User Story 4559

Title: Specimen Manifest Rewrite

Requested by: Accessioning

Estimated LOE: High

Supporting Author(s): K. Wing

Audience: Accessioning

Requirements Document v1.4

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Contents

Change History

Version No.	Date	Owner	Description
1.0	12/20/18	Katy Wing	Original
1.1	10/10/19	Katy Wing	Added requirements 6-7.1
1.2	11/18/19	Katy Wing	Added Requirement Clarifications
1.3	02/24/20	Katy Wing	Added Requirement Adjustments section and adjusted requirements 79.4.1 through 79.4.1.3
1.4	3/5/20	Katy Wing	Added requirements 97-99.2

Requirements for US #4559: Specimen Manifest Rewrite

Purpose and Expectation of Requirements:

The requirements below outline a completely new build out of the Specimen Manifest screen. With this new build the Accessioning team will have the ability to work the manifest in a more consistent workflow, and the system will provide more automated processes allowing for more accurate tracking, more flexibility, and an increase in user efficiency.

Repurpose "Lab Assignment" Field

1. "Lab Assignment" should be repurposed and renamed to "Case Creation Lab".
    1.1. This applies to the field in all screens, the field and column in the Worklist, and the name of the column option in Worklist Manager.
    1.2. This field should only list accessioning lab locations under the dropdown: NeoGenomics Florida, NeoGenomics Tennessee, NeoGenomics California, NeoGenomics Atlanta, NeoGenomics Houston, NeoGenomics Europe, SA, CHI Memorial Hospital, CHI Memorial Hospital, Demo Lab, Northwest Arkansas Pathology Associates, South Carolina Oncology Associates PA, Tennessee Oncology, PLLC-HMS, Tennessee Oncology, PLLC-CH, University Cancer & Blood Center, LLC
    1.3. If an Accession Lab is added or removed via the checkbox in Lab Management 2.0, the lab should be added or removed from the Case Creation Lab dropdown menu as well.
    1.4. When a case is added in the Accessioning screen or released from Specimen In Transit, Case Creation Lab should default to the home lab of the user creating/releasing the case.
    1.5. Allow the user to change these selections via the dropdown.
    1.6. The Accession Lab and the Case Creation lab do not have to be the same lab selections.
    1.7. The TCP and TCA lab assignments for the case should default to the home lab of the user as well, driven off of the Case Creation Lab selected by the system instead of the Accession Lab.
        1.7.1. The TCP, TCA, and PC lab assignments for MOL and NTP case types only should continue to be defaulted to NeoGenomics California.
    1.8. TCP, TCA, and PC lab assignments should continue to be changeable fields via the dropdown.

2. The Accession Lab field should continue to be a one-time capture field when an accession is first created, and should be auto-selected based off of the user's home lab.
    2.1. For Online Orders, the Accession Lab field should be set to the home lab of the user that created the case on the original order.
    2.2. Allow the Accession Lab field to be changed by an internal user.

3. In Lab Management 2.0, under the Lab tab, create a new checkbox titled "Manifest Lab".
    3.1. This logic should no longer be tied to the Accession Lab checkbox.
    3.2. When checked, that lab should be eligible to be a Ship To or a Ship From location for specimen manifest transfers.
        3.2.1. These labs should be listed in the Spec. Manifest dropdown menu in the Accessioning screen.

4. Next to the Manifest Lab checkbox, provide a text box labeled "Manifest Abbreviation" that accepts up to 3 alphanumeric characters.
    4.1. This is a mandatory field if the Manifest Lab box is checked. The user should be alerted if they try to save without this text box filled out.
    4.2. This text box will set the abbreviation that will be used for manifest numbering (see 28 below).

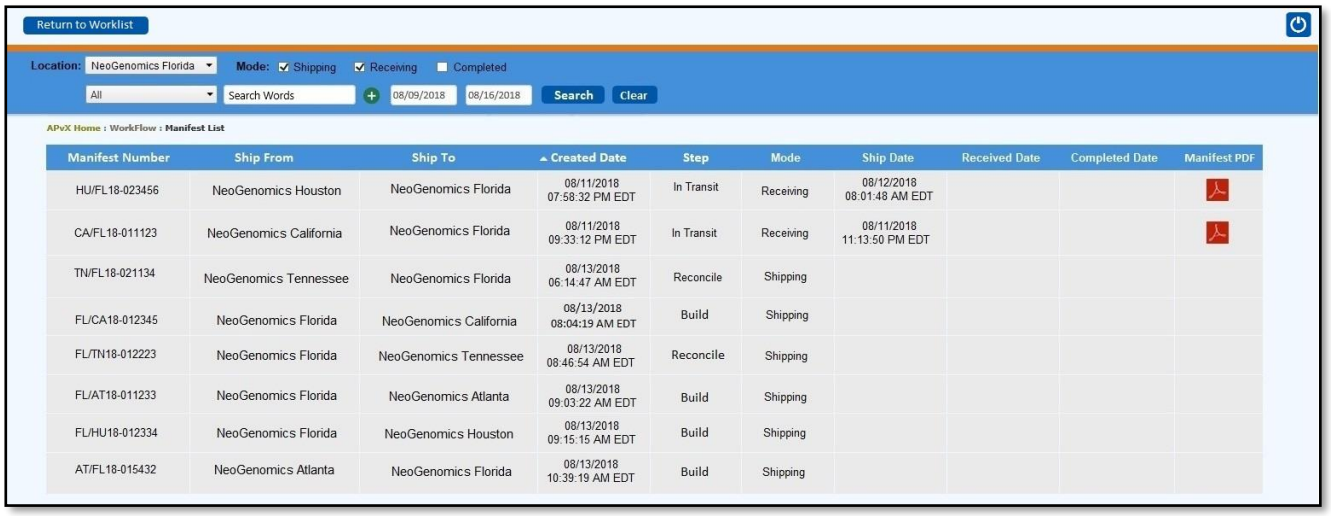
New Manifest Screens

Locating and Accessing the New Manifest List Screen

5. The old Manifest List screen should be removed, and replaced with a new Manifest List screen in the same location within the LIS: Workflow > Manifest List.

Manifest List Screen Design

Mockup of Manifest List screen:



6. At the top of all manifest screens, provide a button titled "Return to Worklist".

6.1. This button should return the user to the APvX Worklist screen.

7. At the top right corner of all manifest screens, provide a logout button.
   7.1. The button should log the user out of ApvX and take them back to the Login screen.

8. The Manifest List screen should look and function similar to the Worklist with a blue and orange static ribbon at the top of the screen, and a gridded list of manifests divided into columns.

9. In the static ribbon users should have the ability to input search criteria for the Manifest List similar to how they can search the Worklist screen using dropdowns, date range fields, and set multiple search criteria.
   9.1. **Location:** Dropdown field titled "Location:" that defaults to the user's home lab, and also narrows the manifest list to show only those manifests that have the user's home lab as either the Ship From or Ship To location.
      9.1.1. Users should have the ability to change this location in the dropdown to alter the manifest list view per location.
      9.1.2. The Location dropdown list should contain all of the lab locations that are set as a Manifest Lab in Lab Management 2.0.
         9.1.2.1. The following labs should be set up as Manifest Labs at this time: NeoGenomics Florida, NeoGenomics California, NeoGenomics Tennessee, NeoGenomics Atlanta, NeoGenomics Houston, and NeoGenomics Europe, SA.
      9.1.3. The dropdown should also have an "All" option at the top of the list to view all Manifests that fit the search criteria regardless of location.
   9.2. **Mode:** Text "Mode:" with checkboxes after it in the following order: "Shipping", "Receiving", "Completed".
      9.2.1. The search results should return manifests that fit the search criteria for the mode(s) checked, and leave out manifests in the mode(s) that are unchecked.
      9.2.2. By default, Shipping and Receiving should be checked and Completed should be unchecked.
   9.3. **Column header dropdown:** lists all column headers and allows the user to set up search criteria based on the header chosen. This should work as the worklist does. See 10 below for columns.
      9.3.1. This should be an untitled dropdown field under the Location dropdown in the ribbon.
      9.3.2. Provide an "All" option as the default search criteria for this dropdown that will bring up all manifests with created dates between the default dates.
   9.4. **Keyword search text box:** free text entry box that allows the user to enter keywords for a search.
      9.4.1. The system should match based on keyword search either by partial matches and/or exact matches. This should work as the worklist does.

9.5. **+ icon:** button that works as the one in the worklist and adds an extra column header dropdown to allow the user to filter results based on the column header or add additional search criteria.

9.6. **Date Range tool:** The user should be able to set any date range in the search parameters similar to how they can in the Worklist screen.

9.6.1. The furthest back the user should be able to go in the new Manifest List screen is the date the first new manifest is created.

9.6.2. When first accessing the Manifest List screen during a session, default the date range to show manifests created within the past 7 days of the date the user accesses the screen.

9.7. **Search button:** prompts the system to search the manifest based on the search criteria input into the dropdowns and the keyword search box.

9.8. **Clear button:** resets the search criteria and the search results back to default settings and results.

10. Under the ribbon, provide a list of manifests that fit the search criteria that looks and functions similar to the Worklist and are divided by columns.

