

CardioDoc™ Echo

STRUCTURED REPORTING

Today's Business Challenge: Rapidly Document Echocardiography Procedures and Results

Documentation is a critical step in any echocardiography procedure. Referring physicians, the medical records department, insurance companies, hospital administrators and staff all use portions of clinical data, demographics, images and inventory information. And all concerned stakeholders require timely access to case details. Yet producing and distributing a report with manual systems can take days or weeks, slowing follow-up treatment and reimbursement. Physicians need a solution that allows them to complete, sign and distribute comprehensive documentation at case end—simply and quickly.

The Solution: CardioDoc™ Echocardiography Structured Reporting

CardioDoc is the premier physician reporting solution for cardiology. With CardioDoc's Echo Reporting Solution, sonographers and physicians can rapidly

- **Complete reports** for resting, stress, pharmaceutical stress and transesophageal echo tests
- **Sign** securely with a password-protected electronic signature
- **Automatically distribute** to referring physicians, medical records, billing, inventory management, their own offices and hospital administration

By documenting data digitally, CardioDoc ensures that physicians and referring physicians have all the information they need at their fingertips to provide the highest quality patient care. Additionally, CardioDoc Echo report formats are compliant with the Intersocietal Commission for the Accreditation of Echocardiography Laboratories (ICAEL); ICAEL certification coming soon.

Here's how CardioDoc's Echo Reporting Solution works:

1. **Registration.** The patient is pre-registered for the procedure using the hospital information system (HIS). Data is transferred to Apollo Advance™ clinical data repository via an ADT interface, reducing duplicate data entry and thus decreasing the chance of error.
2. **Procedure.** Through an interface, measurement data automatically populates CardioDoc and Apollo. Data can also be entered manually.
3. **Post-procedure.** The physician logs into CardioDoc and sees a list of all of his patients with unfinished reports.

The screenshot displays the 'Echocardiography Patient Information (Resting)' screen. It is divided into two main sections: 'Demographic Information' and 'Procedure Information'.
Demographic Information:
Name: James d Aachen, Account Number: 34242, MFI#: 324234
Birth Date: 4/28/2000, Gender: Female, Race: [blank]
Height: 66 in 167.64 cm, Weight: 99.01 lb 44.91 kg, BSA: 1.48
Echo Case #: 7978, Procedure Date: 4/17/2008, Age: 7
Procedure Information:
Location: Inpatient (Room: 444), Reading Physician: James Peterson, MD, Sonographer: Betty Brown
Portable: ER, Interpreting Group: EchoPhysicians, Additional Staff: [blank]
Procedure Room: 777, Referring Physician: Emily Yee, MD
Procedure Details:
Time: 16:57, Schedule Type: Elective, QA: [checked], After Hours: [checked]
Informed Consent: [checked], Procedure Time Out: 13:11, ASA Classification: [blank]
Equipment: Acuson, Study Quality: adequate, Tape Number: 8979
Study Performed: Resting
Study Description: complete transthoracic (congenital)
A table at the bottom shows CPT Code 123 and CPT Code Description Pulsed Wave Doppler.

Patient Information Screen

i. The physician selects the patient whose report is to be completed. The physician can view echo images in **CardioPACS™** multi-modality imaging system. Images launch automatically when the patient is selected.

ii. CardioDoc takes the physician to the appropriate report template based on procedure performed.

iii. Data entry forms are pre-populated with the information acquired during patient registration and the procedure.

