


QUALITY STANDARD SYSTEM MANUAL	 HALCYON MARINE HEALTHCARE SYSTEMS	DOCUMENT NO. QTU 4.1	EFFECTIVITY DATE: July 11, 2018
			REVISION NO.: 1
		PREPARED BY: Marilar F. De Guzman, MD QAM	APPROVED BY: Glennnda E. Canlas, MD Medical Director
SUBJECT: 2D ECHOCARDIOGRAPHY QUALITY MANUAL			

1.0 OBJECTIVES

- 1.1 To be able to facilitate scheduled patients for stress echo/2d-echo within the day
- 1.2 To ensure that no patients sustains a cardiac arrest during the procedure
- 1.3 To ensure 100% accuracy of all encoded results
- 1.4 To ensure that all results are encoded and uploaded by the echo technician within 24 hours after the examination.
- 1.5 To ensure that all results are interpreted by the cardiologist within the day
- 1.6 No malfunction or damage in 2D echo equipment that can incur costs.
- 1.7 To avoid and/or minimize complaints of misbehavior from co-workers and/or supervisors.
- 1.8 To ensure punctuality in the attendance per month.
- 1.9 To ensure continuous professional growth and apply learnings in 2D echo process for the improvement of its operations.
- 1.10 To participate in all company events and/or gatherings

2.0 SCOPE

This procedure applies to all patients requiring 2D echocardiography and Stress echocardiography recommended by the attending physician or the specialist to undergo cardiac diagnostic test upon evaluation of patient's medical profile and risk factors for a suspected cardiac disease.

3.0 DEFINITION

Two-Dimensional Echocardiogram (2D Echo) - is a test in which ultrasound is used to picture out the heart. It is capable of displaying a cross sectional "slice" of the beating heart, including the chambers, valves and the major blood vessels that exit from the left and right part of the heart.

Doppler - is a special part of the ultrasound exam that assesses blood flow (direction and velocity). Doppler exam shows the flow of blood as it makes its way through and out of the heart. One would hear "swishing" or "whooshing" sounds during this part of the procedure.


Information that Echocardiography and Doppler provide?

Echocardiography is an important tool in providing the doctors with important information about the following:

- Size of the chambers, dimension, volume and the thickness of the walls.
- Pumping function: one can tell if the pumping power of the heart is normal or reduced to a mild or severe degree.

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Valve function: it identifies the structure, thickness and movement of each heart valve.

Volume status: Low blood pressure can occur in the setting of poor heart function, but may also be seen in reduced volume of circulating blood.

Others: "pericardial effusion" or fluid in the pericardium (the sac that surrounds the heart), congenital heart disease, blood clots or tumors within the heart, active infection of the heart valves, abnormal elevation of pressure within the lungs.

Stress Echocardiography - also called an echocardiography stress test or stress echo, is a procedure that determines how well the heart and blood vessels are working. During a stress echocardiography, the patient exercises on a treadmill while the Echo Technician monitors the patient's blood pressure and heart rhythm. When the heart rate reaches its peak level, Echo Technician will take ultrasound images of the heart to determine whether the heart muscles are getting enough blood and oxygen while doing the exercise.

Echocardiographer - also known as an echo technician or cardiovascular technician - utilizes a noninvasive diagnostic test called an echocardiogram, which is a sonogram that anatomically evaluates a heart.

4.0 RESPONSIBILITY AND AUTHORITY

4.1 The Echo Technician is responsible in doing the baseline 2D echo.

4.2 The Echo Technician is responsible in ensuring the regular maintenance, calibration of the machine and cleanliness of the unit.


4.3 The Echo Technician ensures that all results are uploaded and encoded within 24 hours after the examination and that all the tests for the day has been interpreted by the Cardiologist on duty.

4.4 The Echo Technician is responsible in overseeing the emergency cart of the unit, safekeeping of the key, daily inventory of items in E-cart (morning and afternoon), reporting of nearly expired vaccines and requisition of near expiry medications in the emergency cart.

