



## Misys Blood Bank V6 Enhancements & Maintenance Changes

To facilitate and expedite the implementation of your QualityAdvantage Blood Bank solutions, we have created this document to help you understand the maintenance changes introduced in Misys Blood Bank V6. Information on the enhancements is intended to help you make decisions on how to set up your maintenance and test cases and is correct to the best of our knowledge. Questions on Misys functionality should always be directed to Misys Blood Bank Support.

The new enhancements covered in this document are:

- Unit Attributes
- Conflicting Unit Antigen/Antibody Pairs (Ag/Ab Pairs)
- Unit Location
- Appended Component Type
- the use of Alternate Component Types
- the Ability to Add Testing to New Units in Blood Component Preparation (BCP)
- QA Failures and Security Overrides

Each enhancement is described in detail and the Appendix contains tables you can use to record your maintenance changes. Each enhancement described is independent of the other enhancements and you can implement enhancements in any order. At the end of the enhancement description is a maintenance checklist to help you ensure that you have made all necessary changes. These will come in handy when you have to make these changes again in the production area.

Remember, if you need to make maintenance changes after your QualityAdvantage solutions have been initially configured, first rerun the extract tests for each affected solution then do the following:

- For Patient Unit Compatibility:
  1. review the Components Types Tab in the Environment Profile to ensure the correct components are checked for the selected HID;
  2. review the Crossmatch tab;
  3. review the Patient Unit Testing tab.
- For Antigen/Antibody/Attribute:
  1. remove any deactivated Antigen Codes that have now been defined with new codes as Attributes on the Codes tab in the Environment Profile;
  2. add the new Attribute codes, making sure to set the Attribute column to "yes".
- For Blood Bank Scenario:
  1. modify the test cases that were affected by the maintenance change;
  2. you may run a new baseline for just the updated test cases if you like.

## Attributes

### ***Overview***

Attributes give you the ability to define a transfusion requirement and to verify that the unit being transfused complies with the requirement. For example, if your patient needs irradiated blood, irradiated blood would be considered an attribute.

Prior to v6, attributes were handled like antigens and antibodies and you needed to set up antigen/antibody tables to cover attributes. With v6, attributes are defined instead and a new field, *Attribute*, has been added to the unit demographic information as well as the patient blood bank administrative data (BAD).

The difference between a unit antigen and an attribute is that the antigen typing applies to the entire unit, whereas the attribute does not. For example, if you were to split a unit of packed cells into aliquots and antigen type one part of the split, the antigen typing updates the parent unit and the antigen typing will apply to the other split as well. However, the same is not true if you were to irradiate one of the split parts. In this case, the attribute of irradiation would apply to only the part that was actually irradiated. The parent unit is not updated with this information and the other part of the unit is not updated with the attribute. However, any units created from a unit with an attribute will retain that attribute.

### ***How this enhancement works***

An attribute is an antigen/antibody English text code, that has been defined to the new maintenance *option 14: Attribute Definition Table*. A new field in the component definition is used to indicate whether or not the unit should be checked for attributes. New attribute fields have been defined for both the patient and units.

When a unit is selected for allocation or issue, the system checks the patient's attribute field. If there is an attribute(s) present, the system will look at the component type definition for the selected unit. If the attribute flag is set to check attributes for that component type, the system will check for the same code in the attribute field of the unit. If the code is not found on the unit, a new QA failure, "Patient/unit attribute incompatibility" is generated which must be overridden in order to proceed.

For example: A patient has an attribute for irradiated blood in the BAD file. A unit of packed cells is selected for issue. If the packed cell definition has been set to check for attributes, the system will generate a QA failure if it does not find the irradiated attribute on the unit. If the packed cell definition has not been set up to check for attributes, the unit can be issued without being irradiated.

