



Apollo_{LX}

Peripheral Vascular Invasive

LX CLINICAL MODULE

A Fully Integrated, User-Friendly Solution for PVI Procedures

- ✓ Outcomes Management
- ✓ Physician Structured Reporting
- ✓ Interoperable with All Major Enterprise Systems and Diagnostic Devices

The Apollo LX Peripheral Vascular Invasive module provides streamlined, integrated information management for your facility's diagnostic and interventional PVI procedures. Electronically collecting data and images for inclusion in the patient report, the PVI module also expands your department's ability to perform statistical analysis. Built on the powerful Apollo LX clinical data repository and featuring dynamic, user-generated workflows, automated compliance triggers, and unmatched interoperability, LX PVI enhances efficiency, supports best-quality care and enables the easy exchange of clinical information.

To minimize manual effort while maximizing data access, the PVI module interfaces with most major hemodynamic systems as well as electronic health record (EHR/HIS) and admission, discharge, transfer (ADT) systems. And to facilitate best-of-breed environments, LX PVI integrates easily with any other clinical systems you may have installed.

The screenshot displays the Apollo LX software interface for a patient named James Aachen. The interface is organized into several sections:

- Workflow:** A top navigation bar with icons for Patients, Save, Cancel, Refresh, AutoEntry, Picklist, Layout, Show, Imaging, Analytics, PV Invasive Attachments, Echo, and PV Invasive Reports.
- Patient Information:** Fields for Account/Order, Patient ID (2392908), Last name (Aachen), First name (James), Middle (A), Birth Date (1/25/1951), Gender (Male), and Race (Caucasian).
- Past Medical History and Risk Factors:** A text area containing a detailed medical history: "The patient is a 58 year old Caucasian Male. Additional history includes recent angina, and previous CABG. Cardiovascular history includes a LVEF 55%. Vascular history is positive for DVT. Neurological history includes a stroke on 1/1/2008. Respiratory history includes sleep apnea. General history includes GI ulcer bleed. Risk factors include Former tobacco use, hypertension and hyperlipidemia."
- Imaging:** A text area containing imaging findings: "Difficult exam due to patient inability to lie still. Severe homogenous plaque of irregular contour, and with significant areas of calcification in the carotid bulb, proximal ICA, and ECA. Minimal heterogeneous plaque formation in the bilateral carotid bulb and proximal internal carotid/external carotid. Velocity analysis indicates: 1. Minimal (0-40%) stenosis of the bilateral internal carotid artery. 2. Less than 50% stenosis of the bilateral external and common carotid arteries."
- Procedure and Contrast:** A section for recording procedure details.

The bottom status bar shows: "User: James Peterson, MD | Connection: Sales Demo | Patient: Aachen, James [2392908] | www.LUMEDX.com"

The Procedure workflow includes easy access to patient data, medical history and risk factors.

Streamline Data Flow and Improve Data Integrity

LX PVI enables detailed documentation of lesion-specific data and procedure-specific clinical information for accurate accounting of endovascular procedures and outcomes. The PVI module is compliant with the ACC-NCDR® CARE Registry™ and provides carotid stenting vs. carotid endarterectomy comparison outcomes. JCAHO performance measures are documented automatically within the case record. ICD and CPT Codes can be assigned during or immediately after the case. The module also includes additional case data for documentation: History and Risk Factors, Labs Values, Pre-Procedure Imaging comments, Complications, Images and more.

- Use interfaces to gather data easily from your existing hemodynamic equipment to reduce redundant data entry.
- Track and record procedural events (with optional Clinical Documentation module), allowing automatic population of discrete data fields in Apollo LX.
- Enter visual data—easily and quickly—using the Vascular Anatomy Editor.
- Enable rapid completion and distribution of physician reports with structured reporting.
- Drag and drop images into patient records.
- Import and export data from/to the EHR or ADT systems.
- Keep a complete record of the patient all in one database, thus:
 - ♦ Making data more easily accessible.
 - ♦ Minimizing errors.
 - ♦ Providing greater continuity of care.

Intuitive Workflows Enhance Efficiency

The PVI module was designed to meet the disparate needs of physicians, clinicians and administrators. This means that regardless of your role, our software can help you do your job faster, easier—and better. The single-page format and user-configurable views allow you to perform necessary tasks quickly, navigating from history to procedure smoothly and rapidly. Physicians can go straight to their unfinished reports or choose the Conclusion tab, review data, attach any images, add comments and findings as necessary, then sign the report, finalize it and distribute it electronically (with Auto-Distribution).