5.0 REFERENCES:

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5.1 SIEMENS

Acuson X300 Premium Edition

Diagnostic Ultrasound System

Instructions for Use

5.2 SIEMENS

Acuson X300 Premium Edition

Diagnostic Ultrasound System

Electromagnetic Emissions and Immunity:

Guidance and Manufacturer's Declaration

5.3 SIEMENS

Acuson X300 Premium Edition

Diagnostic Ultrasound System

System Reference

5.4 SIEMENS

Acuson X300 Premium Edition

Diagnostic Ultrasound System

Features and Applications Reference

5.5 GE Healthcare T-2100 Treadmill Operator's Manual 2021403-026 ENG Revision C

5.6 GE Healthcare Case/Cardiosoft/CS Version 6 (6.6) XML Data Export Reference Manual 2040396-084 Revision A

5.6 GE Healthcare Case/ Version 6.7 Operator's Manual 2060290-001 ECG Revision C

5.7 Work Instructional Manual for 2D Echocardiography


6.0 POLICIES

6.1 The Echo Technician verifies the identification of the patient prior to the procedure.

6.2 The Echo Technician ensures that the test has been properly explained to the patient and that the patient is prepared for the procedure.

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6.3 The Echo Technician assists the Cardiologist in all aspects of the procedure.


6.4 The Echo Technician should monitor any abnormalities in the tracing of the patient and informs the Cardiologist on duty immediately.

6.5 The Echo Technician maintains the emergency cart and oxygen tank to ensure that all medications are not expired and that it is readily available in case of emergency.

6.6 The Echo Technician monitors the preventive maintenance and calibration of the 2D Echo machine. The 2D Echo Technician shall advise the Purchasing Assistant to coordinate with the external service providers for the schedule of machine maintenance. Details in the Preventive Maintenance Certificate and Service report shall be checked prior to filing.

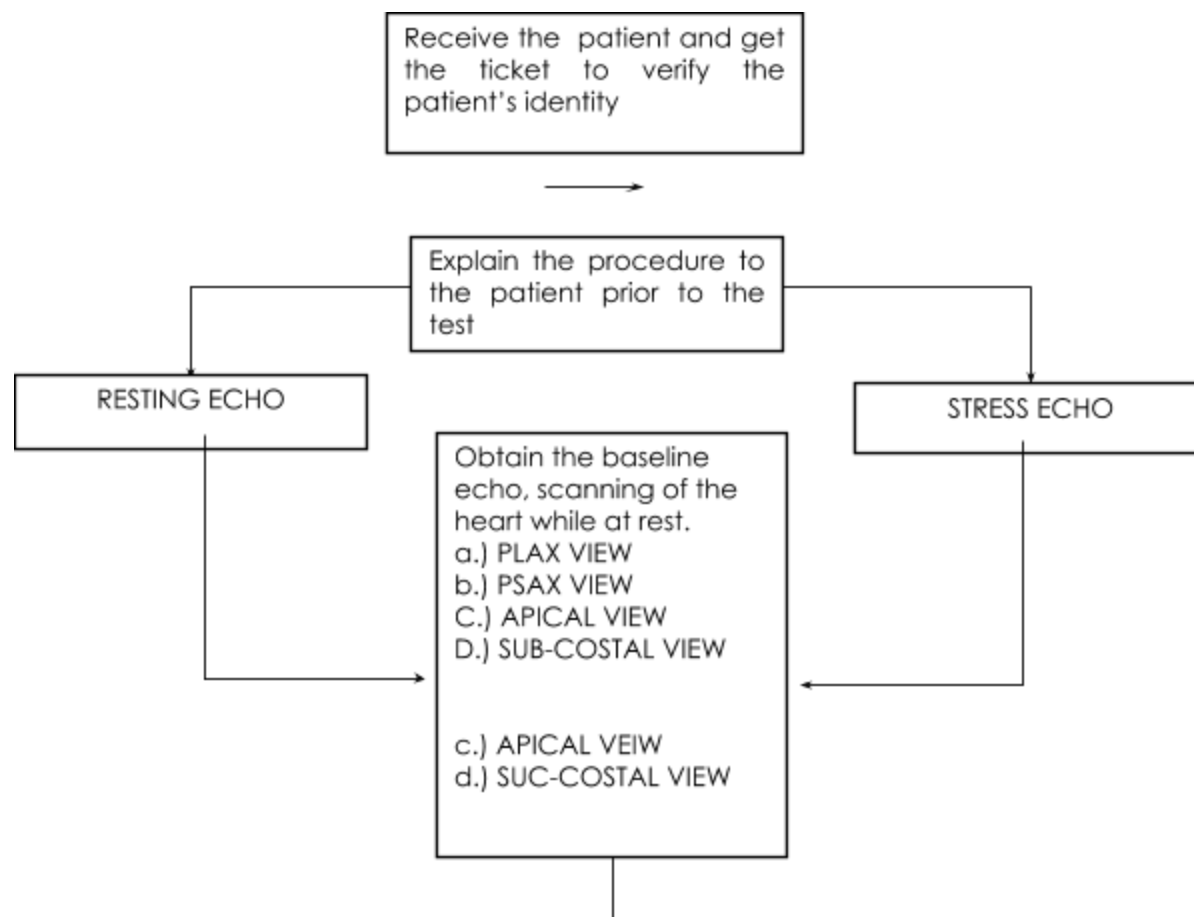
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7.0 PROCEDURES

