A Case Study

Transforming Cardiology Workflow at Apollo Hospital with SoftLink Cardiology PACS & CVIS

Apollo Hospital achieved end-to-end cardiology workflow automation by upgrading to SoftLink's integrated Cardiology PACS and CVIS, seamlessly connecting imaging, analysis, and reporting across invasive and non-invasive cardiology.

Background

For nearly two decades, **Apollo Hospital** has relied on **SoftLink's Cardiology PACS** to manage and archive cardiac imaging data. Over the years, the cardiology department expanded significantly with multiple Cath Labs and Echocardiography systems generating large volumes of diagnostic images and procedural data.

With growing clinical demand and the need for a more integrated workflow, Apollo Hospital recently undertook a major upgrade of its cardiology imaging infrastructure. The objective was not only to modernize the PACS platform but also to introduce a **comprehensive Cardiovascular Information System (CVIS)** to unify imaging, measurements, and reporting across invasive and non-invasive cardiology.

The Challenge

Apollo Hospital required a solution that could:

- Upgrade the existing Cardiology PACS infrastructure
- Consolidate imaging data from **5 Cath Labs and 12 Echo carts**
- Enable **advanced quantitative analysis**
- Provide **anywhere access to cardiac images**
- Standardize reporting across all cardiac procedures
- Integrate non-invasive cardiology workflows with imaging and reporting
- Reduce manual data entry and improve measurement consistency

The Solution

SoftLink implemented a **comprehensive upgrade combining Cardiology PACS with an integrated CVIS platform**, delivering end-to-end automation for the cardiology department.

PACS Upgrade
The PACS upgrade extended imaging coverage across the department and introduced advanced capabilities:

Expanded Imaging Integration
Integration with 5 Cath Labs and Connectivity with 12 Echo carts

Offline QCA (Quantitative Coronary Analysis)
The offline QCA module allows cardiologists to perform accurate vessel measurements and lesion analysis outside the Cath Lab environment, improving flexibility in reviewing procedures and supporting clinical decision-making.

ZFP Viewer for Enterprise Access
The ZFP viewer enables high-speed access to cardiac images across the hospital network and on multiple devices. Clinicians can securely view studies anywhere within the hospital environment without needing specialized workstations.

CVIS Implementation
The newly implemented **Cardiovascular Information System (CVIS)** standardizes documentation and reporting across the cardiology department.

The system supports structured reporting for a wide range of cardiac procedures including:

- Coronary Angiography
- PTCA / PCI
- Electrophysiology (EP) procedures
- TAVI
- Other invasive cardiac interventions

Structured workflows improve clinical documentation, enable faster reporting, and ensure consistent data capture for each procedure.

Non-Invasive Cardiology Integration

Beyond invasive cardiology, the solution also streamlined **echocardiography reporting and analysis**.

The Echo Reporting System was implemented with deep integration to the PACS platform and includes a **specialized Echo viewer**.

Key capabilities include:

- Offline ultrasound measurements
- Acceptance of measurement data directly from Echo carts through **DICOM Structured Reports (SR)**
- Automatic population of measurement data into structured reports
- Historical comparison of measurements across studies

This approach significantly reduces manual data entry and ensures greater accuracy and consistency in echo reporting.

Key Benefits

End-to-End Cardiology Automation
The system connects imaging, analysis, measurements, and reporting into a single workflow across invasive and non-invasive cardiology.

Improved Diagnostic Efficiency
Cardiologists can perform advanced analysis such as QCA outside the Cath Lab, accelerating post-procedure review and decision making.

Enterprise Image Accessibility
With the ZFP viewer, clinicians can securely access cardiac images anywhere in the hospital and across multiple devices.

Standardized Reporting
The CVIS platform ensures structured documentation for complex cardiac procedures, improving consistency and clinical documentation quality.

Seamless Echo Workflow
Direct integration with Echo carts through DICOM SR eliminates redundant data entry and enables easy comparison of measurements over time.

The Vision Ahead

Following the successful implementation, Apollo Hospital's long-term vision is to **extend this integrated cardiology platform across multiple hospitals within the group**.

The goal is to create a **centralized cardiology repository** that consolidates imaging and procedural data across the Apollo network, enabling:

- Unified cardiac patient records
- Multi-center clinical collaboration
- Longitudinal cardiac data analysis &
- Scalable cardiology workflow standardization.