The screenshot displays the Apollo LX software interface for a patient named James Aachen. The main window is titled "Apollo LX - Patient: Aachen, James [2392908] - Procedure". The interface is divided into several sections:

- Workflow:** A top toolbar with icons for Patients, Save, Cancel, Refresh, AutoEntry, Picklist, Layout, Show, Imaging, Analytics, PV Invasive Attachments, Echo: 2/4/2010, and PV Invasive Reports.
- Procedure Findings Follow Up:** A section with two data entry tables.
 - Add Procedures:** A table with columns for Procedure and Status. It contains two entries: "Aortogram with Runoff" (Secondary) and "Intravascular Stenting" (Primary).
 - Total Fluoro Time:** A text input field containing "22".
 - Contrast Agent:** A table with columns for Contrast Agent, Dose, and Units. It contains one entry: "Hypaque" (70 cc).
- ICD and CPT Coding:** A section with two data entry tables.
 - Add ICD:** A table with columns for Code and Description. It contains one entry: "440.21 Claudication".
 - Add CPT:** A table with columns for Code and Description. It contains two entries: "35450 Runoff with Intervention" and "36010-51 Catheter".
- Procedure Personnel:** A section for assigning roles to physicians.
 - Physicians:** A table with columns for Role and Physician Name. It has three rows for "Attending MD", "Assisting MD", and "Diagnostic MD". The "Attending MD" and "Diagnostic MD" roles are currently assigned to "James Peterson, MD".

The bottom status bar shows: "User: James Peterson, MD | Connection: Sales Demo | Patient: Aachen, James [2392908] | Event: PVI/Invasive.FluoroTime | www.LUMEDX.com".

Enter procedure data—including ICD and CPT codes—at the point of care or right at case-end.

Compliance e-Triggers Improve Patient Safety

Apollo LX PVI features Compliance e-Triggers to help ensure adherence to patient safety protocols. Icons alert users to noncompliant activity or data outside of normal ranges. Fields can be set up as “Must Enter Data,” so critical information is not overlooked even in busy labs. And compliance fields are visible and easily identifiable on the screen.

The PVI Module:

- Documents over 300 arteries and veins (first, second and third order vessels).
- Documents multiple vessel pathologies documentation: Lesions, Lesion Characteristics, Aneurysm and Aneurysm Characteristics and many others.

The screenshot displays the Apollo LX PVI software interface. The top menu bar includes 'Workflow', 'Patients', 'Save', 'Cancel', 'Refresh', 'AutoEntry', 'Picklist', 'Layout', 'Show', 'PV Invasive Attachments', 'Registry', and 'Security'. Below the menu bar, there are several sections for data entry and compliance checks:

- Medications and Allergies:** Fields for 'Medication Reconciliation' and 'Allergy Update' with corresponding buttons.
- Quality and Patient Information:** A section titled 'Patient Safety Assessment Performed Prior to Procedure' with a list of checkboxes for various safety protocols, such as 'Verified Correct Patient with 2 Identifiers', 'Positioned Patient Correctly', and 'Observe Central Line Protocol Line in place'. An 'All Complete' button is present.
- Patient Information:** Fields for 'Date/Time', 'Side', 'Site', 'Type', 'Prep Done', and 'Procedural Pause/Time Out Completed'. There are also buttons for 'Pulses' and 'Negro Assess'.
- Procedure Personnel:** A table with columns for 'Physicians' and 'Role', with 'Add MD' buttons for each row.

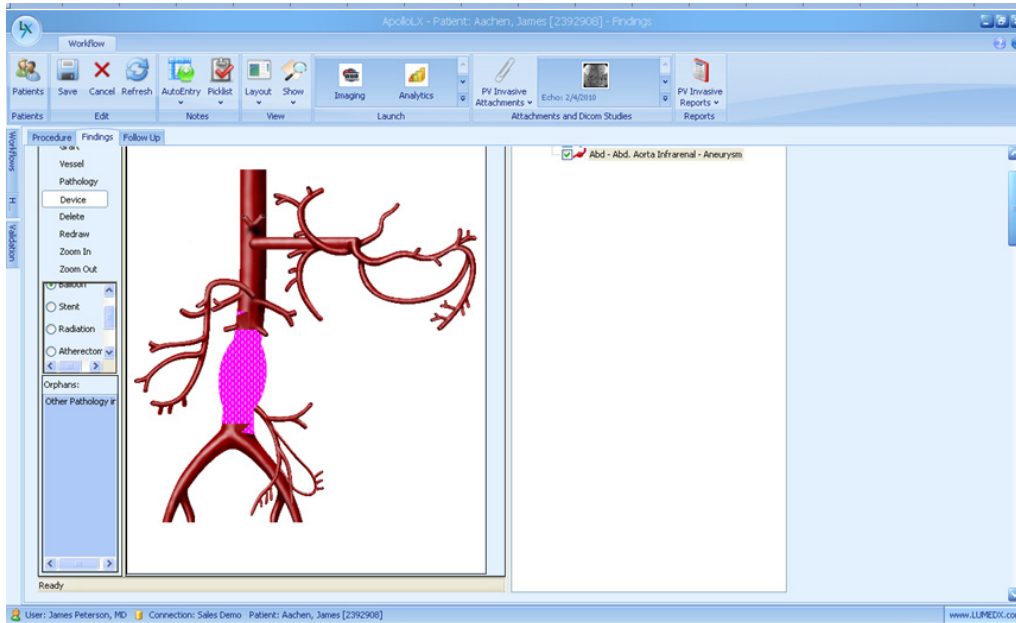
The status bar at the bottom shows 'User: appApollo', 'Connection: ApolloLX', 'Patient: Tooney, Tommy [2345]', 'Event_PVInvasive.PreSedOther', and 'www.LLUMEDX.com'.