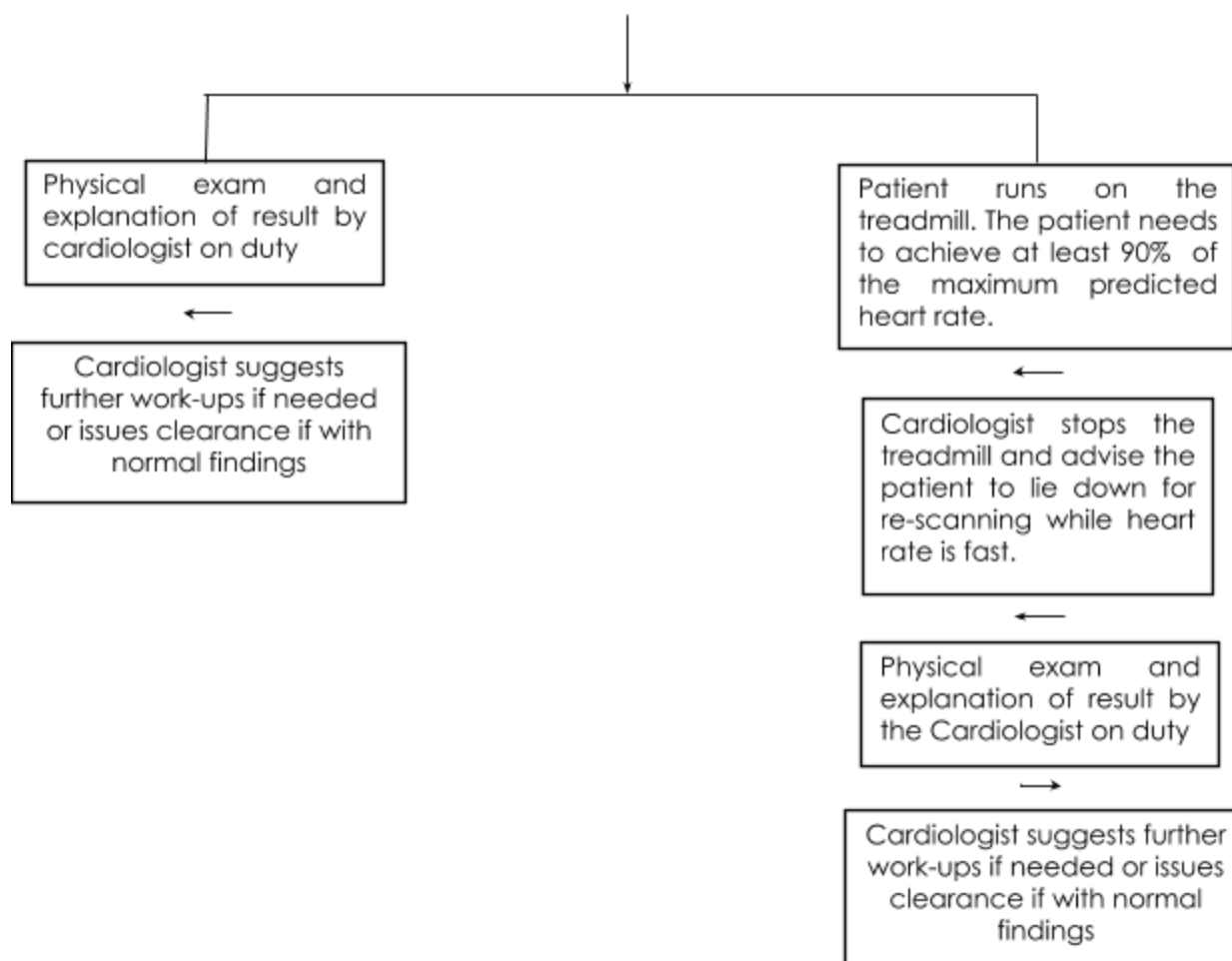
7.1 Receiving of Patients



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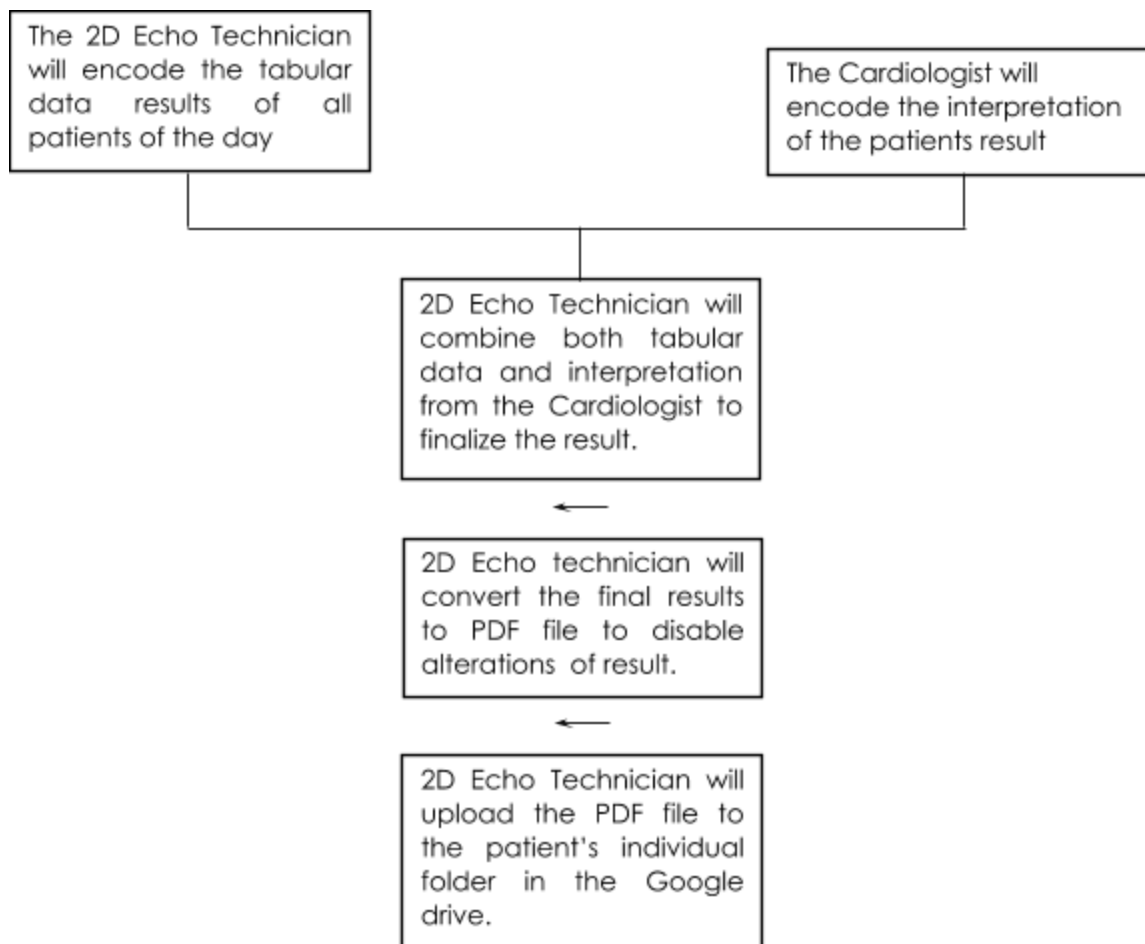


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II. Encoding of Results



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8.0 LIST OF FORMS

- 8.1 Baseline 2D Echo Form
- 8.2 Doppler Normal Ranger Form
- 8.3 Stress Echo Form
- 8.4 Vascular Assessment Form
- 8.5 ABI Form

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