### ***What you should know about Attributes***

1. If you have the donor system, attributes will not update the donor. Attributes apply to the unit only and not the donor. If you want an "attribute" to update the donor, you need to use an antigen/antibody code that is not defined to the attribute table.
2. Once a code is defined to the attribute table, it cannot be removed.
3. There is only one attribute code for both the unit and the patient – if the code is in the patient's attribute field, and the unit component type is set to check for attributes, the same code is looked for on the unit.

4. If you want to use existing codes as attributes, remember that these codes are currently in the patient's antigen/antibody or other BAD field and attribute checking is only done on the attribute field. You may want to consider using new codes for attributes.
5. The component type definition in Blood Bank Maintenance, (BMA) option 3:1 Component Definition, has a new field for attribute checking. This field works the same way the antigen checking field works, you must set this field to check for attributes on this component type. If the flag is not set, this component will not be checked against the patient's attributes. The conversion does not set this flag and unless set by you, no attribute checking will occur.
6. The component type definition in Blood Bank Maintenance, (BMA) option 3:1 Component Definition, allows you to enter default attribute(s) for the component type. For example, if you define an attribute IRR for irradiation, and you put that attribute in the definition for your irradiated packed cells, when you component prep a unit from a packed cell, to an irradiated packed cell, the unit will automatically be updated with the IRR attribute.
7. Attributes are cumulative, for example, if you have an attribute on a unit and then component prep a unit to a component type with a different attribute, the unit will have both attributes on file. A default attribute will add to the existing attributes and not replace them.
8. Attributes can only be removed from a unit by manually removing it in Blood Product Entry.

### ***Maintenance***

If you decide to use attributes, you will need to:

1. Decide on the code you want to use for the attribute. The Appendix contains a table you can use to record your attribute codes, **Table 1: Attribute Codes**.
2. Define the code in Maintenance (MA) option 4, English Text codes as a BC type A code (just like antigen/antibody codes).
3. Define the code to the Attribute Definition Table in Blood Bank Maintenance (BMA) option 14. *Attribute Definition Table* (step 2. must be completed first).
4. Decide which component types should be checked for attributes. If desired, you can record them in **Table 2: Set Attribute Checking and Add Default Attributes to Component**.
5. Decide which component types should have default attributes. If desired, record them in **Table 2: Set Attribute Checking and Add Default Attributes to Component Definitions**.
6. Update BMA 3:1 for attribute checking and defaults. If you chose to record attribute updates in **Table 2: Set Attribute Checking and Add Default Attributes to Component**, you can use this table to help you make these changes.

## Conflicting Antigen Pairs

### **Overview**

Conflicting antigen pairs gives you a warning when the antigen codes entered on a unit do not make sense because they are opposites of one another. For example, a unit should not be both positive and negative for the Kell antigen, if the codes for both of these typings are entered on the unit, the system will alert you by generating a QA failure that must be overridden to continue. Conflicting antigen pairs are defined by you.

This enhancement is important because of the way the system does antigen/antibody compatibility checking. For antigen/antibody compatibility, the system looks at the codes in the antigen/antibody field of the patient's BAD file. It then looks at the antigen/antibody compatibility table you have defined and checks the unit for the code that needs to be on the unit. Until this enhancement, there was no check for possible mis-typings a unit could have the code for a negative antigen typing on file, but might also have the code for the positive type as well.

### **How this enhancement works**

You set up conflicting antigen pairs in function *BMA 10. Quality Assurance Tables: 8. Conflicting Unit Ag/Ab Pairs* so that the system knows which codes are the positive and negative code for a particular antigen typing. When an update is made to the antigen /antibody field, the system will check for the codes currently on file for the unit. If the update will result in conflicting Unit Ag/Ab pairs on a unit, a QA failure will be generated that will need to be overridden in order to continue. In addition, anytime an attempt is made to allocate or issue a unit with conflicting antigen/antibody pairs, a QA failure is generated that must be overridden to continue.

The new QA failure for conflicting antigen pairs is: "Conflicting Ag/Ab pair(s) on unit".

