

Nepean ICU Echo Protocol

PLax (Parasternal Long Axis)

2D	RV, IVS, LV, AV, Ascending Aorta, MV, LA * check for pericardial and pleural effusion*
	Zoom AV → measure the LVOT diameter in systole (for CO)
	Zoom MV
CD	AV, MV
M-Mode	Aortic root (onset of QRS) * leading edge to leading edge*
	LA (end-systole) * inner edge to inner edge *
	LV (tip of MV) : IVS, LVD, LVPW (onset of QRS); LVD (systole) * leading edge to leading edge*
2D	RVIT- TV (transducer head down), RVOT-PV (transducer head up)

PSax (Parasternal Short Axis)

2D	LV (3 Levels) : Basal-MV, Mid-papillary muscles , Apex
	Aortic Valve Level : AV, LA, IAS, RA, TV, RVOT, PV, MPA & bifurcation
CD	AV, PV, TV, IAS
CW	if TR present – measure the TR Vmax

A4C

2D	LA, MV, LV, RA, TV, RV
	Zoom LV – assess LV systolic motion (inferoseptal & anterolateral & Apex)
CD	MV
PW	tip of the MV leaflets (mitral inflow: E & A ratio)
TDI	PW medial and lateral mitral annulus (E' & A') – to estimate LAP = E/ E' ratio <8 (Normal) > 15 (LAP > 15 mm Hg)

A5C

CD	LVOT, AV
CW	AV (aortic flow)
PW	LVOT (for CO)

A4C

2D	RA, TV, RV
CD	TV
CW	If TR present – measure the TR Vmax
M-Mode	TAPSE to assess RV systolic function, normal > 1.8 cm
TDI	PW tricuspid annulus to measure the Sm

A2C/A3C

A2C 2D	LA, MV, LV (anterior and inferior)
A3C 2D	LV (anteroseptal and inferolateral)
CW	MV

Subcostal 4 Chamber

2D	LA, LV, RA, RV
CD	IAS, IVS

Subcostal Short Axis

2D	IVC
M-Mode	IVC (to estimate RAP)
2D	Short axis : AV level and LV

Suprasternal

2D	Ascending aorta, aortic arch, thoracic descending aorta, right pulmonary artery
CD& CW	Thoracic decending aorta