

Left ventricular systolic function measurement

On adult transthoracic echocardiography

Normal LV end diastolic measurements:

Male (LVIDd)	Female (LVIDd)
• Normal size: 4.2-5.9cm	Normal size: 3.9-5.3
• Mildly dilated: 5.4-5.7cm	Mildly dilated: 6.0-6.3cm
• Moderately dilated: 5.8-6.1cm	Moderately dilated: 6.4-6.8cm
• Severely dilated: ≥ 6.2 cm	Severely dilated: ≥ 6.9 cm

Measure LVIDd (Left ventricular internal dimension in end-diastole), in end-diastole. Beginning of 'R' wave on ECG, MV fully open, AV closed. LV at fullest

LV Ejection Fraction:

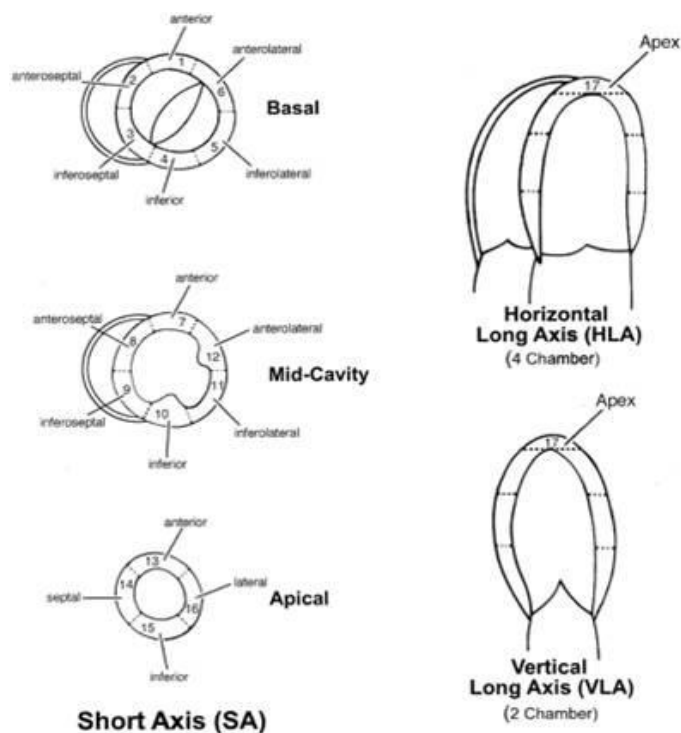
Normal: $\geq 55\%$

Mildly impaired: 45-54%

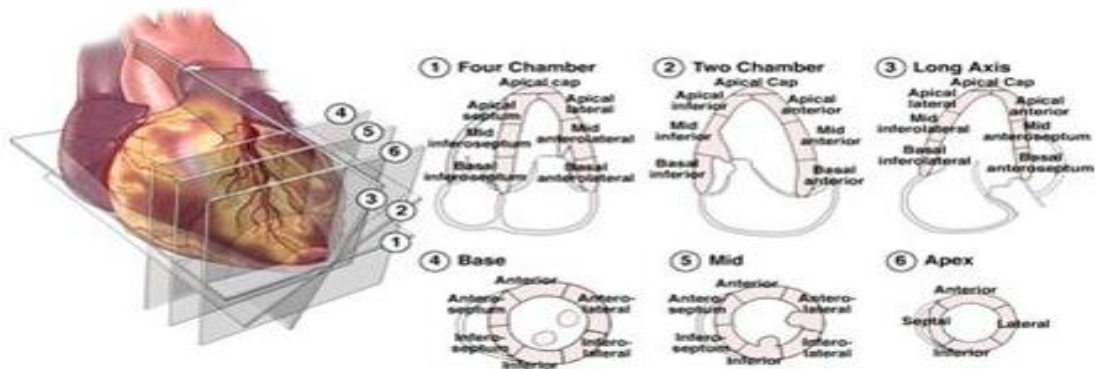
Moderately impaired: 36-44%

Severely impaired: $\leq 35\%$

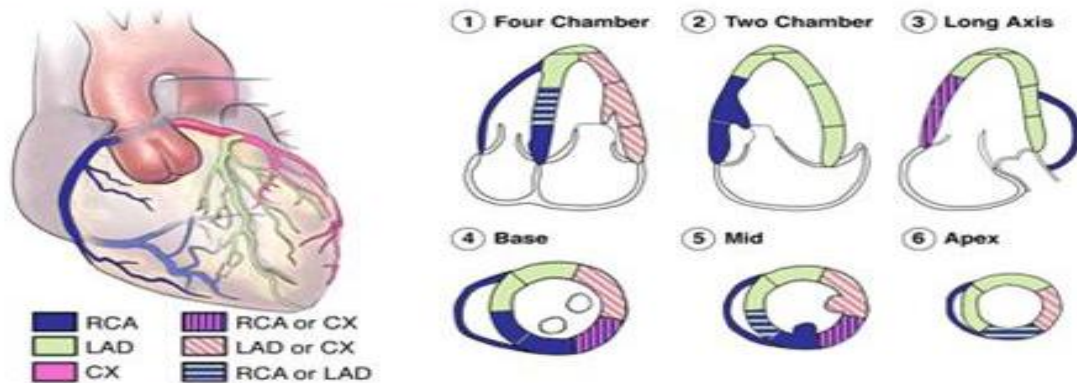
LV 17 wall regions:



LV region names and coronary artery supply
 (RCA - Right coronary artery, LAD- Left anterior descending, Cx: Circumflex)



istribution of coronary arteries blood flow.



Defining regional wall motion abnormalities

Visual/subjective

normal, hypokinetic, akinetic, dyskinetic

Semiquantitative

WMS or WMSI

1. = normal

2. = hypokinetic, i.e. reduced endocardial excursion and wall thickening

3. = akinetic, absent endocardial excursion and thickening

4. = dyskinetic, systolic bulging with no thickening

WMSI = Total score of segments/Total number of segments.

WMS, wall motion score; WMSI, wall motion score index