OPTIMUM®
Life Reinsurance

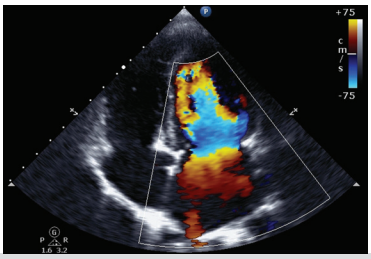
"The strength of expertise"

Learning Series - #5

Making sense of medical terminology - ECHOCARDIOGRAMS

Echocardiogram 101
(more to come on measurements and their significance)

Echocardiography, echocardiogram, cardiac echo or simply an echo, is an ultrasound of the heart. It uses standard two-dimensional, three-dimensional, and Doppler ultrasound to create images of the heart.



Here are the modes and types:

1 M-Mode Echo
The simplest type of heart ultrasound: a uni-dimensional picture similar to a tracing rather than a picture but of high resolution, allowing accurate measurements of ejection fraction, cardiac chamber size, aortic dimensions, and wall thickness

2 2-D Echo
A real-time heart ultrasound that captures the motion of the heart wall. It's usually presented in video format, with the interpreting physician giving a qualitative summary of any abnormalities seen.

3 Doppler Echo
This type of echo focuses on flow in and around the cardiac valves, assessing the degrees of stenosis and/or regurgitation present, intracardiac shunts (i.e septal defects).

4 Colour Doppler Echo
An enhanced form of Doppler echocardiography that uses different colors to designate the direction of blood flow. This simplifies the interpretation of the Doppler Echo.

5 3-D Echo
This technique captures views of the heart structures with greater detail than 2-D echo.

6 Transthoracic Echocardiography (TTE)
A transthoracic echocardiogram (TTE) is the most common noninvasive type of echocardiogram, which uses high frequency soundwaves (ultrasound) to create a moving picture of your heart through the chest wall. In this case, the probe (or ultrasonic transducer) is placed on the chest or abdomen of the subject to get various views of the heart. It is good for evaluating the size and function of vessels and chambers, revealing enlargements, atherosclerosis, stenosis, regurgitation), wall hypertrophy, and congenital heart abnormalities.

7 Transesophageal Echocardiography (TEE)
A transesophageal echo (TEE) test is a type of echo that uses a long, thin, tube (endoscope) to guide the ultrasound transducer down the esophagus ("food pipe" that goes from the mouth to the stomach). This lets the doctor see pictures of the heart without the ribs or lungs getting in the way; particularly the posterior parts of the heart. Certain cardiac impairments, particularly those involving atrial abnormalities, are better suited to TEE imaging. These include: atrial or ventricular septal defects, complex valvular heart disease and endocarditis, atrial enlargement with suspected atrial blood clots, and intracardiac tumors.

8 Stress Echocardiogram
A heart study where two sets of images, one at rest, another one after working out on a treadmill or stationary bike. If health prevents physical activity, a medication that mimics the effect of exercise is injected. This test is called a pharmacologic stress echocardiogram. When heart muscle becomes ischemic, it loses its ability to produce strong contractions. On echocardiography, this appears as localized wall motion abnormalities (hyperkinetic, hypokinetic, akinetic, dyskinetic).

Since 1973, Optimum Reassurance has been offering its clients in the Canadian market with professional reinsurance services and capacity. Optimum Reassurance is a subsidiary of the Montreal-based holding company, Optimum Group. Optimum Group is a privately owned international financial group active in life reinsurance, property and casualty insurance, life insurance, actuarial consulting and asset management.

optimumre.ca
optimum--reassurance/linkedin