10.1. The available columns in the list should be: Manifest Number, Ship From, Ship To, Created Date, Step, Mode, Ship Date, Received Date, Completed Date, and Manifest PDF (see image above).

10.1.1. **Manifest Number:** Lists the manifest number and allows the user access to that particular manifest and its list of specimens

10.1.2. **Ship From:** Lists the Ship From lab location

10.1.3. **Ship To:** Lists the Ship To lab location

10.1.4. **Created Date:** Lists the date the manifest was created; this date should be the date and time the manifest first enters into Shipping Mode and the Build workflow step (see 41 and 45 below).

10.1.4.1. This column should be set as the default sort column in ascending order.

10.1.5. **Step:** Lists the workflow step the manifest is in at any one time

10.1.6. **Mode:** Lists the mode the manifest is in at any one time

10.1.7. **Ship date:** Lists the date the specimens are considered shipped; this should be the date and time the user clicks Complete Step and moves the manifest into Receiving Mode and the workflow step into In Transit (see 41 and 58 below).

10.1.8. **Received Date:** Lists the date the specimens are considered received; this should be the date and time the user clicks Complete Step and moves the workflow step into Verify Receipt (see 41 and 61 below).

10.1.9. **Completed Date:** Lists the date the manifest is considered completed; this should be the date and time the user clicks Complete Step and moves the manifest into Completed Mode and the workflow step to Complete (see 41 and 73 below).

10.1.10. **Manifest PDF:** Contains a PDF icon that accesses the most recently generated Manifest PDF (In Transit or Completed). See 58.4 and 73.4 below.

11. The user should have flexibility in their view and search results based on the column order, sort, etc.

11.1. All columns should be sortable.

11.2. Allow the user to change the sort column by clicking on another column header.

11.3. Allow the user to toggle between ascending and descending sort order by clicking on the column header of the sort column.

11.4. Allow the user to move columns by clicking and dragging into any order they wish.

11.4.1. The user should not have to save this. It should be autosaved once dropped.

12. If a user navigates away from the Manifest List screen during a session, allow the user to return to the same search results if they return during the same session.

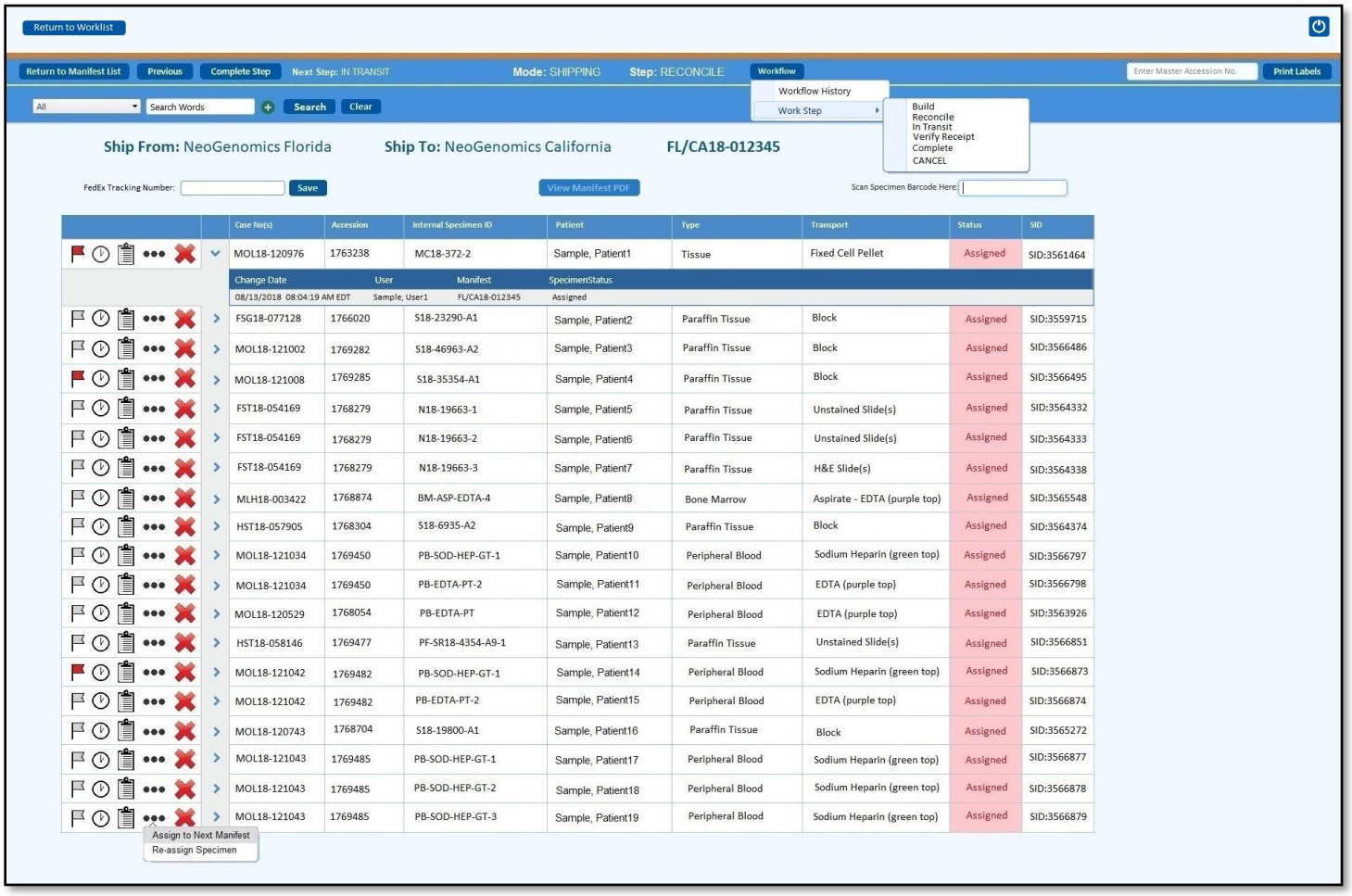
13. If a user ends a session, the search results should return to the default settings.

Locating and Accessing a Manifest

14. The user should be able to access a particular manifest (and its list of specimens) by clicking on the actual manifest number in the Manifest List screen as they do today.

Manifest Screen Design

Mockup of Manifest screen:



15. At the top of the manifest screen, the user should see a static orange and blue ribbon containing buttons, workflow step and mode information, along with a search tool, and a print label tool.

15.1. In the ribbon, provide the following in the following order: “Return to Manifest List” button, “Previous” button, “Complete Step” button, the manifest’s next workflow step, the manifest’s current mode, the manifest’s current workflow step, “Workflow” button, Master Accession number entry field, and a “Print Labels” button.

15.1.1. **Return to Manifest List button:** this button should save the changes made by the user and return the user back to the Manifest List screen.

15.1.2. **Previous button:** this button should pull the manifest back to the previous workflow step and the accompanying manifest mode.

15.1.2.1. Statuses should also be pulled back to what they were previous to the step the user is pulling the case back from.

15.1.3. **Complete Step button:** this button should push the manifest mode and workflow step to the next mode and/or step. Specimen statuses should also change (outlined further below).

15.1.4. **Manifest’s next workflow step:** format this as “Next step:” with the next workflow step listed after this in all caps.

15.1.5. **Manifest’s current mode:** format this as “Mode:” in bold with the current manifest mode listed after this in all caps. This should be located at about the middle of the page.

15.1.6. **Manifest’s current workflow step:** format this as “Step:” in bold with the current manifest workflow step listed after this in all caps. This should be located after the mode at about the middle of the page.

15.1.7. **Workflow button:** this button should offer two options: Workflow History and Work Step when clicked.

15.1.7.1. Workflow History should be a button that opens a pop-up window listing the workflow step and accompanying mode history that looks similar to how workflow history is being tracked for cases currently.

15.1.7.1.1. The workflow and mode history should tag the user that made the change along with date and timestamps, and the workflow step changes.

15.1.7.1.2. The pop-up should close using an “X” in the top right corner of the window. This should close without making any changes.

15.1.7.2. Work Step should be a hover over that lists the workflow steps (see Manifest Workflow: Modes and Steps) for the manifest like it does for a case in the Case Status screen.

15.1.7.2.1. Users should be allowed to push the workflow to any step, or pull back from any step (except for Cancel), using this work step menu.

15.1.7.3. The workflow button should be active for all manifests at all times regardless of mode or step (includes Complete and Cancelled).

15.1.8. **Master Accession number entry field:** this should be a numeric only entry field that is used to enter the Master Accession number to look up and print labels using the Neo Label App.

15.1.8.1. In the field provide the following text “Enter Master Accession No.” in dark gray font that disappears when the user types in the field.

15.1.9. **Print Labels button:** this button should look up the Master Accession number entered in the field in 15.1.8 above and pull up the Neo Label App and the applicable labels under that Master Accession number.

