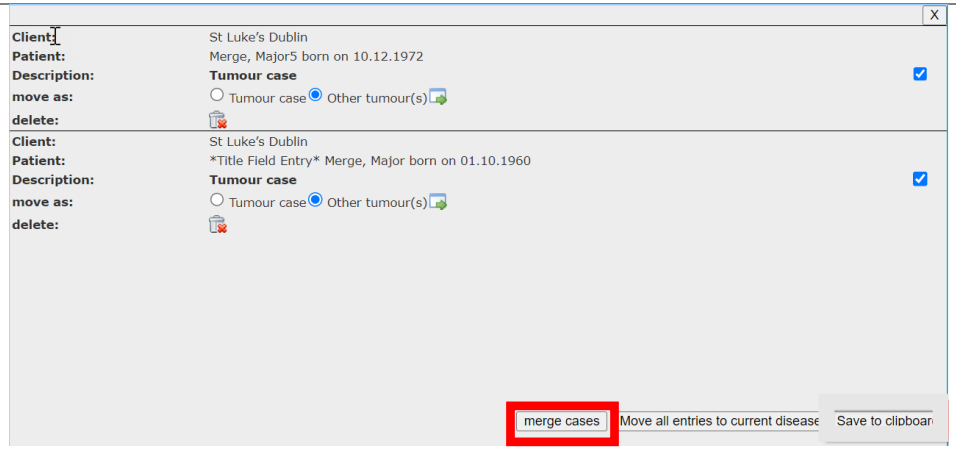
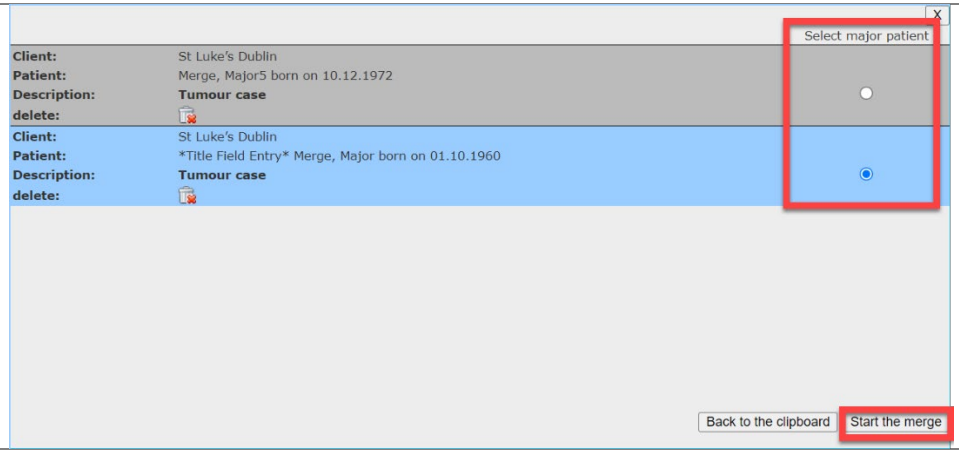
Where there are two or more cases for the same patient in NCIS, the clipboard can be used to merge the cases together in NCIS Chart. The Clipboard is visible to Local Administrator users. **Please note: the clipboard should only be used from the patient's tumour case screen.**