### **What you should know about Conflicting Ag/Ab Pairs**

1. Conflicting Ag/Ab pairs apply to units only – they do not apply to patients.
2. Like other information in the unit's antigen/antibody field, conflicting antigen/antibody codes can only be removed or modified in Blood Product Entry.

### **Maintenance**

If you decide to implement conflicting antigen pairs, you will need to:

1. Identify the codes that represent "opposite" typings. The Appendix contains **Table 3: Conflicting Antigen/Antibody Pairs** which you can use to enter your conflicting codes for ease in defining the maintenance.
2. Enter your predefined antigen/antibody pairs in *Blood Bank Maintenance 10. Quality Assurance Tables: 8. Conflicting Unit Ag/Ab Pairs*

## Unit Location

### *Overview*

V6 introduced the concept of unit location. Each unit is automatically associated with an HID when it is entered into the system. This allows all facilities, regardless of HID, to use the same component type (also see the section Alternate Component Type). In addition to HID, if desired, you can now define an area, device, shelf and slot for each unit. Sites using the same HID, but having blood banks in different facilities, can assign units to the appropriate facility by defining the blood banks as areas. You can also set up areas for other parts of the hospital such as the OR or ER as well as devices such as freezers and refrigerators. Most inventory reports can be called by unit location.

### *How this enhancement works*

When lab locations are defined in MA 6, they are associated with a HID. Based on the lab location of the tech entering units into the system, units are automatically associated with the correct HID. If there are multiple blood banks associated with your HID, you can define areas within that HID for each facility. For example, if there are two blood bank facilities within your HID, you would define an area under the HID for each blood bank, such as BB1 and BB2. When units are entered into the system, you use the location tab in Blood Product Entry (BPE) to indicate the correct location for the unit. You can also define an area for other hospital locations where blood is sent or stored, for example ER or OR. If your OR has a monitored refrigerator that you maintain, you may want to set up a device for the Refrigerator, in area OR. A new function, Blood Location, allows you to change the location of a unit within your HID. In addition, Blood Product Entry, Blood Product Testing, Blood Product Issue, Blood Status Update, Blood Status Correction (BSC), and Blood Component Preparation allow you to change the unit location.

### *What you should know about Unit Location*

1. The HID associated with a unit is based on the HID for the lab location in use when the unit was entered into the system.
2. Maintenance Option 6 associates the Lab Location with a HID.
3. The Blood Location function allows you to change location within a HID.
4. To change the location of a unit to a different HID, you need to use BSC and ship out or in transit the unit. The receiving facility then changes the HID in BSC when the unit is returned to inventory.
5. Locations for each HID can be defined as to Area, Device, Shelf, and Slot, but you do not need to go to this detail.
6. If you do not need area, device, shelf or slot, you do not need to set up any location maintenance, HID is automatic based on the lab location.
7. If you are currently using the multiple hospital alternate component type table, in BMA 11, to bring units into the system as different component types based on your lab location, you should be aware that this functionality goes away in V6 and this maintenance table is removed.

***Maintenance***

If you decide to use unit location beyond HID, you will need to:

1. Use *BMA option 15. Unit Location* to define the level of detail that works for your facility. **Table 4: Unit Location Definitions** in the appendix can be used to record your definitions.

## Appended Component Type

### *Overview*

Prior to V6, the unit number was the only unique identifier of a unit. For this reason, the system would not allow the entry of the packed cells, platelets and plasma or cryo from the same unit without changing the unit number in some way. For most sites, maintenance was defined to append the component type to the unit number for components that were not in the red cell group. In addition, all-numeric unit numbers were not allowed.

Starting with V6, Misys uses the combination of unit number and component type as the unique identifier and will allow units with the same unit number, but different component types to be entered into the system.

### *How this enhancement works*

The appended component type is no longer necessary for components from the same unit. In addition, the system will now allow all-numeric unit numbers, and again, appending the component type to the unit number is no longer necessary.