16. Underneath the top ribbon, provide another blue ribbon with a small white break between the two. This should look similar to what is in the input screens currently.
    16.1. In this ribbon, provide the following in the following order: dropdown that lists column headers, keyword search text box, + icon, “Search” button, and “Clear” button.
        16.1.1. **Column header dropdown:** lists all column headers and allows the user to set up search criteria based on the header chosen. This should work as the worklist does. See 21 below for columns.
        16.1.2. **Keyword search text box:** free text entry box that allows the user to enter keywords for a search.
            16.1.2.1. The system should match based on keyword search either by partial matches and/or exact matches. This should work as the worklist does.
        16.1.3. **+ icon:** button that works as the one in the worklist and adds an extra column header dropdown to allow the user to filter results based on the column header.
        16.1.4. **Search button:** prompts the system to search the manifest based on the search criteria input into the dropdowns and the keyword search box.
        16.1.5. **Clear button:** resets the search criteria and the search results back to default settings and results.

17. At the top of the manifest screen always list the Ship From location, Ship To location, and the manifest number for that manifest.
    17.1. Format the Ship From location as “Ship From:” in bold with the ship from location listed after it (not bold).
    17.2. Next to the Ship From location, format the Ship To location as “Ship To:” in bold with the ship to location listed after it (not bold).
    17.3. Next to the Ship To location, list the manifest number in bold.

18. Under the Ship From/Ship To/manifest number, provide an optional field titled “FedEx Tracking Number:” with a field for free text entry box and a “Save” button after this.
    18.1. The user should be able to enter an alphanumeric number into the free text entry box and click save to save the number to the manifest.
        18.1.1. This should remain on the manifest at all times unless removed or changed by a user.
    18.2. After clicking Save, the button should change to “Edit” and allow the user to edit the number entered.
        18.2.1. The Edit button should change to “Save” after it is clicked.
    18.3. The user should then be able to save the edited entry by clicking the Save button again.

19. Next to the FedEx Tracking Number field, provide a “View Manifest PDF” button that pulls up a PDF version of the manifest list.
    19.1. The button should be inactive if an In Transit or Completed Manifest list has not yet been generated, and active when they have (see 58.4 and 73.4 below).
    19.2. The button should pull up the manifest list that was most recently generated.

19.3. The PDF should be in a separate window that can be closed by clicking an "X" in the upper right corner.
    19.3.1. The user should be allowed to print or save the manifest from this window.
19.4. Clicking this button should not change the manifest in any way, nor should it advance the manifest to another mode or step.

20. Next to the "View Manifest PDF" button, provide a field titled "Scan Specimen Barcode Here:" and an entry box for the user to scan a specimen barcode.
    20.1. The specimen label scanned in the box will be embedded with the Case Number and SID (FLG18-021597|SID:3341029). Just as the current manifest does, these numbers should be used to validate the specimen on the manifest and move the specimen through statuses and workflow (see below).

21. Under the FedEx Tracking Number, View Manifest PDF button, and Barcode Scan field, specimens should be listed in a grid as they are now in the current manifest.
    21.1. Provide the following column headers in the grid: "Case No(s)", "Accession", "Internal Specimen ID", "Patient", "Type", "Transport", "Status", and "SID".
        21.1.1. **Case No(s):** Lists the Case Number(s) that the specimen is assigned to.
        21.1.2. **Accession:** Lists the Master Accession Number the specimens are accessioned under.
        21.1.3. **Internal Specimen ID:** Lists the Internal Specimen ID of the specimen.
        21.1.4. **Patient:** Lists the first and last name of the patient in the following format: Last, First.
        21.1.5. **Type:** Lists the Specimen Type for the specimen.
        21.1.6. **Transport:** Lists the Specimen Transport of the specimen.
        21.1.7. **Status:** Lists the status of the specimen as it pertains to the manifest (see below).
        21.1.8. **SID:** Lists the specimen's SID number.
        21.1.9. Add a blank column with an arrow that expands/collapses the status change history per specimen. This should be collapsed by default.
            21.1.9.1. The change history should show the change date and time, the user's name that made the change, the manifest number the change was made on/to, and the specimen status changes. This should also include re-assignment to another manifest along with that manifest's number, but should end there.
                21.1.9.1.1. Additionally, that new manifest should begin with reference to the specimen's removal from the previous manifest along with that manifest number, and continue tracking change history as it pertains to the manifest from there.
    21.2. These columns should be sortable, allowing the user to toggle between ascending and descending sort order by clicking on the column header of the sort column.
    21.3. Allow the user to change the sort column by clicking on another column header.
        21.3.1. The user should not have to save this. It should be autosaved.
    21.4. Allow the user to move columns by clicking and dragging into any order they wish.
        21.4.1. The user should not have to save this. It should be autosaved once dropped.
    21.5. Anytime the user returns to a manifest screen, this is the view that they should have since it was the last view saved.

Specimen Manifest New Logic

Specimen manifests should be driven off of the following logic:

22. Specimen Manifests are only eligible for specimen transfers from one NeoGenomics Lab to another at this time. This should be designated and controlled via the Manifest Lab checkbox in Lab Management 2.0 (see 3 above).
    22.1. Eligible labs at this time should only include NeoGenomics Florida, NeoGenomics California, NeoGenomics Tennessee, NeoGenomics Atlanta, NeoGenomics Houston, and NeoGenomics Europe, SA.
    22.2. All labs listed above should be able to send and/or receive specimens via the new manifest screens.
    22.3. If a new lab is created in Lab Management 2.0, and the Manifest Lab box is checked, the new lab should also be able to send and receive specimens via the manifest.
    22.4. Adjust the Spec. Manifest dropdown in the Accessioning screen to include only labs that have the Manifest Lab box checked.
        22.4.1. Any new lab that is created and designated as a Manifest Lab should be added to this list as well by checking the Manifest Lab box.

23. Specimen Manifest creation and specimen assignment to a manifest should be done by the system automatically when the user clicks Launch in the Accessioning screen.
    23.1. This should be driven off of differing Case Creation and TCP lab assignments on a case, but only for those labs designated as a Manifest Lab using the checkbox in Lab Management 2.0.
    23.2. The Case Creation lab (also the user's home lab) should be considered the "Ship From" location, and the TCP lab should be considered the "Ship To" location.
    23.3. Only assign the specimens assigned to the case to the manifest.

24. A new manifest should be created if one does not exist with that particular Ship From and Ship To combination, or if the manifest with the same locations are in any of the following workflow steps: "In Transit", "Verify Receipt", "Complete", or "Cancelled" (see Manifest Workflow: Modes and Steps).
    24.1. Manifest Creation should happen when the user clicks Launch.

25. If there is an existing manifest with the same Ship From and Ship To locations, and that manifest workflow step is in either in "Build" or "Reconcile", the specimens assigned to the case should be added to that existing manifest (see Manifest Workflow: Modes and Steps).

26. The Spec. Manifest area of the specimen grid in the Accessioning screen should also reflect the Ship To location assigned by the system for each applicable specimen.
    26.1. This should happen when the user clicks Launch.

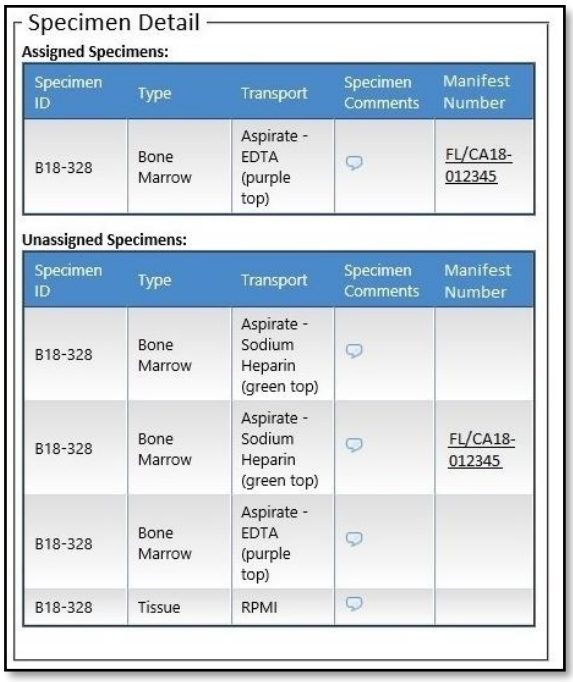
27. If the Case Creation lab is the same as the TCP lab assignment on a case, the system should not create a manifest or add the assigned case specimen(s) to a manifest.

28. When a manifest is created, it should be assigned a Manifest Number.
    28.1. Manifest naming and numbering should follow the convention outlined below:
    [Ship From location's Manifest Abbreviation]/[Ship To location's Manifest Abbreviation][last 2 digits of year of creation]-[6 digit maximum sequential number]
    For example, shipping from NeoGenomics Florida to NeoGenomics California, the manifest number should appear as "FL/CA18- 012345".
    28.2. Manifest Abbreviations should be as follows for the labs listed in 22.1 above:
        NeoGenomics Florida = FL
        NeoGenomics California = CA
        NeoGenomics Tennessee = TN
        NeoGenomics Atlanta = AT
        NeoGenomics Houston = HU
        NeoGenomics Europe, SA = EU
    28.3. The 6 digit manifest number should be sequential regardless of the Ship From or Ship To locations as it is now.

