1.0 Purpose

To define the standard workflow for planning and optimizing specifications for future manufacturing years using the Blood Optimization Platform. This procedure ensures that forecasting is accurate, optimization opportunities are utilized, and all changes are version-controlled.

2.0 Procedure

2.1 Create a New Future Specification

1. Navigate to the Future Specifications panel using the sidebar.
2. In the "Create Future Specification" card, select the Customer, Event, and Year (e.g., 2026) for the new plan.
3. From the "Copy Structure From" dropdown, select a recent historical event for that customer (e.g., "WSLH 1st 2025"). This is the primary method for creation.
4. Click the "Create Specification" button.
   * *System Action:* The platform will copy the sample structure from the selected historical event. For each sample, it will automatically run the new forecasting logic to calculate a forecasted\_quantity based on year-over-year trends.

2.2 Edit the Specification

1. Locate the newly created specification card in the "Active Future Specifications" list.
2. Click the "View/Edit" button to open the detailed editing modal.
3. For each sample row in the table, you can now perform the following actions:
   * Manual Assignment: Use the dropdowns in the ABO, Rh, and DAT Status columns to set specific values.
   * Manage Antigens: Click the "+ Add Antigen" button to add a new requirement. Select the antigen and its status (Positive/Negative). Use the "×" button to remove a requirement.
   * Manage Antibodies: Click the "+ Add Antibody" button to add a required antibody from the dropdown list. Use the "×" button to remove one.

2.3 Utilize Optimization Suggestions

1. For any sample where the blood type is still "TBD" (or for any sample you wish to check), click the "💡 Suggestions" button in the "Optimization" column.
2. A popover will appear, listing potential blood types that can be sourced from standing order overages or shared with other PT events. It will include details on the source and potential savings.
3. To apply a suggestion, click the green "Accept" button.
   * *System Action:* The ABO, Rh, and Antigen fields for that row will automatically update to match the suggestion. This change is visual and is not saved until you complete the next step.

2.4 Save and Version the Specification

1. After making all desired edits and accepting suggestions, click the "Save Changes" button at the bottom of the modal.
   * *System Action:* All changes are saved permanently. The system automatically increments the version number for this specification (e.g., from v1 to v2), creating an immutable snapshot of the plan for historical tracking. The "Last Modified" date and the new version number will be reflected on the main panel.

2.5 Clone a Specification (Optional)

1. If you need to create a similar plan for a different customer or event, click the "Clone" button on an existing specification card.
2. Enter the new Customer, Event, and Year when prompted.
   * *System Action:* A complete, independent copy of the specification will be created, which you can then edit and manage separately.