

## NWH ED POINT OF CARE ULTRASOUND

### LIMITED ECHO / CARDIAC

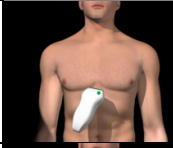
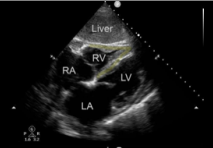

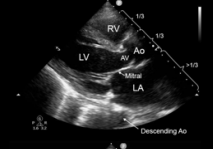
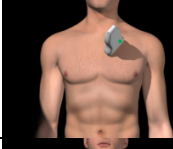


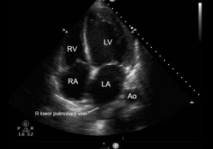


TRANSDUCER: phased array probe



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CONFIRMATORY STUDIES: CT chest, Cardiology Echo

REQUIRED VIEWS: 2 views (SX, PSLA, PSSA, A4C) +/- IVC

View	Positioning	2D Image	Interpretation
Subxiphoid			Evaluate for pericardial effusion. Most useful in cardiac arrest when other views would interfere with chest compressions.
PSLA			"Scout film" for Echo. Establishes the long axis of the heart when AV, MV and Apex are in plane. Use to. Evaluate LA, LV function, Mitral valve, Aortic Valve, pericardial space.
PSSA			Short axis view of both ventricles – good for chamber size comparison in patients with PE, pericardial effusion, LV function.
A4C			More difficult view to obtain. Usually patient will need to be in left lateral decubitus position. Good view to compare chamber sizes, valves, RV function.
IVC			Evaluate IVC diameter and respiratory variability. The IVC is a poor surrogate of CVP, a bad measure of fluid responsiveness. Extremes of IVC size may be of use.

### PATHOLOGY:

- Absence of Cardiac Activity.
- Pericardial Effusion
- LV Dysfunction (Global Hypokinesis)
- RV Dysfunction (Pulmonary Hypertension)

### TIPS:

- Coach breathing.
- Use left lateral decubitus position.
- Place marker in center of ventricle to assess for ventricular walls moving and thickening.

### PITFALLS:

- In arrest, profound bradycardia and very weak myocardial contractility may be confused with true cardiac standstill.