29. Allow users to manually assign or change the assignment of individual specimen(s) to a manifest using the existing "Spec. Manifest" dropdown in the Accessioning screen.
    29.1. The specimen(s) should be assigned to a manifest, or the assignment should trigger creation of a new manifest, based on differing labs between the user's home lab and the Spec. Manifest selection.
        29.1.1. The user should not be allowed to choose their own home lab location in the Spec. Manifest list. This is the current functionality and should remain unchanged.
    29.2. The user's home lab should be considered the "Ship From" location, and the Spec. Manifest lab should be considered the "Ship To" location.
        29.2.1. Assignment to a manifest via the Spec. Manifest field should not change the TCP lab assignment of a case.
            29.2.1.1. The TCP should only be allowed to be changed by a user or preset based off of the user's home lab when the case is first created.
    29.3. The ability to change specimen manifest assignment or assign a specimen to a manifest via the Spec. Manifest field should apply to all specimens including unassigned specimens.

30. The manifest number of the specimen(s) assigned to a manifest should also be shown in the Case Status screen in a new column of the Specimen Detail section titled "Manifest Number".
    30.1. This should show per specimen and should show in both the Assigned Specimen and Unassigned Specimen grids.
    30.2. Underline the specimen manifest number in this column to show it as a hyperlink to open another window (see 90.1 below).

30.3. This column should not be visible to remote users while in the Case Status screen as it will be used for internal visibility only.


Specimen Detail

Assigned Specimens:

Specimen ID	Type	Transport	Specimen Comments	Manifest Number
B18-328	Bone Marrow	Aspirate - EDTA (purple top)		FL/CA18-012345

Unassigned Specimens:

Specimen ID	Type	Transport	Specimen Comments	Manifest Number
B18-328	Bone Marrow	Aspirate - Sodium Heparin (green top)		
B18-328	Bone Marrow	Aspirate - Sodium Heparin (green top)		FL/CA18-012345
B18-328	Bone Marrow	Aspirate - EDTA (purple top)		
B18-328	Tissue	RPMI		

31. Specimen movement through the manifest workflow should be tracked using its unique SID number.

32. One SID should not be able to be assigned to two of the same manifest modes at the same time unless the specimen is removed or missing (see below).
    32.1. Applies to the Shipping and Receiving modes only.
    32.2. 2 Shipping Manifests = No
    32.3. 2 Receiving Manifests= No; also somewhat of an invalid scenario as 32.2 should prevent this from happening.

33. One SID can be assigned to two (or more) different types of manifests at one time, but there are some limitations:
    33.1. Shipping and Completed = Yes, always acceptable
    33.2. Receiving and Completed = Yes, always acceptable
    33.3. Shipping and Receiving = Shipping Mode should change to Receiving within the workflow process; workflow should be completed under one Manifest Number before assigning the same SID to another.

34. Completed Manifests may always have a duplicate SID between them since the user can realistically transfer a specimen from one lab to another multiple times.

35. Each time a change is made to the screen, the changes should be saved so that if the user navigates away from the screen and then goes back, that they can pick up where they left off.
    35.1. These changes should be made without the user having to wait or without the whole screen having to refresh.

35.2. Statuses of specimens should change as they are scanned.
35.3. The only exception should be when the user pushes a case to the next workflow step; the user should still not have to wait more than 3 seconds to see the page refreshed and changes made.

36. Changing the manifest assignment should not change the TCP lab.

37. If a user pulls a manifest back into a different step, the specimens should reflect the last status change before the workflow change took place. For example, if the user scanned in all specimens except for 1 on a manifest in the Reconcile step, then pushed it to In Transit, they should be able to pull the manifest back to Reconcile and only have to scan the 1 specimen instead of starting over.
    37.1. This same idea applies to all modes and steps when pulling back manifests.

38. Similar to a case, if a user pushes a case forward after pulling it back, and no changes were made, the manifest step and statuses should just move back to what it was before pulling back, without creating a new In Transit or Completed list (if applicable). See 58.4 and 73.4 below.

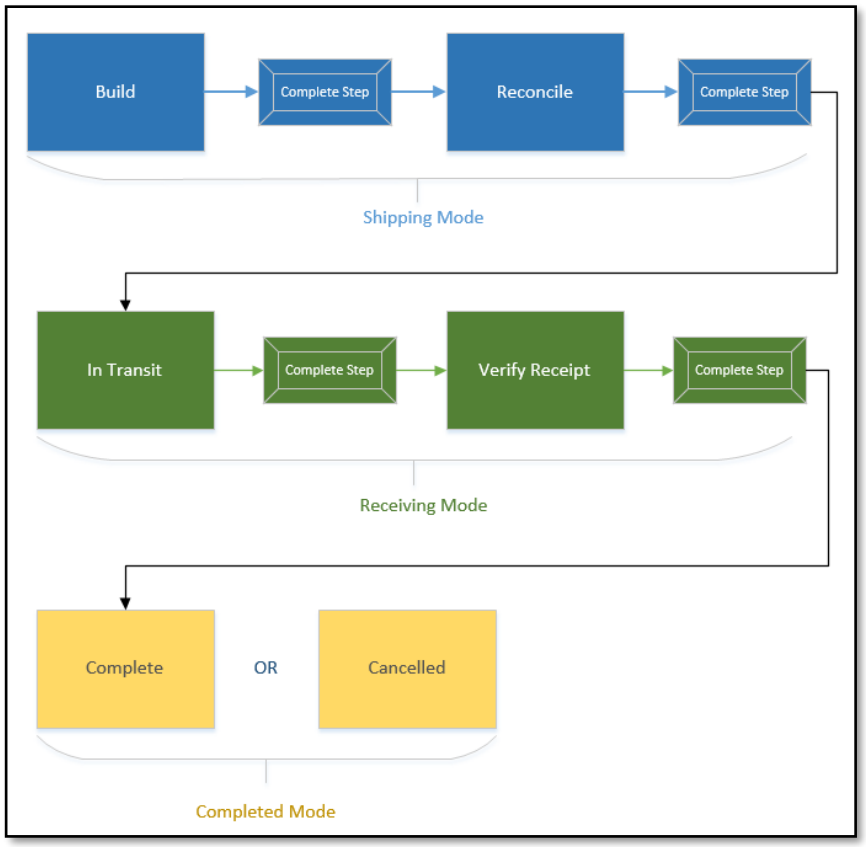
39. Pushing a case forward to another step (and accompanying mode) should follow the rules outlined below, but more specifically those in 57, 58, 72, and 73 below.

Manifest Workflow: Modes and Steps

40. When a new manifest is created, it should first be assigned a manifest number according to rules outlined in 28 above.

41. The manifest should have a workflow associated to it, similar to a case type in NeoLINK. Additionally, there should be three different manifest modes: “Shipping” mode, “Receiving” mode, and “Completed” mode.
    41.1. Under Shipping Mode, there should be two workflow steps: “Build”, followed by “Reconcile”.
    41.2. Under Receiving Mode, there should be two workflow steps: “In Transit”, followed by “Verify Receipt”.
    41.3. Under the Completed Mode, there should be two separate workflow steps: “Complete” and “Cancelled”.
    41.4. Between each manifest mode and workflow step, the user should click a button titled “Complete Step”, to advance the mode and step, similar to working through a case. See below for example of overall workflow and mode switching process and order.
        41.4.1. Cancelling a manifest will be done differently, and is detailed later in this document.
    41.5. Allow the user to pull the manifest workflow (and associated mode) back or push it forward manually similar to a how users can with a case.

41.5.1. Users should only be able to select a workflow step during this process, but the mode should automatically be changed with the associated workflow step chosen. For example, if the manifest workflow step was in In Transit (the mode set to Receiving Manifest), and the user pulls the workflow step back to Reconcile, the mode should automatically switch back to Shipping Mode since that is the mode associated with the Reconcile workflow step.



Manifest Workflow: Specimen Status

42. Each specimen in a manifest should have a status at all times that will change as the user moves through the manifest workflow. There are 8 possible statuses a specimen may have at any one time during workflow:
    42.1. Assigned
        42.1.1. This status is used when a specimen is assigned to a manifest, but the specimen label has not yet been scanned to verify that it is ready to ship.
    42.2. Scanned
        42.2.1. This status is used when a specimen that was previously assigned to a manifest, has had its label scanned during the manifest workflow, matching the SID on the label to the SID on the manifest list.
    42.3. Additional
        42.3.1. This status is used when a specimen was not assigned to a manifest, but has had its label scanned during the manifest workflow.
    42.4. Removed
        42.4.1. This status is used any time the user clicks the remove icon for the specimen during the manifest workflow (see 79.5 and 52 below).

42.5. Missing
    42.5.1. This status is used when an Assigned or In Transit specimen has not had its label scanned, but the user pushes through the workflow.
42.6. In Transit
    42.6.1. This status is used when a specimen label has been scanned, and is considered In Transit to the Ship To location.
42.7. Complete
    42.7.1. This status is used when a specimen label has been scanned in the Verify Receipt step, and then the manifest workflow for that specimen has been completed.
42.8. Cancelled
    42.8.1. This status is used when a manifest is cancelled. All specimens should have this status when a manifest is cancelled.