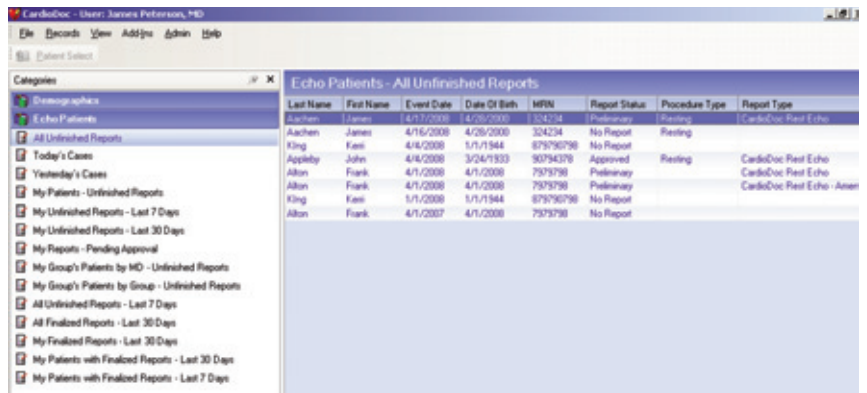
iv. The physician uses the **Wall Motion Diagram** to score the segments quickly. CardioDoc calculates the Wall Motion Index and builds sentences for the report from the scoring.

v. The physician uses the **Smart Notes Advance Editor™** to document any additional findings, the summary and plan for the report. The Smart Notes Advance Editor enables physicians to choose procedure conclusions quickly and is easily customized to the physician's preferences.

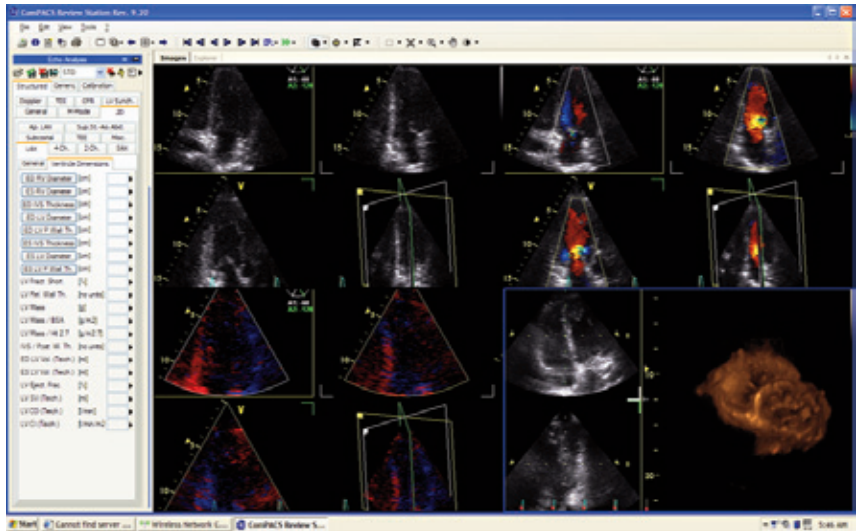
vi. The physician previews the completed report. Field validation ensures all required fields for the report are completed prior to finalization.

vii. The physician electronically signs the report, with final status.

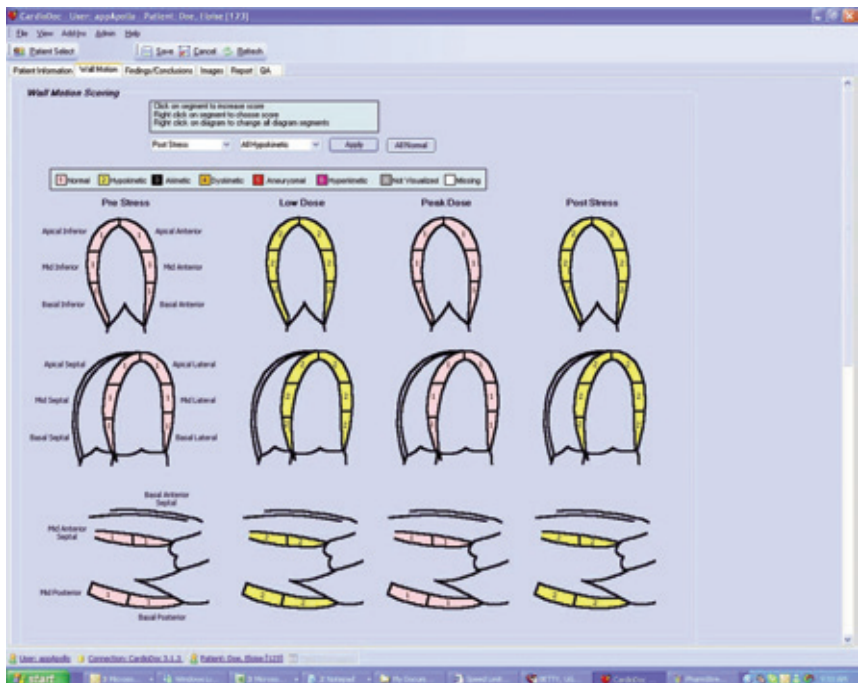
viii. **Auto-Distribution** can be configured to send the report and any additional notes automatically to the physician's own office, the referring physician's office, medical records, etc., via e-fax, e-mail or printer. The report and documentation process is complete.