Compliance e-Triggers ensure patient safety protocols are followed.

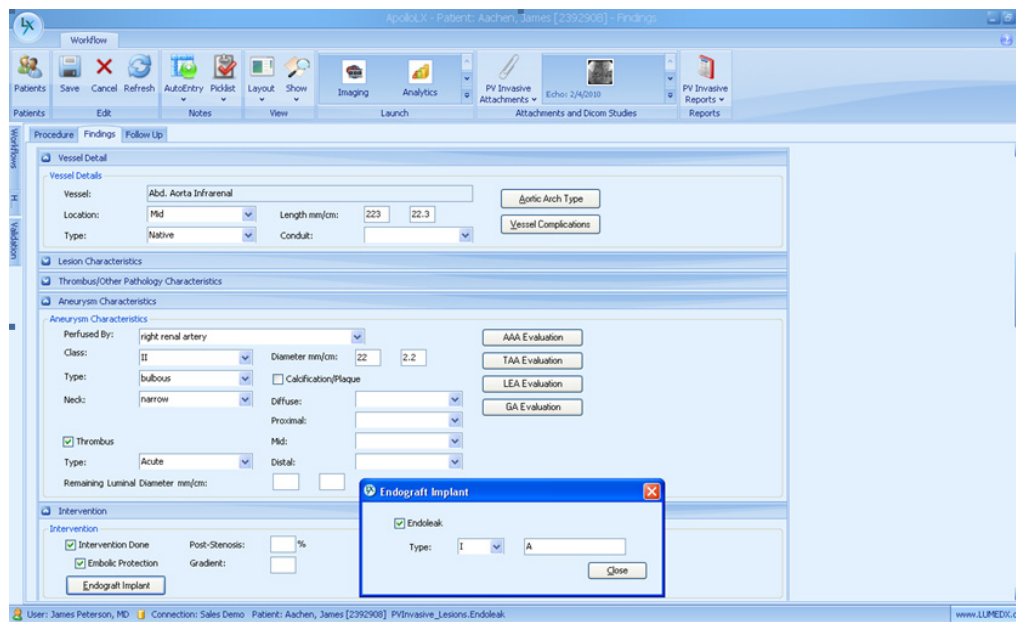
- Documents Anatomical Regions: Cerebrovascular Arteries and Upper Extremity Thoracic Arteries; Abdominal Arteries; Lower Extremity Arteries.
- Enables easy production and finalization of a physician report right at case-end for invasive diagnostic and endovascular procedures, including aortic and thoracic endograft repair.
 - ♦ Report fields are auto-populated.
 - ♦ Images can be imported with one click.
 - ♦ Report can be automatically distributed to referring physicians, medical records, billing, inventory management, attending physician's offices and hospital administration.
- Supports ACC-NCDR® CARE® Registry reporting.

Enter Data Visually Using the Vascular Anatomy Editor

The Vascular Anatomy Editor enables you to depict diseased vessels and device locations accurately. It features 10 arterial and venous diagrams containing over 300 vessels (first, second and third order), including: Cerebrovascular Arteries and Veins; Upper Extremity/Thoracic Arteries; Abdominal Arteries and Veins; Lower Extremity Arteries and Veins, and Diagnostic Runoff (Diaphragm to Feet).



