Sono Graphics

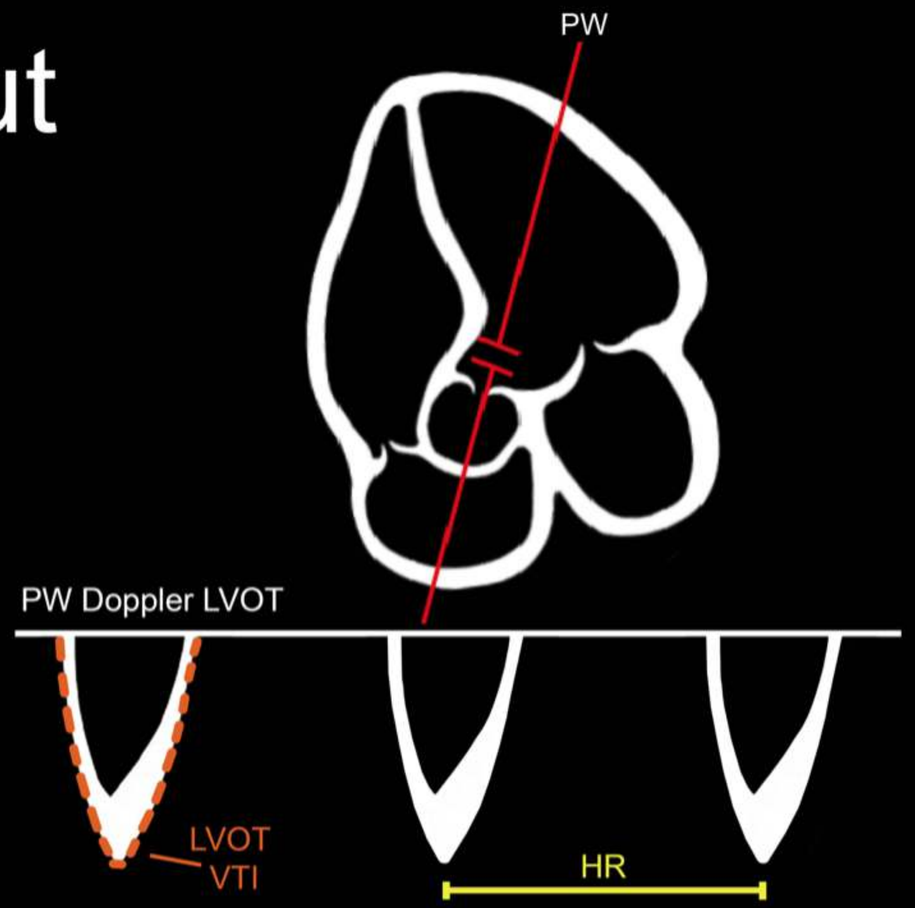
POCUS 101

Cardiac Output

$$\left(\frac{\text{LVOT Diameter}}{2}\right)^2 \times \pi = \text{LVOT}_{\text{area}}$$

$$\text{SV} = \text{LVOT}_{\text{area}} \times \text{LVOT}_{\text{VTI}}$$

$$\text{SV} \times \text{HR} = \text{CO}$$



"Volume Responsive"

SV or CO Increase >15%

VTI Increase > 12.5%

	LVOT VTI (cm)	CO (L/min)	CI (L/min/m²)
Low	<18*	<4**	<2.5
Normal	18-22	4-8	2.5-4
High	>22*	>8**	>4

*May still have normal CO depending on HR
** Normal CO varies depending on patients height/weight

References