43. Each specimen status should be listed in the "Status" column and the status box and status text for that specimen should change color based on the status within:
    43.1. Assigned = Light Red, with dark red text
    43.2. Scanned = Light Green, with dark green text
    43.3. Additional = Light Yellow, with dark yellow text
    43.4. Removed = Light Gray, with dark gray text
    43.5. Missing = Light Orange, with dark orange text
    43.6. In Transit = Light Blue, with dark blue text
    43.7. Complete = White, with black text
    43.8. Cancelled = Dark gray, with white text
    43.9. The background color of each box should be light enough (or dark enough for cancelled statuses) that the user can easily read the status text inside.

Specimen Manifest Workflow Logic

Shipping Mode: Workflow Steps and Statuses

44. While going through workflow, specimens in the manifest list should be organized and grouped first by status, then ordered in those groups by the default sort column in ascending or descending order as set by the user.

Build Step and Statuses

45. The manifest should start in Shipping Mode when it is first created, with the first workflow step set to "Build", and each specimen assigned should have the red status box with the status as "Assigned".
    45.1. While in Build, the manifest should be accumulating a list of specimens either assigned by the system using rules in 22 through 23 above, or assigned by the user using rules in 29 above.
    45.2. While in Shipping Mode and in the Build step only, specimen assignment to a manifest should be considered a record of where the specimen should eventually end up, meaning that specimens should eventually be reconciled (by scanning the labels) with the specimen assignment on the manifest and sent to another lab, but they should not be considered physically in a location when initially assigned to the manifest. See 55 below.

46. All Assigned specimens should be grouped at the top of the manifest, and any specimen that has been removed (see below) should be grouped at the bottom of the manifest.

Reconcile Step and Statuses

47. The user should click Complete Step to move to the next workflow step under Shipping Mode, "Reconcile".
    47.1. Specimen statuses should remain as "Assigned" and the boxes should remain red.
    47.2. The system and the user should still be able to add specimens to the manifest in this step.

48. In the Reconcile step, the user will scan the specimen labels of those specimens that will be physically sent to the Ship To location. The SID embedded in specimen labels scanned in during this step should be reconciled against the SID assigned to the manifest during the Build step.
    48.1. When the user scans the specimen label with the embedded Case Number and SID (FLG18-021597|SID:3341029), change the color of the status box to green, the status to "Scanned", and move this specimen to the very bottom of the list under any removed specimens (to ensure that specimens that are not yet scanned are easily visible at the top of the screen).
        48.1.1. This should only happen if the specimen was previously listed in the manifest when the user moved the workflow step to Reconcile.

49. The status and color change of the specimen and movement of it on the list should happen instantaneously. The user should not have to wait or do anything extra to accomplish this.

50. If a specimen is scanned and is assigned to another manifest that is in Shipping or Receiving modes only, list the Internal Specimen ID, the Patient Name, the Case Number, and the other Manifest Number in the alert, and ask the user if they want to add the specimen to the manifest. Do not allow the user to exit the alert window without first selecting one of the options below.

    Example:

    Case Number: MOL18-123456
    Patient: Doe, John
    Internal Specimen ID: SP18-12345

    This specimen is already assigned to manifest CA/TN18-011223. Would you like to add this specimen to the current manifest?

    50.1. Allow the user to choose between two buttons to perform different actions in this alert:
        50.1.1. "No"
            50.1.1.1. 4 things should happen when the button is clicked:
                50.1.1.1.1. Close the alert window
                50.1.1.1.2. Return the user to the manifest screen
                50.1.1.1.3. Do not add the specimen to the current manifest the user is working on
                50.1.1.1.4. The specimen should remain assigned to the manifest it was originally assigned.
        50.1.2. "Yes"
            50.1.2.1. 8 things should happen when the button is clicked:

50.1.2.1.1. Close the alert window
50.1.2.1.2. Return the user to the manifest screen
50.1.2.1.3. Remove the specimen from the other manifest
50.1.2.1.4. Set the status of the specimen in the other manifest to "Removed" with a light gray box
50.1.2.1.5. Change the Spec. Manifest lab in the Accessioning screen to that of the new Ship To location
50.1.2.1.6. Add the specimen to the manifest the user is currently in
50.1.2.1.7. Label the specimen's status as "Additional" with a yellow colored box
50.1.2.1.8. Move the specimen to the appropriate spot on the manifest (see 51.2 below)

51. If a specimen was not previously assigned to the manifest, allow the user to add it to the manifest by scanning the label.
    51.1. If this is done, the status of the specimen should be listed as "Additional" and the status box should be yellow. This only applies to specimens that were not previously assigned to the manifest.
    51.2. Once scanned, Additional specimens should be moved below the last Assigned specimen and above the first Removed specimen (or Scanned specimen) in the manifest list (see below).

52. Specimens should be able to be removed from a manifest via a remove icon for each specimen.
    52.1. This icon should be a red X and located in the action icon column (see 79.5 below).
    52.2. The system should perform 5 actions when this button is clicked:
        52.2.1. Change the specimen status to "Removed"
        52.2.2. Color the status box light gray
        52.2.3. Move the specimen to the appropriate place in the manifest: above Scanned specimens and below Additional specimens.
        52.2.4. Remove the SID-manifest relationship on the back end so that the specimen can be assigned to another manifest without error.
        52.2.5. Remove the Spec. Manifest assignment in the Accessioning screen. This field should be blank.

53. Specimens that have been removed should always appear on the manifest all the way through workflow, and should even appear on the Completed Manifest with the Removed status and gray box.

54. If a previously removed specimen label is scanned, alert the user that the specimen was previously removed from that manifest and ask the user if they would like to proceed and add the specimen to the manifest.
    54.1. Allow the user to choose between two buttons to perform different actions in this alert:
        54.1.1. "No"
            54.1.1.1. 4 things should happen when the button is clicked:
                54.1.1.1.1. Close the alert window
                54.1.1.1.2. Return the user to the manifest screen
                54.1.1.1.3. Do not add the specimen to the current manifest the user is working on
                54.1.1.1.4. The specimen should remain "removed" from the manifest.

54.1.2. "Yes"

54.1.2.1. 6 things should happen when the button is clicked:

54.1.2.1.1. Close the alert window

54.1.2.1.2. Return the user to the manifest screen

54.1.2.1.3. Add the specimen to the manifest, re-establishing the SID-manifest relationship

54.1.2.1.4. Set the status of the specimen in the manifest to "Additional" with a yellow box

54.1.2.1.5. Move the specimen to the appropriate place on the manifest

54.1.2.1.6. Change the Spec. Manifest lab in the Accessioning screen to that of the Ship To location

55. Up until a specimen label is scanned into the manifest while in Reconcile, the specimen location should be able to be logged in the system (in the same History section of the Specimen Detail window used currently) as it moves around the lab.

55.1. Once a specimen is scanned into the manifest while in Reconcile, the manifest should be considered the "location" for that specimen all the way to when the manifest mode switches to Completed and the workflow step is "Complete".

55.1.1. The above is true unless the specimen is removed and not assigned to another manifest, missing (see 57.1.2.1.2 below), or the manifest is cancelled.

56. The user should click Complete Step once all specimen labels have been scanned.

Receiving Mode: Workflow Steps and Statuses

In Transit Step and Statuses

57. If there are any specimens with a status of "Assigned" when Complete Step is clicked during the Reconcile step, the system should alert the user via pop-up that there are unreconciled specimens on the manifest and ask the user if they would like to continue.

57.1. Allow the user to choose between two buttons to perform different actions in this alert:

57.1.1. "No"

57.1.1.1. The system should perform 2 actions when the button is clicked:

57.1.1.1.1. Close the alert window,

57.1.1.1.2. Return the user to the manifest screen with no changes made to the manifest

57.1.2. "Yes"

57.1.2.1. The system should perform 4 actions when the button is clicked:

57.1.2.1.1. Close the alert window

57.1.2.1.2. Change any "Assigned" status to "Missing" and change the color of the box to orange.

57.1.2.1.3. Move the specimen to the appropriate place on the manifest: at the very top

57.1.2.1.4. Proceed with the workflow outlined below beginning at 58.2.

58. After clicking Complete Step to move the step from Reconcile to In Transit, the system should perform several actions:

58.1. Check for specimens with the "Assigned" status and alert the user (see 57 above).

58.2. Switch all “Scanned” and “Additional” specimen statuses to “In Transit” and their respective status boxes to blue.
58.3. Specimens with the status “Removed” and “Missing” should remain as they are and should continue to appear toward the top of the manifest, with Missing specimens at the very top.
58.4. Generate a PDF list of all the specimens as they stand on the manifest, including Removed, Missing, and/or In Transit statuses. Title this list “In Transit Manifest”. See In Transit Manifest PDF Design for more details on the PDF.
58.5. Move the manifest to the next mode, Receiving Mode, and the next workflow step, In Transit.

59. While in the In Transit step the specimen manifest list should not be able to be altered in any way.
59.1. Deactivate the scan field while in this step.
59.2. Allow the user to search the list, Print labels, edit/add/remove the Fed Ex tracking number, and to move through the workflow via the Workflow, Previous, and/or Complete Step buttons.