### *What you should know about Appended Component Type*

1. While it is no longer necessary to append component type to a unit number, you can still do this if you choose. The conversion does not prevent appended component types and does not automatically stop appending component types.
2. The maintenance to add the appended component type to the end of a unit number comes from the product testing maintenance definition.
3. To stop appending component type you must change your maintenance.
4. Product testing definitions are set up by supplier and component type. Both the supplier and component can be defined as 0. These 0 definitions are used if there is not a more specific definition. Because of the use of the 0 definitions, it is not always readily apparent what definition needs to be changed. You need to print out this maintenance to determine the necessary changes.
5. Appending component type to the end of the unit number is a type 2 unit number assignment.
6. Using the unit number as it appears on the bag is a type 1 unit number assignment.
7. The V6 conversion does not change unit numbers for units already on the system. Unit numbers with appended component type as part of the unit number will retain this unit number.

***Maintenance***

To stop appending component type to the end of a unit number you will need to:

1. Use the maintenance report, *BMR 4. Testing Definitions, option 1. Product Testing* to identify the supplier/component type combinations with a type 2 unit number assignment. **Table 5: Supplier/Component Type Combination with a type 2 Unit Number Assignment** can be used to record the combinations with a type 2 unit number assignment that need to be changed to a type 1 assignment.
2. Use *BMA 4. Testing Definitions, option 1. Product Testing* to change those testing definitions that use a type 2 unit number assignment to a type 1 unit number assignment.

## Alternate Component Types

### *Overview*

Prior to V6, inventories in separate facilities were kept separate by using different component types for each HID. You could define multiple component types and then, based on the Alternate Component Type table in BMA 11:1, the system would bring in a unit as the correct component type for the HID.

In V6, the alternate component type table has been removed. Unit location takes the place of alternate component types which are no longer needed.

### *How this enhancement works*

Read the section on Unit Location which replaces the need for alternate component type.

### *What you should know about Alternate Component Types*

1. If you are currently using the multiple hospital alternate component type table, BMA 11, to bring units into the system as different component types based on your lab location, you should be aware that this functionality goes away in V6 and this maintenance table is removed by the conversion. You can continue to use alternate component types, but the system will not function as it previously did and in V6, alternate component types may cause some problems.
2. Even though the alternate component type table is removed by the V6 conversion, units are assigned to a HID based on the *Multiple Hospital Alternate Component Type table* in BMA 11:1. If you have more than one HID, you must have all components defined in BMA 11:1 for the appropriate HID, otherwise, units of that component type will be placed in the HID with the internal number of 1.
3. You should remove any component types that you will no longer be using from any reporting groups and then inactivate the codes.
4. You cannot remove codes that you no longer will be using from the system. Any code, including component type, that has been used in the past, must remain on the system.

### *Maintenance*

If you are a site with more than 1 HID and have alternate component types that you will no longer be using, you need to:

1. Print out your maintenance definitions for your component types, reporting groups, and alternate component definitions.
2. If you like, **Table 6. Component Types Missing from the Alternate Component Table** can be used to record any component types that are not in BMA 11:1.
3. Determine the codes that you will no longer use. You can use **Table 7. Component Type Codes to be Inactivated** to record those codes.
4. If you find codes that are not in the alternate component type table, use BMA 11:1 to add them to the table. If you chose to use **Table 6. Component Types Missing from the**

**Alternate Component Table** to record missing components, you can refer to this table when adding components the BMA 11:1.

5. Remove components that will no longer be used from reporting groups. This is in BMA 3:2. If you chose to record codes you will no longer use in **Table 7. Component Type Codes to be Inactivated**, you can refer to this table when removing alternate component types from the reporting group.
6. Inactivate component codes you no longer want techs to use. This is done in MA 4. If you chose to record codes you will no longer use in **Table 7. Component Type Codes to be Inactivated**, you can refer to this table when inactivating codes.