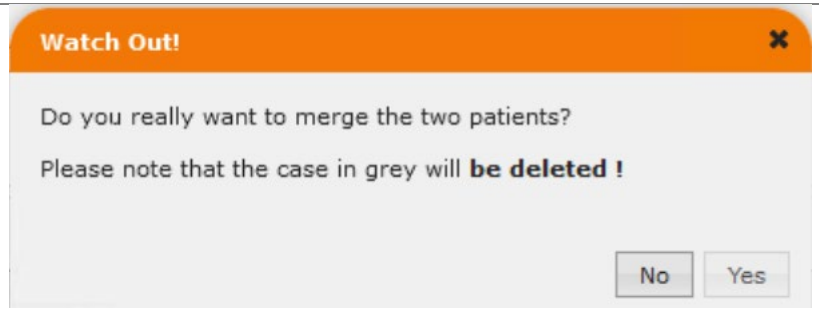
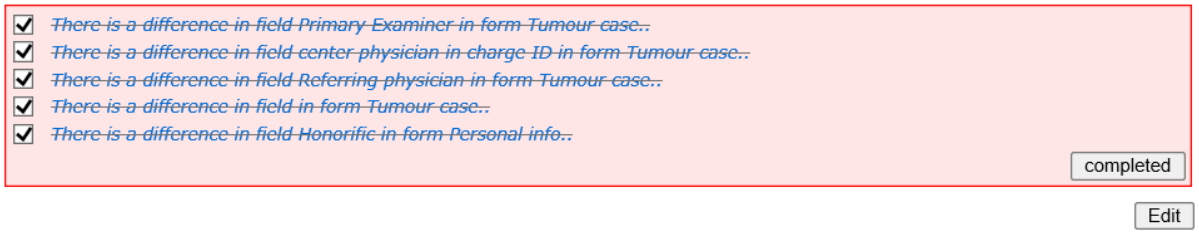
<table>
<tr><td>Step 1:</td><td>Identify the major case and the minor record(s) to be merged.</td><td>Include a review of forms in each case and therapy plans in NCIS MED to identify what should be seen in the merged record.
<table>
<tr><th></th><th>NCIS ID
Hospital ID</th><th>Name</th><th>Date of birth
gender</th><th>Address</th><th>Hospital</th></tr>
<tr><td>MAJOR RECORD</td><td>12655000010
192119 (SLH)</td><td>Merge, Major</td><td>01.10.1960 (m)</td><td>Minor Hill
Major Road
Minor Town
Major City</td><td>St Luke's Dublin</td></tr>
<tr><td>MINOR RECORD</td><td>12655000039</td><td>Merge, M</td><td>01.10.1960 (m)</td><td>Minor Hill
Major Road
Minor Town
Major City</td><td>St Luke's Dublin</td></tr>
</table>
</td></tr>
<tr><td>Step 2:</td><td colspan="2">Open the Major case.</td></tr>
<tr><td>Step 3:</td><td>In the tumour case form click edit</td><td> 
</td></tr>
</table>

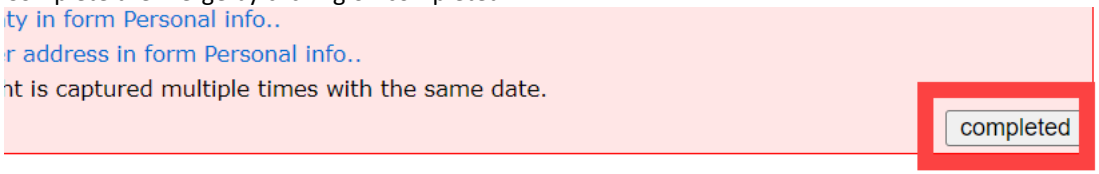
Step 4:	Find the clipboard button at the bottom of the screen (this is only available to users with administrator access)	
Step 5:	Open the clipboard	

Step 6:	Add the case to the clipboard by clicking on the “save to clipboard” button.	
Step 7:	Open the Minor case	
Step 8:	Follow steps 4 to 6 again to add the minor case to the clipboard	

	You can use the title field in NCIS Chart to add information to assist in identifying cases in the clipboard view.	
Step 9:	Tick the check boxes on the cases that you wish to merge *The merge button is disabled until the cases that need to be merged are selected*.	

Step 10:	Click merge cases	
Step 11:	Select the **major** case	

	Before you click on Merge ensure that you are merging the correct cases. The following message will appear. *A Warning message appears to confirm the merge is to proceed*	
Step 12:	The cases will begin to merge and will be locked for editing by other users	
Step 13:	*A Conflict warning will appear to list the differences between the patient demographics and tumour cases content will appear.* *This list is relevant to fields in the tumour case that are only available once, where multiple forms are used (e.g. the conference form or the therapy form) multiple forms are combined into the merged case and no conflict will be noted.* Check that all differences have been validated The user can open each warning to review the information, tick the items that have been reviewed. Each item should be crossed out, note that changes cannot be made to the minor case but the major case can be	 

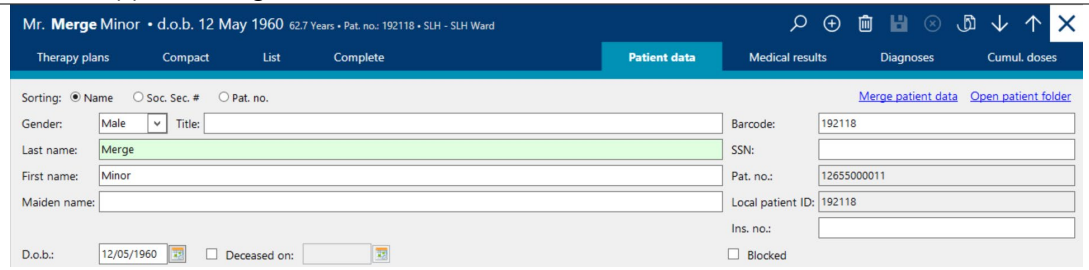
	modified where a change is required.	
	Note: a user should not click close or leave the case view until the merge is complete. This will interrupt the merge.	
Step 14:	Complete the merge by clicking on completed 	