60. The manifest should still be considered a specimen’s location while in this step unless it was removed, missing, or if the manifest was cancelled.

Verify Receipt Step and Statuses

61. Clicking Complete Step should move the manifest to the next workflow step under Receiving Mode, “Verify Receipt”.
61.1. The status of all specimens should remain as “In Transit”, but change the box color to red.
61.2. The user should not be able to scan in any specimen without first clicking Complete Step to get the step into “Verify Receipt”.
61.2.1. Keep the scan field deactivated until the step is in Verify Receipt.
61.3. All In Transit specimens should appear at the top of the manifest. Missing specimens should be under these specimens.

62. In this step, the user should be able to scan in the specimens that have been physically received from the Ship From location. The SID embedded in the specimen labels scanned in during this step should be reconciled against the SID in the In Transit Manifest.
62.1. When the user scans the specimen label with the embedded Case Number and SID (FLG18-021597|SID:3341029), change the color of the status box to green, the status to “Scanned”, and move this specimen to the very bottom of the list (to ensure that specimens that are not yet scanned are easily visible at the top of the screen).
62.1.1. This should only happen if the specimen was previously listed in the In Transit Manifest.

63. The status and color change of the specimen and its movement should happen instantaneously. The user should not have to wait or do anything extra to accomplish this.

64. If a specimen is scanned and is assigned to another manifest that is in Shipping or Receiving modes only, list the Internal Specimen ID, the Patient Name, the Case Number, and the Manifest Number in the alert,

and ask the user if they want to add the specimen to the manifest. Do not allow the user to exit the alert window without first selecting one of the options below.

Example:

Case Number: MOL18-123456
Patient: Doe, John
Internal Specimen ID: SP18-12345

This specimen is already assigned to manifest CA/TN18-011223. Would you like to add this specimen to the current manifest?

64.1. Allow the user to choose between two buttons to perform different actions in this alert:
- 64.1.1. "No"
  - 64.1.1.1. 4 things should happen when the button is clicked:
    - 64.1.1.1.1. Close the alert window
    - 64.1.1.1.2. Return the user to the manifest screen
    - 64.1.1.1.3. Do not add the specimen to the current manifest the user is working on
    - 64.1.1.1.4. The specimen should remain assigned to the manifest it was originally assigned.
- 64.1.2. "Yes"
  - 64.1.2.1. 7 things should happen when the button is clicked:
    - 64.1.2.1.1. Close the alert window
    - 64.1.2.1.2. Return the user to the manifest screen
    - 64.1.2.1.3. Remove the specimen from the other manifest
    - 64.1.2.1.4. Set the status of the specimen in the other manifest to "Removed" with a gray box
    - 64.1.2.1.5. Change the Spec. Manifest lab in the Accessioning screen to that of the new Ship To location
    - 64.1.2.1.6. Add the specimen to the manifest the user is currently in
    - 64.1.2.1.7. Label the specimen's status as "Additional" with a yellow colored box

65. If a specimen was not previously assigned to the manifest, allow the user to add it to the manifest by scanning the label. This may be a rare scenario.
- 65.1. If this is done, the status of the specimen should be listed as "Additional" and the status box should be yellow. This only applies to specimens that were not previously assigned to the In Transit Manifest.
  - 65.1.1. The specimen should be moved to the appropriate place in the manifest: above any Removed specimens and under any Missing specimens.

66. Specimens should be able to be removed from a manifest via a remove icon for each specimen.
- 66.1. This icon should be a red X and located in the action icon column (see 79.5 below).
- 66.2. The system should perform 5 actions when this button is clicked:
  - 66.2.1. Change the specimen status to "Removed"
  - 66.2.2. Color the status box gray

66.2.3. Move the specimen to the appropriate place in the manifest: above any Scanned specimen and below any Additional specimen.
66.2.4. Remove the SID-manifest relationship on the back end so that the specimen can be assigned to another manifest without error.
66.2.5. Remove the Spec. Manifest assignment in the Accessioning screen. This field should be blank.

67. Specimens that have been removed should always appear on the manifest all the way through workflow, and should even appear on the Completed Manifest with the Removed status and light gray box.
    67.1. This is not true for cancelled manifests; these should have a "Cancelled" status.

68. If a previously removed specimen label is scanned, alert the user that the specimen was previously removed from that manifest and ask the user if they would like to proceed and add the specimen to the manifest.
    68.1. Allow the user to choose between two buttons to perform different actions in this alert:
        68.1.1. "No"
            68.1.1.1. 4 things should happen when the button is clicked:
                68.1.1.1.1. Close the alert window
                68.1.1.1.2. Return the user to the manifest screen
                68.1.1.1.3. Do not add the specimen to the current manifest the user is working on
                68.1.1.1.4. The specimen should remain "removed" from the manifest.
        68.1.2. "Yes"
            68.1.2.1. 6 things should happen when the button is clicked:
                68.1.2.1.1. Close the alert window
                68.1.2.1.2. Return the user to the manifest screen
                68.1.2.1.3. Add the specimen to the manifest, re-establishing the SID-manifest relationship
                68.1.2.1.4. Set the status of the specimen in the manifest to "Additional" with a yellow box
                68.1.2.1.5. Move the specimen to the appropriate place in the manifest
                68.1.2.1.6. Change the Spec. Manifest lab in the Accessioning screen to that of the Ship To location

69. If a previously missing specimen is scanned, the status should change to "Scanned" (and the box to green) and the specimen should be moved to the appropriate place on the manifest.

70. The manifest should still be considered a specimen's location while in this step unless it is removed, missing, or cancelled.

71. The user should click Complete Step once all specimen labels have been scanned.

Completed Mode: Workflow Steps and Statuses

Complete Step

72. If there are any specimens with a status of "In Transit" when Complete Step is clicked in the Verify Receipt step, the system should alert the user via pop-up that there are unverified specimens on the manifest and ask the user if they would like to continue.
    - 72.1. Allow the user to choose between two buttons to perform different actions in this alert:
        - 72.1.1. "No"
            - 72.1.1.1. The system perform 2 actions when this button is clicked:
                - 72.1.1.1.1. Close the alert window
                - 72.1.1.1.2. Return the user to the manifest screen with no changes made to the manifest
        - 72.1.2. "Yes"
            - 72.1.2.1. The system should perform 4 actions when the button is clicked:
                - 72.1.2.1.1. Close the alert window
                - 72.1.2.1.2. Change any "In Transit" status to "Missing" and change the color of the box to orange.
                - 72.1.2.1.3. Move the specimen to the appropriate place in the manifest
                - 72.1.2.1.4. Proceed with the workflow outlined below beginning at 73.2.

73. After clicking Complete Step, the system should perform several actions:
    - 73.1. Check for specimens with the "In Transit" status and alert the user (see 72 above).
    - 73.2. Switch all "Scanned" and "Additional" specimen statuses to "Complete" and their respective status boxes to white.
    - 73.3. Specimens with the status "Removed" and "Missing" should remain as they are and should continue to appear toward the top of the manifest, with Missing specimens at the very top.
    - 73.4. Generate a PDF list of all the specimens as they stand on the manifest, including Removed, Missing, and/or Complete statuses. Title this list "Completed Manifest". See Completed Manifest PDF Design for more details on the PDF.
    - 73.5. Move the manifest to the next mode, Completed Mode, and the next workflow step, Complete.

74. While in the Complete step the Completed Manifest list should not be able to be altered in any way.
    - 74.1. Deactivate the scan field while in this step.
    - 74.2. Users should be able to pull back the manifest into another step and re-complete.
    - 74.3. Allow the user to search the list, Print labels, edit/add/remove the Fed Ex tracking number as well.

75. The specimens' location history should show the manifest as the last location, and the specimen should now be able to be transferred to a new manifest or to another department (unless the specimen was removed, missing, or cancelled).

Cancelled Step

76. Users should be able to cancel a manifest at any time by clicking the Workflow button (see 15.1.7 above), hovering over "Work Step", and clicking "CANCEL".

76.1. Users should be forced to enter a reason for cancelling a manifest in a text box at the top of the screen under the Ship From/Ship To/manifest number.
    76.1.1. This field should only appear if a manifest is cancelled.
    76.1.2. Users can save their comments by clicking a save button below the field.
    76.1.3. Users should not be able to edit their comments.
    76.1.4. The system should note the user and date/time of cancellation at the end of the comment.
    76.1.5. No PDF list should be generated.

77. Do not allow users to uncancel or move a manifest to another step after cancelling.
    77.1. Additionally, no changes should be allowed to be made to a cancelled manifest.

Additional Features

78. In the Manifest screen, the user should have access to action icons/buttons that perform different actions.
    78.1. Place these action icons in a column all together.
    78.2. These action icons should be: a flag, a clock, a clipboard, 3 dots, and a red X.