## Changes in Blood Component Preparation

### *Overview*

In V6, Misys allows you to add testing to components created in Blood Component Preparation. This allows you to do a blood type recheck, label check, and antigen typings on derivative units or aliquots.

In addition, there are two layers of security in component preparation. You need to define a security level for access to use the component prep and you need to define a security level that allows overriding to the default maintenance settings. Without having these set, techs will not be able to branch to component prep and use this prep.

If you had multiple component preps to accommodate all of your alternate component types, you will no longer need these preps, as everyone will use the same components and will prep units to the same component types. You cannot delete the component prep, however, you can inactivate the preps that you no longer need.

### *How does this enhancement work*

To accommodate the new product testing enhancement, a new field "Output Testing Battery" has been added in the component prep maintenance definition. In the component prep definition, you add the testing battery for the new or output component in this field. When the component prep is performed the battery is added onto the unit automatically.

### *What you should know about Testing and Component Prep*

1. You can only add batteries and not tests in component prep.
2. The system will add the battery only to those units that do not currently have a product testing battery. For example, you cannot add a battery for a label check to a packed cell that you wash if the unit already has a product testing battery on file for the recheck blood type.
3. This enhancement is particularly useful for sites who draw units and create derivative units, or create pools and split units or make aliquots and want to perform label checks on the units.
4. You can have more than one battery if you are doing different component preps or if there is more than one output component type. In this case, each output can have a different battery.

### ***Maintenance***

To update your component prep definitions and add on product testing in blood component preparation, you will need to:

1. Print out your component prep definitions. Review the definitions and:
  - a. Verify that all preps have access and override security defined. If you like, **Table 8a. Component Preparation Security Updates** can be used to record the necessary changes.
  - b. Determine if there are any component preps that you no longer wish to use. If you like, **Table 8b. Component Preparations To Inactivate** can be used to record preps you will no longer be using.
  - c. Decide which component preps create units that should have product testing. If you choose, **Table 8c. Component Preparation for Testing Batteries** can be used to record these preps.
2. Decide which of the allowed tests you want in the product testing battery for your prepped units. If you like, **Table 9. Product Testing Batteries for Component Prep** can be used to record the batteries and tests you will be using.
3. Define the battery or batteries for use in component prep. If you choose to use **Table 9. Product Testing Batteries for Component Prep**, refer to this table when defining your batteries.
4. Update your component prep definitions. This is done in BMA 5. If you choose to use tables 8a, 8b, and 8c. to record security updates, preps to be inactivated, and preps to add product testing definitions, you can refer to these tables as you make maintenance changes.

## QA Failures

### *Overview*

V6 introduced some additions and changes to the QA failures. All functions now require security overrides in order to continue. The ABO and Rh QA failures have been separated so that there are two QA failures for an ABO incompatibility instead of just one. There are also new QA failures for conflicting antigen pairs (see the section on **Conflicting Antigen Pairs**) and attribute incompatibility (see the section on **Attributes**). In addition, some messages that were warnings prior to V6 can now be made QA failures based on lab location. Refer to the Misys V6 conversion manual and user documentation for more information.

### *How does this enhancement work*

When a tech encounters a QA failure, a warning message displays giving information about the problem that is generating the failure. The warning includes a column that indicates whether or not that tech has the appropriate override security. A tech without override security can proceed through the warning but will not be able to proceed through the QA failure when saving the screen.

System logic determines when to generate a QA failure and cannot be changed. However, whether or not a QA failure can be overridden depends on the security that you define in *BMA 10. Quality Assurances Tables 6. Quality Assurance Failure Messages* and the security the tech possesses. Whether or not a reason is required for overriding the failure is also defined by you in maintenance.

### *Option for Warning only messages to be Failures*

There is a new option that allows you to generate QA failures in BOP and BPI for certain messages that were previously warnings only. This option allows you to indicate which lab locations should get QA failures instead of warning messages. This option is available for the messages:

- 34. "Unit is Expired", and
- 66. "Specimen Expired" .

