**Transducer Types & Applications**

- **Parasternal Long Axis (PLAX)**
  - **Uses**: Quick look or initial wall motion abnormalities.
  - **Tips**: LV (apical view, papillary muscles can exaggerate subendocardial LV).
  - **Position**: RV pressure overload (not diagnostic).

- **Parasternal Short Axis (PSAX)**
  - **Uses**: Limited look or regional wall motion abnormalities.
  - **Tips**: M-Mode, papillary muscle function here.

- **Apical 4 Chamber (A4C)**
  - **Uses**: Limited look or chamber sizes. A good evaluation for 4-chamber view with emphasis on estimating LV size and shape (see advanced TTE 102).

- **Apical 2 Chamber (A2C)**
  - **Uses**: May be useful in foreshortening. LV is round or not in view of view, then look for aortic arch.

**Pocket Guide: Anesthesia POCUS Card design by numerous UCSF faculty and support from:**

- **Images from** echocardiographer.org

**Disclaimer**: This card is intended to be educational in nature and is not a substitute for clinical judgment or detailed review of patients. It is intended for use in an educational or training setting where tabulated correct and incorrect answers are provided. The card is a collaborative effort by representatives of multiple academic medical centers.
**Parasternal Long Axis (PLAX)**

**Uses**
- LV, TV (PASP), PA (though not best view for this)
- PA diameter, Pulmonary VTI (PW PV)
- EPSS (LV function)

**Tips**
- Only slight movement from PLAX view needed
- PASP = 4V^2 + RAP
- Pericardial effusions tend to be anterior to descending aorta, pleural effusion tends to be posterior; should be seen throughout cardiac cycle
- May see eustachian valves (EV) – fetal flow from IVC/RA to LA

**Position**
- RV Inflow view: standard PLAX view, tilt transducer to aim toward pt’s right hip
- PV view – if PLAX aim toward pt’s L shoulder (look up), may see PA bifur

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**Parasternal Short Axis (PSAX)**

**Uses**
- CW of TV (PASP), RVOT, Aortic leaflets, PA, pules V5
- Can cobble for PFO

**Tips**
- Sometimes long over PR, ask pt to exhale
- May move transducer toward pt’s right shoulder to obtain view
- May not see well, but try color doppler
- Normal PR (4V) – 2.8 m/s ~36mmHg if nl RAP
- Pulmonary VTI – PW proximal to PV (14–16@HR80) if low suggests low CO (if not tachy)

**Position**
- Start from PLAX à PSAX, then angle up toward pt’s right shoulder; may show ‘pants view’ of the PA

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**Misc**

- **E-point septal separation (EPSS):** PLAX view, distance if ant mitral leaflet to septum in early diastole
- TV annulus: Parasternal (TVI), subcostal (TVI, LAX function) – see box to left

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**Subcostal**

**Uses**
- Aortic arch Dissection, Right PA

**Tips**
- If RPA is smaller than aorta, filling pressures likely normal

**Position**
- Have pt look up and left; place transducer in suprasternal notch with indicator pointed to 14:00, tilt probe up and down

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**Tricuspid annular plane systolic excursion (TAPSE)**

> 1.6cm ~ good RV systolic function (caution with this measurement)