79. The icon should perform the actions outlined below:
    79.1. Flag: The flag should be gray by default, and when the user clicks the flag, it should turn red.
        79.1.1. If the user clicks the icon again, it should turn back to gray.
        79.1.2. If the flag is activated (red) it should stay that way, no matter the manifest step or mode, until a user clicks it again to deactivate it (gray).
            79.1.2.1. If the manifest is in Complete mode, do not allow users to deactivate the flag; they should have to pull the manifest back to do this.
    79.2. Clock: The clock icon should bring up a pop-up that lists a read-only version of specimen history as it pertains to the manifest only for now.
        79.2.1. This should be available even after a manifest is in the Complete workflow step.
        79.2.2. The user should be able to exit the pop-up and return to the manifest screen by clicking an X in the pop-up's upper right corner.
    79.3. Clipboard: The clipboard icon should bring up a pop-up screen called "Quick Look" listing the following information: Master Accession number, patient first and last name, client number, client name, Accessioning Comments, all cases under the accession with their test(s)/panel(s) and their assigned specimens, and all specimens under the accession. See 80 below.
    79.4. 3 Dots: The 3 dots icon should be a hover icon that brings up two options: "Assign to Next manifest", "Re-assign Specimen".
        79.4.1. Assign to Next Manifest: This should be a clickable option that prompts the system to perform the following actions: (please see Adjusted Requirements section below)
            ~~79.4.1.1. Removes the specimen from the current manifest (status should change to "Removed" and box should change color)~~
            ~~79.4.1.2. Create a new manifest with the same Ship From and Ship to locations once the current manifest is in the "In Tranist" step.~~

~~79.4.1.3. Assigns the specimen to this new manifest.~~

79.4.2. Re-assign Specimen: This should be a clickable option that issues a pop-up asking the user which Ship To location they wish to re-assign the specimen to.

79.4.2.1. The user should be provided a dropdown menu with all of the Ship To locations allowable. Allowable options should be all but the user's home lab and the current Ship To location of that manifest.

79.4.2.2. The user should be able to save the selection via a "Save" button, or exit the pop-up via a X in the upper right corner.

79.4.2.3. The system should be prompted to then perform the following actions when the user clicks Save:

79.4.2.3.1. Remove the specimen from the current manifest (status should change to "Removed" and box should change color)

79.4.2.3.2. Either create a new manifest if needed, or add it to an existing manifest in either the Build or Reconcile step. The Ship From location should always be the user's home lab and the Ship To location should be the location selected from the dropdown.

79.4.2.3.3. Change the manifest location in the Spec. Manifest field in specimen grid in the Accessioing screen.

79.5. Red X: This should be the remove button that allows the user to remove a specimen from a manifest (see 52 above).

80. In the Quick Look pop-up window accessed by clicking on the clipboard icon (see 79.3 above), the information in the window should be read only and some elements should look similar to the Case Status screen.

80.1. At the top of the pop-up window provide Master Accession number, Patient Name, Client Number, and Client Name.

80.2. Provide a Current Cases section that lists all the case numbers for that accession, the test/panel name on the case(s), the specimen(s) assigned to each case, the case workflow step, Case Creation Lab, TCP Lab, TCA Lab, and PC lab in a table format (see image below).

80.2.1. Allow the user to expand/collapse panels to see the tests under the panel via the same icon used in the worklist.

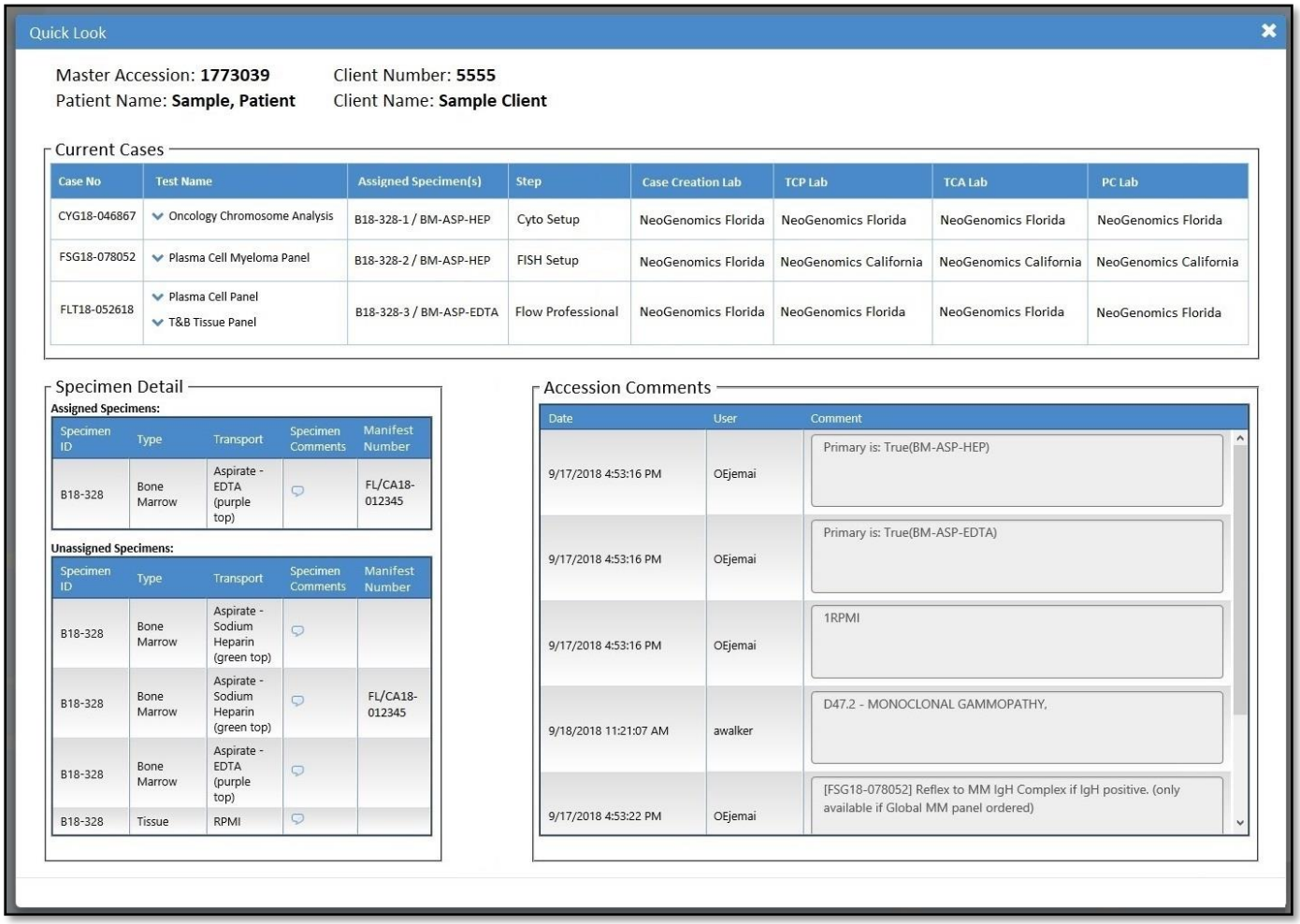
80.3. Provide the Specimen Detail section that lists the Assigned/Unassigned specimens used currently in the Case Status screen. This should include the new "Manifest Number" column as well.

80.4. Provide an Accession Comments section that lists all of the Accessioning Comments on the master accession, but do not provide a free text entry field. The comments should be read-only.

80.4.1. Format this similar to the Accession Comments section of the Case Status screen.

80.5. All sections should scroll independently if there is more information than what fits in the window.

80.6. See below mockup image for formatting.



Manifest PDF Design and Audit Trails

In Transit Manifest PDF Design

81. The PDF should pop-up in a separate window.

82. Allow the user to save the PDF to a location on their computer or to print a copy of the manifest, but do not require either.

83. The user should be able to exit the PDF and return to the manifest screen.

84. The PDF should be divided into columns and the specimens should be organized by status.
    84.1. The same columns from the Manifest screen should be on the PDF except for the action buttons column.
    84.2. The Fed Ex Tracking Number should also be on the manifest if one is entered. If not, do not show this.
    84.3. The Ship From and Ship To locations and the Manifest Number should be listed below the manifest title.

Completed Manifest PDF Design

85. The PDF should pop-up in a separate window.

86. Allow the user to save the PDF to a location on their computer or to print a copy of the manifest, but do not require either.

87. The user should be able to exit the PDF and return to the manifest screen.

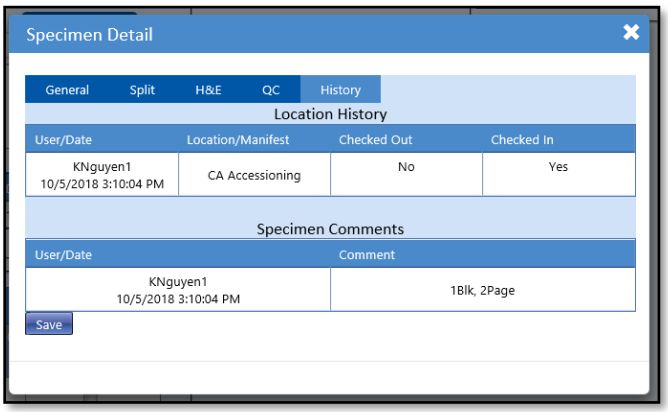
88. The PDF should be divided into columns and the specimens should be organized by status.
    88.1. The same columns from the Manifest screen should be on the PDF except for the action buttons column.
    88.2. The Fed Ex Tracking Number should also be on the manifest if one is entered. If not, do not show this.
    88.3. The Ship From and Ship To locations and the Manifest Number should be listed below the manifest title.