### *Block Allocation*

There is also a new maintenance field which allows you to block allocation of a unit when certain QA failures are encountered. Again, this is defined by lab location. When the system encounters one of these failures, if defined, the unit generating the failure cannot be allocated. This functionality is set up by lab location. The failures supporting this enhancement are:

- 42 "Unit allocated with no blood type on file";
- 70 "Selected unit's ABO does not match patient's permanent ABO";
- 71 "Selected Rh does not match patient's permanent Rh";
- 72 "Selected unit's ABO does not match specimen's ABO"; and
- 73 "Selected unit's Rh does not match specimen's Rh".

*Patients with no Blood Type on file*

Prior to V6, the ABO/Rh incompatibility QA failures for a patient with no blood type on file are generated only at the time of issue and not at allocation. This is to allow the patient to be typed in BOP at the time of allocation.

In V6 you can specify the lab locations that want a QA failure at the time of allocation when the patient has not been typed. The failures supporting this enhancement are:

70 "Selected unit's ABO does not match patient's permanent ABO";

71 "Selected Rh does not match patient's permanent Rh".

***What you should know about QA Failures***

1. The ability to override a QA failure is based on:
  - a. The security level you define in *BMA 10. Quality Assurances Tables 6. Quality Assurance Failure Messages*.
  - b. The security level assigned to the tech.
2. Whether or not a reason is required to override a QA failure is based on maintenance that you define in *BMA 10. Quality Assurances Tables 6. Quality Assurance Failure Messages*.
3. If there is no security override defined in maintenance for a QA failure, no one will be able to override the failure.
4. If a tech does not have security to override a QA failure, the QA failure will allow entry of another tech's information and if that tech has security, they will be able to override the failure.
5. ABO/Rh compatibility is determined by the ABO/Rh compatibility table in *BMA 10. Quality Assurance Tables, option 2 Patient/Unit Blood Type Compatibility*.
  - a. Even though the ABO and Rh QA failures have been split apart, the compatibility table has not. Your techs will be able to give A Pos platelets to an A Neg patient by overriding only the Rh QA failures (because, the ABO is an A in both cases), but they will have to override an ABO QA failure to give the same A Neg patient O Pos platelets.
6. If you set up maintenance to block allocation of a unit, no QA message will be generated, you will simply not be able to allocate the unit.
7. QA failures no longer in use, still appear in the table because of upgrade issues.

***Maintenance***

1. You will want to print BMA 10:6 and familiarize yourself with all of the failures and who should be able to override those failures. The Appendix contains **Table 10a. QA Failure Maintenance** to help you set up your maintenance.
2. Print BMR 10:6 Quality Assurance Failure Messages and verify:
  - a. You have a security level set for every QA failure  
OR  
If some failures are missing security overrides it is because you do not want anyone to override the failure.
3. Decide if you want QA failures instead of warnings when a unit or patient specimen is expired. If needed, **Table 10b. QA Failure Maintenance – Warnings to Failures**, lists those warnings and can be used to track necessary maintenance changes.
4. Decide if you want to block allocation of ABO/Rh incompatible units. If needed, **Table 10c. QA Failure Maintenance – Block Allocation** lists the QA failures associated with this option and can be used to track necessary changes.
5. Decide if you want QA failures in BOP when there is no blood type on file for the patient. If needed, **Table 10d. QA Failure Maintenance – BOP No Blood Type** lists the QA failures associated with this option and can be used to track necessary changes.