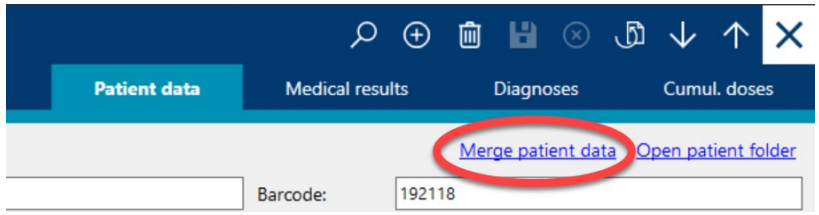
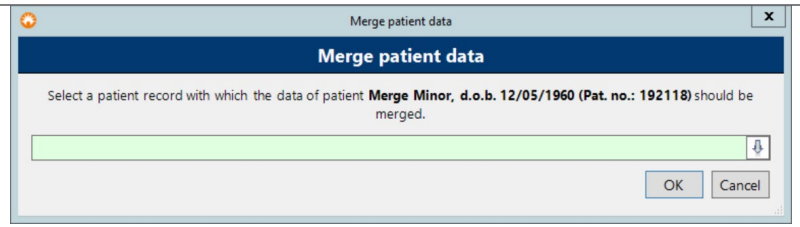
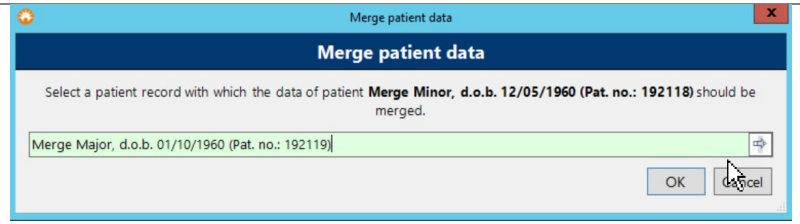
Checks:

- **After the merge in NCIS.Chart is completed, search for the patient and ensure there is only one linked entry.**
- **If the patient has more than 2 entries to begin with you will need to repeat the process as only 2 records can be merged at a time.**
- **Check NCIS Med to ensure there are no duplicates in this section**

NCIS MED Merge

If the two records being merged in NCIS chart have each got a counterpart record in NCIS MED the merge in NCIS.Chart should be replicated in NCIS.Med. However it is possible to complete a merge in NCIS.Med also. This functionality is available to Local Administrator users. **Please note: the merge option in NCIS.MED should only be used when the user is <u>not</u> in patient context.**

Step 1:	Identify the major case and the minor record(s) to be merged.	
Step 2:	Open the Minor case in NCIS.MED.	

Step 3:	In the patient data tab click “merge patient data”	
Step 4:	The merge selection box appears. This provides the option to search for the Major patient with which you wish this record.	
Step 5:	Select the major patient and click ok.	
Step 6:	Merge complete, check record	

Trouble shooting merges:

Scenario 1:	**Scenario 2:**
Patient has two or more records on NCIS. Record One has a Local ID and an NCIS ID (this is often not the preferred local ID) Additional Record(s) has NCIS ID only.	Patient has two or more records on NCIS Both records have the same local ID.
More than one record for the patient on PAS, Demographic information changed after an entry has been created on NCIS – This causes an unlinking and an additional record for the patient with an NCIS ID but no Local ID. *(If the patient has only one entry on PAS it is likely that there has been a change to the demographic information and the unlinked records can then be resolved on NCIS using HIS Match and then merged to tidy up the additional cases)*	Patient has had a new case created instead of an existing case opened. This can sometimes occur if the user double clicks at the point of creating the first case.
CHECK - *That this is the same patient by checking the date of birth, name and address .* - *Whether the cases have become unlinked due to demographic change, typos, use of apostrophe other character in address.* - *PAS to ensure there are no unmerged entries. If the patient has more than one entry on PAS, this will need to be resolved by a PAS merge before the records can be merged on NCIS.*	**CHECK** - *Demographic Information for any discrepancy.* - *PAS to ensure there is only one patient record.* - *Which record has had information added to determine the major case.*