Audit Trails

89. The system should note and track all of these status changes as well as who performed them.
    89.1. Even the system should be noted if it assigned a specimen to a particular manifest.
    89.2. The manifest number should also be noted in the audit trail with each action associated directly with the manifest.

90. These audit trails should be accessible directly from the manifest screen (see 15.1.7.1 above) as well as from the case status screen.
    90.1. The user should be able to click on the manifest number link (underlined to show it as a link) in the Manifest Number column under Specimen Detail (for both Assigned and Unassigned specimen) to bring up the workflow/status history for the specimen as it pertains to the manifests only (see 30 above).

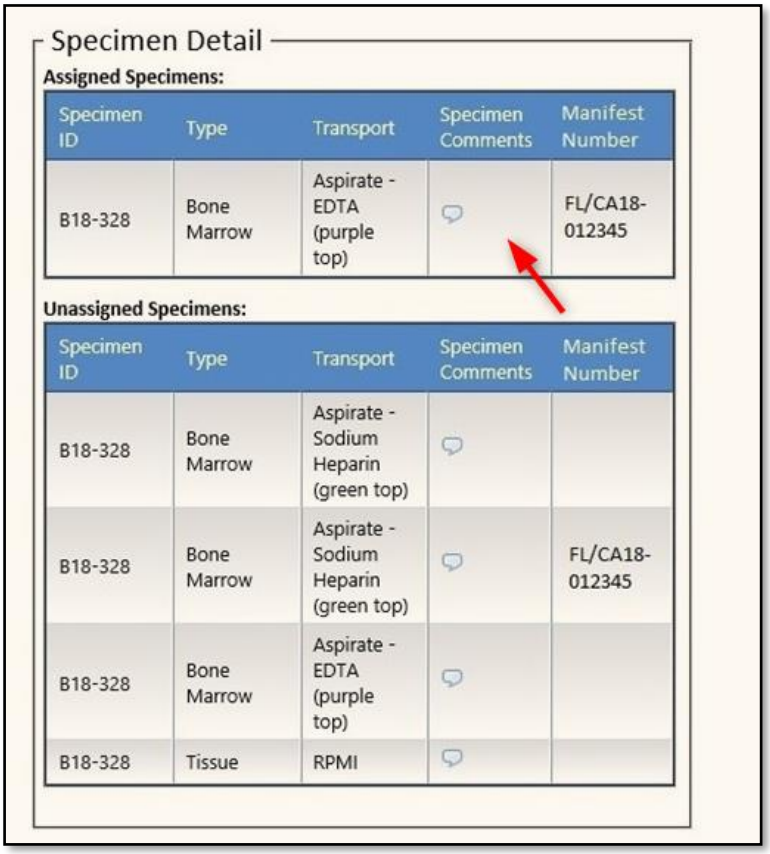
91. The manifest audit trail should no longer be part of the Specimen History page under Specimen Detail, but should be located in the area stated in 90 above.

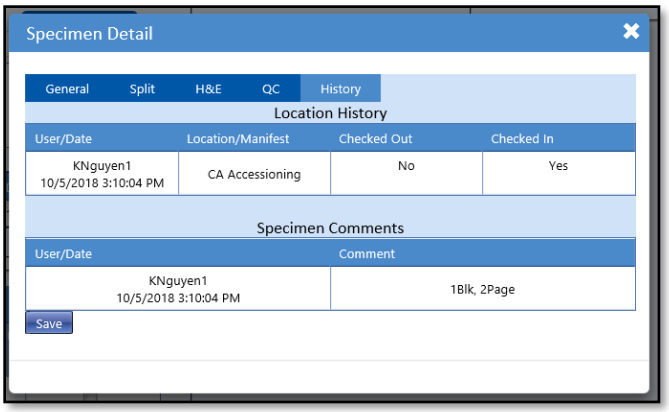


Requirement Clarifications

92. The new Specimen Manifest should not be linked in any way to Specimen Tracking.
    92.1. The simple Specimen Tracking page should still function, allowing users to track specimens from department to department, but this should not have any impact on the new Specimen Manifest logic.
        92.1.1. The Specimen Tracking page should not reference or track specimen movement on the manifest.

93. The Specimen Comments box (under Specimen Detail on the Case Status screen) should still pull up the Specimen Detail History as it pertains to the Specimen Tracking page only.





94. The new Manifest Number link (found under Specimen Detail in the Case Status screen) should only pull up the workflow/status history for the specimen as it pertains to the manifests only, like the information found by pulling up the popup by clicking on the clock icon (see 79.2 above).

Requirement Adjustments

95. Regarding requirements 79.4.1 through 79.4.1.3, original Requirements state:

> 79.4.1. Assign to Next Manifest: This should be a clickable option that prompts the system to perform the following actions: (please see Adjusted Requirements section below)
>
> 79.4.1.1. Removes the specimen from the current manifest (status should change to "Removed" and box should change color)
>
> 79.4.1.2. Create a new manifest with the same Ship From and Ship to locations once the current manifest is in the "In Tranist" step.
>
> 79.4.1.3. Assigns the specimen to this new manifest.

Adjusted requirements:

95.1. Assign to Next Manifest: This should be a clickable option that prompts the system to perform the following:

95.1.1. When Assign to Manifest is clicked, change the specimen status to a new status called "Next manifest".

95.1.1.1. This status should have a light purple box with dark purple text.

96. When manifest is moved from Shipping Mode, Reconcile to Receiving Mode, In Transit:

96.1. Create a new manifest with the same Ship From and Ship to locations once the current manifest is in the "In Tranist" step.

96.2. Assign all the specimens with "Next manifest" to this new manifest.

96.3. Remove the specimen from the previously assigned manifest and change the status from "Next Manifest" to "Removed".

96.4. All changes should be noted in the audit trail.

97. Regarding requirement 42.4, the original requirement states:

> 42.4. Removed
>
> 42.4.1. This status is used any time the user clicks the remove icon for the specimen during the manifest workflow (see 79.5 and 52 below).

Adjusted requirement:

97.1. Removed

97.1.1. This status is used any time the user clicks the remove icon for the specimen during the manifest workflow, when a specimen is removed from a manifest by pulling another manifest back a step, reassigned to another manifest, or assigned to the next manifest.

97.1.1.1. Use case 1:

- System assigns a specimen (S) to a manifest (M1)- M1: Build, S: Assigned
- User clicks red X- M1: Reconcile, S: **Removed**

97.1.1.2. Use case 2:

- System assigns a specimen (S) to a manifest (M1)- M1: Build, S: Assigned
- User clicks Complete Step- M1: Reconcile, S: Assigned
- User re-assigns specimen to a different manifest (M2)- M1: Reconcile, S: **Removed**, M2: Build, S: Assigned
- User clicks Complete Step for M1- M1: In Transit, S: Removed, M2: Build, S: Assigned
- User pulls M1 back to previous step- M1: Reconcile, S: Removed, M2: Build, S: **Removed**

97.1.1.3. Use case 3:

- System assigns a specimen (S) to a manifest (M1)- M1: Build, S: Assigned
- User clicks Complete Step- M1: Reconcile, S: Assigned
- User re-assigns specimen to a different manifest (M2)- M1: Reconcile, S: Removed, M2: Build, S: Assigned
- User pulls M1 back- M1: Build, S: Assigned, M2: Build, S: Removed

97.1.1.4. Use case 4:

- System assigns a specimen (S) to a manifest (M1)- M1: Build, S: Assigned
- User clicks Complete Step- M1: Reconcile, S: Assigned
- User clicks Assign to Next Manifest: M1: Reconcile, S: Next manifest
- User clicks Complete Step: M1: In Transit, S: Removed, M2: Build, S: Assigned

98. Regarding requirement 79.4.1, the requirement states:

79.4.1. Assign to Next Manifest: This should be a clickable option that prompts the system to perform the following actions: (please see Adjusted Requirements section below)

~~79.4.1.1. Removes the specimen from the current manifest (status should change to "Removed" and box should change color)~~

~~79.4.1.2. Create a new manifest with the same Ship From and Ship to locations once the current manifest is in the "In Tranist" step.~~

Adjusted requirement:

98.1. Assign to Next Manifest button should be inactive when a manifest reaches Receiving, In Transit and should remain inactive.

98.2. Assign to Next manifest button should be active only while in the Shipping mode and Build and Reconcile steps.

99. Regarding requirement 79.4.2, the requirement states:

> 79.4.2. Re-assign Specimen: This should be a clickable option that issues a pop-up asking the user which Ship To location they wish to re-assign the specimen to.

Adjusted requirement:

99.1. Re-assign Specimen button should be inactive when a manifest reaches Receiving, In Transit and should remain inactive.

99.2. Re-assign Specimen button should be active only while in the Shipping mode and Build and Reconcile steps.

Approvals

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