Patient Select Screen



CardioPACS Echo with Measurements



Wall Motion Diagram

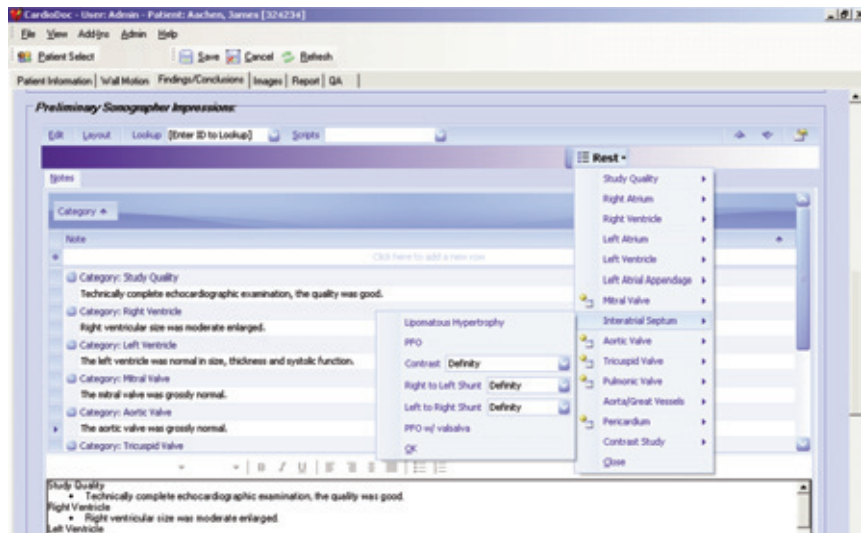
Benefits

Produce a Structured Report at Case End.

Using interfaces to connect hemodynamic equipment, imaging systems and the HIS, CardioDoc retrieves all patient-specific data and incorporates it into the report. Because it's a structured reporting solution—with minimal freestyle documentation—CardioDoc enables quick review and editing. Procedure reports are thus created faster and more accurately than with conventional dictation and transcription. Data is available immediately so that physicians can evaluate care strategies and patient outcomes.

Eliminate Transcription Costs and Associated Delays. Patient data is entered in real-time during the procedure. Therefore, the report is ready for physician review right at case end. He can add conclusions, sign with an e-signature and use Auto-Distribution to send it to the referring physician and medical records department immediately, days faster than with transcription-based documentation. Automated reporting also reduces transcription overhead and eliminates delays typically associated with repetitive editing and multiple reviews.

Increase Physician Satisfaction and Promote High-Quality Follow-up Treatment. Because much of the report, summary and plan is completed with wizards, customizable pre-scripted templates and picklists, physicians can document procedures easily and quickly. In turn, referring physicians receive a timely, focused report that clearly outlines ongoing patient care. Patient reports and images are accessible for review electronically, as well as via the Internet or intranet. The quick turnaround time, accessibility and comprehensiveness of CardioDoc all help to ensure high-quality follow-up care, increase physician satisfaction and promote rapid treatment in case of emergency.



Smart Notes Advance Editor

About LUMEDX: With over 500 heart center clients worldwide, LUMEDX is the market leader in fully integrated cardiovascular information and imaging systems and the No. 1 independent integrator of cardiology information solutions. LUMEDX offers the most proven, comprehensive package of clinical information tools, cardiovascular products, and services to help medical institutions enhance quality of patient care, reduce costs, streamline workflow, increase patient volume, and grow revenue.