## Maintenance Checklist

	Test	Live
<b>1. Attributes:</b>		
<p>a. Decide if you will use attributes.</p> <p>If you will NOT be implementing attributes, record N/A and move to the next section.</p>		
<p>b. Determine the Attribute codes you will define. <b>Table 1: Attribute Codes</b> can be used to track changes.</p>		
<p>c. Use BMR 3:1 and print component definitions – Print your Live Maintenance as it currently exists.</p>		
<p>d. Compare BMR 3:1 between Test and Live. If you have components in use in Live that are not in Test, you may want to define them in Test prior to running your validation.</p>		
<p>e. Determine all component types that should have attribute checking performed. <b>Table 2: Set Attribute Checking and Add Default Attributes to Component Definitions</b> can be used to track changes.</p>		
<p>f. Determine all component types that should have default attributes. <b>Table 2: Set Attribute Checking and Add Default Attributes to Component Definitions</b> can be used to track changes.</p>		
<p>g. Define Attribute Codes in MA 4. If you are using the tables to track your changes, you can refer to <b>Table 1: Attribute Codes</b>.</p>		
<p>h. Define Attribute Codes in BMA 14. If you are using the tables to track your changes, you can refer to <b>Table 1: Attribute Codes</b>.</p>		
<p>i. Print out your Attribute Table maintenance (BMR 14)</p>		

	Test	Live
j. Set the attribute flag in BMA 3:1 as needed. If you are using the tables, you recorded these components in <b>Table 2: Set Attribute Checking and Add Default Attributes to Component Definitions.</b>		
k. Add default attributes to your component types in BMA 3:1. You may have recorded the components and their defaults in <b>Table 2: Set Attribute Checking and Add Default Attributes to Component Definitions.</b>		
l. Print your component type definitions (BMR 3:1) and verify that you have set the attribute flag appropriately and have entered all of your default attributes.		
<b>2. Conflicting Antigen Pairs:</b>		
a. Enter antigen pairs that represent opposite typing results in BMA 10:8. If you are using the tables provided, this is in <b>Table 3: Conflicting Antigen/Antibody Pairs.</b>		
b. Print your conflicting pairs maintenance (BMR 10:8)		
<b>3. Unit Location</b>		
a. Define unit locations in BMA 15. If you are using the tables, this is the information you recorded in <b>Table 4: Unit Location Definitions .</b>		
b. Print your unit locations using BMR 15.		
<b>4. Appended Component Type</b>		
a. Print your Product Testing maintenance from BMA 4: Testing Definitions, option 1: Product Testing. For this step, print your maintenance from your existing live area.		
b. Compare BMR 4:1 between Test and Live. If there are definitions in your live area that are not in your test area, you may want to update your test area.		

	Test	Live
c. Review BMR 4 and identify type 2 unit number assignments. If using the tables, record the definitions that need to be changed in <b>Table 5: Supplier /Component Type Combination with a type 2 Unit Number Assignment</b> .		
d. Change the type 2 unit number assignments to type 1. If you are using the tables, this was recorded in <b>Table 5: Supplier /Component Type Combination with a type 2 Unit Number Assignment</b> .		
e. Print your updated unit number assignments from BMR 4:1.		
<b>5. Alternate Component Type</b>		
a. Print BMR 3:1 Component Type Definitions.		
b. Print BMR 3:2 Reporting Group Definitions.		
c. Print BMR 11:1 Alternate Component Table from your live area. This option is not available in your V6 test area.	N/A	
d. At this time, using BMR 3:1 and BMR 11:1, you may want to identify any component types that have ever been used by any HID that are not in the BMA 11:1 table and define them. If using the tables, you can track these changes in <b>Table 6. Component Types Missing from the Alternate Component Table</b> .	N/A	
e. Identify component types that you no longer need and the associated reporting group. <b>Table 7. Component Type Codes to be Inactivated</b> can be used to record these components.		
f. Inactivate component type codes that you will no longer be using in MA 4. If using the tables, these were recorded in <b>Table 7. Component Type Codes to be Inactivated</b> .		
<b>6. Changes in Blood Component Preparation</b>		

