



Optimal Care: Cardiology

Cardio Disease Approach

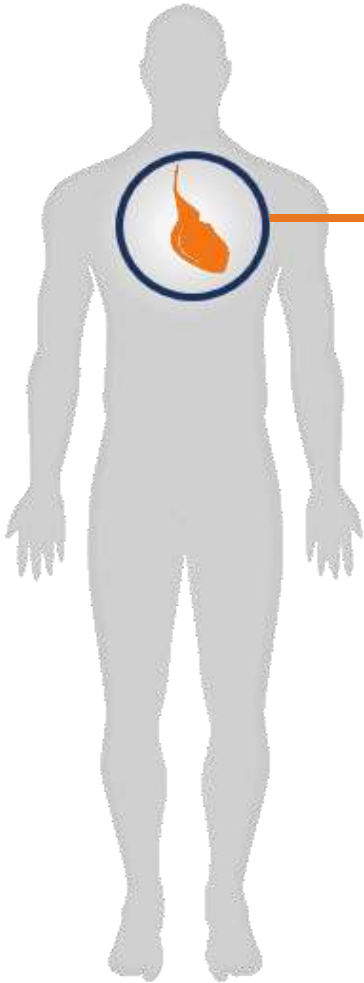


- Extensive testing has become the “community standard”
- Preventive management is more valuable than invasive therapies

Principles of CHF Management

- Daily weights are the most impactful way to monitor CHF and case management is highly effective
- Aldosterone inhibitors are underutilized in systolic Class III/IV CHF and reduce mortality by 11% in two years¹
- Entresto (sacubitril/valsartan) is modestly effective for systolic Class III / IV CHF at a cost of \$4,400 yearly

Management of Cardiovascular Diseases



Screening and Testing

- Routine ischemia testing is not indicated in stable CAD^{2,3}
- Treadmill Exercise Stress Test (EST) is the most cost effective test when ECG is normal and patients are able to exercise on the treadmill
- Preoperative ischemia testing not needed in patients who can achieve 4 METS (climb one flight of stairs, grocery shopping with cart) of activity without CV symptoms
- Screening for asymptomatic carotid stenosis is not indicated
- Cerebrovascular imaging is rarely indicated for syncope

Atrial Fibrillation (AF) Management

- 27% of AF patients are anticoagulated inappropriately and decision to treat should be based upon CHA₂DS₂VASc score of ≥ 2 in men and ≥ 3 in women. Shared decision making should be used at lower scores if anticoagulation is considered
- Warfarin therapy should be converted to DOAC therapy if the TTR $< 70\%$
- In the absence of systolic CHF, rate control and rhythm control for AF have equal outcomes⁴
- Recurrence of AF post ablation is 30-50% at 5 years

Medical Management

- LDL levels can be reduced up to 70% with rosuvastatin/ezetimibe⁵
- PCSK-9 inhibitors are infrequently needed⁵
- Peripheral Artery Disease (PAD) is optimally managed with risk factor control in the absence of lifestyle limiting symptoms
- Aldosterone blockade or amiloride are the most effective therapies for resistant hypertension
- Syncope is often mismanaged; refer to the algorithm in the *Cleveland Clinic Journal of Medicine* for optimal management⁶ (Figure 1. Management of syncope)
- Echo for Patent Foramen Ovale is indicated for cryptogenic stroke under age 60⁷

Shared Decision Making

- ✓ Palliative care evaluation should be obtained prior to Transcatheter Aortic Valve Replacement in the frail elderly (TAVR)
- ✓ Shared decision making should be used prior to defibrillator placement

¹ *NEJM*, 341, 709-717. doi:10.1056/NEJM199909023411001

² *The New England Journal of Medicine*, 373(20), 1937-1946. doi:10.1056/NEJMoa1505532

³ *The Lancet*, 391(10115), 31-40. doi:10.1016/S0140-6736(17)32714-9

⁴ *NEJM*, 378, 417-427. doi:10.1056/NEJMoa1707855

⁵ Kazi, D. S., Penko, J., Coxson, P. G., Guzman, D., Wei, P. C., & Bibbins-Domingo, K. (2019). Cost-effectiveness of Alirocumab: A just-in-time analysis based on the ODYSSEY outcomes trial. *Annals of Internal Medicine*, 170(4), 221-229

⁶ *Cleveland Clinic Journal of Medicine*, 12, 755-766. Retrieved from <https://www.mdedge.com/ccjm/article/89311/cardiology/syncope-etiology-and-diagnostic-approach>

⁷ *NEJM*, 377, 1033-1042. doi:10.1056/NEJMoa1707404