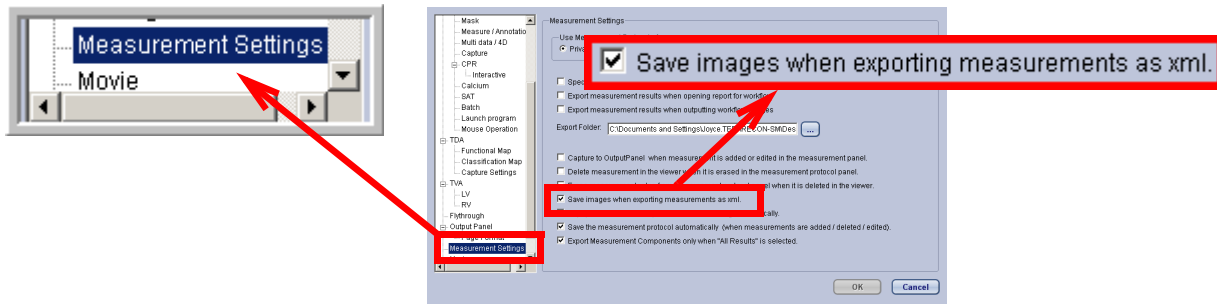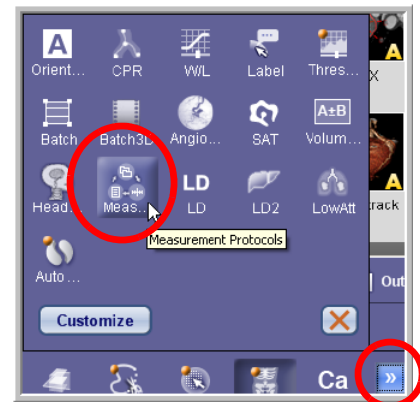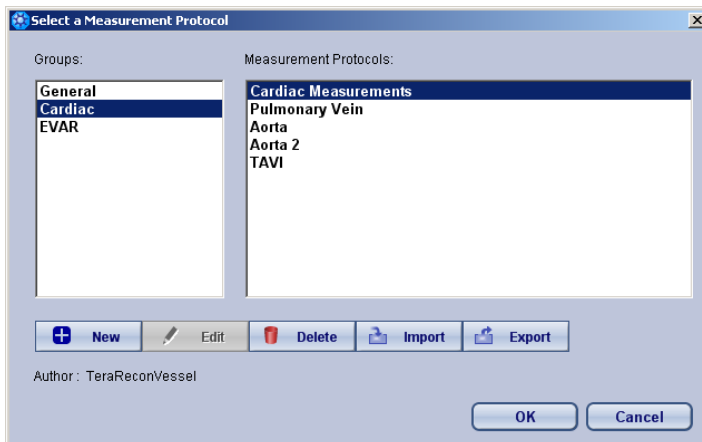# Capturing Cardiac Measurements and Images for a Report

You can associate a Measurement Protocol with a cardiac Workflow, so that measurements obtained while stepping through the cardiac Workflow are automatically captured to the protocol. These results can then be exported to an xml file and incorporated in a report. In addition, you can set a preference so that images from the Workflow are saved and included in the report.

Create a Measurement Protocol

1. Open Preferences and click **Measurement Settings** in the list on the left. Make sure that the box for **Save images when exporting measurements as xml** is checked.

2. Load a cardiac study.

3. In the 3D Viewer, open the **Measurement Protocols** tool panel.

4. Open the **Measurement Protocols** dialog (see "Opening a Protocol" on page 12-1).

5. Select **Cardiac** from the **Groups** list on the left.

6. Create a new protocol called Stenosis (see "Adding Measurements to a Protocol" on page 12-6).
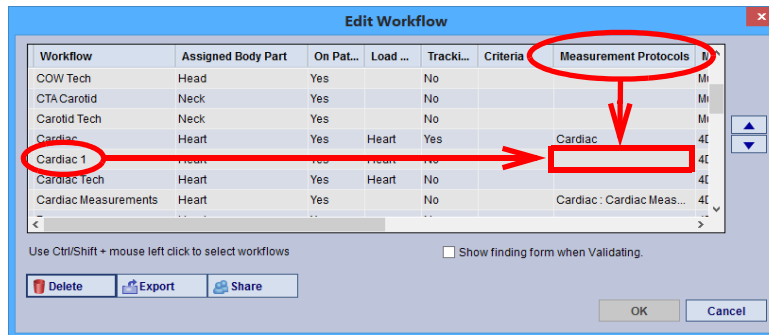
    Note: The only settings you need to configure for this protocol are the protocol name ("Stenosis") and the report template (AqSimpleReport2.doc, which is the default).

    When you have finished, the new (but empty) protocol is loaded into the tool, as shown at right.
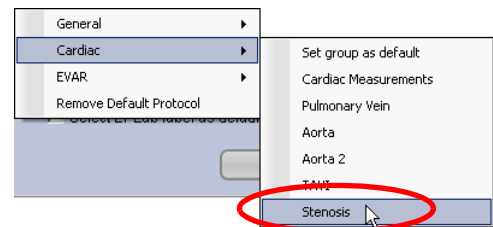
7. Add measurements to the new protocol. In this example, we will add measurements that contain stenosis results from the RCA, LAD and LCX vessels. In the **Long Name** box, type RCA, and type the same in the **Short Name** box. In the **Type** box, select stenosis. (See "Adding Measurements to a Protocol" on page 12-6)

Edit a Workflow

1. From the Cardiac workflow pulldown menu, select **Edit Workflow**. The **Edit Workflow** panel is opened.

2. In the **Workflow** column, find the "Cardiac" row. In the **Cardiac** row, find the "Measurement Protocols" column. Click in that cell to open a menu.
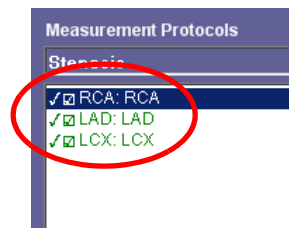

3. Select **Cardiac**->**Stenosis** from the menu/sub-menu, to associate the Cardiac workflow with the Stenosis Measurement Protocol. (See "Measurement Protocols" on page 3-12 for instructions.)
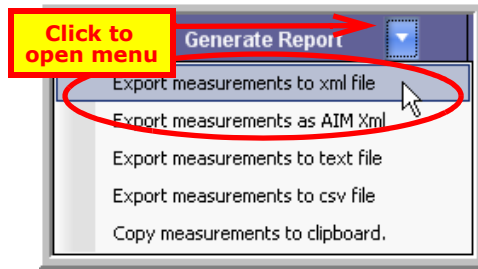
    Note: For convenience, you can also add a workflow element to this workflow that loads the Measurement Protocols tool into the Tool Panel. Make sure to open Measurement Protocols first, and then add the new workflow element. (See "Adding a New Workflow Element" on page 3-4 **for instructions.)**

Using the Measurement Protocol in Other Studies

1. Load a cardiac study.

2. Open the **Measurement Protocols** dialog and select the **Cardiac** from the left column, if not already selected. Select the **Stenosis** protocol from the right column, and click **OK**.

3. Validate the RCA, LAD and LCX workflow elements. Stenosis measurements are obtained automatically.

4. Verify that each step of the protocol has been completed.

5. Find the **Generate Report** button located in the lower-right corner of the Tool Panel.

6. Click the down-arrow on the right (see the following figure).

7. Select **Export measurements to xml file**.

8. Generate a report and verify that the measurements and images have been included in the report.