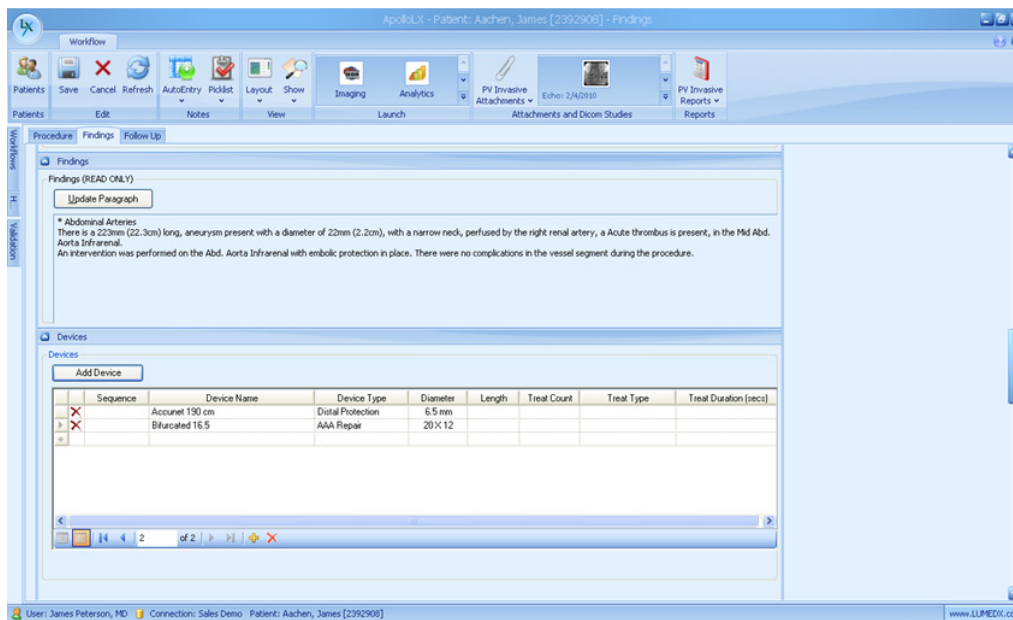
The Vascular Anatomy Editor enables precise visual documentation of current and historical lesions and devices as well as pre- and post-procedure treatments. Findings are then generated automatically.



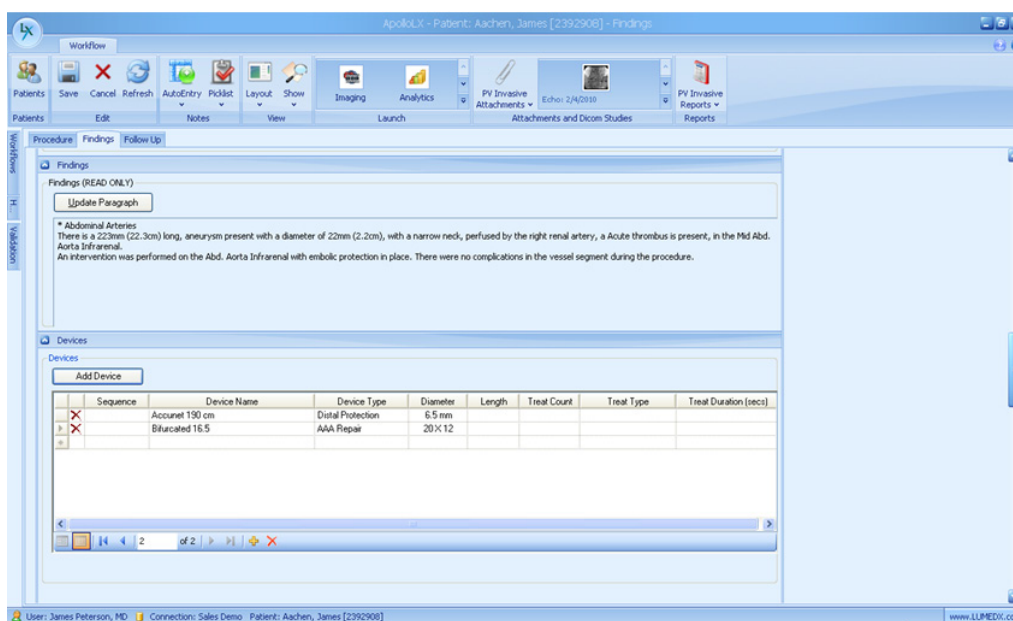
Enter discrete information about lesion during or after the procedure in the Findings workflow.

With the Vascular Anatomy Editor your department can:

- View three-dimensional anatomy, lesion and graft data in full color.
- Populate data fields in Apollo LX using graphical recording tools.
- Display location and severity of pre- and post-intervention lesions.
- Draw and edit native vessels and devices for highly accurate, patient-specific anatomies.
- Track and display progressive treatment history.
- Import color images into Apollo LX Word reports.
- Automate and streamline patient data entry.
- Review patient procedural information and history more rapidly.



Attach equipment used to a lesion.



Document the patient's progress at appropriate intervals in the Follow Up workflow.