	Test	Live
a. Print BMR 5 Component Preparation Definitions. Print the live report from your live area pre-conversion.		
b. Verify all component preps have security defined for both access (Comp Prep Code security level) and override (Override security level). <b>Table 8a. Component Preparation Security Updates</b> can be used to record preps with missing security.		
c. Check the report and see if there are component preps that you will not need after upgrading. If you choose, you can record those preps in <b>Table 8b. Component Preparations To Inactivate</b> .		
d. Decide if there are any component preps to which you would like to add product testing. You can record those preps in <b>Table 8c. Component Preparations for Testing Batteries</b> .		
e. If you will be adding testing to units in component prep you can use <b>Table 9. Product Testing Batteries for Component Prep</b> to record the battery code, translation and the tests in the battery.		
f. Define the component prep batteries in MA 1. If you are using the tables to keep track of maintenance, this information is in <b>Table 9. Product Testing Batteries for Component Prep</b> .		
g. If you are using the tables to track changes, use your battery list from <b>Table 9. Product Testing Batteries for Component Prep</b> and update <b>Table 8c. Component Preparations for Testing Batteries</b> with the batteries for each component prep.		
h. Use BMA 5 to update your component prep definitions with regard to security, inactivation, and product testing batteries. If you are using the tables, this information is in:  <b>Table 8a. Component Preparation Security Updates</b> <b>Table 8b. Component Preparations To Inactivate</b> <b>Table 8c. Component Preparations for Testing Batteries</b>		

	Test	Live
i. You may want to reprint BMR 5 and verify you have made all the appropriate changes.		N/A
<b>7. QA Failures</b>		
a. Print your QA failure report, BMR 10:6. i) Check that security overrides are appropriately defined ii) Review each failure for "reason" required You may want to use <b>Table 10a. QA Failure Maintenance</b> to record any necessary changes.		
b. Decide if you want to generate failures when there were previously only warnings. If so, you may document changes in <b>Table 10b. QA Failure Maintenance – Warnings to Failures</b> .		
c. Decide if you want to block allocation of units when there are ABO/Rh incompatibilities. If so, you can record the lab locations in <b>Table 10c. QA Failure Maintenance – Block Allocation</b> .		
d. Decide if you want to display QA failures in BOP when there is no blood type on file for the patient. If so, you can record the lab locations in <b>Table 10d. QA Failure Maintenance – BOP No Blood Type</b> .		
e. Use BMA 10:6 to update your QA Failure maintenance. If you are using the tables to record your changes, the information you will need is in the following tables: 1. Update for security levels – <b>Table 10a. QA Failure Maintenance</b> 2. Update for reason required – <b>Table 10a. QA Failure Maintenance</b> 3. Entry of lab locations for Warnings to Failures – <b>Table 10b. QA Failure Maintenance – Warnings to Failures</b> 4. Entry of lab locations for blocking allocations - <b>Table 10c. QA Failure Maintenance – Block Allocation</b> 5. Entry of lab locations for failure when there is no blood type on file for the patient - <b>Table 10d. QA Failure Maintenance – BOP No Blood Type</b>		

























**Table 10b. QA Failure Maintenance – Warnings to Failures.**

QA failure	Lab locations for Failures	BMA 10:6 Updated	
		Test	Live
34. "Unit is Expired"			
66. "Specimen Expired"			

**Table 10c. QA Failure Maintenance – Block Allocation**

QA failure	Lab locations	BMA 10:6 Updated	
		Test	Live
42 "Unit allocated with no blood type on file";			
70 "Selected unit's ABO does not match patient's permanent ABO";			
71 "Selected Rh does not match patient's permanent Rh";			
72 "Selected unit's ABO does not match specimen's ABO			
73 "Selected unit's Rh does not match specimen's Rh			

**Table 10d. QA Failure Maintenance – BOP No Blood Type**

QA failure	Lab locations	BMA 10:6 Updated	
		Test	Live
70 "Selected unit's ABO does not match patient's permanent ABO"			
71 "Selected Rh does not match patient's permanent Rh";			